Short-tailed Albatross: Back from the Brink

by Janey Fadely

Short-tailed albatrosses *(Phoebastria albatrus)* once numbered in the millions. These magnificant, graceful, golden-crowned seabirds soared across the North Pacific Ocean and Bering Sea during the non-breeding season, and gathered on numerous remote western North Pacific islands in large dense colonies during the breeding season. Today, however, fewer than 1,000 short-tailed albatrosses remain, and they face threats that are difficult to quantify, predict, and alleviate.

Short-tailed albatrosses were brought to the brink of extinction in the middle of this century by large-scale exploitation at breeding colonies that began in the late 1800's. Between 1885 and 1903, an estimated 5 million of the birds were taken at Torishima Island, Japan, alone. Large-scale killing of short-tailed albatrosses continued until the early 1930's, except for a few years following the 1903 volcanic eruption on the island. Albatross down was used for quilts and pillows, the wing and tail feathers for writing quills, bodies for fertilizer and fat, and eggs for food. An account from this period stated that short-tailed albatrosses were "...killed by striking them on the head with a club, and it is not difficult for a man to kill between 100 and 200 birds daily." By 1949, there were no short-tailed albatrosses breeding at any of the 15 or more historically known breeding sites, including Torishima, and the species was reported to be extinct.

Thankfully, the report was premature. Albatrosses spend much of their lives at sea where they are harder to detect than at the nesting grounds. Juveniles spend years at sea before returning to their natal colonies to breed for the first time, and adults may stay at sea and skip one or more breeding seasons, especially if they are displaced from the colony by disturbance or habitat destruction. There is no information on how many short-tailed albatrosses survived the slaughters, but in 1950, several were observed nesting on Torishima. By 1954, the numbers had grown to 25 birds and at least 6 pairs. Japan designated the short-tailed albatross a protected species in 1958 and added protection in 1962 and 1972. Harvest is prohibited and human activities on Torishima are restricted. These protective measures, together with intensive habitat enhancement projects on Torishima, have made it possible for the population to grow to approximately 500 breeding birds and 1,000 total birds today. While this increase is encouraging, the total world population nests in only two colonies. Approximately 30 adults nest on remote Minami-kojima Island, which is difficult and dangerous for biologists to visit because of territorial disputes. The remaining 95 percent of the species' breeding birds nest at the Tsubamesaki ("Swallow Point") colony on Torishima. The albatross's eggs are, more or less, all in one basket.

Short-tailed albatrosses face other natural and human-related threats. The island of Torishima is an active volcano that has erupted several times in the last century. In 1903, an explosive eruption caused 125 human deaths and significant habitat destruction on the island. Albatross breeding habitat is also threatened by monsoon rains that can cause mudslides and erosion. Short-tailed albatrosses return to the same nesting sites each year, and destruction of breeding habitat can delay nesting by

any surviving adults for years. Because Torishima is the only large colony of short-tailed albatrosses in the world, a catastrophic event could have devastating effects on the future survival or recovery of the species.

Conservation and monitoring efforts continue on Torishima. Dr. Hiroshi Hasegawa of Toho University in Japan has made several trips per year to Torishima since 1976 to monitor the colony and band chicks. To protect the colony from mudslides and soil erosion, he mounted an enormous project to stabilize slopes and direct mud flows away from the colony with artificial berms and transplanted vegetation. These efforts have paid off with improved nesting success. More recently, he used an experimental program to establish a new colony in stable, well- vegetated habitat on the opposite side of Torishima in an area less likely to be affected by any future volcanic eruptions. Using decoys and broadcasting recorded albatross vocalizations, he successfully lured at least one pair of breeding adults to the new colony site, and the first chick was produced in 1997. Long-term plans call for establishing additional breeding colonies at other sites. Short-tailed albatrosses have also been observed on Midway Atoll in the Northwestern Hawaiian Islands since the early 1930's. Although there are no confirmed breeding records, Midway Atoll (now a national wildlife refuge) could be a potential future colony site.

In addition to natural threats on the breeding grounds, albatrosses face human-caused threats at sea. These include plastics ingestion, oil contamination, and longline fishing. Seabirds actively search out longline vessels in search of bait. During longline setting, baited hooks are available to surface-feeding birds from the time the hooks leave the vessel until they sink out of range. If birds are hooked while attempting to feed on bait, they can be dragged underwater and killed.

Seabird bycatch in southern fisheries has been effectively reduced through the use of: 1) weighted lines, which sink immediately upon entering the water, 2) streamers flown or buoys dragged above the longline as it is being set, and 3) underwater setting of longlines. Recognizing the threat that seabird bycatch could represent, representatives of the longline industry requested that the National Marine Fisheries Service (NMFS) implement regulations requiring the use of seabird deterrent devices in Alaska's hook-and-line groundfish fishery. In response to this request, and as a result of Biological Opinions issued under the Endangered Species Act, NMFS adopted regulations requiring the use of seabird bycatch reduction measures in these fisheries. Since 1995, observers on Alaskan fishing vessels have reported five short-tailed albatross deaths on longlines (two in 1995, one in 1996, and two in 1998). Although population modeling indicates that this rate of mortality in North Pacific fisheries will not jeopardize the future survival and recovery of the species, continued vigilance in improving the effectiveness of seabird bycatch deterrent measures, and in monitoring the other threats to the species, is critical.

The Biological Opinions on Alaska's fisheries also required NMFS to develop and implement a research plan to test the effectiveness of existing seabird deterrent methods in reducing bycatch in North Pacific fisheries. The plan has now been developed and the agencies are searching for funding. Meanwhile, fishermen in the North Pacific and Bering Sea continue to test and improve these methods. Seabird bycatch mitigation measures are also being tested and considered in Hawaiian pelagic longline fisheries. The U.S. Fish and Wildlife Service and NMFS are committed to continuing cooperative approaches to short-tailed albatross conservation with international and domestic partners.

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Because the short-tailed albatross was originally listed as a *foreign* endangered species, it is currently protected by the Endangered Species Act throughout its range *except* in the U.S. The potential threats posed by longline fishing (above), plastics pollution and oil contamination may not individually represent significant threats, but when combined with a catastrophic event on Torishima, could jeopardize the survival and recovery of this species. Thus, the species is still at risk. On November 3, 1998, the FWS published a proposal to extend the range over which the species is listed to include the U.S.