

Questions and Answers

Intertidal- Predator-Prey Interactions

1. What were the 5 functional feeding groups in the intertidal zone

Filter Feeders, Grazers, Photosynthesizers, Scavengers, and Predators The filter feeder category would be species such as mussels, barnacles, at times crabs and anemones, and tube worms. Grazers consist of limpets, chiton, and snails. The Photosynthesizers are the algae of the ocean which are primary producers, they are able to produce their own food source, some species we looked at were rockweed, sea lettuce, bull kelp, and giant kelp. Scavengers are those opportunistic feeders, they fed on a variety of different organisms. Species such as crabs and fish fit in this category. Lastly the predators we looked at in the intertidal zone were sea stars, anemones, and fish.

2. If we were to categories the groups into a food web structure, which category would be the base of a food web (primary producers) and which feeding group would be at the top (Apex predators)

The primary producers of the intertidal zone are the photosynthesizers. These organisms only need the sun to produce their energy requirements. From here, this energy created is then transferred up the food web to all other species. All of the algae species produce food through photosynthesis. The top of our food web structure consists of the apex predators of the intertidal zone. Species such as anemones, sea stars and fish.

3. What exactly is plankton?

Plankton can be categorized in two ways- zooplankton and phytoplankton. Both types consist of organisms too small to swim against the currents. Instead they are free floating in our oceans and their movements are caused by drifting about in the currents Zooplankton are tiny animals, they feed on other animals and algae. Whereas phytoplankton create their own energy reserved through photosynthesis. Any organism too small to swim against the current and instead drifts about can be considered plankton.

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4. When barnacles aren't attached to a rock (free floating) are they considered plankton?

Most definitely, plankton barnacles are too small to swim against the current, so instead they drift about until they are able to excrete their cement and attach themselves to rocks and other surfaces.

5. Are wolf eels a typical intertidal predator? Or do they only come near shore every so often?

You would not typically find a wolf eel in the intertidal zone. When we discussed this organism in our video, we talked about them being a predator species of sea urchins. Keep in mind sea urchins aren't just found in the intertidal, they also appear in deeper waters of the subtidal zone. Here in the subtidal is where the wolf eels would be able to interact and consume urchins.