

Green Sea Anemones (*Anthopleura spp.*)

Phylum Cnidaria/ Class Anthozoa

Where do I live?

All along the west coast, Alaska to Panama, in the mid to low tide zone

What do I eat?

Plankton, mussels, crabs, and small fish

The anemone has only one hole for both its anus and its mouth. During feeding, it uses nematocysts on its tentacles to capture and sting prey. Once food is caught, it closes in and digests its meal within fifteen minutes!

Cool Facts:

Anemones are the squirtguns of the ocean.

They have no skeleton and consist mostly of water.

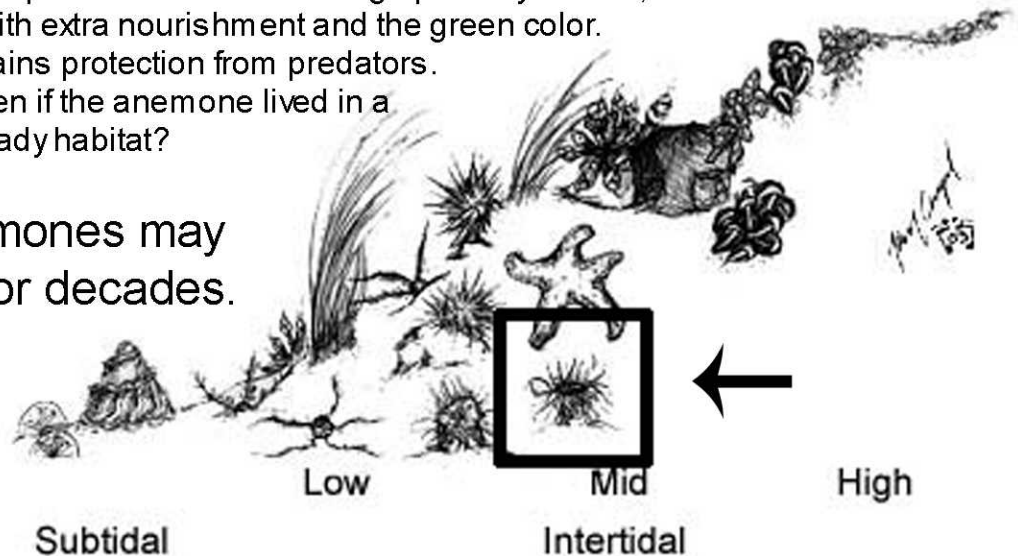
The Green Sea Anemone is not really green.

The tissues of this animal are part of a symbiotic relationship with a unicellular marine plant. The two organisms help each other out. Through photosynthesis, the algae provides the animal with extra nourishment and the green color.

In return, the algae gains protection from predators.

What would happen if the anemone lived in a shady habitat?

Anemones may live for decades.





Wavy Top Turban Snail (*Lithopoma undosum*)

Phylum Mollusca/ Class Gastropoda

Where do I live?

Subtidal to low tide zone from Point Conception to Baja California

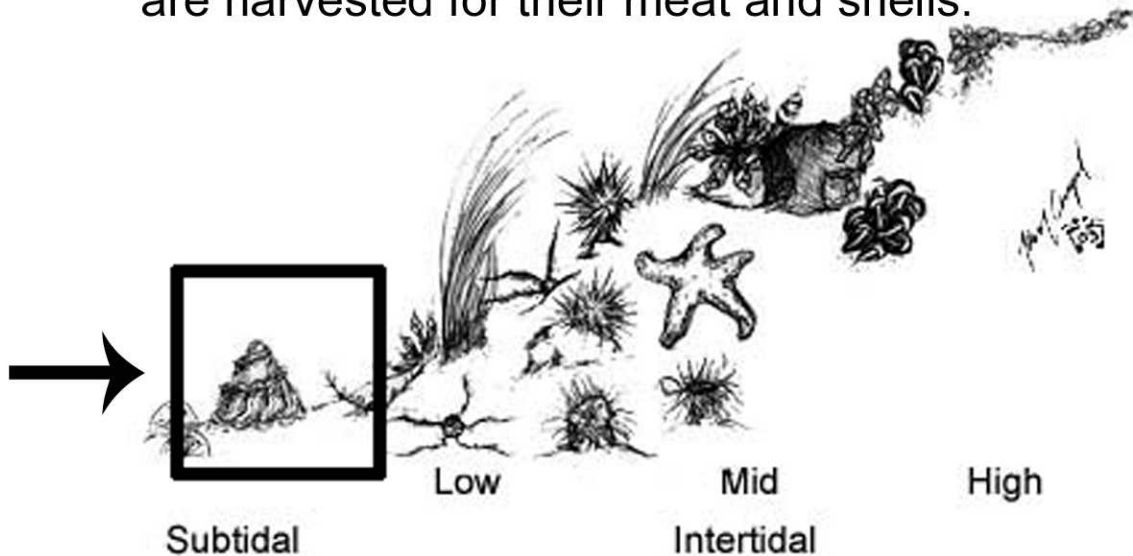
What do I eat?

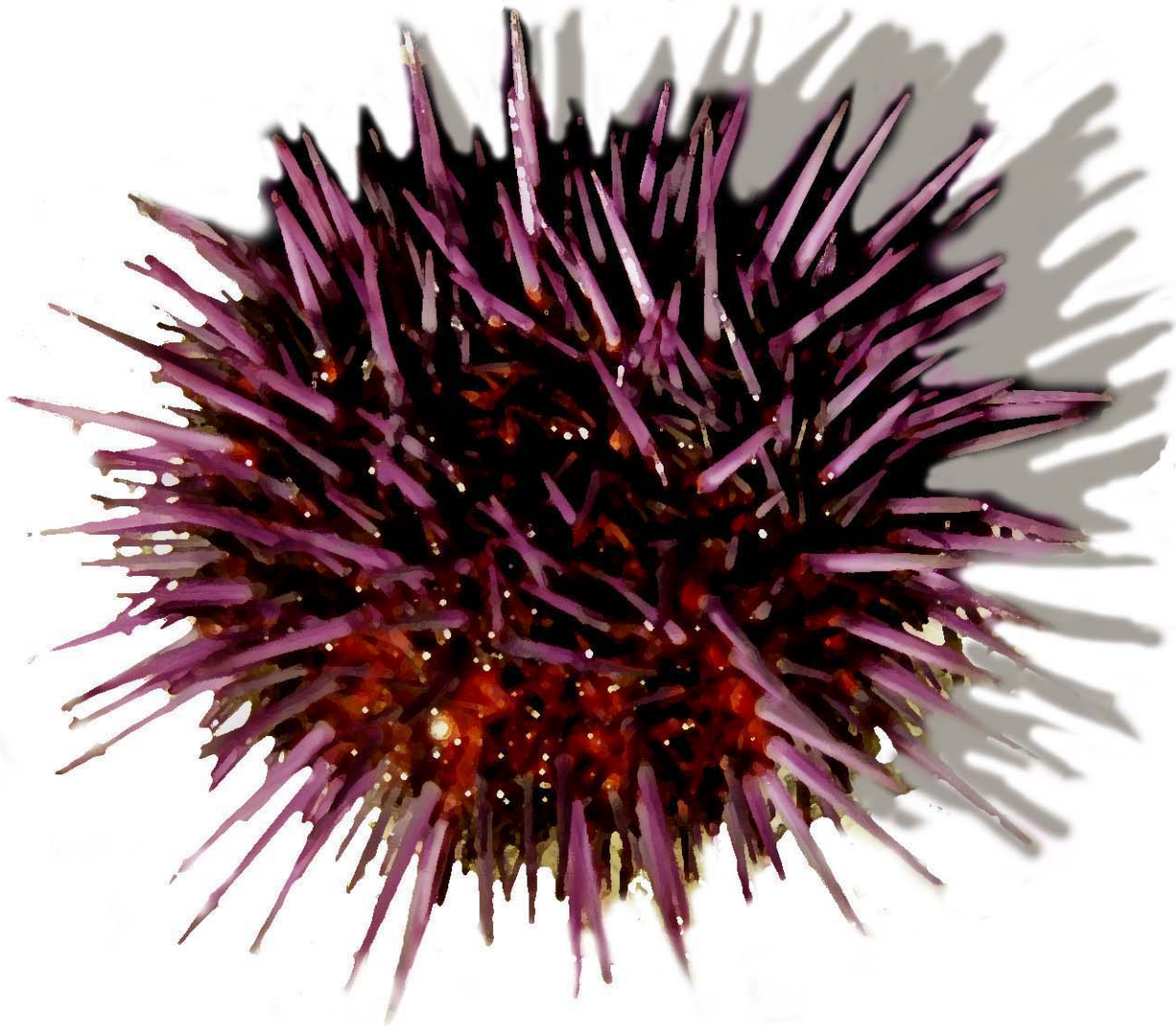
Microscopic algae, diatoms

Cool Facts:

Snails have simple eyes and chemical receptors on the ends of their tentacles.

Wavy top turban snails can grow to be 10 cm and are harvested for their meat and shells.





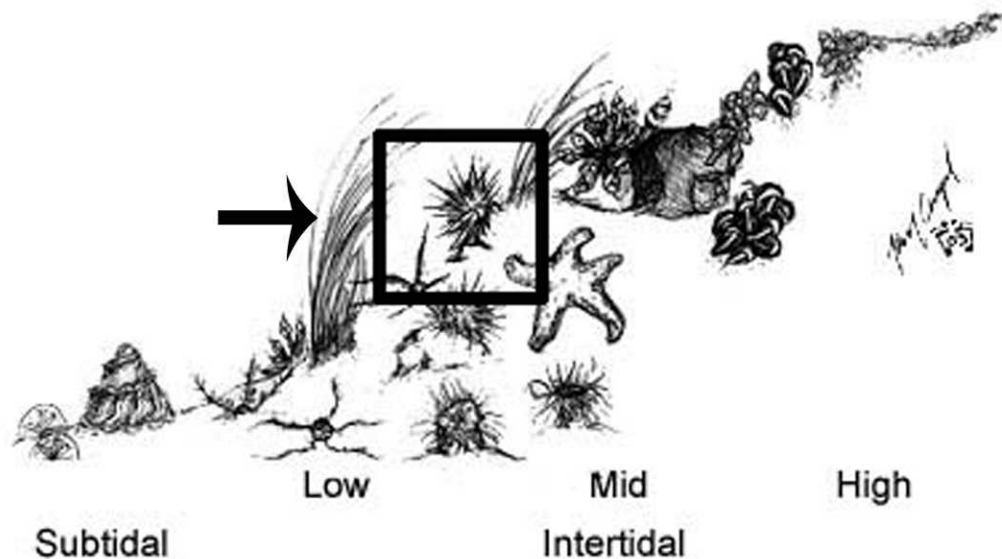
Purple Sea Urchin (*Strongylocentrotus purpuratus*)

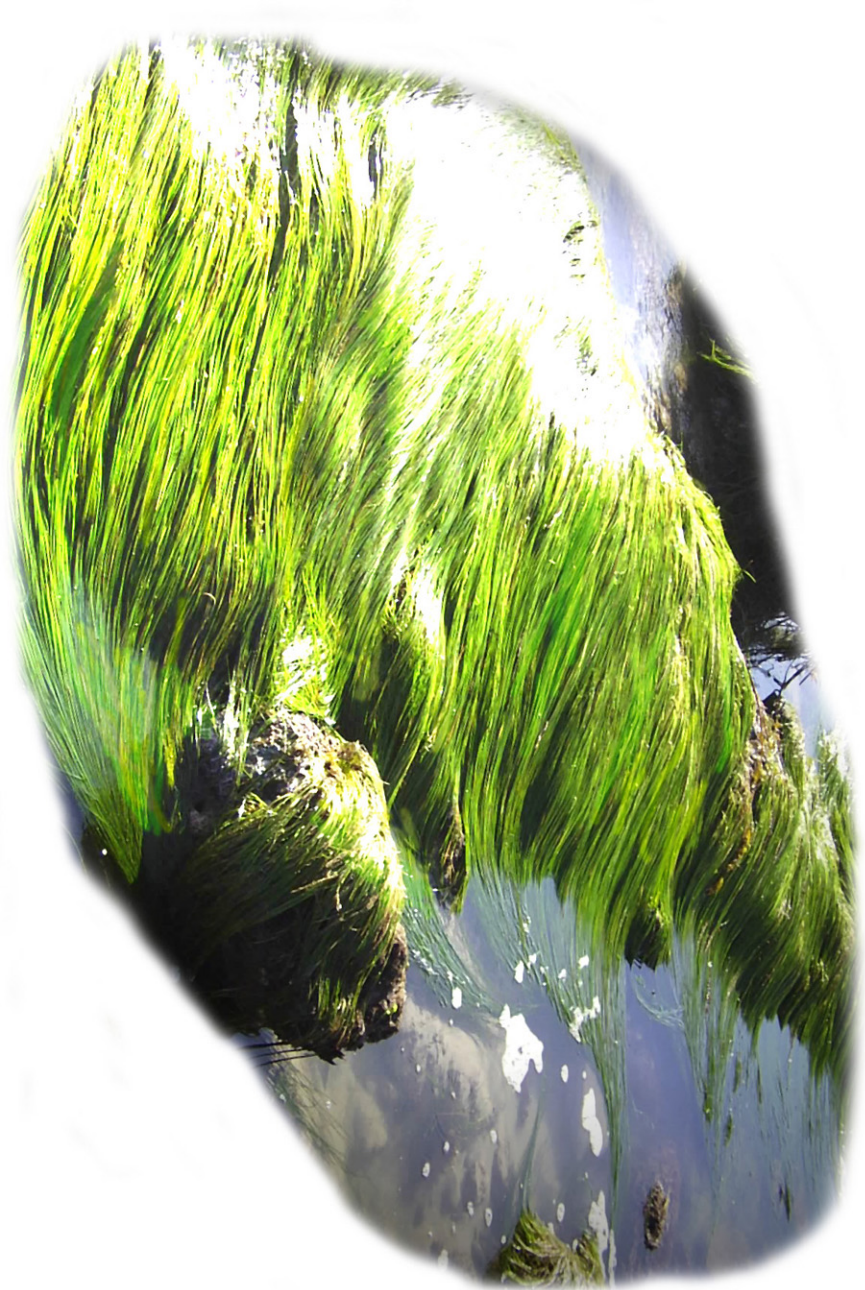
Phylum Echinodermata/ Class Echinoidea

Where do I live?
Low tide zone from Alaska to Mexico

What do I eat?
Algae
The purple urchin has teeth on its bottom side that are used to scrape off algae from rocks.

Cool Facts:
Urchins use their spines to dig holes in rocks for burrowing.
Spines are used as weapons and can break off and inject poison into attackers.





Surfgrass (*Phyllospadix* spp.) Marine Flowering Plant

Where do I live?

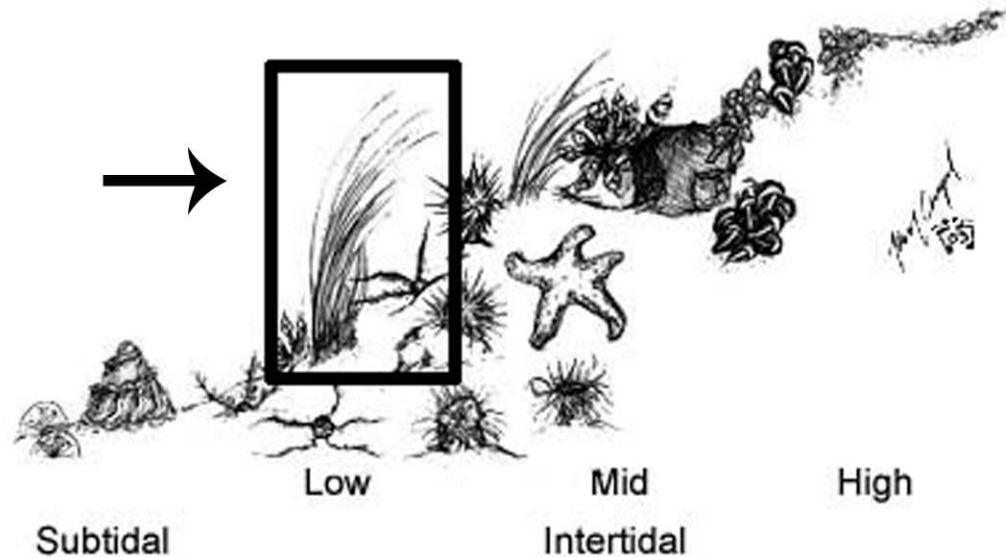
Subtidal to low tide zones from Alaska to Mexico.

Cool Facts:

This plant uses water currents to pollinate its flowers.

Surfgrass prefers violently surfy conditions and provides habitat for a variety of marine life.

Surfgrass can grow up to 3 meters long.





California Mussel (*Mytilus californianus*)

Phylum Mollusca/ Class Bivalvia

Where do I live?

Attached to rocks and other mussels in the mid tide zone.
California mussels are found up and down the west coast
from Alaska to Baja California.

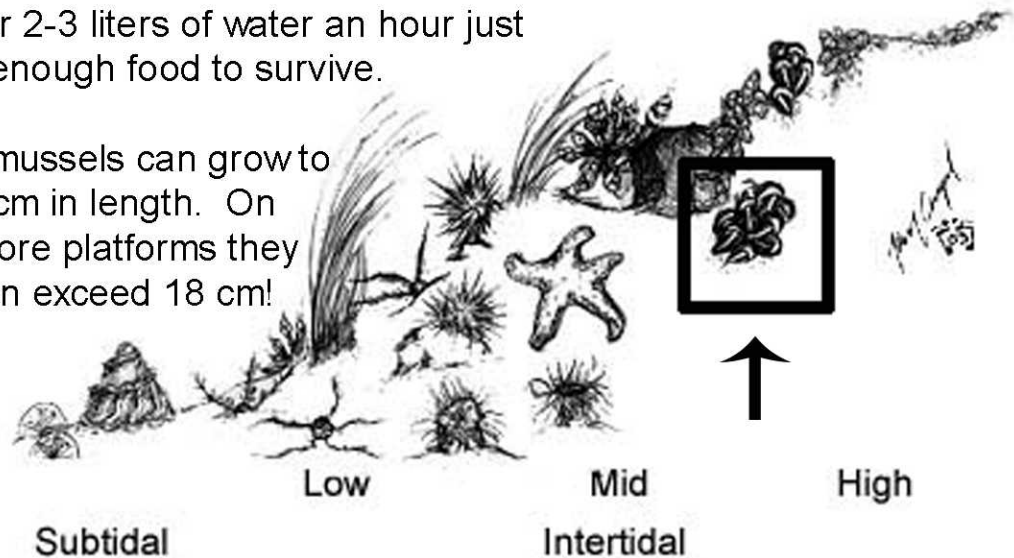
What do I eat?

Fine organic debris and living plankton
California mussels are filter feeders. They have tiny hairs called
cilia that they use to collect and transfer food from the water
column to their mouth.

Cool Facts:

A mussel must filter 2-3 liters of water an hour just
to collect enough food to survive.

Some mussels can grow to
12 cm in length. On
offshore platforms they
often exceed 18 cm!





Sea Lettuce (*Ulva* spp.)

Chlorophyta

Where do I live?

On the surface of rocks in the upper to mid tide zones

This bright green algae forms large mats, attaching itself to rocks with tiny holdfasts.

What eats me?

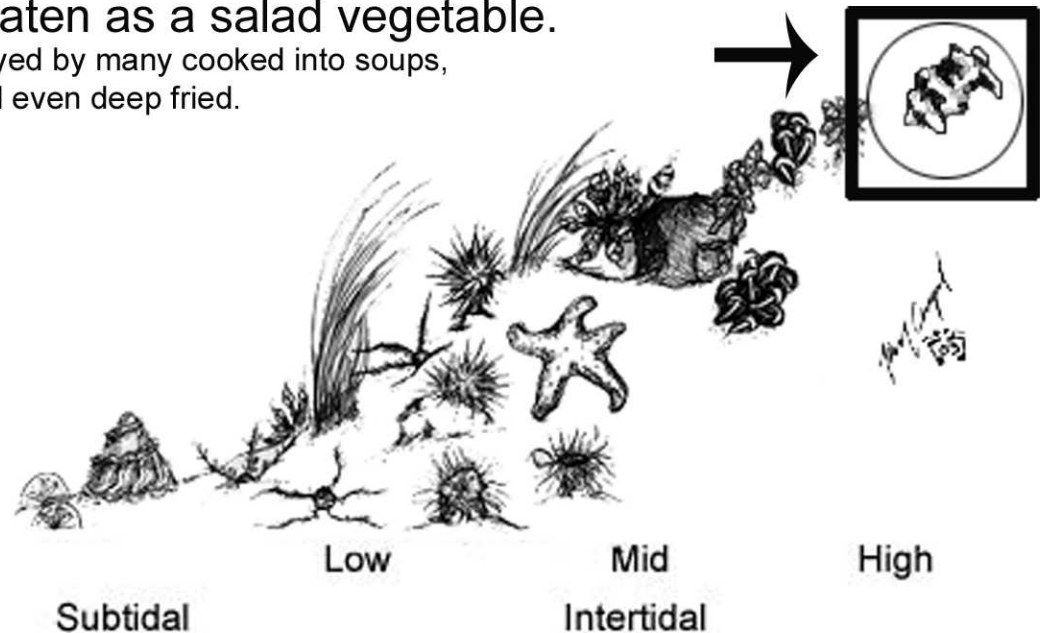
Worms, fish, sea slugs and birds

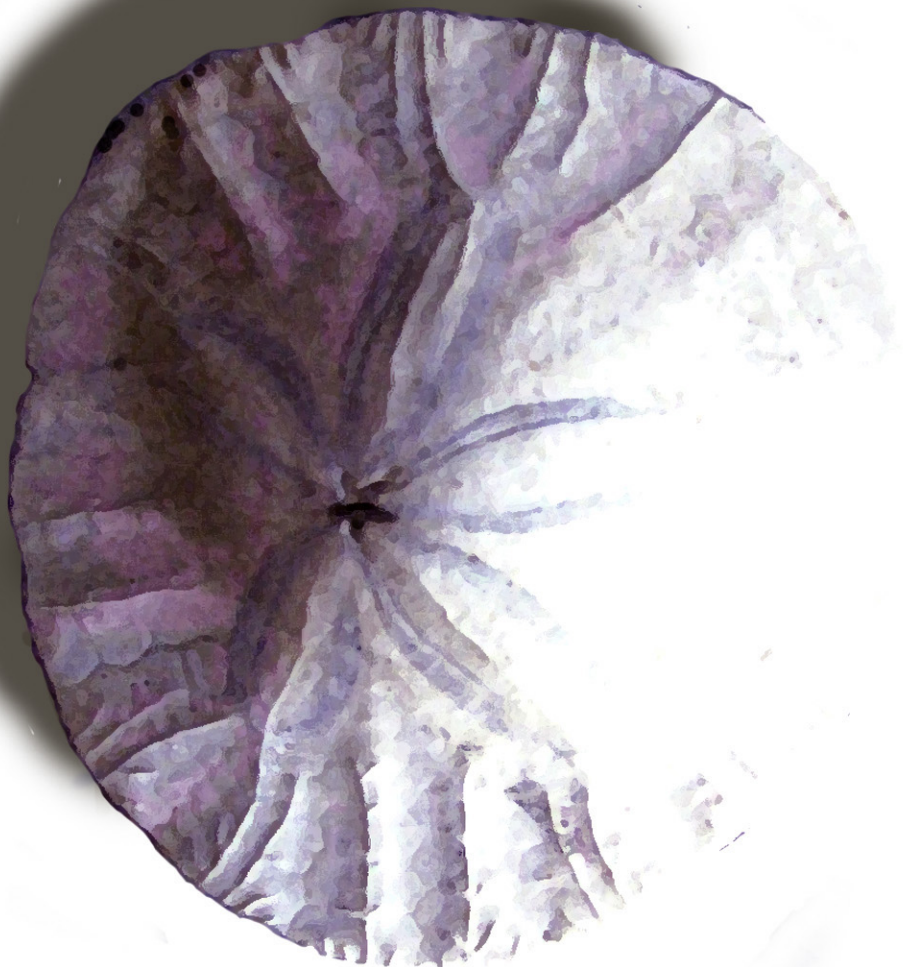
Cool Facts:

Sea Lettuce is only two cells thick and thrives in polluted and disturbed waters.

This green algae is eaten as a salad vegetable.

Sea lettuce is also enjoyed by many cooked into soups, dried and even deep fried.





Sand Dollar (*Dendraster excentricus*)

Phylum Echinodermata/ Class Enchinoidea

Where do I live?

Subtidal zone from Alaska to Baja California

Dead sand dollars are found more commonly than live ones. When they die, sand dollars turn from purple/brown to ghost white.

What do I eat?

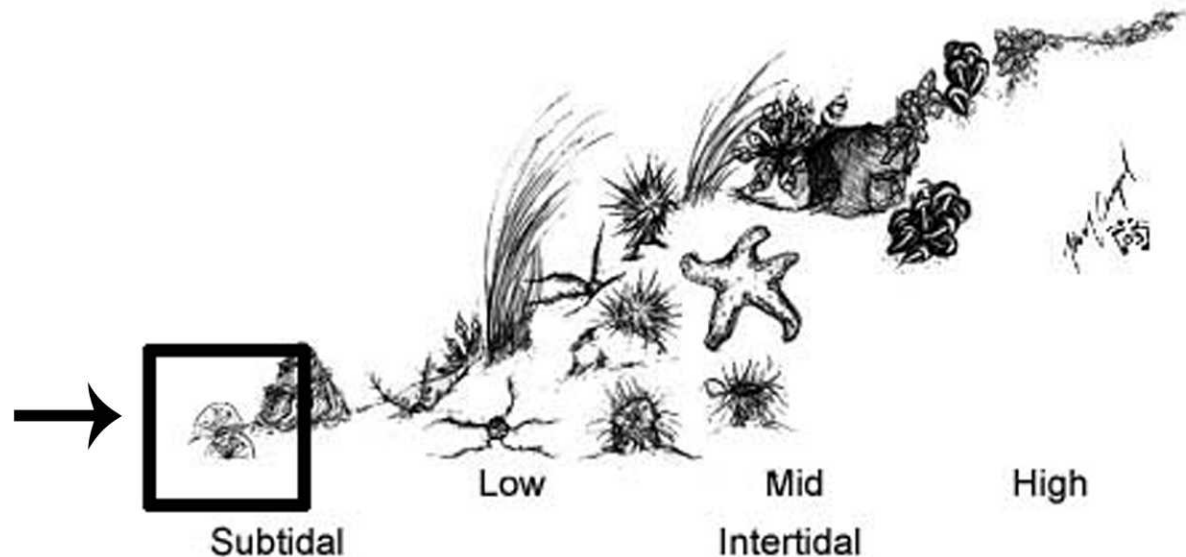
Plankton and plant detritus

Sand dollars bury themselves edgewise in the sand, leaving half of their body exposed to their food source.

Cool Facts:

Sand dollars are closely related to sea urchins sea stars.

Like sea urchins and stars, they have tube feet and their bodies are segmented into fifts.





Sea Star (*Pisaster giganteus*)

Phylum Echinodermata/ Class Asterozoa

Where do I live?

On rocks in the mid to low tide zone

Sea stars are found in waters between Baja California and Alaska.

What do I eat?

Preferably the CA mussel but also limpets, barnacles, and chitons

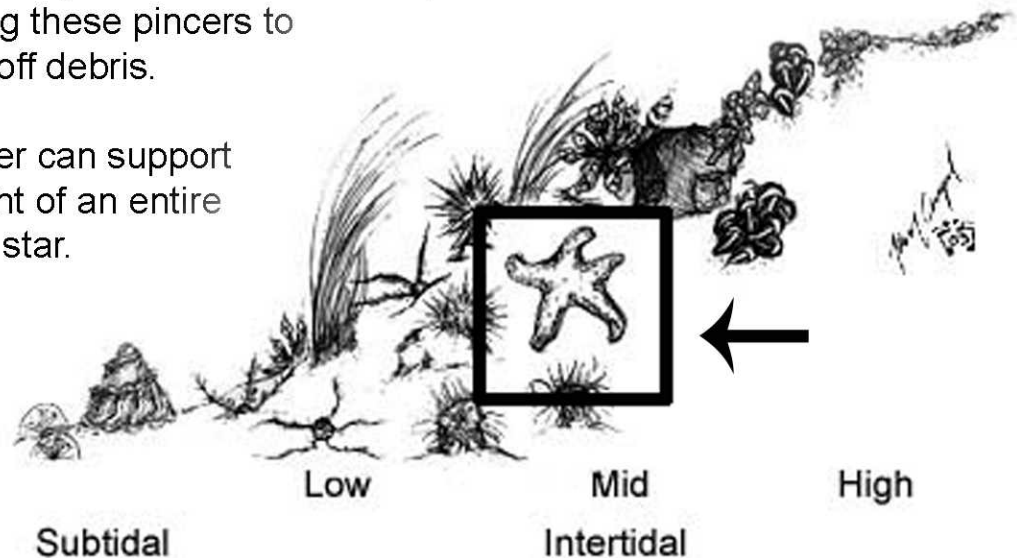
The sea star uses its tube feet, which also function as taste receptors, to surround the mussel with its whole body. Once the mussel is opened, the star extends its stomach through its mouth and digests the mussel within its own shell. This process can take up to three days!

Cool Facts:

Sea stars can grow to have a diameter of 50 cm.

The upper surface of their skin has very tiny pincers-like body parts that are shaped like little pinching beaks. The star keeps itself clean by using these pincers to pick off debris.

One pincer can support the weight of an entire star.





Spiny Brittle Star (*Ophiothrix spiculata*)

Phylum Echinodermata/ Class Ophiuroidea

Where do I live?

Low tide to subtidal zones

This brittle star lives in waters
from Northern California to Peru.

What do I eat?

Organic particles and small animals

A brittle star spends much of its time in crevices or kelp holdfasts with
its arms hanging out waiting to catch food.

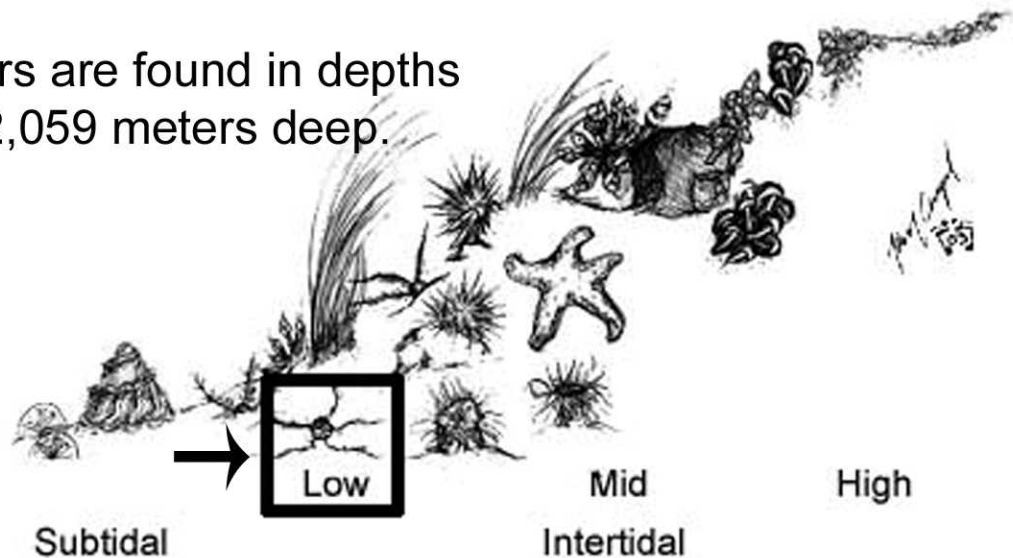
In some places spiny brittle stars densely coat the bottom, reaching
densities of more than 1,000 stars for every meter squared.

Cool facts:

Brittle Stars break their own arms as defense.

If attacked, the part of the arm grabbed snaps off piece by piece and is later regrown.

Brittle Stars are found in depths
up to 2,059 meters deep.





Goose Barnacle (*Pollicipes polymerus*)

Phylum Arthropoda/ Class Crustacea

Where do I live?

Mid tide zone from British Columbia to Mexico

What do I eat?

Plankton and detritus (tiny marine debris)

When submerged in water, gooseneck barnacles extend their branched feet.
They grab food out of the water column by passing water through spaces
between their branched feet.

Cool Facts:

Goose barnacles get up to 8 cm in length.

Their long necks are semi-flexible and allow them mobility.

Barnacles are related to crabs,
shrimp, and lobsters.

