## The Sea Otter



**Did You Know** that the sea otter that is such a tourist attraction in northern California, once abundant off the entire coast of California, has been barred from southern California waters for the last 24 years. As part of a compromise with fishing groups, the government declared waters south of Point Conception a "no-otter zone" and promised to round up any otters that strayed close to the Southern California mainland, where they dine on the same shellfish fishermen seek.

Years ago, southern sea otters inhabited waters from Oregon to Baja California, numbering 16,000 in the 19th century. They were nearly wiped out by fur traders who hunted them for their pelts. In 1977 they were protected under the Endangered Species Act.

The sea otter inhabits offshore environments where it dives to the sea floor to forage. It preys mostly upon marine invertebrates such as sea urchins, various mollusks and crustaceans, and some species of fish.

Unfortunately, with the elimination of the sea otter along the Palos Verdes coast the kelp beds, which were extensive, have suffered in recent times. The losses have been attributed primarily to excessive grazing by hordes of sea-urchins which is the otter's main food source.

The unfortunate problem for the sea otter is that it was competing with its human counterpart for its preferred prey species, particularly abalone, clams, and crabs.

But the sea otters had a significant positive effect on the marine environment, contributing to preservation of the kelp forests which directly supported other industries such as the kelp

harvesting industry via their well-known role in controlling sea urchin populations. Kelp is used in the production of diverse food and pharmaceutical products. By the end of 1957 all harvesting had ceased along the Palos Verdes coastline. The area covered by kelp was about five percent of its maximum in 1928.

The kelp forests also provided shelter and food for hundreds of fish species and dozens of marine mammals. Thousands of sea birds then feed on the



marine life, while millions of juvenile fish find shelter from predators within the protective canopy of kelp. Furthermore, the kelp forests perform a service similar to coral, protecting the beaches from erosion by acting as a breakwater for the massive ocean swells that would devastate the beaches that are so important to the marine environment.

During the 1960s, the entire kelp forest in southern California was threatened because the sea urchin population was so dense. Declared a menace, thousands of sport divers were recruited to destroy the sea urchins.

Hope is not all lost for the return of the sea otter in our waters as there is a move to remove the ban. So hopefully in the near future we will again see the sea otter off the coast of Southern California frolicking in lush kelp forests.