

Intertidal Adaptations: a qualitative description of life between tides

Remember: Never turn your back to the waves!!

Objectives:

- Explore the intertidal and tide pools
- Describe animals and plants in your area
- Describe species interactions
- Describe specific adaptations and lifestyles of different species in the intertidal
- Relate these to biotic and abiotic factors that structure the community

Tools (materials): hand lens, paper/pencil, bucket, ID books

Choose a buddy and a location in the intertidal. Describe your area according to the handout "Between Pacific Tides", and your own observations. State where your area is (what zone).

- 1) Make a list of the animals and algae you see. Place them in either invertebrate, vertebrate or algae (focus on the animals). For each organism,
 - a). List some specific adaptations those organisms have for living in the area you have chosen. Break your adaptations into two categories: adaptations for abiotic factors, and adaptations for biotic factors.
 - b). What is the major "lifestyle" of the animal (sessile, grazers, mobile, scavengers, predators etc.)
- 2) Watch your intertidal community carefully, and for a period of time. List and describe (specifics, including species involved) the biotic interactions you see taking place. This one will take patience!
- 3) List the abiotic factors your community is experiencing right now. List other potential abiotic factors that will affect it soon.
- 4) Make some conclusions about your community: what are the major factors affecting the community structure? Which type of organism dominates? Why?
- 5) Take a trip through the rest of the area and identify as many algae and animals as you can to prepare for our quantitative sampling of the intertidal in a later lab.