

the rocky reef

Rocky reefs can be found just off-shore in Australian waters. Their ecosystems are influenced by the flow of tides and currents. Kelp, sea urchins, abalone, rock lobster, bryozoans, seahorses, snapper and larvae and juveniles of many fish and invertebrates are common to the rocky reef. Two types of communities are found here:

GIANT BULL KELP FORESTS

Dense kelp forests can form large areas of floating fronds where many animals feed and find refuge. In places where

fronds are not so dense and sunlight can penetrate, kelp forests have a rich and diverse understorey of algae.

SHALLOW 'BARRENS'

Here there are high densities of sea urchins, particularly *Centrostephanus rodgersii*. Sea urchins create barren areas by grazing at night on leafy algae, including newly settled kelp plants.

Food energy from kelp flows to other species through direct food chains (where one species eats another) and detritus

food chains (decaying pieces of plants and animals which are eaten by other species). The ecosystems are affected by waves, rock type, structure and depth of the reef, by the amount of light that penetrates from the surface and by the movement of certain species between land and reef. The southern rock lobster is an example of one species whose life history links inshore areas with the ocean. Rock lobster larvae travel vast distances on open ocean currents and return to shallow areas as they mature.

