

Karthikeyan S.



COASTAL CRABS FROM DEVBAGH, KARWAR

blog : www.wildwanderer.com

email : palmfly@gmail.com

COASTAL CRABS

A walk along the beach is something most people would enjoy. When we see crabs trying to run away from our path, often the child in us comes to the fore and we run about chasing them! It was during my first visit to Devbagh, Karwar that I was taken by surprise by the beauty of the few crabs that I saw. Even as I arrived at the jetty, I saw a large crab moving about on the rocks. It had stunning red legs. As I approached it, it disappeared under the rocks. On the same trip I also chanced upon my first fiddler crabs. Thus began my tryst with crabs.

Over the years, during the many visits to Devbagh, I have spent considerable amount of time looking for crabs both on the shore and also in the mangroves around Devbagh. I have thoroughly enjoyed waiting for them to come out of their burrows, watching them at work, and in the process I have also managed to photograph a good number of them.

Crabs are a very important and easily noticeable component of the coastal and mangrove ecosystems. They have adapted to the tidal actions and also the varying salinity that is so typical of delta areas. They are considered to be the most predominant species particularly in the mangrove forests. This also could be because many crabs use the mangroves for their very survival. They feed on the leaf litter and other organic matter. Thus play an important role in recycling of nutrients. Their behaviour of digging into the sand helps better aeration of the soil.

As should be expected, crabs of the coasts and mangroves use an array of specific habitats. While some use the spaces between prop roots of mangrove trees, others use the rocky shores; some use mud banks and mud flats while others, the intertidal zone. Some also use the habitat created by streams and channels that make their way to the sea while others, the zone between the low and high tides.

Sea eagles, kites, waders, etc. among birds and small mammals like mongooses and shrews have crabs as part of their diet. All of these co-exist in the coastal habitat making for interesting observations and also for interesting action to look forward to while on the beach.

A variety of human activities threatens the survival of the coasts and associated habitats on which the crabs are dependant. So, while we let our curiosity and the child in us take over, let us also be cautious, responsible and sensitive about what we do when we spend time on the beach. Let us not forget that there are others creatures that play on the beach and also call it their home!

Ms. Pradnya Bandekar readily agreed to help in the identification of the crabs from the photographs. I would like to thank her for all the help she extended in this process without which this compilation would not have taken shape.

Here is an effort to show case some crabs of Devbagh, Karwar.



Family Grapsidae : *Grapsus albolineatus*



This crab is best seen on a rocky beach. The red legs of the crab, along with the patterned carapace and colourful pincers are quite attractive. When they sense disturbance, these crabs tend to go under the rocks and boulders. They are known to occur all the way from the east coast of Africa to Australia. In India, they can be seen along the east and west coast and on the Andaman and Nicobar Islands.

Family Grapsidae : *Metapograpsus latifrons* : Purple Crab



The Purple Crab is not a particularly large species. These crabs can be seen on rocky shores. However, the one that I sighted was near the roots of mangroves during low tide. They are known to be nocturnal, hiding in holes and crevices during the day. The carapace has yellowish markings; the purple colour of the pincers is very noticeable. Though their main food seems to be algae which they scrape off rocks with their pincers, they will scavenge on any edible matter that they chance upon.

Family Grapsidae : *Metapograpsus messor*



This is a small crab with a squarish appearance. The carapace is dark with golden coloured markings. It lives among mangroves and on rocky shores as well amidst under rotting wood. It is known to be quite capable of climbing trees.

Family Grapsidae : *Sesarma quadratum*



This little crab is very colourful. The orange on the front of the carapace and the pincers stand out on an otherwise dark purple coloured crab. It is known to be common among the prop roots of mangroves. I saw this individual among prop roots during low tide.

Family Grapsidae : *Sesarma* sp.



This black, gold and orange crab *Sesarma* sp. is small too. I happened to see this crab also amid the roots of mangroves during low tide not far from the location where *S. quadratum* was found.

Family Grapsidae – *Sesarma* sp.



Like the previous two species this Sesarmid is also small – about an inch across. However, it is the colouration helped the crab blend beautifully with the background.

Family Matutidae : *Matuta lunaris* : Moon Crab



The Moon Crab is often seen in sandy areas. During the day, these crabs burrow just below the surface. They come out at night and forage for small creatures and organic matter. Their paddle-like legs are used for swimming and digging. It spends the day buried in sand. Its spade-like appendages are used to dig into the sand and for swimming!

When these crabs come out to forage in the night, they are known to feed on small creatures – be it worms, clams, and other small animals – that they can overpower. They also seem to have a special taste for dead fish!

Adult females have been found to be capable of producing more than one batch of eggs from a single mating with each batch containing about 65,000 eggs!

Moon Crabs have a very wide distribution. They are known to occur all the way from the Red Sea, through much of Asia to Australia where it is common in the Great Barrier Reef.

Family Ocypodidae : *Dotilla myctiroides* : Soldier Crabs



Watching the Soldier Crabs can be a very interesting experience! During low tide they come out in large numbers and set about feeding. This is also the time when there is plenty of interaction. Frequent altercations between individuals can also be witnessed. All in all, the Soldier Crabs make good subjects to sit back and watch while on the beach. Very noticeable was the really long pincers. Even as they come out of their burrows, they start shovelling sand into their mouth rapidly with their pincers, leaving behind little sand pellets. In this process, they feed on tiny creatures or the organic matter that gets washed ashore due to the action of the waves and tides.

Family Ocypodidae : *Ocypode ceratophthalmus*



Ocypode ceratophthalmus is known by popular names like Ghost Crab and Horn-eyed Ghost Crab. A close look at the crab's eyes will tell you how the second name might have come about. Another quick glance and you will notice how the pincers of these crabs are unequal. Walk on the beach during the night and you will see several of these crabs going about their normal activity. You will see them run at breakneck speeds when you shine a torch and walk close to them. These large crabs live in deep burrows to escape from predators. They have a very wide geographical distribution – East Africa to Australia.

These Ghost Crabs are known to change colour. They can be yellow or shades of brown or grey. Their young are translucent and their colours match the sandy substrate camouflaging them in their habitat.

Family Ocypodidae : *Ocypode cordimanus*



Like *O. ceratophthalmus*, this species also enjoys a wide distribution. Both these species can be seen occurring alongside each other on the beaches between sunset and sunrise. This species is told apart easily by the absence of the 'horns' on the eyes. They occur in the inter-tidal zone, where, when disturbed they run into their deep burrows. Sometimes, they run into the surf only to disappear temporarily in the incoming wave!

Family Ocypodidae – *Uca annulipes* – Porcelain Fiddler



Fiddler Crabs are known for the pronounced inequality of their pincers, particularly in the male crabs. These are also often brightly coloured too. The manner in which the males wave these appendages is a sight to behold! The Porcelain Fiddler that is seen in our waters is no exception. These are relatively small sized crabs. They come out and feed in the vicinity of their burrows during low tide. They quickly duck into their burrows when disturbed.

Family Portunidae – *Charybdis cruciata*



Charybdis cruciata is also known as *C. feriata*. Like other crabs discussed above, this is also found from the east coast of Africa all the way up to Australia. In India itself, it is found on both the east and the west coasts and Andaman and Nicobar Islands. These swimming crabs are prettily marked. They can be seen inhabiting rocky areas as well as sandy and muddy areas.

Family Portunidae : *Scylla serrata* : Mud Crab



These are often referred to as Mud Crabs. Naturally, they occur from South Africa to Australia. They have been introduced in Florida and Hawaii. These are large crabs and quite vicious. They would raise their arms and snap the pincers when I approached close to take pictures. These mud crabs spend time in the mangrove zone, venturing away from water at times. They live in burrows in muddy banks, creeks and puddles in the mangrove zone.

Family Portunidae : *Thalamita crenata* : Crenate Swimming Crab



The colour of these crabs is very variable. However, individuals with a greenish or brownish shell with some yellow are most frequently met with. Though most members of this group are active during the night, they do venture out during day time and this is particularly true of this species. This species also enjoys a wide distribution – from Madagascar to Hawaii where they inhabit mudflats, sandy beaches and mangroves. As in the Mud Crab of the same family, the Crenate Swimming Crab has the last pair of legs flattened into a paddle and is used for swimming. This, similar to the Mud Crab, is also aggressive and will not hesitate to use its claws in self-defence.

Family Xanthidae – *Atergatis subdentatus* – Red Reef Crab



The Red Reef Crab *Atergatis subdentatus* has a squat appearance. The uniform reddish brown colour and robust pincers can help in identifying these crabs. Around Karwar, these crabs can be seen on rocky beaches. As a species it is distributed from the Lakshadweep Islands and Gulf of Mannar to Singapore, Japan and Taiwan.