

Coenobita clypeatus (Caribbean Hermit Crab)

Order: Decapoda (Crabs, Lobsters and Shrimps)

Class: Malacostraca (Crustaceans: Crabs, Sand-hoppers and Woodlice)

Phylum: Arthropoda (Arthropods)



Fig. 1. Caribbean hermit crab, *Coenobita clypeatus*.

[https://upload.wikimedia.org/wikipedia/commons/thumb/e/e7/Caribbean_hermit_crab.JPG/220px-Caribbean_hermit_crab.JPG, downloaded 26 October 2016]

TRAITS. There are over six hundred different species of hermit crabs, with *Coenobita clypeatus*, the Caribbean hermit crab (Fig. 1) being one of the most common. The first pair of legs of a Caribbean hermit crab are called chelipeds, with claws. The one on the left is bigger because it is used for fighting other crabs and shielding itself inside the shell (Fig. 2), while the claw on the right is smaller because it is used for feeding. The Caribbean hermit crab has four other pairs of legs called pereopods which helps them to move around with their mollusc shell home. The abdomen of the Caribbean hermit crab is not hard or covered, which is why it needs a mollusc shell to protect its abdomen (Wilkins, 2007). Before moulting the Caribbean hermit crab is usually a greyish colour, after moulting it becomes reddish, with purple claws (Fig. 2).

DISTRIBUTION. The origin the Caribbean hermit crab is the Caribbean Sea where the climate is hot but now can be discovered on the coast of Florida, Venezuela, The West Indian Islands and Bermuda (Wilde, 1973), although Caribbean hermit crabs are scarce there because of the inadequate vacancy of shells on the island (DENR, 2016).

HABITAT AND ECOLOGY. Hermit crabs habitats include mangrove swamps and coastal forests and wetlands. Most of the time they are found concealed by coastal vegetation, under ridges or in trees which have holes in them, hiding away where they can be safe from predators. Hermit crabs are more active in the night and they are terrestrial. They can travel miles from coastal areas by keeping a small provision of water in the shell in order to keep the gills moist.

REPRODUCTION. When the male and female both come out of their shells a little, the male Caribbean hermit crab transfers a spermatophore into the female's gonopores located on her last pair of legs. Hundreds or thousands of eggs are laid by a female Caribbean hermit crab, carried on the abdomen inside the shell with the assistance of the pleopod legs. The female then migrates to the sea (Fig. 3) to lay her eggs, which hatch into larvae as soon as they touch seawater. The Caribbean hermit crab larva stays afloat on the sea currents, consuming plankton and metamorphosing into a megalopa stage. After it transforms into a megalopa it scouts for an abandoned mollusc shell, then moults to fully transform into a young Caribbean hermit crab.

BEHAVIOUR. Caribbean hermit crabs use their claws when threatened but most of the time they just hide in their shell from predators or when they sense danger. These creatures are nocturnal which means they are more active at night time. Hermit crabs tend to be aggressive towards one another when competing for an empty shell (Natural History, 2008). They are nature's bandits, they pretty much steal shells from other crabs in order to survive by hiding their soft abdomens. Caribbean hermit crabs are omnivorous; they will eat anything for example meat (even decaying), fruits and leaves (which can be harmful or deadly to other animals). Caribbean hermit crabs keep their gills moist by going into salt or fresh water ponds but they do not stay in the water (Wilde, 1973). After the females lay their eggs in the sea they go back inland (Fig. 4).

APPLIED BIOLOGY. Caribbean hermit crabs are not yet endangered but they could be if humans keep them in captivity. Humans keep them as souvenirs or pets and they seldom breed in a confinement of an aquarium, they need salt water to lay their eggs. They live for about 30-40 years in their natural habitat whereas in captivity they are lucky to stay alive for a few months even with good care.

REFERENCES

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- Wilkins, K. A. (2007). Hermit Crabs For Dummies. Indianapolis, Indiana: Wiley Publishing, Inc.

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Fig. 2. Caribbean hermit crab emerging from shell.

[<https://www.vistaalmar.es/recursos/fotografia-video/2840-gran-migracion-cangrejo-ermitano-caribe.html>, downloaded 25 November 2016]



Fig. 3. Caribbean hermit crabs (female) migrating to lay their eggs.

[<https://www.vistaalmar.es/recursos/fotografia-video/2840-gran-migracion-cangrejo-ermitano-caribe.html>, downloaded 26 October 2016]



Fig. 4. Caribbean hermit crabs going back inland after laying on a coastline in Belize.

[<https://s-media-cache-ak0.pinimg.com/564x/b1/f7/4c/b1f74c68f9a80cc3141f9e4c776c5f95.jpg>, downloaded 26 October 2016]

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