

MUSSELS

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MENU - A

SCIENTIFIC CLASSIFICATION

COMMON NAME:	mussels
KINGDOM:	Animalia
PHYLUM:	Mollusca
CLASS:	Bivalvia
SUBCLASS:	Pteriomorphia
ORDER(S):	<ul style="list-style-type: none">• Arcoida• Limoida• Mytiloida• Ostreoida• Pterioida
FAMILY:	
GENUS SPECIES:	Approximately 250 species

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FAST FACTS

DESCRIPTION:	<p>Right and left sides of the shell are held together by an elastic ligament. Near one end of the ligament on each valve is an elevated knob called the umbo. The end of the animal nearest to the umbo is the anterior end.</p> <p>Mussel shells are thick, pointed near the umbo, and have radiating ribs and growth lines. Shells appear to be worn from abrasion or from commensal species such as barnacles and limpets.</p>
SIZE:	At least 12.7 cm (5 in.) in the intertidal zone and up to 25.4 cm (10 in.) in subtidal clumps.
LOCOMOTION:	Mussels seldom move after settling. They live attached to rocks or other suitable substrate by byssal threads, which are secreted by the foot. Young mussels use byssal threads to climb.

DIET:	Plankton and detritus
FEEDING:	Filter feeders; a mussel can filter two to three quarts (1.89 to 2.84 L) of water an hour when they are completely submerged.
REPRODUCTION:	Mussels are either male or female. Fertilization occurs in the water.
RESPIRATION:	Mussels use gills for gas exchange.
LIFE SPAN:	In general, bivalves (mussels, clams, oysters, and scallops) can live 20 to 30 years.
RANGE:	Temperate oceans worldwide
HABITAT:	Low to mid-intertidal on rocks, wharf pilings, and sea walls; mussels thrive in areas of high wave energy and are usually found in dense mats referred to as "mussel beds."

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FUN FACTS

1. A California mussel, *Mytilus californianus*, may reach a length of 86 mm (3.4 in.) within its first year.
2. Humans have been using mussels as a source of food for thousands of years. Some species, such as the blue mussel (*Mytilus edulis*), are cultivated in order to protect the natural mussel beds from destructive harvesting practices.
3. For more information, please visit the Tide Pool Infobook.

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ECOLOGY AND CONSERVATION

Mussels filter dinoflagellates that produce toxins that can cause paralytic shellfish poisoning in humans. Mussels can accumulate large amount of this toxin when the dinoflagellates are most abundant. To prevent shellfish poisoning, mussels are often quarantined during times of large dinoflagellate blooms.

Many mussel species are considered "invasive species" when they are introduced out of their natural range. One example is the Asian mussel, *Musculista senhousia*, which has invaded areas in Australia and San Diego, California.

Beachcombers, tidepoolers, and divers must remember not to disturb or collect any specimens that they may encounter. The removal of animals from an ecosystem may disrupt ecological processes and decrease the diversity in areas that are frequently visited. Because of their specific nutritional and physiological needs, certain animals, such as mussels have a much better chance for survival in their natural environment than in an unregulated home aquarium. Also, a fishing license is required for collecting mussels to eat and they should not be collected during quarantine periods.

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