

# Guide to Life on the Rocky Shore

## Crustaceans

Related to insects, this group typically has a hard outer shell and jointed legs. Many crustacean species are planktonic and never grow to more than a millimetre in length.

Crabs scuttle sideways to hide under rocks and seaweed where it is damp and out of the view of birds.



Hairy handed crab



Purple shore crab

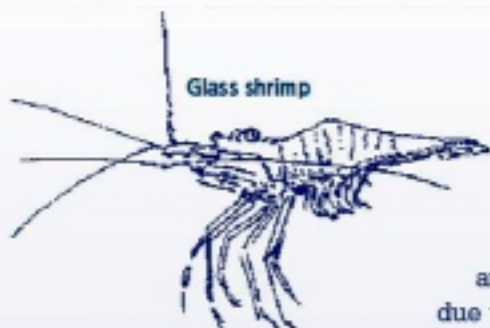


Half crab

The shell resembles a volcano, but when the top door opens, the barnacle kicks out its hair-covered legs to filter tiny plankton from the passing water.



Barnacles

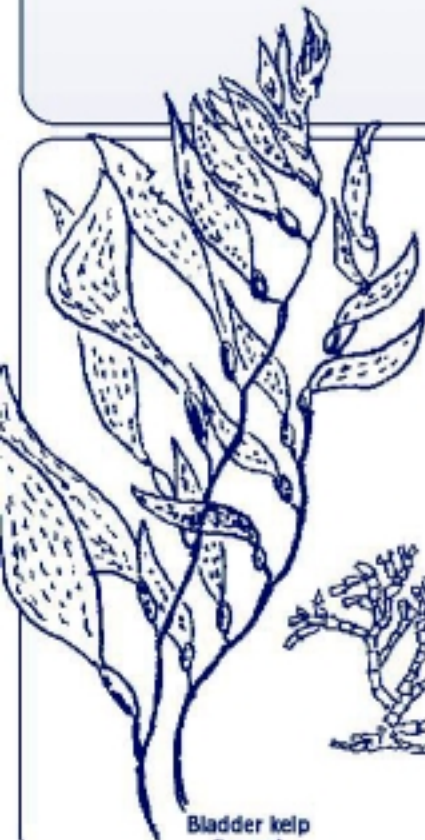


Glass shrimp

In tide pools glass shrimp are almost invisible due to their clear shell

## Seaweeds

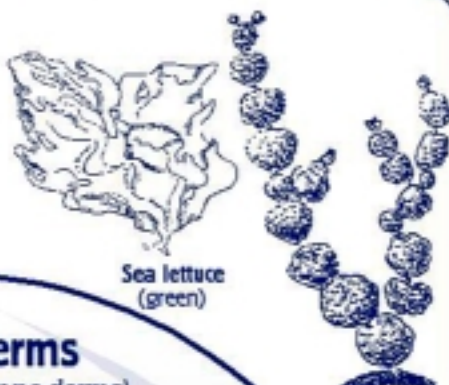
Plants in the ocean are vital as food producers and oxygen releasers. Oceanic plants may produce as much as 70% of the world's oxygen. Phytoplankton are microscopic but seaweeds are macroscopic and easy to find. Look out for the three main groups; red, green and brown.



Bladder kelp (brown)



Corallina (red)



Sea lettuce (green)

Neptunes necklace (brown)

## Echinoderms

(pronounced ee-ky-no-dorms)

The name refers to the spiny-skin of this group. All echinoderms have radial symmetry like the seastar. They have water-filled tube feet for holding on to the rocks and are able to grow back lost body parts. They are found only at the water's edge and deeper.



Spring sea star



Brittle star



Sea cucumber



Kina



Kina

## Sea Squirts (ascidians)

Some sea squirts are colonial and look like shiny jelly. Others are solitary with obvious openings where water is pumped in and out to filter food.



Solitary sea squirt



Seatulip

## Molluscs

Despite the variety, most molluscs share a basic body plan with a muscular foot and a protective shell. They are well adapted for life on the intertidal zone as the shell helps keep them wet and cool.



Cats Eyes

### Chitons (pronounced Kai-ton)

Chitons have eight interconnecting shell plates allowing them to mold to uneven rock surfaces.

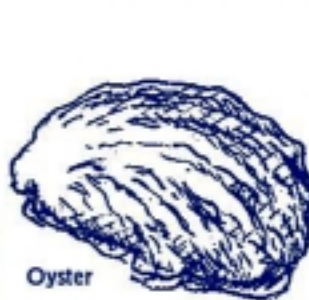


Green chiton

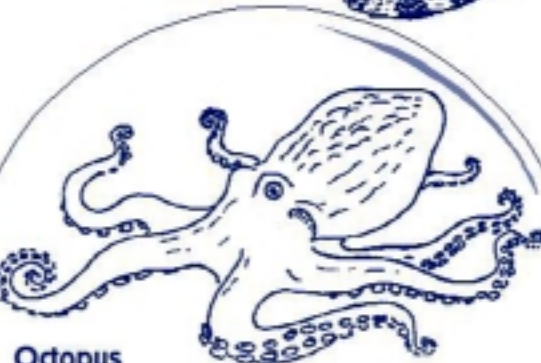
Snakeskin chiton



Limpets



Oyster



### Octopus

Common but often unseen, octopus lurk in the shallow water. Crab shells, leftover from its supper, may mark the entrance to an octopus lair!



Whelks

### Snails

Snails come in many shapes: long and thin, short and fat, with shell and without! Most snails are grazers, but whelks prey on barnacles and mussels.



Top snails



Limpets have a cone-shaped shell for protection. The shell of the ducks-bill limpet is small so it relies on its bad taste for protection.



Ducks-bill limpet



Mussels

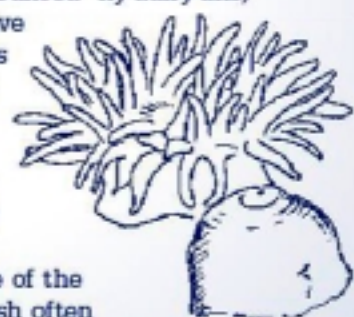
### Bivalves (two shelled)

Bivalves like mussels and oysters filter feed. Extremely efficient plankton feeders, mussels can filter 6-9 litres of water per hour at high tide. At low tide the shells are pulled tightly closed to prevent them from drying out.

## Cnidarians

(a silent 'C' - pronounced ny-dairy-ans)

All cnidarians have stinging tentacles which stun their prey. Luckily, most anemones have such small stinging cells they can't hurt us. However, beware of the blue bottle jellyfish often found washed up on the beach.



Anemone

## Fish

During low tide you will only see small fish living in the rock pools. Triplefins may be found under large rocks at low tide guarding eggs. Most fish are predators and scavengers, but some species are vegetarians and feed on seaweed.



Triplefin



Rockfish

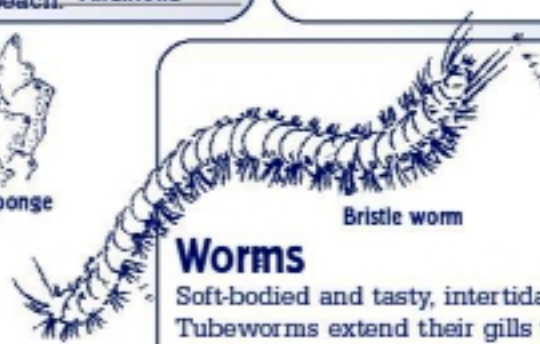
## Sponges



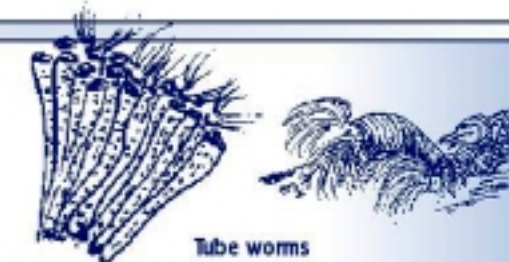
Golfball sponge



Encrusting sponge



Bristle worm



Tube worms

## Worms

Soft-bodied and tasty, intertidal worms hide in the sand or in their own hard tubes. Tubeworms extend their gills to filter plankton at high tide. The bristle worms are carnivorous with sharp pincer-like jaws.

Sponges are not plants but rather an apartment block of individual animals living together as one organism. On the rocky shore they keep a low profile and often encrust rocks and shells. Sponges suck water in, filter out tiny plankton, then expel it through the larger openings.