

# CHRISTIAN LIBERTY NATURE READER

## Book Two

*Third Edition*



JULIA MCNAIR WRIGHT

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## Preface

We are honored to bring you this classic reader. This particular book is designed to not only improve a student's reading skills and comprehension, but to also increase the student's understanding of and interest in God's wonderful creation.

The ability to read is the foundation for all subsequent education. The child whose reading skills are deficient may grow up to become one who is frustrated and loses hope, but learning to read well encourages the freedom to learn and the hope to succeed.

Phonics-based reading is a teaching method of vital importance, which is coupled with the quality of the reading material. So many of what pass for "modern" readers in education today are nothing more than a means to promote "social adjustment"; that is, conformity to the standard and values of secular society in order to be accepted.

The Bible, however, commands us to do "all to the glory of God" (1 Corinthians 10:31). Reading for God's glory demands reading material that draws attention to Him and His truth, which reflects His majesty and meets biblical standards. This means that we should measure whatever we read against the standard of Philippians 4:8. Ask these simple questions: Is it true? Is it

noble? Is it right? Is it pure? Is it lovely? Is it admirable? Is it excellent? Is it praiseworthy?

As we look at the American readers of days gone by, we find that the biblical standard was followed. Such readers featured the finest British and American authors, who emphasized the glory of God, obedience to His Word, appreciation for His creation, and respect for one's country.

The *Christian Liberty Nature Reader* series follows the pattern of the past. Believing that the student can gain an enhanced appreciation for God by studying His creation (Psalm 19:1; Romans 1:20), this reader seeks to present the majestic splendor of His handiwork.

It is our prayer that this series will give to the student the joy that is to be associated with “good reading,” and that the knowledge imparted will help “make wise the simple” (Psalm 19:7).

*The Staff of Christian Liberty Press  
Arlington Heights, Illinois*

# Unit 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

Atlantic Ghost Crabs  
at Home



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.

## Review

1. Describe what Mr. Crab looks like.
2. Where does Mr. Crab make his house?
3. How is Mr. Crab’s house divided up?
4. Tell me about a crab’s eyes.

## 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 you live near the **ocean**, then you know how the tides flow in and out every day.

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



Atlantic Ghost Crab at Low Tide

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 insects 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.

## Review

1. How does the crab dig out his home?
2. What do crabs like to eat?
3. While the tide is high, what do crabs do?

## 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 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



Mrs. Crab Carrying Her Eggs

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 eyestalk is cut off, however, it takes up to a whole year for a new eye to grow. I think a crab knows that; it is very careful of its eyes.

## Review

1. What is the thin, hard “shell” that covers Mr. Crab’s body called?
2. Mr. Crab can live and \_\_\_\_\_ either in the water or on the land.
3. If a crab’s eyestalk is cut off, how long does it take to grow back?

# 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 that 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 **molts**, or takes it off. 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





Freshly Molted Ghost Crab

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 about only a few of them.

## Review

1. Mr. Crab is in a hard \_\_\_\_\_ that will not stretch.
2. How does Mr. Crab change his “coat”?
3. Mr. Crab’s soft skin is made of what?
4. What does Mr. Crab do when Mrs. Crab and their children molt?

# What Mr. Crab Does

Do you get angry quickly? Mr. Crab does, and he also likes to fight. He is like a boy who may act badly when he is upset.

When Mr.

Crab sees

some other

crab near

his house,

he becomes

angry. Then

he stands high on his

toes and pulls in his

eyestalks for fear they will be hurt. He

spreads out his big claw. Now Mr. Crab

is ready to fight! He runs at his enemy!

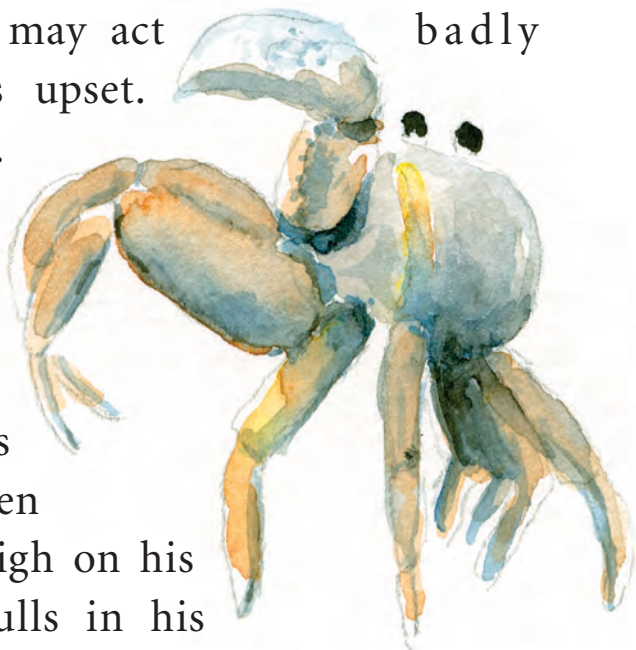
Each crab tries to hit the other with his

big claw. This big claw can cut and pinch

hard.

Sometimes, Mr. Crab cuts off the claw

or leg of the other crab, or he bites the



exoskeleton on the other crab's back. If only a leg is cut off, the crab may keep on fighting; but if his claw, eye, or back is hurt, he must give up. He runs home to hide until a new eye, claw, or leg can grow.

If your hand is cut off, will it grow again? No, God only gives a few wild animals the ability to grow new body parts. When Mr. Crab has lost a leg or claw, and a new one grows, it is small at first. Then when he gets a new "coat," the new claw or leg becomes half as large as the one he lost. The next new "coat," the new claw or leg comes out the full size it should be. When Mr. Crab gets a new exoskeleton, we call this molting.

When Mr. Crab is afraid, he runs home; but he is very brave and does not fear other crabs. He fears birds most because they eat small crabs, and he cannot fight a bird that is larger than he is.

Swing a rag over a crab's head. Up fly its eyestalks! Up comes its big claw! There, it has caught the rag! It will not let go. You can lift it into the air by the rag, and it still holds on. Once I saw a blue crab catch a dog's tail. The crab held on fast. The dog gave yelps, and ran up and down the beach. We had to catch the dog and pry open the crab's claw.

If you lay a piece of shell on the opening into Mr. Crab's house, he will run up and hit the shell with his head. See him shake! Now he waits. Watch carefully. There, the shell flies up in the air! As Mr. Crab runs, he strikes the shell hard and makes it fly up. See Mr. Crab try again, making the shell shake. He knows how hard he must hit the shell to get it out of the way.

Some folks think Mr. Crab shuts the door of his house with his big claw. He knows that the tide will wash a lump of sand over the opening to his house. The

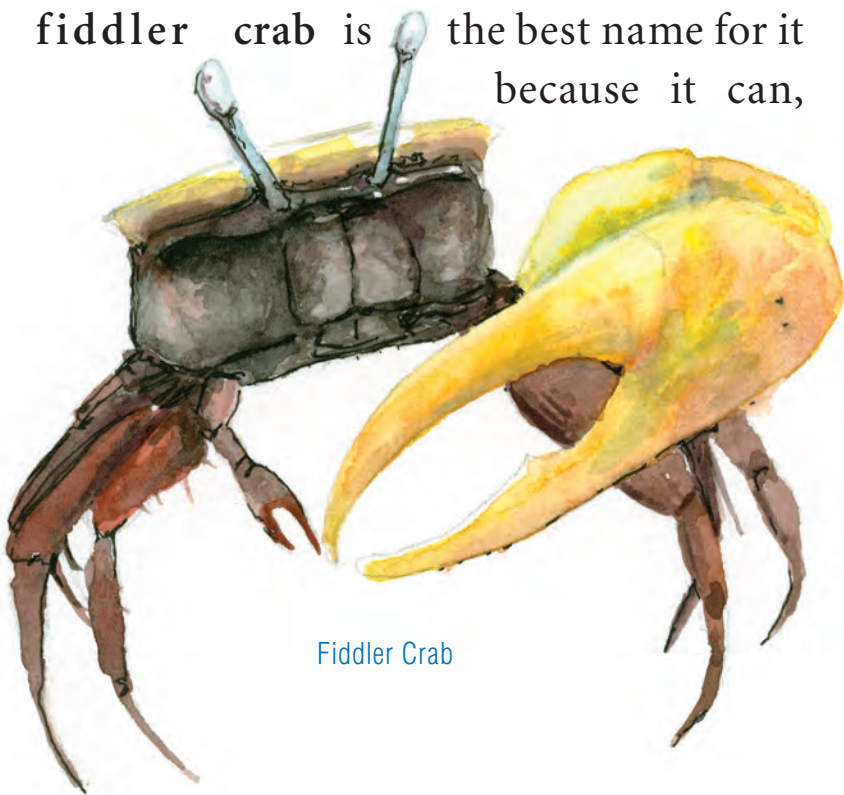
tide will shut it in. Mr. Crab watches the waves come near. At the last wave, he runs into his house because he knows the next wave will close the opening. Mr. Crab never stays up one wave too long. He gets in his house just in time.

## Review

1. When Mr. Crab sees some other crab near his house, what does he do?
2. If Mr. Crab's claw, eye, or back is hurt in a fight, where does he go?
3. Why does Mr. Crab fear birds most?
4. When the tide comes in, what does Mr. Crab do?

# Food for Mr. Crab

The crab that has one large claw has many names. Some call it the “fighting crab” because it is angry so much of the time. Others name it the “calling crab” because, when it runs, it holds its big claw high as if it is calling, “Come! Come!” Most people call it the “fiddler crab” and say that its big claw is its **fiddle**. I think **fiddler crab** is the best name for it because it can,



Fiddler Crab

and does, play a tune on that claw. Do you see a row of little knobs on the inner edge of its big claw? It rubs those knobs on the edge of the exoskeleton that covers its back and makes a tune. It uses that tune to call its mate, which thinks it is fine music. The crab's big claw is its violin, as well as its "hand," "spade," and "sword."

Mr. Crab finds food on the beach, as well as down deep in the sand and in the water. When he walks along the sand, he meets big flies with two wings. He is glad to see them. Why? These flies put their **grubs**, or young ones, in the sand, and Mr. Crab knows just where he can find them to eat. Mr. Crab also meets a large, green **tiger beetle**. He does not fight with him, but Mr. Crab knows that he shall find the beetle's grubs in the sand and eat them.

While he digs down in the sand, he meets a little, fat, round crab with big eyes and a thin, gray exoskeleton. He is glad to see



it. If Mr. Crab does not have enough food to eat when the tide is high, he will creep along in the sand and catch this small crab for his dinner. Deep down, Mr. Crab also meets long worms that are green, red, or brown; but he does not trouble them. They are making houses for themselves.

Out in the sea, Mr. Crab finds some small shellfish called **limpets**; they are small snails with flat shells. These shells are very hard to open, so Mr. Crab has his work cut out for him. If Mr. Crab is able, he will pry open or crush the shell of the limpet and then enjoy his lunch.

## Review

1. How does the fiddler crab make music?
2. What does Mr. Crab like to eat?
3. What does Mr. Crab do to the long worms he finds?
4. What does Mr. Crab need to do to eat a limpet?

## Some Other Crabs

All crabs are not alike. There are many different kinds. They differ in shape, color, and habits. They are different and yet very beautiful. Some crabs make houses in the sand, while others live in holes in the rocks. All are very special and fun to study.



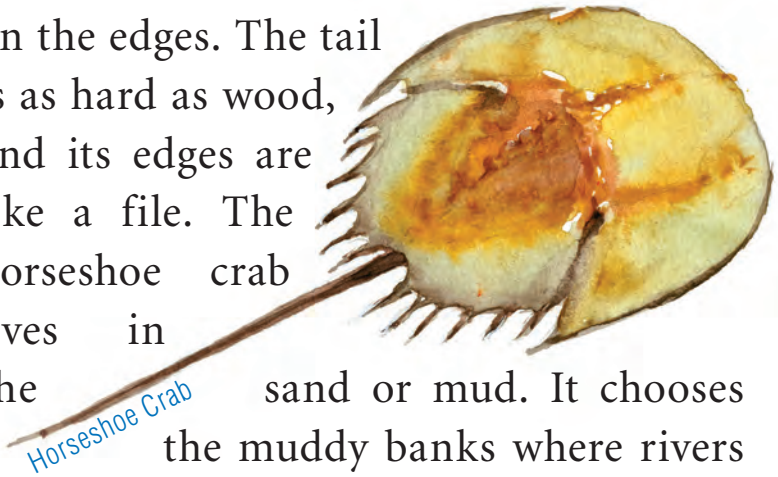
Japanese Spider Crab

The **spider crab** has long, thin legs. The front of its exoskeleton,

which is over its head, is not wide but comes to a sharp point. This point helps it dig its way into sand and mud.

The **horseshoe crab** has a chestnut color. Its exoskeleton is in the shape of a horse's hoof with a long tail that has sharp points

on the edges. The tail  
is as hard as wood,  
and its edges are  
like a file. The  
horseshoe crab  
lives in  
the



Horseshoe Crab

sand or mud. It chooses  
the muddy banks where rivers  
or streams run into the sea. It pushes  
its way into the mud with its big, round  
exoskeleton and scrapes the mud out with  
its many “feet.” The horseshoe crab eats  
the worms that it finds in the sand and  
mud. Why are the worms down there?  
Like the horseshoe crab, they build a  
house in the mud. Some time I will tell  
you about these worms.

Now and again, as the horseshoe crab  
goes along under the ground, it finds  
in its way a long, soft thing that looks  
good to eat. It is the long pipe, or tube,  
that a clam uses to take in its food. The

horseshoe crab puts out its claw to get it. It can move its claw as quickly as a cat can jump or strike out its paw, but the clam is far quicker than the horseshoe crab and shuts its shell down on the crab's claw. Now the crab's claw is caught, like a rat in a trap! It waits to see if the clam will let go. No, it will not. Then the crab drops off its claw and goes away to hide and grow a new one.

Do you see the crab in a shell made like a curl? That crab steals its house. It is called the **hermit crab**. It finds an



empty shell and goes into it to live. It is odd to see this crab run with the shell it stole on its back. How does the hermit crab live? It lives by fishing. In fact, all crabs hunt and fish. You already learned how the crab hunts on the sand for bugs and flies, and how it hunts for grubs in

the sand. Now it is time to learn how the hermit crab fishes. First, it gets into a good place to fish and pops out its eyestalks to see all around it. Then, when things that the crab likes to eat float by, it strikes out with its big claw. It catches what it wants nearly every time. The great Creator gave crabs the ability to be good “fishermen.”

## Review

1. The spider crab uses the point on its head for what?
2. What is the shape of the horseshoe crab’s exoskeleton ?
3. What does the horseshoe crab like to eat?
4. How does a crab fish?

# The Hermit Crab

Do you wish to hear more about the crab that steals its house? Why does the hermit crab do that? Its back is long and soft, not hard like the backs of other crabs. If it cannot find a hard cover, it will die. Other crabs would bite or pinch it. So would many fish. As the hermit crab grows too big for one shell, it finds another. It never leaves its shell until it knows that it is about to die. How does it know that? Only God knows for sure. Even so, it comes out, lies down flat by its house, and dies. The hermit crab wants its house to live in, not to die in.

When the hermit crab needs to change its shell house, it hunts for one that will fit. Then the crab puts its long claw into the shell to feel if it is clean and empty. At times, the hermit finds another crab living in the shell it wants, so the two fight for it. Likewise, if some small creature



Hermit Crab

lives in that shell, the crab pulls it out with its long claw. Then the hermit brings the new shell near and springs from the old shell into the new one, as you would spring from chair to chair.

On the end of its long, soft tail, the hermit crab has a hook. It twists its soft body into the new shell. Then it clasps its tail-hook to a small, round post in the top of the curl of the shell. That holds the crab firmly in place. Its horny legs hang out in

front; it uses them to run and carry the shell. It can also draw back into the shell and hide if there is danger.

One kind of hermit crab lives with a small, pink sea creature that looks like a flower. The crab wants it to grow on its shell. Perhaps it helps the crab catch food or hides the door of the crab's shell. This sea creature can also build more shell on the edge of the shell in which the crab lives. This makes the shell larger, so the crab does not need to move as often. When it does move, the crab takes its friend along. It puts out its claw and lifts the sea creature off its old shell and sets it on the new one. Then the crab holds it there until it has made itself secure. Then, tail first, the crab slips into its new shell. The fine red, pink, and white frills of its friend hang like a veil over its door. The frills keep fish and other foes away because these frills can sting.



In the South Seas, some of these crabs do not live in seashells; they live in coconut shells. They eat the meat of the nuts, and when it is all eaten, they look for another shell. Each night these crabs crawl into the water to get wet. They leave their eggs in the water to hatch.

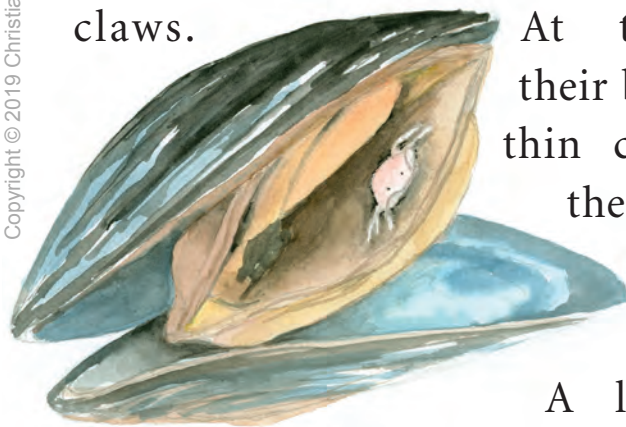
## Review

1. Why does the hermit crab steal a house?
2. What does the hermit crab do with the hook on the end of its long, soft tail?
3. How does the small, pink sea creature help one kind of hermit crab?
4. In the South Seas, where do some of these crabs live?

## More About Crabs

Crabs have many enemies. Fish and birds eat them. People eat some kinds of crabs. Crabs eat each other. With so many enemies, crabs would soon be all gone, if they did not lay so many eggs. Each year, a crab lays more eggs than you could count. Crabs do not always have hard shells. When they first come from their eggs, they have long tails, four legs, and no claws.

At this time, their bodies have thin covers over them, but they can swim well.



Pea Crab in an Oyster

A little, pink crab called a “pea crab” goes to live in the shell of the oyster. The oyster does not seem to mind it. You may see this little crab in your oyster soup. It

turns orange colored when it is cooked. The pea crab has a very soft exoskeleton.

The spider crab has a brown “coat,” or exoskeleton, that is rough like sand. It has little thorns all over it. The spider crab cuts off fine seaweed with its little sharp claws and hangs it like ribbons on these thorns or hooks. Then it looks like a little green grove! Who can tell why it does that? Is it to hide?

Do you see the wide back feet of the blue crab?

Those are its “paddles,” or “oars.” They are its swimming “feet.” Its exoskeleton is wide and

light. This crab can float on the waves like a boat, and it goes far out on the deep sea.

Sand crabs can hide by digging into the sand very fast. They go in backwards. They slip out of sight like a flash, or they



Blue Crab

leave the tips of their heads and their eyestalks out to look around. They do this almost every day. Their pale brown or sand-colored “coats,” or exoskeletons, are wide and round behind and come to a point in the front. Their heads are in the narrow part of their rough “coats.” They are swift runners. God protects sand crabs with their sandy color. When they are afraid, they lie flat on the sand, so it is hard to see them. Even so, some birds have long, thin bills, which they use to pick a crab right out of its sand house.

## Review

1. Name some of the enemies of crabs.
2. Where does the pea crab live?
3. What does the spider crab do with the “ribbons” of seaweed it cuts up?
4. What is unique about the back feet of a blue crab?
5. How do sand crabs hide?

# The Uses of Crabs

How often does a crab get a new coat? Its coat does not wear out, but it gets too small. Then the crab molts, or sheds, its shell to get a larger one.

A baby crab grows fast. It seems to grow before your eyes. You grow fast, too. Your parents say it is hard to keep you in clothes. Your father may be able to wear his coat for many years, but you cannot wear the same coat you had last year. It is the same with a baby crab. When it is very young, it grows fast. It needs a new coat, or exoskeleton, very often. When the crab is older, it grows more slowly. Then it gets a new coat every spring. At last, it does not grow anymore but keeps the same coat, year after year. The crab's exoskeleton gets very hard and thick, and loses its bright color. Very often, it is nearly covered with limpets, or small

snails. They fasten their flat or pointed bodies to the crab's back and stay there.

Of what use are crabs? Did God create them for a reason? Yes, the great Creator made all things for a special reason. Sometimes, we cannot find out their use, but we do know that crabs are good for food. Some people like to eat certain kinds of crabs, as well as fish, oysters, and other seafood. Birds also like to eat a great many crabs; some birds almost live on them. Many crabs are eaten by fish, too. There are many kinds of crabs so small that you could hardly see them. Fish feed on these small ones, and then men catch and eat the fish.

We also know that crabs help to keep the sea and the seashore clean. Crabs eat nearly all kinds of dead things that would spoil and make a bad smell if left on the sand. Crabs eat dead fish and dead animals that are thrown into the sea. Do

you ever see people going about to clean the streets? In the same way, crabs help to keep the sea and the shore clean. There are so many crabs that they are able to eat a lot of dead fish and animals, and do it quickly. This is why they can clean away much of the dead stuff that lies along the shore.

## Review

1. A young crab needs a new \_\_\_\_\_ often.
2. Very often, an adult crab is nearly covered with \_\_\_\_\_, or small snails.
3. What kinds of animals like to eat crabs?
4. How do crabs help to keep the sea and the seashore clean?

# Words You Should Know

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## A

**abdomen**—the body part behind the thorax in an arthropod; the part of the body between the chest and the legs of mammals

**acid**—a chemical substance that has a sour or stinging taste

**annelids**—long, segmented earthworms and leeches

**antennae**—a pair of feelers on the head of insects and other creatures; used to smell, taste, and sense heat, sound, and motion

**Arachnida**—a large class of arthropods that breathe with book lungs; includes spiders, scorpions, mites, and ticks; members have segmented bodies divided into two regions—cephalothorax and abdomen

**arachnids**—arthropods that have segmented bodies divided into two regions—cephalothorax (head and chest combined) and an abdomen; have four pairs of legs but no antennae

---

## B

**beebread**—pollen and a little honey mixed together with the saliva of the bees