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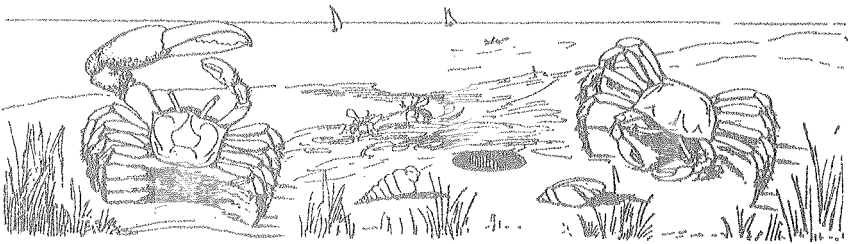


# Chapter One

## *All About Crabs*

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### Mr. and Mrs. Crab



This is a picture of Mr. and Mrs. Crab. Do you see the round hole? It is the door of their house. Mr. Crab lives in the sand by the sea. He has a smooth, flat outer “shell” on his back, eight legs, and two “hands,” or claws. One claw is large; the other claw is small. Mr. Crab fights with the big claw and takes his food with the little one or with both claws.

Mr. Crab digs out his house in the sand; he makes a place for a hall, a bedroom, and a pantry. Mrs. Crab does not dig.

Both her hands are small and weak. She gets food to put into the pantry, and she never fights. If she is in any trouble she runs home, or to a hole in a rock.

See how strange a crab's eyes look! They are set on **pegs**; some call them **stalks**. The crab can push the eye-pegs out and pull them in. How odd would you look if you could make your eyes stand out six inches? When crabs go into their houses, they draw down their eyes and tuck in their feet.

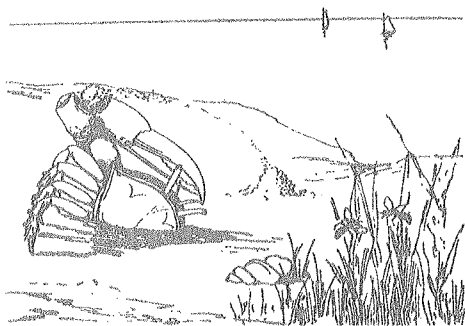
God made crabs with many different colors. He made some that are red, brown, green, yellow, or blue. The claws of crabs are often of a very bright color. The color on their outer "shells" is less bright; this color is in small dots. The color on some kinds of crabs is in lines. No crab is clear, bright red when it is alive. When crabs are cooked in boiling water, their color turns to bright red.

Why is this? We cannot tell why the heat makes their color change.

## Mr. Crab and His House

The water from the sea comes and goes in **tides**. Twice each day the water rises—this is called high tide. After each high tide the water goes back—this is called ebb tide. Each tide lasts six hours. If a stream or brook near your home were high and low twice each day, the change would be like the high and low tides of the sea. If you live near the **ocean**, then you know how the tides flow in and out everyday.

When the tide is low, Mr. Crab digs out his house. He scoops out the sand with his big claw. Then he folds his claw to carry the sand, as you would carry grass or leaves in your arm. Some kinds of crabs carry sand in three of their legs, bent to form a basket. Mr. Crab takes the



sand to the top of his hole. Then, with a jerk, he throws the sand in a heap.

Mr. Crab is very strong. He can lift and carry things larger than his body. He digs out a long hall in the sand. He makes rooms in his house. Then he goes with his wife to look for food.

Mr. and Mrs. Crab eat flies, gnats, ants, ladybugs, and other little insects. They also eat seaweed. When beach fleas land on the sand or seaweed, the crabs jump at them, and catch the fleas as cats catch mice. Even cats do not move as quickly as Mr. and Mrs. Crab. They put the bugs they catch into their pantry.

Mr. and Mrs. Crab keep near their home in case there is danger. For six hours, while the tide is high, they stay in their

house and eat insects and seaweed they have stored away.

God the Creator gave crabs the ability to know how the tides come and go. The crabs know when the tide will be high over their house and when it will be low, so they can come out again.

## More About Mr. Crab

I could tell you many strange things about Mr. Crab. At this time, let me simply ask you a question. Where is your **skeleton**? It is inside your body. Your skeleton is made up of bones that hold up your soft flesh. Mr. Crab's "skeleton," however, is on the outside of his body; it is called his **exoskeleton**. It is a thin, hard "shell" that covers Mr. Crab's body. His exoskeleton is like armor that keeps him from being hurt.

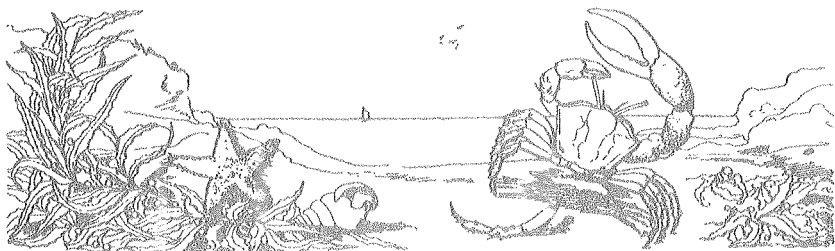
Did you know that Mr. Crab can live and breathe either in the water or on the



land? You can live only on the land, but he can live on the land and in the water.

A hen, you know, lays eggs, one by one, in a nest. She keeps them warm till the chicks come out. Mrs. Crab also lays eggs but does not leave them in a nest. She puts her eggs in a long tube or sack. Mrs. Crab carries them tied on her long legs or under her body. When the small crabs come out of the eggs, they grow very fast.

Did you ever try to catch a crab? At first, it will pinch you, if it can, with its big claw. When you catch a crab by its leg and do not let go, it will drop off its leg and run. Could you run with one leg gone? No, but the crab can. In fact, the crab has legs to spare. When one leg



drops off, a new leg will grow back. A boy or girl could never grow a new arm or leg! A crab's leg, however, will grow again very soon.

If a crab's eye-peg is cut off, however, it takes a whole year for a new eye to grow. I think a crab knows that; it is very careful of its eyes.

Mr. Crab has a wide, flat exoskeleton with a notch in each side. He can let his eye-pegs lie in the notches. How can he do that? His eye-pegs are so long he can bend them down flat to fit in the notches. There they are kept safe.

## Mr. and Mrs. Crab Get a New Coat

Your skin is soft and stretches easily into a new shape. As you grow more and more, your skin does not break. Your skin gets larger as your body grows. Mr. Crab, however, is in a hard exoskeleton

which will not stretch. When it gets too tight, what can Mr. Crab do? What do you do when your coat is too small?

Now I will tell you something strange. When Mr. Crab finds that his "coat" is too small, he takes it off, as you would take off your coat. He pulls his legs, claws, and back out of it. He does that in his house, just like you do when you change your clothes in your room. As Mr. Crab slips out of his exoskeleton, he pulls out his "feet" and claws, as if he were taking off boots and gloves. Then he becomes a helpless, cold creature. His body is only covered with a skin, soft as paste; this skin is made of lime and a kind of "glue." In a few days it gets hard. It is as big as Mr. Crab and fits his shape well. It is a strong, new "coat"! It also



has the right colors—blue, brown, red, or gold. It may have spots and rings, too.

When Mrs. Crab changes her “coat,” Mr. Crab stays near and tries to keep her from being hurt. He also watches over the young crabs which have to change their “coats” often. They grow so fast!

Crabs that live in dark mud have dark brown or green exoskeletons. Some crabs have sand-colored ones—pale gray or brown, with close, fine specks like sand on them. God gives each kind of crab just the right color it needs to hide when there is danger.

There are more kinds of crabs than you could count. They live in all parts of the world. This book tells you only about a few of them.

## What Mr. Crab Does

Do you get angry quickly? Mr. Crab does, and he also likes to fight. He is like