

Identifying Crabs at Maroochy Wetlands Sanctuary
[MWS is a sanctuary and ALL life forms are protected]

As with all life forms, DNA recognition is meaning that there are changes to the understanding of classifications of crabs. This document has been compiled with information available as at 30th June 2024, but it is likely some information will be out of date very quickly.

The first identification feature to look for is the length of the eye-stalk and its form. Other important features are carapace [including shape, teeth and colour], chelae shape and colour, size, mouth-part markings. Some crab species are highly variable in colour.

For those interested, the classification of crabs is as follows

Kingdom	Animals	
Phyllum	Arthropoda	(sub-phyllum Crustacea)
Class	Melacostraca	
Order	Decapoda	

ABBREVIATIONS

MWS	Maroochy Wetlands Sanctuary
M	Male
F	Female
J	Juvenile or immature

OCYPODID CRABS (Superfamily Ocypodoidea Family Ocypodidae)

Ocypodid crabs normally inhabit open areas. To avoid predators, they need to recognize attacks from above, and long eye-stalks located closely together allow them to see above the close environs and be aware of horizons. However, the closely-located eyes preclude clear focus.



Orange-clawed Fiddler Crab *Tubuca coarctata* Alternative common name **Suppressed Fiddler Crab**

To 40 mm carapace width. Long-eyed. Male has one large claw, palm orange with rough upper surface, white finger tips. White spot on last walking leg (M) – colour variation blue. Light under body. Back black with (white) tooth at front sides immediately behind eye grooves. Highly variable colouration. Most common fiddler at MWS.



Two-toned Fiddler Crab *Gelasimus vomeris* [In some publications, this is also named “Orange-clawed Fiddler Crab” creating confusion with *Tubuca coarctata*]

To 30 mm. Long-eyed. Male has one large claw, lower half of hand orange, upper half light (grey/pink/bluish-white). Palm conspicuously rough. Broad white bands on mouth parts. Mostly found in open area now separated from loop to the crab hide at MWS. Common elsewhere, but extremely difficult to find at MWS.



Pink-clawed Fiddler Crab *Tubuca polita* Alternative common name **Polished Fiddler Crab**

To 25 mm. Long-eyed. Carapace patterned. Male has one large claw, arm and hand rose-pink, fingers paler to white. Small claw rose-red. Small colony amongst the *Gelasimus vomeris*. Extremely difficult to locate as above at MWS.



Grey-clawed Fiddler Crab *Tubuca longidigitum* Alternative common name **Moreton Bay Fiddler Crab**

To 25 mm. Long-eyed. Male has one large claw pale grey-blue, fingers lengthen with age. Broad whitish mark on lower part of mouth parts. Uncommon along bank opposite crab viewing platform at MWS.



Yellow-clawed Fiddler Crab *Austruca perplexa*. Alternative common name **Perplexing Fiddler Crab**

To 16 mm. Long-eyed. Stalks thicker than other fiddlers. Whitish mouth parts. Carapace more square than other fiddlers and patterned. Male has one large yellow claw. Occasionally seen at crab viewing platform and rarely up-river of pontoon walkway. NOTE: Do not confuse with some male Orange-clawed Fiddlers which have yellow claws but their white fingers and black carapace are distinguishing.



Sunburst Fiddler Crab *Tubuca dussumieri* Alternative common name **Dussumier's Fiddler Crab**

To 30 mm. Long-eyed. Carapace black, narrowing towards back end. As a fiddler, the male has one large claw, rough surfaced, upper finger white, lower finger rose with white tip, carpus/merus (arm) blue or with rose below, rose at base of chelae. Body more deeply vaulted than other fiddlers. Legs muddy in colour. Found uncommonly amongst *Tubuca coarctata* at crab viewing platform.

SEMAPHORE CRABS (Superfamily Ocypodoidea Family Heloeciidae)

This family has only one documented genus, and species.



Semaphore Crab *Heloecius cordiformis*

To 25 mm carapace width. Long-eyed. Carapace mottled dark purple. Crabs with large purple claws are males with immatures having orange to red claws. Narrow white bands on mouth parts.

(Superfamily Ocypodoidea Family Camptandriidae)



Ward's Hairy-legged Crab *Paracleistostoma wardi*

To 18 mm. Short-eyed, mid way across carapace. Carapace smooth, appears to have cut-off triangle at front sides, edges behind eyes orange and lack teeth. Legs broad, flattened, furry. Claws small and orange, male on left, female on right. Generally feeds in shallow water in Orange Mangrove forest. Rarely observed at MWS.

SENTINEL CRABS (Family Macrophthalmidae)

This family is now separated from the Ocypodids and includes the Sentinel Crabs.



Orange-spined Sentinel Crab *Macrophthalmus crassipes* Alternative common name: **Seagrass Sentinel Crab**

To 40 mm across. Very long fine eye-stalks. Carapace width is about twice its length, plain muddy-olive. Does have an orange spine on the chelae, not visible in the field. Prefers soft mud areas but rarely found in recent years.



Australian Sentinel Crab *Macrophthalmus setosus*

To 40 mm. Long fine eyes. Similar to Orange-spined, but not as broad - (width is about 1-1/2 times length)



Blue-clawed Sentinel *Macrophthalmus pacificus*

To 35 mm. Long-eyed, but the eye-stalks are slightly more separated, not as fine and not as long as in the Ocypodidae family. Carapace roughly oval, grey-brown washed blue, legs may be blue-washed, hands of claws blue. Vertical black and white markings on mouth parts. Likes soft wet sand/mud, often feeds in shallow still water. The left photo is of males in territorial battle and the right photo is a female. In many species it is possible to recognize sexes by the shape or colour of the claws, the female's often being finer in shape.



Giant Sentinel *Venitus latreillei*

To 60 mm. Long-eyed. Carapace grey/brown, with 3 to 4 large sharp teeth behind eye grooves. Burrows in very soft mud with oval or rectangular entrance. Is found at lowest tide in front of the crab viewing platform where the mud is almost liquid. [Note that this crab has formerly lost its left claw and is regrowing it. It will increase in size with each moult until similar to the right claw.]



Furry-clawed Crab *Australoplax tridentata*

To 12 mm, normally to 10 mm, but many specimens may be as tiny as 3 mm. Note that the eyes do not clearly fit either category of short or long eye-stalks and are positioned midway between the centre and edges of the carapace. Blue/purple claws, brown furred fingers with orange tips. Broad white bands on mouth parts and to the sides. Females' chelae are much finer. Right crab is a female in berry. Unlike most crabs, they may be seen on the surface when carrying eggs. Most numerous crab at MWS, found in many habitats.

GRAPSID CRABS (Superfamily Grapsidoidea Family Grapsidae)

Crabs of the Grapsid family generally inhabit areas with mangroves, rocks, or other cover. To protect themselves from predators, they need to be able to judge distance, and thus their eyes require good separation and short eye-stalks for accurate focus.



Broad-fronted Mangrove Crab *Metopograpsus frontalis*

To 30 mm. Short-eyed wide apart. Carapace smooth, some forms mottled (more often as above left at MWS), squarish but narrower at back. Arms and claws purplish. Appears four-lobed across front of carapace. In small numbers, hard to find as it seems to move around. Does not burrow and requires suitable habitat. There are two forms of this species, the one on the right being the blue and orange form. It has the habit of climbing into the hollows of fallen dead trees.

SESARMID CRABS (Family Sesarmidae)



Red-fingered Marsh Crab *Parasesarma erythodactylum*

To 25 mm. Short-eyed at edge of carapace. Orange to brown arms and claws, with red finger-tips. (M). Carapace shield shaped, green to pale blue, sometimes with "smiley-face" markings on male. Female and juvenile very dark green/black, (patterned.) May hide in crevices or climb trees. Easily recognized and found from the Casuarina forest and throughout the mangrove areas.



Maroon Mangrove Crab *Parasesarma messa* (syn. *Perisesarma messa*)

To 25 mm. Short-eyed, wide apart, often eye-stalks red, eye green. Carapace dark, squarish, appears ridged across, tooth on edge behind eye. Hands always maroon but colour may be much more extensive. Hairs on either side of mouth.



Scarlet Three-spined Mangrove Crab *Neosarmatium trispinosum*

To 40 mm. Short-eyed, wide apart, white on top. Deeply vaulted body appears meshed on sides. Carapace black. Claws large, scarlet, male has 3 short white spines near base of (top) moveable finger. Mud mound at burrow entrance allows entry from the side. Described as nocturnal leaf-eater, but often seen during daylight at both crab hides and in Orange Mangrove forest.



(No common name presently used in Australia) Sarmatium germaini

To 65 mm – largest of the land-based crabs at MWS. Short-eyed, wide apart. Body deeply vaulted with mesh-like appearance on sides. Carapace purplish-black mottled with purplish-pinkish and cream markings. Legs cream mottled with pinkish-purple, claws cream with purple-pink markings. Definitive feature is the ridges along the top of each hand. They locate strictly with others of the same species in areas around the viewing platform and hide. Best viewing times are as the highest

summer daytime tides recede. They emerge to collect brown dry leaves of grey mangroves to stock the burrows and do not appear to graze on surface detritus at all.

VARUND CRABS (*Superfamily Grapsoidea Family Varunidae*)

NOTE: This group of crabs is currently under review and major changes are likely once the review is completed.



Purple and Cream Shore Crab *Pseudohelice subquadrata* (formerly *Helice leachii*)

To 25 mm. Short-eyed. Stout claws. Arms greyish-purple, claws and fingers cream. Thick-bodied, squarish carapace greyish-purple or blackish with two notches each side, may have some cream on back, legs mottled. Orbital tooth. Described as nocturnal, but plentiful, and often seen during the day battling over green or yellow leaves to store in their burrows, especially after tidal inundation. Burrows are complex and located in firm mud supporting long horizontal off-shoots below ground. They colonise strictly with others of their species. Around both crab hides and shelter shed where an aberrant colour-form may be sighted.

SWIMMING CRABS (Family Portunidae)

Swimming crabs vary from land dwelling species in that they have three sets of walking legs and one set of flattened swimming legs. Two of the three species known at the sanctuary form a valued resource for the commercial fishery, and mangroves are also the nursery for many fish species. These commercial species leave the sanctuary when small. The third species, Green Swimming Crab, *Thalamita crenata*, is rarely seen in the water near the far crab hide.

Mud Crab *Scylla serata*

To 200 mm. Short-eyed. Carapace olive-green, front half is almost a semi-circle with many teeth, back half narrows noticeably. Three sets of walking legs, and one set of swimming appendages. Commercial species, but seen less than half-grown at MWS before moving out to sea. Juveniles may be seen swimming over the mudflats during tidal inundation.

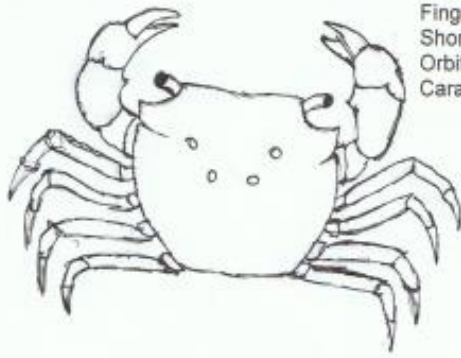
Blue Swimming Crab *Portunus pelagicus*

To 190 mm. Carapace mottled blue, brown, olive, strongly patterned. Prominent spine in centre of carapace on each side. Claws long and relatively fine. Seen in shallow water near pontoon or far crab hide.

HERMIT CRABS

Two species of hermit crabs are occasionally seen, especially around the Orange Mangroves. Both species use discarded mollusc shells. The Yellow-striped Hermit is the more common and is recognized by the yellow stripes on legs, claws and body. Basic body and appendage colour is dark green. The Yellow-footed Hermit is also dark green, but has yellow markings on the ends of the walking legs and claws.

Helograpsus haswellianus



- Chelae or claws
- Fingers
- Short eye-stalks
- Orbital tooth
- Carapace width

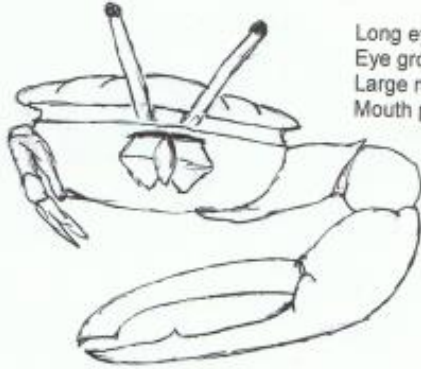


Female abdomen



Male abdomen

Fiddler Crab - example only



- Long eye-stalks
- Eye grooves
- Large male claw
- Mouth parts



Swimming leg

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