

# **Agreement on the Conservation of Albatrosses and Petrels**

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# REPORT ON USA SEABIRD CONSERVATION EFFORTS 2005-2006

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#### **REPORT ON**

## **USA SEABIRD CONSERVATION EFFORTS, 2005-2006**

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<u>Introduction</u> Although the USA is not a party to ACAP and whereas the primary albatross and petrel species that many USA efforts address are northern hemisphere species that are not currently in Annex 1 of ACAP, the USA has engaged in numerous activities that also contribute to the conservation of ACAP species. This report summarizes the USA's seabird conservation efforts in 2005 and 2006. Work has been undertaken by government agencies and non-government entities (e.g. universities, fishing industry associations, conservation groups).

#### Species Conservation

Pacific Region Plan The US Fish & Wildlife Service (USFWS) Pacific Region issued its "Regional Seabird Conservation Plan" in January 2005. The purpose of the plan is to identify USFWS's priorities for seabird management, monitoring, research, outreach, planning and coordination. It will serve as a guide to coordinate USFWS activities for seabird conservation at the regional scale. The plan includes: a review of seabird resources and habitats, a description of issues and threats, and a summary of current management, monitoring and outreach efforts. All species are prioritized by conservation concern at the regional scale and recommendations for conservation actions are identified and prioritized. In Part II of this plan, brief profiles for each breeding species provide a summary of current information on population size, status, ecology, distribution, habitats, threats, and recommended conservation actions. For purposes of the plan, the Pacific Region includes the coastal and offshore areas of California, Oregon, Washington, Hawaii, and the US Pacific Island commonwealths, territories, and possessions. Sixty species of seabirds representing three Orders and ten Families, nest in the Region including: three albatrosses, six petrels, four shearwaters, seven storm-petrels, three cormorants, one pelican, two frigatebirds, three boobies, two tropicbirds, five gulls, twelve terns, three noddies, one skimmer, one murre, one guillemot, three murrelets, two auklets, and one puffin. Many of these populations are of global or national importance. In addition to the breeding seabirds, millions of non-breeding birds migrate to, or through, the area (USFWS 2005a).

Recently completed population assessments of the black-footed (BFAL) and Laysan albatross (LAAL) are currently being reviewed by USFWS and will be distributed for peer review in the near future (Naughton, USFWS, pers. comm.)

Short-tailed Albatross Draft Recovery Plan In the USA, the short-tailed albatross (Phoebastria albatrus) is listed as endangered under the Endangered Species Act. The USFWS established an international recovery team for this species and as required by US law, issued a draft recovery plan for the short-tailed albatross (USFWS 2005b). Tasks and actions for the recovery of the species are identified and prioritized. Some of these actions include: ongoing population monitoring and habitat management on Torishima, establishment of one or more nesting colonies on non-volcanic islands, telemetry studies to identify important foraging areas or areas where birds may congregate, and continued work on seabird/fishery interactions. The draft plan was made available for public comment and USFWS is currently reviewing comments received for issuance of a final plan.

NACAP—Pink-footed Shearwater Plan As mandated by the 1994 North American Agreement for Environmental Cooperation, the Commission for Environmental Cooperation (CEC) encourages Canada, Mexico, and the USA to adopt a continental approach to the conservation of wild flora and fauna. The North American Conservation Action Plan (NACAP) initiative began as an effort through the CEC to facilitate the conservation of marine and terrestrial species of common concern. The main assumption supporting this initiative is the need and opportunity to enhance, through coordination, the effectiveness of conservation measures undertaken by diverse countries sharing migratory or transboundary species. The countries, through the CEC, agreed upon an initial set of species which included the pink-footed shearwater (Puffinus creatopus). The NACAP for the pink-footed shearwater (PFSH) resulted from a trinational workshop hosted by the CEC in March 2004. The plan provides an updated account of the species, identifies current factors causing loss or decline, and identifies objectives and targets for trinational conservation actions (CEC 2005). A CEC/NOAA funded project in FY05-FY06 is currently underway and identified the following goals and objectives: Continue to quantify migratory routes and wintering habitat use patterns within CEC waters through satellite tracking of post-breeding PFSH; build the capacity of Mexican researchers to protect the PFSH; develop educational materials and units for Mexican schools on the PFSH biology and the results of the satellite tracking program; and develop a database of at-sea survey data to address the question of PFSH population trends in areas of their wintering habitat in CEC waters. Potential studies include a second year of colony-based satellite-tracking, first year of at-sea satellite tracking off California, or additional colony-based geolocation deployments.

#### **Habitat Conservation**

<u>Breeding site protections:</u> The USFWS's Alaska Maritime National Refuge has an active Invasive Management Program that works to prevent rat spills from commercial fishing vessels and other vessels that port in the Aleutian Islands. For instance, Rat Prevention Kits are available to vessels at

http://www.r7.fws.gov/nwr/akmar/whatwedo/bioprojects/restorebiodiversity/shipaid.htm Additional details on the Invasive Management Program can be found at <a href="http://www.r7.fws.gov/nwr/akmar/whatwedo/bioprojects/restorebiodiversity/restoremain.htm">http://www.r7.fws.gov/nwr/akmar/whatwedo/bioprojects/restorebiodiversity/restoremain.htm</a>

The American Bird Conservancy has worked with the Pacific Seabird Group and the USFWS to promote rat eradication on Kiska Island, part of the Alaska Maritime National Wildlife Refuge. Norway rats are killing tens of thousands of Least and Crested Auklets, both adults and chicks. An experimental hand broadcast of rodenticide on a 10 acre plot at Kiska on the auklet colony was done in April 2004 to measure success on the talus slope, to evaluate logistics concerns, and to document non-target concerns. Additional trials are anticipated for August-October 2006 on Adak Island. Results will be used in planning future control or eradication programs. With American Bird Conservancy support, Island Conservation received a grant for a comprehensive program that will eradicate invasive rodents from four islands in California, Mexico, and the Caribbean, implement plans to prevent the accidental introduction of rodents to islands in British

Columbia, Baja California and the Caribbean, and further develop rodent eradication teams in Mexico, the Caribbean, the US and Canada.

The Endangered Species Recovery Council concluded a successful feral cat removal project for the Department of Defense on Wake Island. The cats were causing significant damage to indigenous bird populations on the atoll. Already, Masked Boobies, Brown Boobies, Wedge-tailed Shearwaters, and Gray-backed Terns have increased.

#### Management of Human Activities

#### Report on EIAs related to albatrosses and petrels

A Final Environmental Impact Statement on Seabird Interaction Avoidance Methods under the Fishery Management Plan for the Pelagic Fisheries of the Western Pacific Region (NOAA 2005) was prepared to address proposed measures to reduce fishery interactions with North Pacific albatrosses (Laysan albatross *Phoebastria immutabilis*, black-footed albatross *P. nigripes*, and short-tailed albatross).

#### Measures to reduce or eliminate incidental mortality in fisheries

A subsequent rulemaking allowed side-setting as an option to Hawaii-based pelagic longline vessels required to use seabird avoidance measures. The final rule for these measures was published in the <u>Federal Register</u> in December 2005 and can be found at <a href="http://www.fakr.noaa.gov/protectedresources/seabirds/70fr75075.pdf">http://www.fakr.noaa.gov/protectedresources/seabirds/70fr75075.pdf</a>

A collaborative technical assistance program for Hawaii pelagic longline vessels to change deck design and fishing practices to side set was initiated in 2004-2005. To date, 44 of 124 Hawaii-based longline vessels have converted to side-setting and none of these boats caught albatross in 2005. Additional vessel conversions are scheduled to begin in May 2006.

http://www.fakr.noaa.gov/protectedresources/seabirds/sidesetassistancefinal.pdf

#### RFMOs and Seabirds

<u>ISC:</u> Seabirds was on the agenda of the ISC's (International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean) Bycatch Working Group meeting (March 20-22, 2006). The ISC provides scientific advice to the Western and Central Pacific Fisheries Commission (WCPFC) on the status of stock of tuna and tuna-like species in the North Pacific. The report of the ISC 6th Plenary Meeting (March 23-27, 2006, La Jolla, California, USA) can be found at

http://isc.ac.affrc.go.jp/meetings.html

The links for the annexes (Bycatch Working Group, Annex 9) appear on page 3, and the direct link address for the bycatch working group is;

http://isc.ac.affrc.go.jp/isc6/ISC06\_Annex%209\_ISC6%20BYCATWG%20REPORT.pdf IATTC: Seabirds is on the agenda of the Inter-American Tropical Tuna Commission's (IATTC) Stock Assessment Working Group meeting May 15-19, 2006, in La Jolla, California, USA. The working documents for the IATTC's Stock Assessment Working Group meeting are at: <a href="http://www.iattc.org/IATTCandAIDCPMeetingMay06ENG.htm">http://www.iattc.org/IATTCandAIDCPMeetingMay06ENG.htm</a> Three seabird documents are posted: SAR-7-10 Seabird interactions (IATTC document), SAR-7-05b Albatross and petrel distribution (submitted by BirdLife International), SAR-

7-05c Seabirds and fisheries in EPO (Submitted by USA). The IATTC's 5<sup>th</sup> Bycatch Working Group meeting (June 24, 2006, Busan, Korea) also has seabirds on its agenda, topics including information on interactions with seabirds, including incidental catches, and mitigation measures.

#### Measures to combat IUU Fishing

In May 2006, NMFS intends to publish a proposed rule that includes measures to assist in combating illegal harvesting of and trade in toothfish. Proposed measures would address a centralized satellite-linked vessel monitoring system and the use of electronic catch documents for toothfish shipments entering the USA.

The USA has been involved with the International Monitoring, Control and Surveillance Network for Fisheries-Related Activities (International MCS Network) since its inception in 2000. The International MCS Network is an arrangement of national organizations/institutions in charge of fisheries-related MCS activities, which have been authorized by their countries, to coordinate and cooperate in order to prevent, deter and eliminate IUU fishing. Additional details and updates on the Network can be found at <a href="http://www.imcsnet.org/">http://www.imcsnet.org/</a>

Environmental Contaminants: American Bird Conservancy, working with Dr. Myra Finkelstein under a Switzer Fellowship Grant, advanced efforts to remediate peeling lead paint from old Navy buildings on Midway Island National Wildlife Refuge that is killing an estimated 1,000 Laysan Albatross chicks annually. The Laysan chicks ingest the lead paint chips while awaiting their parents' feedings. The USFWS completed a detailed, phased remediation assessment and the American Bird Conservancy is working to gain funding and implementation. Efforts have been expanded to keep albatrosses from nesting around 14 buildings to prevent lead poisoning and this stop-gap measures have been successful.

### Research and Monitoring

<u>Alaska:</u> Collaborative research continues to be the focus of efforts by Ed Melvin and the Washington Sea Grant Program (WSGP) to address seabird bycatch in the Alaskan longline and trawl fisheries. International collaborations have also occurred (fisheries in Antarctica, New Zealand, and Russia). Additional details can be found at <a href="http://www.wsg.washington.edu/pubs/seabirds/seabirdsolvinghr.pdf">http://www.wsg.washington.edu/pubs/seabirds/seabirdsolvinghr.pdf</a>

#### Mitigation Research:

Testing of integrated weight (IW) groundlines continued through 2005 by the WSGP. Experiments took place on two freezer-longliner vessels using auto-bait systems in the Pacific cod fishery in the Bering Sea/Aleutian Islands to determine if baited hooks would sink more quickly, thus preventing access by seabirds and resulting in reduced seabird interactions. IW groundlines (50g/m) and unweighted lines, with and without paired streamer lines, were tested. Preliminary results show IW groundline coupled with streamer lines can further reduce seabird bycatch, especially of diving birds such as shearwaters.

WSGP initiated pilot testing of seabird deterrent technologies (snatch block, streamer lines, third wire scarer) to reduce seabird interactions with trawl cables in the Bering Sea catcher-processor fleet. Based on recommendations from these tests, two vessels were retrofitted in 2005 for continued research. Several seabird deterrents were shown to be highly effective and work continues to make deterrents more practical. Data are currently being analyzed (Melvin et al 2004).

Regulatory requirements for paired streamer lines and standards came about for the Alaska demersal longline fishery based on WSGP research on 'large' vessels, over 55 ft length over all (LOA). It was recognized that these standards may not be suitable for smaller vessels (26 to 55 ft LOA) that fish in 'inside' waters. Testing was undertaken by WSGP to evaluate the effectiveness of seabird avoidance measures on smaller vessels (Melvin and Wainstein 2006). Additionally, WSGP undertook a three-year collaborative program to collect seabird distribution data in the course of existing fish stock assessment surveys (Melvin et al 2006). Data collected from the surveys and other sources suggest that longline fishing poses little to no risk to albatrosses and other tubenose seabirds in Alaskan inside waters. Recommendations based on these two reports will be presented to the North Pacific Fishery Management Council at its June 2006 meeting. The Council may choose to consider revisions to the existing seabird avoidance regulations at its subsequent meetings.

With funds provided by the USFWS, the University of Alaska Sea Grant Marine Advisory Program completed two projects to address the needs of small longline vessels encountering seabirds in Alaskan waters. Building on work by Ed Melvin, WSGP, the first project tested a variety of gear and techniques for deterring seabird attacks on baited longline hooks (Rice et al 2006). The second effort created streamer lines better suited to the many types of small vessels fishing in Alaska waters (Rice and Cullenberg 2006).

NOAA Fisheries Alaska Fisheries Science Center (AFSC): The AFSC's Seabird Program collaborates with various groups (WSGP, NOAA Fisheries National Cooperative Research Program, Pollock Conservation Cooperative, Marine Conservation Alliance, North Pacific Longline Association, NOAA Fisheries North Pacific Groundfish Observer Program, USFWS and others) to study a variety of seabird/fishery issues, including: development and effectiveness of seabird deterrent devices and methods for the longline and trawl fisheries, improved characterization of seabird bycatch on trawl vessels, food availability to seabirds through discards and offal from the commercial fisheries, seabird stationary sighting surveys from US regional survey platforms (Alaska and US West Coast), contributions to the North Pacific Pelagic Seabird Database, continued improvements with seabird aspects of fishery observer training and debriefing, annual estimates of seabird bycatch the Alaska groundfish fisheries in (http://www.afsc.noaa.gov/refm/reem/doc/Seabird%20bycatch%20tables%201993-2004 13April2006.pdf), and seabird sections to the ecosystem chapter of the annual stock Alaska fishery evaluation reports (http://www.afsc.noaa.gov/refm/reem/Assess/Default.htm). Additional details can be found at <a href="http://www.afsc.noaa.gov/Quarterly/amj2005/divrptsREFM2.htm">http://www.afsc.noaa.gov/Quarterly/amj2005/divrptsREFM2.htm</a>

North Pacific Pelagic Seabird Observer Program: The USFWS received funding from the North Pacific Research Board to begin a North Pacific Pelagic Seabird Observer Program. The two year program (May 2006-May 2008) will put seabird observers on ships of opportunity in Alaska waters. The program will collaborate with NOAA Fisheries and other vessel-based programs. Data on seabird

distribution and abundance will be collected in conjunction with environmental and fisheries data, and the seabird data will be entered into the North Pacific Pelagic Seabird Database to be available for multiple applications. Contemporary at-sea bird data will provide information on spatial and temporal overlap of seabirds with commercial fisheries, oil tanker routes or catastrophic spills, and identification of sensitive management areas. In addition, the current data will be compared to similar data collected in the 1970s-1980s, to determine if there is evidence of changes in seabird species composition or distribution at sea following decades of environmental changes (K. Kuletz, pers.comm).

#### Satellite-Tracking Projects:

<u>TOPPS Program</u> The Tagging of Pacific Pelagics (TOPP) program has tracked both LAAL and BFAL at two sites for the past four seasons (2002-2006) (S. Shaffer, pers.comm.). At Tern Island, French Frigate Shoals, Northwest Hawaiian Islands, both species were tracked using satellite tracking tags, light-based archival data loggers, and GPS tags. At Guadalupe Island, Baja, Mexico, LAAL were tracked with satellite tracking tags and light-based archival data loggers. To date, a total of 233 individuals have been tracked with satellite tags during the incubation, brooding, and early chick rearing stages. Additionally, 72 individuals have been tracked with light-based archival data loggers during the post-breeding phase (6-12 months deployments). In addition to the tracking effort, blood samples are being collected for 1) contaminants, 2) stable isotopes, and 3) population dynamics, and diet samples from chicks and adults. Current plans are to continue this effort in 2006-2007 to maintain/build a longer term time series records of the foraging ecology of North Pacific albatrosses.

In addition to tracking albatrosses, TOPP researchers have also tracked 20 sooty shearwaters during breeding (2003 & 2005) and the post-breeding migration (2005 only) using light-based archival tags. Another 10 sooty shearwaters, caught at sea off California, have also been tracked using satellite tracking tags in 2005. Finally, 10 pink-footed shearwaters have been tracked during breeding (2003 & 2005) and post-breeding migration (2005 only) from the Juan Fernandez Islands, Chile, using light-based archival tags. In addition to location, the archival tags also provide information on diving depths and environmental temperatures.

Another investigation looked at movements of 18 BFAL during the post-breeding period and tagged within the Cordell Bank National Marine Sanctuary, California. All birds ventured outside of the US EEZ, with one individual traveling more than 7300 km from the tagging site to Hokkaido, Japan. Overall, five birds traveled west of the international dateline, and three birds ventured into territorial waters of four other nations (Canada,

Japan, Mexico, and Russia). On average, birds spent greater than 50% of their time in the high seas (Hyrenbach et al 2006).

A joint US/Japan effort has been satellite-tagging STAL albatrosses both on Torishima Island and at at-sea locations off the Aleutian Islands in Alaska. The at-sea work has also included taggings of BFAL and LAAL, to monitor these species during the non-breeding period (June to September), when they are most common in Alaska waters. The goal of the project is to compare the marine habitat use of all three species of albatrosses in Alaska and the spatial and temporal interactions with commercial fisheries. Satellite transmitters were attached to 10 BFAL, 10 LAAL, and 2 STAL. Deployment durations ranged from 13 to 106 days. In general, STAL remained nearest the Aleutian Island archipelago, followed by LAAL, which ranged a bit further south and north of the Islands. BFAL ranged much more widely, with some birds traveling into the Gulf of Alaska, British Columbia, and the transition domain between Alaska and Hawaii (ca. 35 to 40°N) (Suryan and Balogh 2005).

Data from US satellite-tracking studies on STAL, BFAL, and LAAL are submitted to the Global *Procellariiform* Tracking Database coordinated by BirdLife International.

American Bird Conservancy has administered grants and selected projects for seabird research using satellite transmitters under the North Star Grant Program funded by North Star Science and Technology, LLC. Projects include satellite tagging of: juvenile Blackbrowed Albatrosses by Falklands Conservation to determine fishing mortality of this species; Pink-footed Shearwaters by the Juan Fernandez Island Conservancy to determine fishing mortality; and for Blue-eyed Shags in Argentina by Dee Boersma.

Assessing Population-level Impacts from Fisheries on Albatross Species: An ongoing effort is underway to develop integrated population modeling for BFAL and LAAL populations and to assess whether past and present levels of bycatch are likely to affect significantly the populations of these species. Two coordinated projects are being funded by Joint Institute for Marine and Atmospheric Research (JIMAR), School of Ocean and Earth Science and Technology, University of Hawaii at Manoa, Honolulu, Hawaii. Through modeling, one project will attempt to estimate a threshold level of bycatch that would, at a specified level of certainty, allow a sustainable growth rate for the albatross populations (Goodman and Lebreton, 2005). The objective of the other project is to generate a general Bayesian integrated model for protected species modeling that can be applied to multiple species and used to provide management advice (Maunder and Hoyle 2005).

Global Bycatch Database: Project GLOBAL--Global Bycatch Assessment of Long-Lived Species. In 2005, a team of researchers from Duke University's Center for Marine Conservation and the Blue Ocean Institute launched Project GLOBAL to develop a global network of investigators and donors who will work together to understand the patterns and implications of incidental fisheries catch (bycatch) of seabirds, sea turtles, and marine mammals, by integrating data on bycatch, fishing effort, and its associated oceanographic context on regional, ocean-wide, and global scales. The team also hopes

to facilitate international collaboration and coordination of bycatch mitigation and management. Work will be conducted through regional workshops, where participants can discuss current bycatch issues, identify data gaps and urgent needs within their regions, and come up with novel approaches of how to analyse multiple datasets across taxa and fisheries in relation to oceanographic features at different scales. The workshops will provide prospective collaborators an opportunity to synthesize and analyze their data in a regional context using innovative approaches. Project GLOBAL's first regional workshop will be in the Southwest Atlantic (Argentina, Brazil, Uruguay, Falklands), June 14-16, 2006, in Argentina.

#### **Education and Awareness**

NOAA Fisheries Seabird Program links <a href="http://www.fakr.noaa.gov/protectedresources/seabirds/national.htm">http://www.fakr.noaa.gov/protectedresources/seabirds/national.htm</a>

Oikonos Updates on PFSH project at <a href="http://www.oikonos.org/whatsnew.htm">http://www.oikonos.org/whatsnew.htm</a>#pfsh.htm

Wake Forest University's The Albatross Project http://www.wfu.edu/biology/albatross/

International Outreach: American Bird Conservancy published reports in Spanish, English, and Chinese: Sudden Death on the High Seas: Longline Fishing--A Global Crisis for Seabirds, Working for Solutions to Benefit Seabirds and Fishermen. The Reports describe the problem and provide solutions based on research by fishery and seabird experts. Mitigation measures such as streamer lines, integrated line weights, and other methods are explained. The reports list web sites for useful documents including regulations, completed National Plans of Action, and research on mitigation measures. The reports serve as resources for fishery regulators, longline fishermen, scientists, researchers, and the general public and thousands of hard copies have been widely distributed around the globe. view the full reports, go http://www.abcbirds.org/policy/seabird\_reports.htm. ABC co-sponsored a session with NOAA/NMFS at the March 2005 Rome meeting of the UN's FAO, Committee on Fisheries to promote effective solutions to seabird bycatch and distributed copies of the reports.

In May 2006, American Bird Conservancy hired a full-time Seabird Program Director, Jennifer Arnold. Arnold's experience includes management, advocacy, policy development and conservation-based research at both the national and international levels. Her contact information is jarnold@abcbirds.org.

American Bird Conservancy has funded work to begin on June 1, 2006 in Argentina by Dr. Marco Favero, Director Ecología y Conservación de Aves Marinas at Universidad Nacional de Mar del Plata - CONICET to conduct workshops and develop a draft National Plan of Action for Seabirds and Longlines. The first workshop in Buenos Aires will be with representatives of local government organizations, NGOs, and research institutes, and the second workshop in the city of Puerto Deseado (Patagonia) will include the fishing industry and designated representatives of the first workshop. After the workshops, a draft document to be used as the basis (or draft) for the Argentinean NPOA

will be developed. Argentina is a signatory to ACAP and Dr. Favero has developed research and conservation projects dealing with the mortality of albatrosses and petrels associated with fisheries. Most of these projects were in collaboration with the National Observers Program (National Fisheries Research Institute), NGOs (local BirdLife and WWF Partners), and more recently with other research groups involved in the same issues.

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