Intertidal Zones

- In the splash zone, plants and animals must be able to withstand changes in salinity and exposure to extreme temperature changes. You will not find a great variety of species in this zone, however, the few species that are present may be in great abundance. Desiccation and heat shock are major factors for any organism or plant in this zone. Predation by birds is also a factor, since organisms are exposed most of the time.

- In the high intertidal zone, the algae and animals residing here must be able to cope with extreme changes in water availability, salinity, and changes in temperature. This is also the zone that is most affected by wave action, which can cause wave shock. Many animals in this zone have shells or hide under rocks to avoid waves. The algae and animals in this zone must be securely attached to the substrate. Many of them have a way of retaining water in their bodies or within their shells for the period of time when the tide is low, while others may hide in crevices or under rocks. This helps them to avoid desiccation and predation.

- In the mid intertidal zone, water covers and uncovers this zone twice a day at Rocky Point. Therefore, the organisms living here have to cope with many of the same conditions as the high intertidal zone, except that water availability is not as limited. A great variety of species can be found in this zone. The animals here are much more able to move around, many of which move with the tides. Most of the tidepools you will find in the intertidal will be found specifically in this zone. Tidepools can offer a view of some of the species that may be found in the low intertidal zone. Competition and predation are major factors in this zone.

- The low intertidal zone is only uncovered by water at the lowest tides. This is where the greatest variety of species will be found, so competition and predation are major factors as well. These animals rarely have to cope with direct sunlight, salinity changes, and water availability. Most of these organisms cannot survive long periods of exposure to air.

Illustration by Darne` Smith