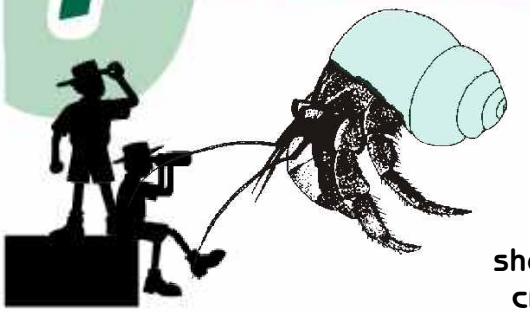
JR Nature Notes

Junior Ranger



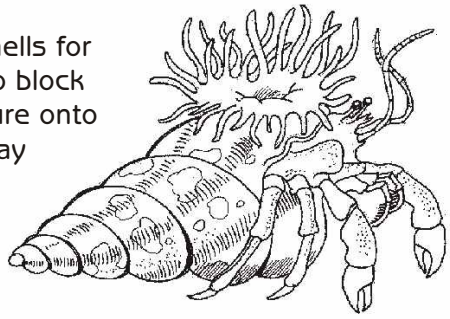
HERMIT CRABS

Hermit crabs are unusual because they use sea snail shells for their homes. Recycling shells has helped hermit crabs wander where their crab cousins fear to tread.

HOME SWEET HOME

To hermit crabs, snail shells are everything! If startled, they use their snail shells for protection. They tuck neatly into a ball, using strong front legs and nippers to block the entrance from intruders. The shell also keeps them wet when they venture onto land, shields them from the sun's rays and is a protected place for them to lay their eggs.

Some hermit crabs allow other marine life to piggy-back on their snail shells. The sea anemone is a welcome hitch-hiker as it stings predators. The anemone benefits from the ride by feeding on tiny particles of food as it is moved around. This arrangement, which benefits both creatures, is known as **symbiosis.**

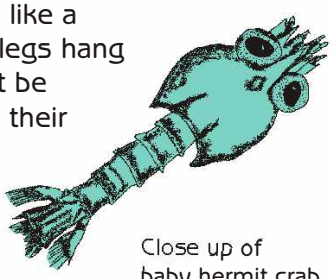


A marine hermit crab with a sea anemone attached to its shell.

SHAPED TO FIT!

Hermit crabs are arthropods and therefore have an **exoskeleton** (a hard shell-like covering). The original crab body shape has changed to fit the shape of snail shells, making them look more like a crayfish. The soft abdomen is shaped to curl inside the shell opening. Their four rear legs hang tightly onto the inside of the shell. Their four front legs are used for walking and must be powerful to be able to pull a house along! They have two front nippers used to cut up their food and defend themselves.

WARNING: never try to pull a hermit crab from a shell; they hang on so well that they may be torn apart!

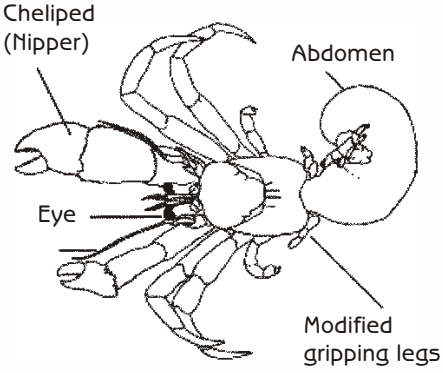


Close up of baby hermit crab (zooplankton).

HERMIT CRAB HABITAT

There are two types of hermit crabs: marine and terrestrial (land hermit crabs). Marine hermit crabs spend their whole lives underwater. Land hermit crabs can live in water but are really 'land-lubbers'. They can also live in freshwater but need to return to the sea for a salt recharge after a few days. Their modified gills allow them to get oxygen from the air as long as they don't get too dry.

Hermit crabs lay thousands of eggs at a time. The hatchlings roam the sea as zooplankton. A microscope is the only way to see them.



Hermit crab anatomy outside a snail shell.

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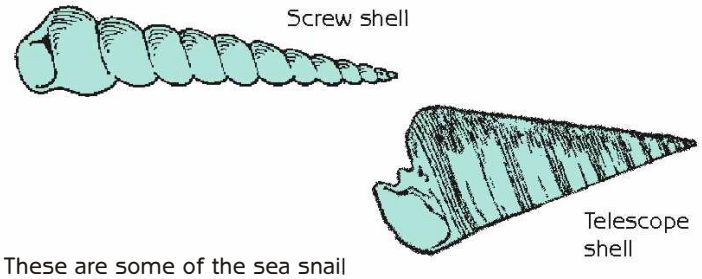
SHELL SWAPPING

Hermit crabs are not social animals spending most of their life alone. They will often fight each other for the other's shell. There is however one strange thing that they do called co-operative shell swapping. It works like this: a few hermit crabs come together and discuss their housing needs, then they will all hop out at the same time, and swap shells without complaint. But first they must carry out a full inspection!



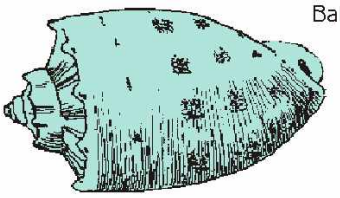
These are some of the sea snail shells that hermit crabs use for their homes. See how they all have a basic screw shape. Have a look for them next time you're at the beach, but remembe,r someone could be at home!

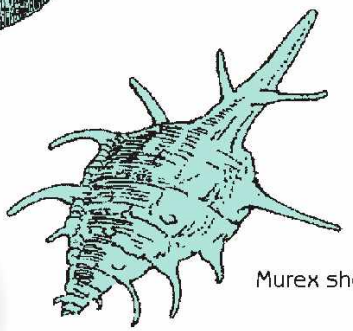
INSPECTING THE NEW HOME

Hermit crabs are fussy about the state of their shell. When they find a new shell, firstly, they pick it up to test the weight and strength by rocking it back and forth. Then, they roll the shell around in order to check the surface for cracks or holes. Finally, they will test for size and fit.

HOW TO FIND A HERMIT CRAB

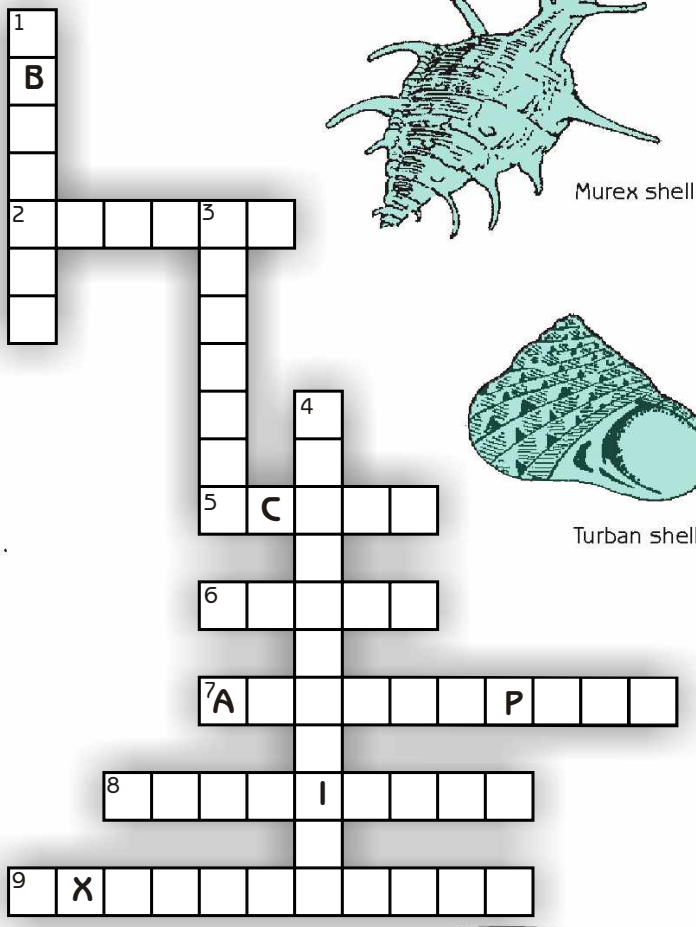
Land hermit crabs are great fun to look for and study. Simply find the freshest (sharpest looking) tracks you can see and follow them. Big tracks mean big hermit crabs. During the hottest times of the day they'll hide to avoid the heat, so look for them under flotsam and jetsam and sea shore plants.





HERMIT CRAB PUZZLE

This will test your hermit crab knowledge. Read back through the article for the clues.



Across

2. Plants and animals that live in the sea.
5. Hermit crabs need shells that have a _____ shape.
6. All hermit crabs need one to survive.
7. Crabs, yabbies and crayfish, all belong to the same group (Phylum) of animals called _____.
8. When animals benefit each other.
9. The outside covering of crabs is called an _____.

Down

1. The main part of the hermit crabs body inside the shell is called the _____.
3. Used to chop up hermit crab food and as defence.
4. All land animals are called _____ animals.

Want to learn more about Hermit Crabs?
Check out the book ***A Field Guide to Crustaceans of Australin Waters*** *by* ***Diana Jones & Gary Morgan.***

Written by Andrew Pickering, illustrated by Adrienne Williams and Bob Whiteford.