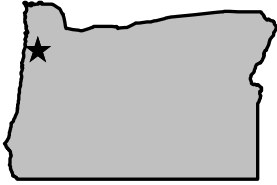


CHAPTER 7—CAPE MEARES NATIONAL WILDLIFE REFUGE

A Rock Shore Biome



In 1938 **Cape Meares National Wildlife Refuge** was established to help protect nearly 139 acres of old growth forest along the Pacific coastline. Ancient forests, consisting of tall stands of Sitka spruce and western hemlock provide incredibly rich habitats for several species of endangered and threatened animals, including bald eagles, marbled murrelets, and northern spotted owls. The vantage along the sea cliffs provides for fine whale watching during the creatures' migrations along the Pacific coast. The refuge is named after Captain John Meares, the first to sail into what is now known as Tillamook Bay.



Gray Whale (*Eschrichtius robustus*) These huge mammals spend their summer months in the northern waters off the coast of Alaska and the winter months in the waters off Mexico's Pacific Coast. This migration, round trip is over 12,000 miles! Gray Whales eat shrimp and other creatures found along the ocean's bottom. These whales have no teeth and use plates of baleen that hang from their upper jaw to filter food from ocean water. Female Gray Whales are larger than their male counterparts, reaching lengths up to 50 feet and weighing as much as 35 tons.



Marbled Murrelet (*Brachyramphus marmoratus*) This small seabird spends much of its time in the waters of the Pacific Ocean, but must fly inland to make nests among old growth forest stands. This murrelet eats small pacific fish like sandlace, herring, and seaperch and can often be seen carrying their catch great distances to their nesting sites. Because of the decline in Pacific old growth forests, this species has struggled to find adequate nesting ground. The Marbled Murrelet was designated as threatened in 1991, though their numbers appear to be rebounding.



Giant Pacific Octopus (*Octopus dofleini*) Though octopuses do not usually live more than a year or two, the Giant Pacific Octopus lives up to four years. The deep red body of the octopus, also called a mantle, can grow to an average length of 16 feet when measured from tentacle tip to tentacle tip. One caught off the Pacific Coast weighed over 600 pounds and measured 33 feet from tip to tip! The Pacific Octopus is an extremely intelligent creature and has been known to solve complex puzzles in laboratory aquariums. Octopuses have no bones in their body, though their beak is made of a material similar to fingernail.



Sitka Spruce (*Picea sitchensis*) The tallest conifer in North America, the Sitka Spruce reaches an average height of near 200 feet. This tree grows along the Pacific Coast of British Columbia, Alaska and southward into Northern California. Native Americans used this spruce to weave baskets, make rope, and prized its inner bark as a laxative and a source of Vitamin C. Today the Sitka is used in ship building and in the making of several different musical instruments. It is Alaska's state tree.

Shoreline Bird Tracking Activity: Contact the U.S. Fish and Wildlife Service's Sister School Program at the address below and arrange for an e-FieldTrip for your students. This will involve interactions with experts on shorebird biology as well as a tour of typical shorebird habitat. The site also offers a multimedia virtual visit, live chat with wildlife biologists, and the opportunity to email questions to these experts.

<http://sssp.fws.gov/index.cfm>