

Discover

The Rocky Foreshore of Tapalla Point



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The rocky foreshore is an **"intertidal"** area, which means it is covered with water at high tide and exposed to the air at low tide. This is a very challenging place for animals to live, as they have to survive extreme conditions of temperature change, moisture loss, wave action and predation. Because many of the animals that live here are either slow moving or attached they also have to compete with other animals for space.

Some animals are better at this than others as they have "adapted" to these harsh conditions. There are three types of zones of animals on rocky fore shores – the lower littoral, mid-littoral and upper littoral zones. If you look closely you will notice that each zone is dominated by one or two kinds of animal.



Tapalla Point :

photo R Findlay

Small grey periwinkles can survive the longest out of water and are found on top of the rock platform in the **upper littoral zone**. They are able to trap water inside their shell and cling to the rock face while the tide is out to prevent moisture escaping. When the tide is high they come out and move around "grazing" on tiny plants growing on the rock surface.

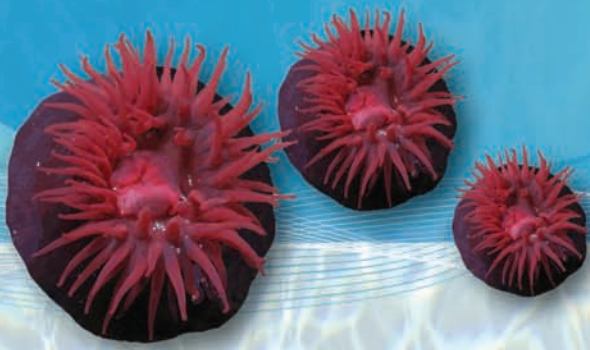


Zonation of intertidal animals : photo S Brown

The **mid-littoral zone** is often dominated by larger periwinkles, limpets and black nerite snails. Barnacles are also common in this zone. Barnacles also trap water within their shell but are not able to move about. They feed by filtering tiny animals and plants from the water which enters their shell.

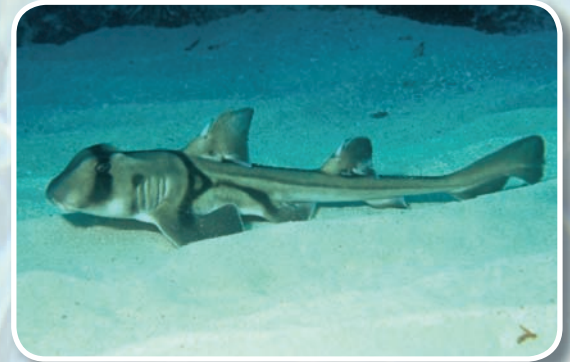
The **lower littoral zone** is closest to the waters edge and is only exposed at very low tide. This zone is home to the tubeworms, cunjevoi and the seaweed "Neptunes Necklace". Although these are the **"dominant"** (most common) **animals** in each zone, many other intertidal species share this space, including anemones, crabs and starfish.

Jervis Bay Marine Park



Living Fossils of the Sea

Many creatures live and feed in the waters around the shores of Jervis Bay. The harmless Port Jackson shark is one of the oldest known sharks alive today and is sometimes referred to as a "living fossil". These sharks forage for shellfish and sea urchins at night and shelter in rocky caves and gullies during the day. In late winter and early spring the females lay eggs which are attached to seaweed and rocky crevices. The young shark hatches after twelve months and the empty spiral egg cases wash onto the shore where they can be seen in their hundreds!



Port Jackson shark :

photo A Cookson

FACT SHEET



Sooty Oystercatcher :

photo S Brown

The Ghosts of Crystals Past

Millions of years ago the Huskisson rock platform was made of soft sediment. As that sediment hardened to become rock, the cold climate caused the minerals contained in it to form crystals. Those crystals gradually wore away leaving empty "casts" in the rock. These casts then filled up with a different type of sediment which in turn hardened into rock. As you walk along that rocky foreshore today you can see the "newer" rocks (shaped like large crystals) embedded in the existing rock platform. These **glendonite beds** are recognised today as being geologically important.

The Human Effect

Many visitors enjoy snorkelling, exploring rock pools and fishing around rocky shores. Many small animals are crushed or damaged by people walking on them and also by turning over or removing the rocks which are their home. Rocky shores are also important feeding and nesting areas for some threatened species of birds including Sooty Oystercatchers. Disturbance by humans and animals can interfere with their breeding cycles.

The relationship between all of the animals and plants on the foreshore is very complicated. To remove one species would change the nature of the whole community. Humans have caused serious damage in many places by removing vast numbers of shellfish for bait or food. It can take many years for these areas to recover.