

Intertidal Zone

To explore where the land and sea meet is to discover a unique habitat: the intertidal zone.



What tide is it?

The tide rolls in over the intertidal and the tide rolls back out. When you arrive at the beach and want to learn where you are in the tide cycle, use a stick or a stack of rocks to mark the current tideline. Over time, does the tide pass your marker or does it recede?



Get in the Zone

On the shore there are distinct zones of seaweeds and animals whose distribution from the low tide to high tide areas is determined by how much exposure to air and other environmental stressors they are able to withstand. Can you see the different zones?



I Spy Trash

There are many ways that garbage gets into the ocean (over 1 million metric tons of plastic per year), but we're the only way it gets out. When going to the shore, consider bringing a bag to carry out the trash you find. This way it can be disposed of properly.



Unique Habitats

Intertidal habitats are varied and include rocky coasts, sandy beaches, eelgrass meadows, mudflats, and estuaries, each of which has its own special assemblage of life. What type of habitat is your beach?



Life Under Rocks

Many interesting creatures can be found under rocks at the beach. However, turn over only small rocks and do so gently. A quick turnover may crush animals that are darting away as their hiding place is uncovered. Replace the rock slowly and carefully.



Binoculars For Birds

Birds at the beach may be resting, nesting, or fueling up while on migration. View them from a distance so as not to disturb them. You can see them probing for invertebrates in the sand, catching fish and crabs, and prying barnacles, limpets, and chitons off rocks. Keep dogs on a leash or leave them at home.



A Year At The Beach

In fall, shorebirds are stopping in as they migrate south. In winter, seabirds are most abundant and storms deposit seaweed and other material on the shore. In spring herring spawn and whales migrate north. In late spring/early summer, the lowest tides are during the day. What time of year are you visiting?



A Bare Beach?

A sandy beach may not seem to have much life on it. But look carefully: can you see tracks in the sand? Or holes where clams have buried themselves? Ghost shrimp's volcano-shaped mounds, squiggly poop piles of sand worms, and trails left behind by snails. Crabs and sand dollars may be found in the shallows.



Exciting Estuaries

Estuaries are unique habitats where a river (freshwater) meets the sea (saltwater). The river carries nutrients washed from the land, creating particularly rich feeding grounds. Estuaries are protective nurseries where young fish like salmon, can feed and grow before they head out to sea.

Residents of the Intertidal Zone

Here are some common creatures that you might meet in the Intertidal Zone.



Acorn Barnacle



Ochre Sea Star



Purple Shore Crab



Glaucous-winged
Gull



Tidepool Sculpin



Aggregating
Anemone



Rockweed



Butter Clam



River Otter