

Cancer crabs and the green crab (*Carcinides maenas*) that invaded the Fundy region during the past ten years, do serious damage to clam and oyster beds. The lady crab (*Ovalipes ocellatus*) is a colourful free-swimming species found in Minas Basin and Northumberland Strait. Four species of hermit crabs are commonly taken in the Atlantic region, the largest of which is the blue-handed hermit (*Pagurus acadianus*) living in empty shells of large moon snails and whelks. The sand shrimp (*Crango*) is very common in the sandy shallows of protected beaches. Amphipod crustaceans are virtually everywhere, living mainly on or in the bottom. They may be free-living, burrowing, tube-dwelling, or even parasitic, and form one of the basic food items of most bottom-feeding fishes such as cod, halibut, hake and sole. The seaside visitor may find beach fleas and beach hoppers (*Orchestia*, *Talorchestia*) hiding under debris or in the moist sand at the drift line. He may disturb the scuds (*Gammarus*, *Marinogammarus*) sidling about under stones or algae at mid-tide levels, or screen out the squat-bodied haustoriids that literally swim through the wet sand underfoot with astonishing rapidity, or perhaps net the free-swimming scuds (*Calliopius*, *Gammarellus*, *Pontogeneia*) that occur in cloud-like swarms among the kelps, the fucoids and Irish moss of wave-battered shores. The opossum shrimps (*Mysis*, *Neomysis*) frequently swarm among the eel-grass in brackish water estuaries at river mouths. The isopods (e.g., *Idothea*) are flattened above and below like a cockroach, enabling them to crawl about among the boulders and algae, to which they cling with strong curved claws of their seven pairs of walking legs.

The barnacles are sessile or sedimentary crustaceans living inside their calcareous walls or plates attached to a rock or other firm substrate. They feed by extending their coiled filamentous legs out between their opercular plates and straining minute particles from the sea water. The common acorn barnacle (*Balanus balanoides*) lives intertidally on rocky shores of the Atlantic and parts of the Arctic and Pacific shores of Canada. Other species (*Balanus cariosus*, *B. improvisus*) are more common in estuaries and protected bays and are frequent fouling organisms on vessels, wharves and aids-to-navigation. Goose barnacles (*Lepas* spp.) attach to free-floating objects such as boxes, planks, bottles and net floats and are washed ashore on open ocean coasts, usually following onshore winds. One species (*Mitella polymerus*) attaches in clusters to surf-pounded rocks at mid-tide level along the Canadian Pacific Coast.

The arctic intertidal, because of severe winter temperatures and heavy ice scouring, is virtually without crustacean life, except for those species that can burrow in the bottom or invade the region during the ice-free summer. Amphipods and decapod shrimps are the dominant arctic bottom crustaceans, but only a very few crabs and hermit crabs are present.

The Pacific Coast, on the other hand, has a very rich fauna of most major crustacean groups, largely because of its nutrient-rich waters, its relatively uniform seasonal range of temperature, and freedom from winter icing. Approximately three times as many species are found there as at equivalent latitudes on the Atlantic Coast. True crabs are dominant, even in the intertidal zone where *Hemigrapsus nudus* and *H. oregonensis* abound. Five species of native *Cancer* crabs provide stiff competition to the newly introduced lobster. Several species of small pinnixid crabs live parasitically within the mantle cavity of large bivalve molluscs. More than 10 kinds of hermit crabs, mostly small species of *Pagurus*, and of lithodid crabs (*Petrolisthes*, *Emerita*, *Hapalogaster*, and the giant edible king crab *Paralithodes*) are also known from the Pacific Coast, and three kinds of ghost shrimps (*Callinassa*, *Upogebia*) riddle the mud flats with their deep inter-connected burrows. About 50 kinds of penaeid and caridean shrimps and prawns, several of commercial importance, have been recorded from the fiords, inlets and shelf waters of this much-dissected coastline. Amphipods and isopods are also more varied in type and more abundant numerically than on the Atlantic Coast, although represented by different species and usually different genera in comparable intertidal habitats. The crustacean fauna of open sandy beaches is particularly well-developed and shows striking intertidal zonation, perhaps reflecting a rich food supply, protection from desiccation by frequent coastal fogs, and a relatively stable regional geological history.