# **Estuarine Shore Crabs of New South Wales**

### **Shore Crab Environment**

From the highest to the lowest shore levels in our estuaries along the New South Wales coastline we find a number of different crabs.

In some places there may be as many as ten differences types which may be found from the saltmarsh down across the sandy beach to the low muddy flats.

The true shore crabs belong to two major groups. One group consists of the square-shaped Grapsids, while the other contains the more rounded Ocypodids. Members of this group often have longer eyestalks.

## **High Shore Crabs**

### Haswell's Crab Helograpsus haswellianus

The highest living crab on many estuarine shores is the orange to light brown coloured Haswell's Shore Crab. It is often found well above high tide levels in mud areas and saltmarsh flats. It shelters under debris or in burrows.

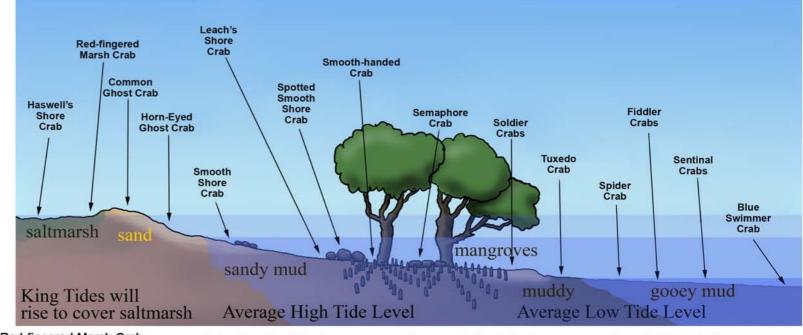


This adult male Haswell's Shore Crab defends its burrow in the saltmarsh.



See the egg-mass located under the abdominal flap of this female. Notice the female crab's chelae (claws) are much smaller than the male's chelae

Illustration, Photography & Design www.keithdavey.com.au



Red-fingered Marsh Crab Sesarma erythrodactyla



This striking green, gold and red coloured crab occurs in mangrove swamps, on river banks and in salt marshes. It can live in areas with very low salt levels, such as the upper reaches of rivers. Males may have a brilliant green carapace (exoskeleton) and orange and white chelae.

The finger tips are brilliant red.



Females have smaller chelae and are not as brightly coloured as the males. This may be for protective camouflage. Does the claw size affect what the different sexes eat?

Estuarine Ghost Crab Ocypode cordimanna



This is the smallest of the two ghost crabs found along eastern Australia. It digs its burrows above high tide levels on sandy beaches. It shelters during the day, but comes out at night to roam the beach looking for scraps of food. Notice that one chelae is much larger than the other.

Horn-eyed Ghost Crab Ocypode ceratopthalma



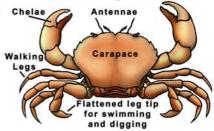
This ghost crab is spectacularly coloured and appears to be the most highly adapted of the estuarine shorecrabs. It is a swift and moderately large crab with a dark chocolate brown undersurface and is pure white above. It has small tips to the eyestalks and has a ridge on the claws which may be used to make a creaking noise.

Smooth Shore Crab
Cyclograpsus audouinii



This is a small, pale coloured crab found at all tide levels on estuarine shores and also on some rocky ocean shores. It shelters under rocks. Unlike most other shore crabs, the rim of the carapace does not have any spines or notches, which accounts for its common name.

## **Crab Body Parts**





## Mid Shore Crabs

## Leach's Shore Crab



This crab is round in shape. The chelae of males are very rounded, almost as high as long. The walking legs are long and slender. It is found in inlets and bays, near the river mouth. Found high up on the beach, near the high-tide level where it burrows into fairly firm soil, among loose stones and mangrove roots.

#### Semaphore Crab Heloecius cordiformis



This is a very common, equal handed, purplecoloured crab living on muddy estuaries from southern Queensland to Tasmania. The waving of the arms give the common name Semaphore Crab.



When we look at the crab side on, we can see that the claws are curved backwards. The crab uses these to roll up balls of sand and with its mouth-parts sifts out and eats detritus which is mixed up with the sand.



Young Semaphore Crabs are quite different in colour to the adults. Their carapace is mottled with grey and their chelae are light orange in colour. Sometimes they are confused with juvenile Red-fingered Marsh Crabs.

#### Spotted Smooth Shore Crab Paragrapsus laevis



This is a large, gregarious crab found under rocks and litter on muddy shores of coastal rivers and estuaries from Moreton Bay, south to north-eastern Tasmania. Some can grow to 4 cm across the carapace. The chelae may be quite large and powerful in the males.

# Smooth-handed Crab Pilumnopus serratifrons



Often found lying in moist holes under rocks lying on a sandy shore. When the rock is turned over, this crab does not run away, but folds up its legs and claws tight under its body and pretends to be a pebble.



Male crabs are sometimes parasitised by a shell-less barnacle. The young barnacle swims through the water and attaches to the crab under its body flap and then burrows in. The barnacle's soft body parts then spread through the crab like a fine fungus and take in food from the living crab. This causes male crabs to become female-like. The yellow lump under this male Smooth Handed Crab's abdominal flap is a shelless parasitic barnacle ready to shed its eggs back into the water.

#### Light Blue Soldier Crab Mictyris longicarpus



This globe-shaped crab has a distinctive dark patch on each joint of its spindly legs. These crabs form large armies on sandy areas of estuaries and some headlands. Both Soldier Crabs are unusual because they can walk straight ahead, while all other crabs walk sideways. Large groups may break out of the sand when the tide is going out.



If disturbed, they burrow into the soft sand with a corkscrew motion. They occur across northern Australia, down to eastern Victoria.

#### Dark Blue Soldier Crab Mictyris platycheles



This distinctive dark-blue and grey crab occurs in estuaries where the sandflat is gradually becoming a mudflat. It forms large feeding groups only on southern shores. Large amounts of sand are processed to sift out the micro-algae and detritus food. The processed sand is left as round pellets. If disturbed, the Dark Blue Soldier Crab rapidly burrows down in a spiral manner.

## Low Shore Crabs

#### Tuxedo Shore Crab Australoplax tridentata



This beautifully marked small shore crab is found low on the shore often hiding in amongst oysters in very sloppy mud habitats. This crab ranges from Cooktown in north-eastern Queensland to Sydney, NSW.

## Three-pronged Spider Crab Halicarcinus ovatus



The spindly legs of this very small crab give it a spider-like look. This crab is very hard to untangle from the algae on which it lives. There are many colour forms, some crabs being red-white, red-black or brown-white. It occurs from Port Stephens, New South Wales, south around all southern shores at very low tide levels.

#### Orange-clawed Fiddler Crab Uca vomeris



The brilliant orange-coloured claw of this widespread fiddler crab is distinctive. Male Fiddler Crabs have one claw which is much larger than the other. The claw is used to wave away other males and attract females to its burrow. It is found on unshaded sandy mud at low tide levels in open bays and creeks.

#### Seagrass Sentinal Crab Macropthalmus crassipes



This light-brown crab prefers firm mud shores, usually with a cover of zostera seagrass. It ranges from north-western Australia across northern Australia and south through eastern Australia. When threatened, or in display, both chelae are raised. The males are territorial and will fight off competitors with a ritualised display.

#### Mudflat Sentinal Crab Macropthalmus setosus



This blue-clawed crab is found in large numbers out near the lowest tide level on very sloppy mud shores. It ranges from eastern Queensland to Sydney. It sometimes lies partly buried in mud in shallow pools, with only its long eyestalks appearing.

#### Blue Swimmer Crab Portunus pelagicus



Although the Blue Swimmer Crab is not a shore crab, it does follow the incoming tide. It tries to capture any foolish creature which hasn't hidden itself. The Blue Swimmer Crab is an efficient hunter and has a really large appetite.