

Intertidal Zone Residents

High Intertidal Zone



Limpet Snail

Limpets attach very firmly to rocks. Their shell is flush with the rock surface, forming a watertight seal. This protects them from drying out. They graze on diatoms and algae

growing on rocks.

Barnacle larvae are free swimming. The juvenile barnacle cements its head to rock in the vicinity of other barnacles. They are able to completely shut their shell when exposed to air to keep from drying out. Barnacles use their feathery legs to move food into their mouths.



Barnacle



Periwinkles

Periwinkles use their sticky mucous to cement themselves to rocks in the splash zone. They can survive extended periods out of the water. Periwinkles are not true marine snails and would

drown if submersed for long.

This anemone has algae living inside its tissue. The algae living in it's intestine provide extra nourishment for the anemone while the anemone provides protection for the algae from grazers (e.g. snails). Giant green anemones feed on mussels, crabs and small fishes.



Giant Green Anemone



Ochre Star

The ochre star feeds on mussels, barnacles, snails and even limpets. It will only eat under water. During low tides the ochre star pulls off mussels and drags them farther out beyond the

tideline to devour them under water. To do so the ochre star turns its stomach inside out and engulfs its prey.

Middle Intertidal Zone



Black Abalone

Black abalones tuck themselves safely into rock crevices. They move about primarily at night. They eat giant kelp, feather boa kelp, and bull kelp.

Purple sea urchins are equipped with hundreds of tiny tube feet. These serve several functions. Sea urchins use them to move and to anchor themselves into rock crevices where they wait for algae to drift by. The tube feet are used to transport pieces of algae that land on the sea urchin's back to its mouth.



Purple Sea Urchin



Leather Chiton

Chitons have 8 slightly overlapping plates that allow it to be more flexible than having a single solid shell for protection. It's muscular foot enables the chiton to cling

tightly to uneven surfaces. It eats brown and red algae including kelps, sea lettuce, and encrusting diatoms. Chitons also like to munch on sponges, tiny barnacles, spirobid polychaetes, and bryozoans.

Groups of aggregating anemones are actually clones of a single individual. Each clone is equipped with stinging cells. One cluster of clones will not tolerate clones of another anemone to touch them. They will immediately zap each other with their stinging cells.



Aggregating Anemone

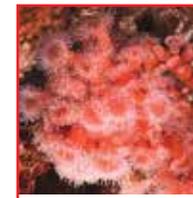
Low Intertidal Zone

Sponges come in many different forms and sizes. Some are encrusting varieties such as the red volcano sponge, others are free standing such as the orange puffball sponge. Water freely circulates through pores and channels in the sponge's



Sponge

body, thereby supplying it with oxygen and nutrients and at the same time flushing out waste. Sponges do not have a digestive, nervous or circulatory system.



Strawberry Anemone

Colonies of strawberry anemones like to cling to steep rock faces. They multiply by dividing one individual in two. These clones do the same until they carpet about one square meter of rock surface. Strawberry

anemones eat copepods, and other zoo plankton.

Unlike other sea stars, the leather star has a smooth, soft, velvety texture. It heavily preys on strawberry anemones but will devour giant green anemones, aggregating anemones and even sea cucumbers. Sea stars are Echinoderms and therefore related to sea urchins, sanddollars and sea cucumbers. They display a 5- point symmetry and have tube feet.



Leather Star