

XII. Permits, Species Killed, Captured

The following chart provides information on Antarctic Conservation Act (P.L. 95-541) Permits issued during 1 July 1999 to 30 June 2000.

Permit #	Active Dates	Permit Activity	Location	Purpose
2000-001	21 Sep 99 – 31 Jan 2005	Take/Entry into ASPA /Import into U.S.	Antarctic Peninsula, Victoria Land, Ross Sea and McMurdo Station vicinity	Conduct surveys and excavations (no more than 1x1 m test pits) of sediments from modern and abandoned penguin colonies to determine patterns in population fluctuations in relation to climate change in the past.
2000-004	21 Sep 99 – 28 Feb 2002	Taking/Import into U.S.	McMurdo Sound area	Temporarily attach depth and physiological recorders to Emperor penguin chicks and adults to study thermo-regulation and underwater diving behavior. In addition, muscles will be biopsied to ex-amine myoglobin mRNA content in relation to myoglobin concentration in both adults and developing chicks.
2000-005	08 Oct 99 – 01 Apr 2001	Taking/Import into U.S.	Ross and Amundsen seas	Capture and release seals to collect blood and biopsy samples, in order to assess a suite of bio-indicators of health. This data will be used along with other data to provide the most detailed model of the link between ice seals and the environment.

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2000-07	01 Dec 99 – 28 Feb 2002	Take/ Entry into ASPA	Beaufort Island (ASPAs #105)/ Cape Royds (ASPAs #121)/ Cape Crozier (ASPAs #124)	Capture, tag, weigh and collect blood and stomach samples from Adelie penguins to determine why the penguins at the smaller Royds rookery are growing faster than those at the larger Crozier site.
2000-008	01 Oct 99 – 28 Feb 2005	Entry into ASPA	Canada Glacier (ASPAs #131)	Access ASPA to provide maintenance on the continuously recording stream gage and collect water quality samples as part of a Long Term Ecological Research program. The extensive microbial mats and mosses growing in the Canada stream are unique compared to other areas in the Dry Valleys. The stream gage on the Canada stream provides one of the longest records of discharge in the Taylor Valley.
2000-010	04 Oct 99 – 31 Jan 2002	Introduction into Antarctica	Amundsen-Scott South Pole Station	Introduction of commercially packaged freeze-dried yeast to be exposed to the extreme climate at South Pole during the winter. The yeast will then be used as part of an educational outreach program where students will look for changes in the yeast's metabolic activity.
2000-011	08 Oct 99 – 30 Aug 2004	Taking/Import into U.S.	Circumpolar pack ice	As a component of a multi-disciplinary Antarctic Pack Ice Seal study, seals will be captured, tagged, marked, instrumented and biological samples (biopsies, blood, urine, teeth, etc.) collected. Samples will be returned to the U.S. for further analysis.
2000-012	21 Sep 99 – 31 Aug 2004	Entry into ASPA	Antarctic Peninsula/ Western Shore Admiralty Bay (ASPAs #128)	Continue site surveys and census of fauna and flora at various heavily visited sites to collect data for the Antarctic Site Inventory Project.

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2000-013 and 2001-008	01 Nov 99 – 28 Feb 2000 01 Aug 00 – 01 Mar 2001	Entry into ASPA	Cape Crozier (ASPA #124)	Enter edges of ASPA for purposes of filming Adelie and Emperor penguins during nesting, egg tending and egg hatching. Under-water filming of penguins, leopard seals, Orcas and Minke whales.
2000-014	01 Oct 99 – 30 Apr 2001	Taking/Import into U.S.	Antarctic Peninsula, East Antarctica and Ross Sea region	Collect blood samples from penguins for analysis of the phylogenetic relationships and population genetics of 2 major genera of penguins. In addition, blood samples from seabirds and penguins near Davis Station will be collected to investigate the diseases reported in these populations.
2000-015	01 Jan 00 – 31 Jan 2004	Taking/Import into U.S.	Antarctic Peninsula regions	Conduct satellite-monitored radio tagging (Telonics transmitter ST-15) studies of humpback, blue and fin whales to track movements, migration routes and location of individuals. In addition, collect biopsy samples for sex determination and genetic analysis.
2000-016	01 Dec 99 – 30 Dec 2004	Entry into ASPA	Tramway Ridge (ASPA #130)	Enter site to measure temperature of the soil as a means of monitoring the volcanic activity of Mount Erebus. In addition, collect soil samples to measure the quantity of CO ² and measure its flux into the atmosphere which provides information on the degassing behavior of the magmatic system.
2000-017	10 Nov 99 – 31 Dec 99	Introduction into Antarctica	McMurdo Station	Perform positive control experiments when measuring denitrification rates at Lake Bonney using bacterial cultures originally isolated from the lake.
2000-018	10 Nov 99 – 31 Jan 2000	Entry into ASPA	Barwick Valley (ASPA #123)	Enter site to map lacustrine deposits and collect samples of evaporates and algae for radio-carbon and uranium-thorium dating.

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2000-019	20 Dec 99 – 20 Feb 2001	Introduction into Antarctica	McMurdo Station	Bacterial cultures of <i>E. coli</i> are a component of several molecular biology DNA cloning kits used for research in the Cray Lab.
2000-020	15 Dec 99 – 20 Apr. 2000	Taking/Import into U.S.	Ross Sea region	Capture Emperor penguins to collect stomach contents and attach recorders/transmitters. Data collected will be used in an ecosystem analysis of the Ross Sea.
2000-021	10 Nov 99 – 15 Jan 2004	Taking/Import into U.S.	Circumpolar pack ice and sites ashore	Tag and collect biological samples from seals as part of a project to study the feeding ecology, reproduction, and population dynamics of Antarctic seals and examine their role in the marine ecosystem.
2000-23	21 Jan 00 – 01 Mar 2000	Taking	Palmer Station vicinity	Salvage dead specimens for the educational outreach collection of the Palmer Long Term Ecological Research project.
2000-024	22 Jan 00 – 01 Mar 2000	Taking/Entry into ASPA	Lake Fryxell (ASPA #131)	Collect cyano-bacterial assemblages from the lake ice cover to examine the physiological responses and community structures that are selected by the ice-cover environment.
2001-001	01 Apr 00 – 31 Mar 2005	Entry into ASPA	Litchfield Island (ASPA # 113)	Enter site to inspect and resupply the survival cache that is required for boating safety.
2001-002	01 Apr 00 – 31 Mar 2005	Taking	McMurdo Station and associated airfields	Taking associated with removing penguins, seals and skuas from McMurdo Station and associated airfields to ensure safety of operations and protection of the animals.
2001-003	01 Apr 00 – 31 Mar 2005	Entry into ASPA	Northwest White Island (ASPA #137)	Entry into ASPA for access to and maintenance of Black Island INMARSAT transmitting and receiving equipment.

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2001-004	01 Apr 00 – 31 Mar 2005	Entry into ASPA	Western Shore of Admiralty Bay (ASPAs #128)	Entry into ASPA for movement of personnel and supplies to and from the U.S. research station, Copacabana.
2001-005	01 Apr 00 – 31 Mar 2005	Taking	Palmer Station	Taking associated with removing penguins, seals and other birds from the Palmer Station pier to ensure safety of operations and protection of the animals.
2001-006	15 May 00 – 30 Jun 2000	Taking/Entry into ASPA/ Import into U.S.	Shores of Port Foster (ASPAs #140)	Collect sand and snow samples for analyses for aerosol sources of iron.
2001-007	15 May 00 – 30 Jun 2000	Introduce into Antarctica	Antarctic Peninsula	Use of unicellular algal species in rearing Antarctic zooplankton in a study of the larvae of benthic organisms, and their larval life history in understanding the demography of bottom organisms.
2001-010	28 Jun 00 – 1 Apr 2001	Entry into ASPA	Byers Peninsula (ASPAs #126)	Entry into ASPA to reconnoiter possible landing sites and camp sites along the southern shore for a future research camp.

ASPAs = Antarctic Specially Protected Area (formerly SPAs and SSSI's)