

## Crab Signal System

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In Peninsular Malaysia, mangrove crab fetches high commercial value and is a sought after seafood. This rare species contributes towards balancing the ecosystem through its daily activities such as burrowing and consuming leaf litter. Through burrowing, mangrove crab helps to aerate sediment through consuming leaf litter; and it also helps to retain much of the energy in the forest. The roles of this unique creature may be akin to an engineer of the forest.

Nonetheless, like many other creatures, the mangrove crab faces environmental threats caused by other species such as feud for food and burrow. These factors may influence the activity patterns that will likely affect mangrove crabs' behaviour. Mangrove crabs can also watch and hear you by tracing vibrations in the forest as they react sensitively to substrate vibrations. How do they do this? Mangrove crab converts stimuli to ecophysiological pulses to be translated by its neural network and the brain. This creature may have a tiny brain but it is not to be underestimated. The signal system for coordination of its body parts is far from simple. Tasks such as feeding, defence, mating, and fighting are coordinated by different wavelengths simulating the 'wifi' that links its behaviour and appearance with the environment. So, it is not surprising that you will see different colour shells or carapaces of mangrove crab which tells you colour of food that they ate.





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