Sea Otters – Threats and Conservation Efforts
By: Bernadette Do

ABSTRACT
Enhydra lutris, also known by its common name of Sea Otter, are considered to be one of the smallest marine mammals. They can be found along the North American west coast to the northern region of Japan. The females and juveniles are separate from the male otters. Male otters also have more than one mate in their lifetime. Male sea otters are very aggressive during mating season. Sea Otters are threatened to become extinct and are currently being affected by multiple conservation organizations as well as by the government that passes laws. Sea Otters are threatened by both human problems as well as natural problems. If the species dies out, the ecosystem in which they belong would be tremendously impacted by their loss.

BACKGROUND
Common Name: Sea Otter
Scientific Name: Enhydra lutris
Family: Mustelidae
Current Status: Threatened

Enhydra lutris, also known as Sea Otters, are from the order Carnivora family Mustelidae. Sea Otters were considered to be one of the smallest marine mammals. The Sea Otter can be found along the North American west coast from Alaska to Baja California. Scientists have confirmed at least three subspecies of Sea Otters. With two of the three subspecies being found in Alaska and the last species found along the entire coast of California. The Sea Otters found along the California coast are known as either Southern Sea Otters or California Sea Otters. These mammals’ bodies are completely covered in fur with the exception of the pads that are found on the fore- and hind-paws along with the tip of their noses. Both male and female adult Sea Otters have a heavy coloring of dark brown to reddish brown fur. Their face and head have a lighter brown to blond coloring. The young newborn pups are usually light, buff-colored peage with the face and head hair becoming yellowish a few weeks after their birth. When the Sea Otters are born, they are about twenty two to twenty four inches long and about four to five pounds. The maximum length of a male Sea Otter is about four feet and ten inches while the females are four feet and seven inches. The male would weigh about ninety to one hundred pounds while the female would weigh seventy three pounds. The life spans of Sea Otters are fifteen years for males and twenty years for females. A peculiar species to the Sea Otters would be the Bear Otters. Sea Otters were hunted to almost extinction due to their highly prized fur throughout the eighteenth and nineteenth centuries. Their do not have an extra layer of fat to keep in the heat like other marine mammals. They have a layer of air that protects them from the cold heat like other marine mammals. They have a layer of air that protects them from the cold.

HABITAT
Sea Otters can be found from the coastal waters of the North Pacific starting from near Japan north of the Kamchatka Peninsula, east through the Aleutians, and south of the Gulf of Alaska and through the entire west coast of the North American continent to Baja California. The Sea Otters can be found in different type habitats along the coastline. These habitats range from the rocky Sea Floor and shorelines to plopes of mud and sand. They can be found in depths that are on or shallower than one hundred and thirty feet even though they can travel to much deeper waters during migration periods (Reeves 2002). Some of the habitats they are found are rocky and soft sea floors, barrier reefs, tidewater stones, and very dense kelp forests. Sea Otters use the kelp forests for resting and bringing (Hewens 2016).

DIET
Sea Otters usually eat invertebrates such as shellfish and crustaceans. They have blunted teeth that are helpful for breaking the shells of shellfish and crustaceans. Some invertebrates include clams, and mussels (Shimek, Cauldwell 1998). They also eat sea urchins. These diets usually depend on the habitat in which they live. The rocky bottoms provide very large prey that includes lobsters, sea urchins, abalone, and crabs. These large prey usually gives the highest amount of calories. From the soft bottom areas, Sea Otters usually look for smaller prey like those from the invertebrates that are in the sand including clams. Sea Otters are known to use tools when eating. They usually find a rock that they take back to the surface to use as a hammer to break the shells of shellfish and sea urchins. They would balance the prey on their stomach and use their forepaws to hit the rock against the other animal (Reeves 2002).

BEHAVIOR AND BREEDING
Sea Otters are very playful and sociable (Swain 2006). The female Sea Otters are usually found in a group with the pups while the males are separated into another group. These groups are called rafts. The females usually have their first pregnancy at the age of four or five and lasts around four to five months. The pups can be born year round, however in California the majority are born between January and March. The Sea Otter pups are usually weight around three to five pounds when just born. Pups for in a large amount of fur therefore making them unable to dive for food. The mother Sea Otters are around the pups for at least eight months of the pups’ Weime. The mothers are usually found grooming and carrying their pups on their chest. When the mother has to leave to find food, they set wrap the pup in the left before hunting for food. Around the fourth week, pups learn how to swim. When searching for their prey, they usually store the food they find in the loose folds of skin on their armpits “(Wienroth Classification)” (2014). Male Sea Otters usually have multiple female mates. The males are also very territorial during the breeding seasons which leads to them being quite aggressive toward females (Shimek, Cauldwell 1998).

Ecosystem Function
Sea Otters are an example of “keystone” species. “Keystone” species are species that has a very heavy impact on the structure and complexity of the community they are a part of. Sea Otters control the population of the species within their near shore habitat. The kelp forests in California are some of the greatest productivity rates of any ecosystem found naturally on earth. By being one of the most diverse ecosystems on earth it allows for a very stable ecosystem. Due to Sea Otters being able to eat thirty to thirty five percent of their body mass, there is quite an interesting predator prey relationship. The predator prey relationship allows for a diversity and distribution of prey species in the ecosystem. Sea Otters are also known as “Indicators.” This little means that the health and condition can help to show how healthy the ecosystems are doing (Shimek, Cauldwell 1998).

CONSERVATION
Sea Otters are currently considered to be threatened and protected by the Marine Mammal Protection Act and the Endangered Species Act. There have also been laws passed stating that the gill nets were not to be used at depths below fifty four meters (allthesea, 2014). The International Union for Conservation of Nature and Natural Resources (IUCN) have added Sea Otters onto the endangered list (“Sea Otter” 2011).

BEHAVIOR AND BREEDING

The southern Sea Otters are threatened by both natural and human problems as well as by the government that passes laws. Sea Otters are threatened by both human problems as well as natural problems. If the species dies out, the ecosystem in which they belong would be tremendously impacted by their loss. The females usually have their first pregnancy at the age of four or five and lasts around four to five months. The pups can be born year round, however in California the majority are born between January and March. The Sea Otter pups are usually weight around three to five pounds when just born. Pups for in a large amount of fur therefore making them unable to dive for food. The mother Sea Otters are around the pups for at least eight months of the pups’ Weime. The mothers are usually found grooming and carrying their pups on their chest. When the mother has to leave to find food, they set wrap the pup in the left before hunting for food. Around the fourth week, pups learn how to swim. When searching for their prey, they usually store the food they find in the loose folds of skin on their armpits “(Wienroth Classification)” (2014). Male Sea Otters usually have multiple female mates. The males are also very territorial during the breeding seasons which leads to them being quite aggressive toward females (Shimek, Cauldwell 1998).

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