

## **California Sea Lion** *Zalophus californianus*

**Fantastic Flippers** - California sea lions are marine mammals with limbs that are modified as flippers. When swimming, sea lions are propelled by their large front flippers while the rear flippers act like rudders that help steer. Flippers enable sea lions to swim long distances and dive deep to find food. Sea lions are also adapted for movement on land! Amazingly they can rotate their rear flippers forward for improved mobility on land.

**Speedy Swimmers** - Sea lions have streamlined bodies that enable them to swim at speeds of 25-30 miles per hour. A layer of blubber under the skin helps provide warmth and buoyancy. Their nostrils and ears close when diving under water. When submerged for long periods (5-10 minutes) a sea lion will decrease its heart beat to reduce the amount of oxygen needed.

### **Classification**

Class: Mammalia  
Order: Carnivora  
Family: Otariidae  
Genus: *Zalophus*  
Species: *californianus*

### **Distribution**

California sea lions are found along the west coast of North America from British Columbia to Baja California and in the Galapagos Islands, the Sea of Cortez and the Gulf of Alaska.

### **Habitat**

They live along the coast and off-shore islands. They have been found up to 75 miles out in the ocean. They may also travel up rivers that feed into an ocean.

### **Physical Description**

- They are five to eight feet (1.6-2.4 m) long.
- Average weight for males is about 660 pounds (297 kg) although they can weigh up to 1000 pounds (450 kg); females are smaller weighing an average of 220 pounds (99 kg).
- California sea lions have a torpedo-shaped body with short dark brown to light brown fur.
- By the age of five, males develop a distinct bump, called the sagittal crest, on the top of their heads with lighter brown to tan fur giving the appearance of a mane.

### **Diet**

What Does It Eat?

*In the wild:* More than 50 species of fish, octopus, squid, crab, clams and lobsters.

*At the zoo:* Capelin, herring and mackerel supplemented with vitamins and minerals as well as a manufactured ground up fish product.

What Eats It?

California sea lions are preyed on by whales and sharks.

### **Social Organization**

California sea lions are highly social animals gathering in large groups called "colonies". They often rest closely packed together on land or float together in the water. During breeding season, adult males called bulls, battle for dominance and establish territories. Each male attracts a "harem" of up to 20 females. Females gather at a rookery – a beach or rocky outcropping - a few days before giving birth. In the safety of the rookery they give birth and nurse their young.

### **Life Cycle**

After a gestation of nine to 11 months females give birth to a single pup born fully furred with eyes open. Newborn pups are able to move around within 30 minutes after birth. The mother stays with the pup for up to six days before venturing back into the ocean to feed. While mothers are gone, pups gather together to play. Pups and mothers identify each other by sound and smell. Pups nurse for a year even though they can begin to digest fish at three months. Under their mother's protection, the pups will begin to venture into deeper water to feed. They leave their mother after one year. Females breed again about 21 days after giving birth and can delay implantation of the fetus for up to three months. Sea lions live from 12-30 years in the wild.

## **Adaptations**

### **Speedy Swimmers**

Sea lions have streamlined bodies that enable them to swim at speeds of 25-30 miles per hour. A layer of blubber under the skin helps provide warmth and buoyancy. Their nostrils and ears close when diving under water. When submerged for long periods (5-10 minutes) a sea lion will decrease its heart beat to reduce the amount of oxygen needed.

### **Fantastic Flippers**

California sea lions are marine mammals with limbs that are modified as flippers. Their wing-like flippers provide increased speed and grace in the water. When swimming, sea lions are propelled by their large front flippers while the rear flippers act like rudders that help steer. Flippers enable sea lions to swim long distances and dive deep to find food. Sea lions are also adapted for movement on land! Amazingly they can rotate their rear flippers forward for improved mobility on land.

### **Underwater Senses**

Vision is the sea lions' most important sense. They have large eyes that must function well in both water and air. The tapetum lucidum, a mirror-like layer in the back of the eye, reflects light back through the eye to aid in night vision. They also have a nictitating membrane, a third eyelid that moves across the eye to wipe away sand and debris. They have long whiskers called "vibrissae" that are very sensitive and can detect slight vibrations in murky water enabling them to capture prey. Sea lions have small external ear flaps and can hear as well as humans on land. In the water, their hearing is exceptional – they can hear higher frequency sounds than humans.

### **Are You My Mother?**

Sea lion mothers stay with their newborn pups for about six days after birth, nursing the pups and bonding with them. Then the mother returns to the water to feed for several days. When she returns to the beach, she calls to the pup and the pup answers. Mother and pup recognize each other by their distinctive calls. Mothers confirm the recognition by smell.

## **Conservation Connection**

*IUCN Status: Lower Risk Least Concern.*

California sea lions are close to becoming a threatened species due to competition with commercial fisheries for declining fish supplies. They can also get caught in drift or gill nets and ocean debris. The Marine Mammal Act of 1972 protects California sea lions.

## **Fun Facts**

- Sea lions have tiny external ear flaps; seals do not have external ears.
- Scientists believe sea lions may be as intelligent as cats and monkeys.
- Unlike many other species of sea lion, the male California sea lion lacks a well-defined mane.