



U.S. Fish & Wildlife Service

Threatened and Endangered Species

SW Alaska Sea Otter

(Enhydra Lutris)

Status

The southwest Alaska Distinct Population Segment (DPS) of the northern sea otter was listed as Threatened under the Endangered Species Act on August 9, 2005 (70 FR 46365).

Description

Sea otters are a member of the weasel family (Mustelidae) and live in the near-shore waters along the North Pacific Ocean. They are the smallest marine mammal and are most closely related to river otters. Sea otters are suited to their marine environment by adaptations of dentition, skeletal structure, and pelage. Their dentition is adapted for crushing hard-shelled invertebrates such as clams, urchins, and crabs.

Their skeletal structure is loosely articulated and lacks a clavicle which allows for increased flexibility in swimming and grooming. The forelimbs are used primarily for grooming and foraging rather than swimming. The hind feet are flattened and flipper-like with an extension of the fifth digit which enables them to swim efficiently on their back on the surface of the water.

Sea otters do not have a blubber layer like those of other marine mammals; instead they depend upon a dense, water-resistant fur to provide insulation against cold. Sea otter fur has a greater number of hair follicles per inch than any other mammal.

Adult sea otters can reach lengths of up to 6 feet (1.8 m) but average about 4.5 feet (1.4 m). Adult male otters weigh from 70 - 90 pounds (32-41 kg) with some males reaching up to 100 pounds (46 kg). Adult female otters average 40 - 60 pounds (18-27 kg).



Sea otters in southwest Alaska have declined by over 50% since the 1970s.

Range and Population Levels

Historically, sea otters occurred in near shore waters around the North Pacific rim from Hokkaido, Japan through the marine coastal areas of the Russian Far East and the Pacific coastal areas in the United States as far south as Baja California. The southwest Alaska DPS ranges from Attu Island at the western end of the Aleutians, east to Kamishak Bay on the western side of lower Cook Inlet, and includes waters adjacent to the Aleutian Islands, the Alaska Peninsula, the Kodiak archipelago, and the Barren Islands

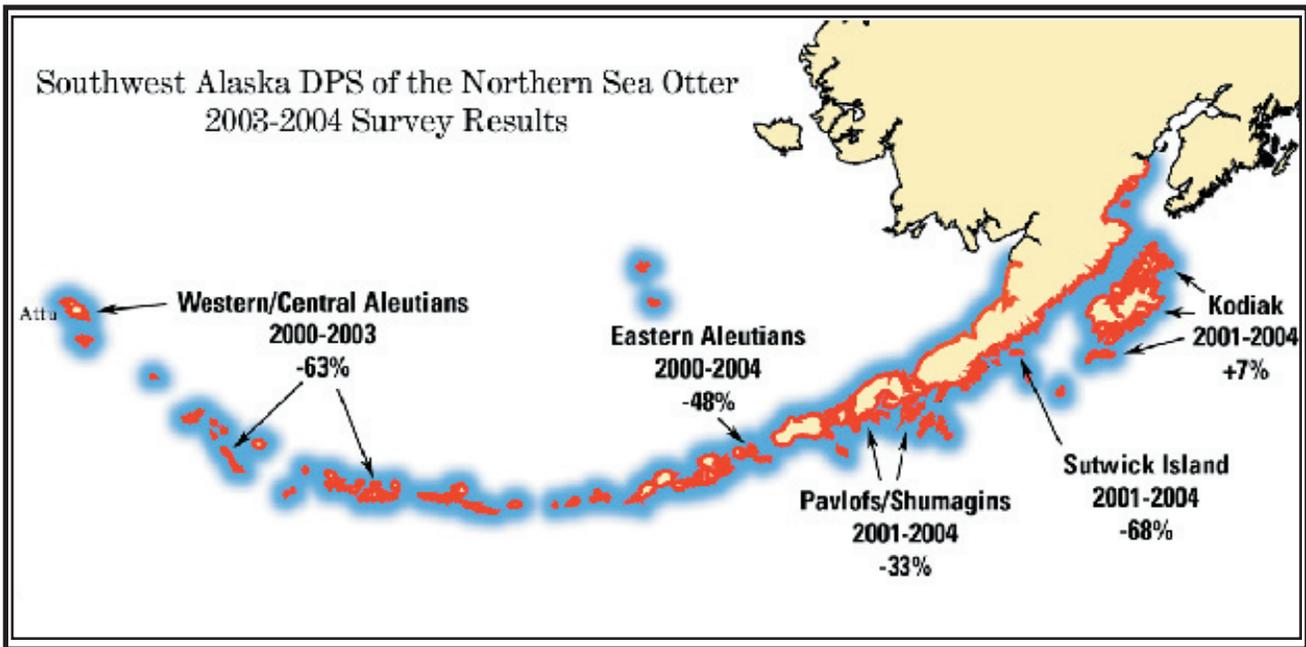
The world-wide sea otter population was drastically reduced to just a few thousand animals between the years of 1742 - 1911, due to commercial harvest by the Russian and American fur traders. Three population stocks of sea otters exist in Alaska today, where the current statewide

population is believed to number around 65,000 animals. The southwest Alaska DPS has declined by over 50%, from an estimated 94,050-128,650 in the mid-1970s, to approximately 41,685 at present.

Habitat and Habits

Sea otters' average life span is approximately 15 - 20 years. Female sea otters do not begin breeding until age 2 - 5 years. They may breed annually up until age 20. Males become sexually mature at ages 4 - 6 years, but may not hold breeding territories until several years later.

Mating occurs at all times of the year, and young may be born in any season. In Alaska, most pups are born in late spring. Sea otters generally have a single pup during each breeding cycle though the gestation period can be highly variable due to delayed



The greatest declines of sea otters took place in the western and central Aleutian Islands.

implantation of the fertilized egg. A pup will weigh from 3 to 5 pounds (1.4 - 2.3 kg) at birth and stay with its mother from 3 - 6 months.

Sea otters dive to gather food from the ocean floor in relatively shallow water in areas with both rocky substrates and soft bottom sediments. A loose pouch of skin at the axilla (arm pit) of each forelimb is used to store and transport food to the surface. They eat a wide variety of benthic invertebrates including clams, crabs, sea urchins, snails, octopus, and occasionally fish and sea birds.

Diving depth of sea otters is highly variable and ranges from 5 - 300 feet (2 - 100 m) depending on the prey species. Large food items are cracked by the flattened molars or pounded open with a rock and eaten individually while it floats on its back. Small prey items are often consumed whole. Foraging dives average 1-1½ minutes, though sea otters are known to remain under water for up to 4 minutes at a time.

Sea otters compensate for their small body size and no blubber layer by having an increased metabolism that helps them keep warm in the cold water. In captivity they will consume up to 25% of their body weight per day.

Reasons for Current Status
Following protection from

commercial fur harvests, northern sea otters in Alaska made an amazing recovery from the brink of extinction. The cause of the current decline of sea otters in southwest Alaska is unclear, however. Studies in the western and central Aleutians suggest that the decline is the result of increased adult mortality, rather than a lack of productivity.

There is no evidence to suggest that disease, starvation, or contaminants are responsible for the increase in mortality. Rather, the weight of evidence suggests that increased predation by killer whales (*Orcinus orca*) may be the cause of the decline in the Aleutians. Detailed studies into the cause of the decline have not been conducted in other areas of the southwest Alaska DPS, and additional research is warranted.

Management and Protection

In the United States, the Northern sea otter is protected from hunting and harassment by the Marine Mammal Protection Act of 1972 (MMPA). The U.S. Fish and Wildlife Service (Service) is the federal agency responsible for maintaining healthy populations of sea otters. In Alaska, biologists from the Service and the Alaska Science Center, U.S. Geological Survey, monitor the population health and status. The primary threats to the sea otter are generally human-related, and include competition for shellfish, mariculture,

oil and gas transport, logging activities in coastal areas, and commercial fishing.

Coastal Alaska Natives are allowed to harvest sea otters for subsistence and handicraft purposes under the MMPA. Since 1997, the Service has signed annual cooperative agreements with the Alaska Sea Otter and Steller Sea Lion Commission for the conservation and co-management of subsistence uses of sea otters.

The Service is developing a recovery plan for the southwest Alaska DPS to identify the cause of the decline, monitor population trends, and help conserve the sea otter population in southwest Alaska.

For more information please contact: Douglas Burn at 907-786-3807; email: Douglas_Burn@fws.gov

*U.S. Fish & Wildlife Service
Marine Mammals Management
Office 1011 East Tudor Road,
Anchorage, Alaska 99503*

For information on other threatened and endangered species, contact the U.S. Fish and Wildlife Field Office near you. Contact information is on

**U.S. Fish & Wildlife Service
1 800/344 WILD
<http://www.fws.gov>**