

Sea Otter

Enhydra lutris



Introduction

One of the heaviest members of the weasel family, the sea otter is also the second smallest marine mammal. Sea otters have the densest fur in the animal kingdom, ranging from 250,000 to a million hairs per square inch, which insulates them and maintains warmth. Unlike other marine mammals, the sea otter does not have a layer of blubber (fat) to help keep it warm.

Characteristics

The sea otter displays numerous adaptations to its marine environment. The nostrils and small ears can close. The hind feet, which provide most of its propulsion in swimming, are long, broadly flattened, and fully webbed. The fifth digit on each hind foot is longest, facilitating swimming while on its back, but making walking difficult. The tail is fairly short, thick, slightly flattened, and muscular. The front paws are short with retractable claws, with tough pads on the palms that enable gripping slippery prey.

Male and female Sea Otters differ in size, weight and life span as detailed in the table below.

	<i>Male</i>	<i>Female</i>
Size	4 – 5ft	3 – 4ft
Weight	Up to 100 lbs	Up to 75 lbs
Life span	10 – 15yrs	15 – 20yrs

Life Cycle

Mating takes place in the water and can be rough, the male biting the female on the muzzle – which often leaves scars on the nose – and sometimes holding her head under water.

Birthing takes place through out the year (most commonly between May and June). Each female will typically produce 1 pup weighing 3 – 5lbs. Twins are possible but uncommon and in most cases only one of the pups will survive. Approximately only 25% of pups survive their first year. Pups born to experienced mothers have the highest survival rates.

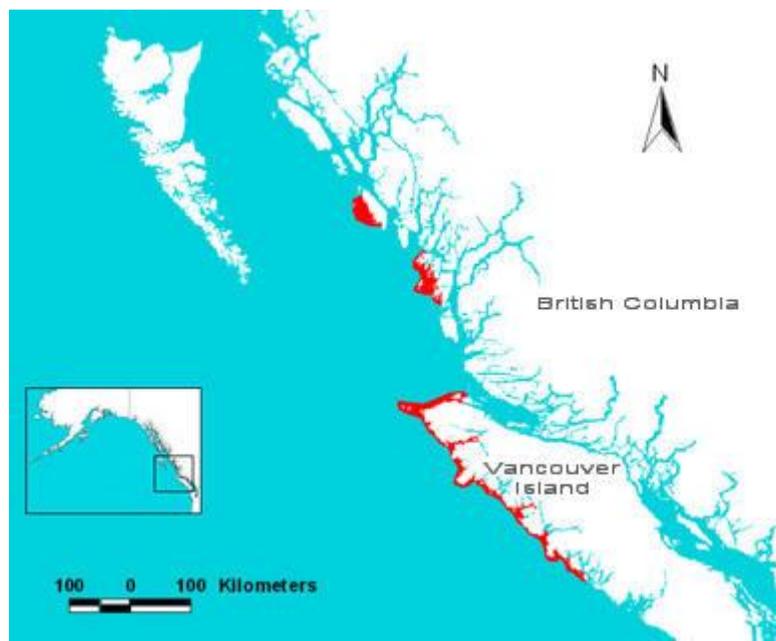
Sea otter pups have a coat (lanugo) that acts as a life preserver, they will float to the surface of the water like a cork when they are born. The pup cannot swim for several weeks after being born and the mother will carry it on her stomach this whole time. She will spend all of her time tending to her baby on her belly. She will groom it, feed it, play with it and teach it all while floating on her back. The pup will shed the lanugo at about 2 months of age and only then can it make its first dive.

Juveniles are typically independent at six to eight months, however a mother may be forced to abandon a pup if she cannot find enough food for it.

Habitat

Sea otters can be most commonly spotted in kelp forests, bays and coastal waters near islands, reefs and fjords. In British Columbia they inhabit the Goose Islands, off the central coast, and the isolated areas of the northwest coast of Vancouver Island, mainly the area of the Brooks Peninsula and adjacent Checleset Bay Ecological Reserve, an extensive area (34,650 hectares) of marine shoreline, reefs and islets providing habitat for BC's recovering sea otter population.

If you are in the Vancouver area the only place to spot a sea otter is at the Vancouver Aquarium.



Behaviour

The sea otter is diurnal. It has a period of foraging and eating in the morning, starting about an hour before sunrise, then rests or sleeps in mid-day. Foraging resumes for a few hours in the afternoon and subsides before sunset, and there may be a third foraging period around midnight.

Sea otters eat, sleep, and even have their babies in the water. In the daytime they float on their backs eating abalone, their favorite food (other dietary components include urchins, mussels, clams, crabs, snails and about 40 other marine species). To open the abalone shell they place a small rock on their chest and smash the shell against it. They are among many known animal species to use tools. An otter will eat approximately 25% of their weight in food each day, this is necessary to counter-act the loss of heat due to their cold aquatic environment.

They sometimes rest in coastal kelp forests, often draping the kelp over their bodies to keep from drifting away.

Threats

Under the Species at Risk Act sea otters are listed as "Special Concern", the definition for this is "A wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats".

Oil spills and other forms of pollution are currently the greatest threat to the sea otter. The difference between sea otters and most other marine mammals is that sea otters rely on their thick fur to insulate them from the cold water rather than relying on a layer of blubber as insulation. When the oil soaks the fur it will stick together in clumps and allow the water to reach the otter's skin. The otter, without his thick blanket of fur protecting it, will now become hypothermic and die from the cold. It can also die from ingesting the oil. The otter will try to groom the oil off with his mouth and he will ingest or inhale a large quantity of it. The oil will have detrimental effects on the otters kidneys, liver and lungs.

After the Exxon Valdez Oil spill a total of 1061 dead sea otters were collected and another 357 live sea otters were captured and treated.

Some of these live sea otters were released back into the wild while others who were determined not able to survive on their own were transferred to permanent facilities.

Sea otters were almost hunted into extinction because of their dense coat. More than 100,000 of these amazing mammals were killed to supply the fur trade. In 1911 they were given Federal Protection and their numbers started to increase. Alaska natives (Indians, Aluets, and Eskimos) can still hunt sea otters for food or to make Native articles and clothing. The Alaskan government regulates this process and all animals must be tagged and checked by the Fisheries and Wildlife office within 30 days.

What We Can Do To Help

Sea otter populations are increasing throughout North America, largely due to the introduction of legislation designed to protect them. The hunting of sea otters is no longer legal in Canada.

Prevention of oil spills and preparation for the rescue of otters in the event of one are major areas of focus for conservation efforts. Increasing the size and the range of sea otter populations would also reduce the risk of an oil spill wiping out a population. However, because of the species' reputation for depleting shellfish resources, advocates for commercial, recreational, and subsistence shellfish harvesting have often opposed allowing the sea otter's range to increase, and there have even been instances of fishermen and others illegally killing them.

Aside from the efforts already being put into their conservation, what the sea otter needs most from us is our understanding. Sea otters are a classic example of a keystone species; their presence affects the ecosystem more profoundly than their size and numbers would suggest. Sea otters keep the population of certain benthic (sea floor) herbivores, particularly sea urchins, in check. Sea urchins graze on the lower stems of kelp, causing the kelp to drift away and die. Loss of the habitat and nutrients provided by kelp forests leads to profound cascade effects on the marine ecosystem. North Pacific areas that do not have sea otters often turn into urchin barrens, with abundant sea urchins and no kelp forest.

Other Interesting Facts

- BC's Sea Otters are considered a threatened species and number from 2,000 – 3,000.
- Decimated by the fur trade in the early 1900s, and extirpated in BC by the late 1920s, sea otters from Alaska were transplanted to the northwest coastal waters in 1969-1972.
- Sea otters spend much of their lives in the water and can dive up to 100 m (330 feet) when foraging for food.

- The fur is thick year-round, as it is shed and replaced gradually rather than in a distinct molting season.
- Sea otters have unusually supple skeletons which allow them to groom their fur (much the same as a cat does). This ensures the waterproof guard hairs of their fur remain clean and effective.
- Around 15% of a sea otters time is spent grooming. This is done by licking and blowing on the fur.
- Sea otter babies are called pups and because their first coat (lanugo) acts as a life preserver, they will float to the surface of the water like a cork when they are born.

Bibliography

Wikipedia – http://en.wikipedia.org/wiki/Sea_otter

Arctic Studies Centre - http://www.mnh.si.edu/arctic/html/sea_otter.html

Defenders of Wildlife -

http://www.defenders.org/wildlife_and_habitat/wildlife/sea_otter.php

British Columbia Website - <http://www.britishcolumbia.com/wildlife/?id=100>

Friends of The Sea Otter - <http://www.seaotters.org/aboutus.html>

Department of Justice Canada - <http://laws.justice.gc.ca/eng/acts/S-15.3/page-37.html#h-39>

COSEWIC (Committee on the Status of Endangered Wildlife in Canada) - http://www.cosewic.gc.ca/eng/sct7/sct7_3_6_e.cfm