

Next Time You See a PILL BUG




BY EMILY MORGAN


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National Science Teachers Association

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For Jack, who likes to collect “roly-polies”

A photograph of three young children of diverse backgrounds gathered around a hand holding a small pill bug. The child on the left is a girl with dark hair, the middle child is a girl with blonde braids, and the child on the right is a boy with dark skin. They are all looking intently at the bug. The background is a grassy outdoor area.

*“Teaching children about the natural world
should be seen as one of the most important
events in their lives.”*

—Thomas Berry

A NOTE TO PARENTS AND TEACHERS

The books in this series are intended to be read with a child *after* he has had some experience with the featured objects or phenomena. For example, turn over some stones or logs in your yard or nearby park and collect a few pill bugs. Watch them roll up in a ball when touched. Let them open up and crawl around in your hands; they won’t bite! Place a few in a jar or bug box and try to count their wiggling legs. Discuss what you observe and what you wonder about these little animals. What do they eat? Why do they live under rocks and logs? Do they lay eggs?

Then, after placing the pill bugs gently back where you got them or in a container nearby, read this book together. Take time to pause and share your learnings and wonderings with each other. You will find that new learnings often lead to more questions.

These books are not meant to present facts to be memorized. They are meant to inspire a sense of wonder about ordinary objects or phenomena and foster a desire to learn more about the natural world. Pill bugs are fairly common animals, but when you stop to think about the fact that they are crustaceans and not bugs at all, and that they are closely related to shrimp and crabs that live in the sea, they become so much more remarkable. My wish is that after reading this book, you and your child feel a sense of wonder the next time you see a pill bug.

—Emily Morgan

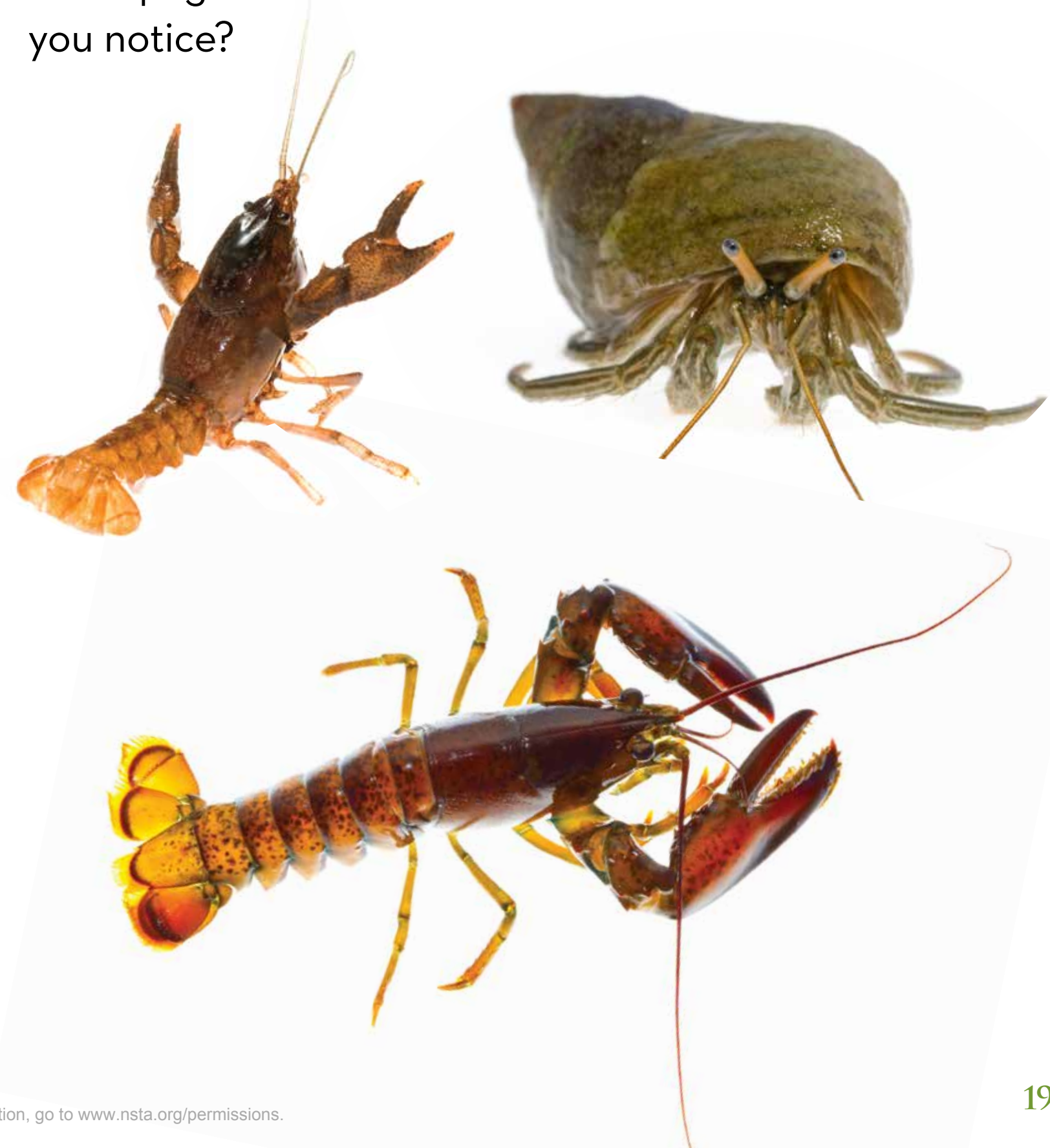


When you look closely at a pill bug, you notice that its exoskeleton is segmented, or divided into sections. All crustaceans are segmented. Another thing crustaceans have in common is that their exoskeletons do not grow as the rest of their bodies grow. So pill bugs must grow a new exoskeleton and shed the old one. This is called molting. They do this in two parts. First, they shed the back half, and a few days later, they shed the front half. If you see a pill bug that looks brownish-red on half of its body, it's probably molting.



Most crustaceans—such as crabs, lobsters, and crayfish—have claws or pinchers on some of their feet. However, pill bugs are different. All of their feet look the same. Because of this difference, scientists call pill bugs *isopods*, which means “same feet.”

Compare the pill bug to the other crustaceans on these pages. What similarities and differences do you notice?



Next Time You See a PILL BUG



If curious children look closely, just under a nearby rock, they might spot a roly-poly pill bug. This book invites children and adults to gently pick up the pill bug and watch as it rolls into a ball and unrolls to take a walk. The better children get to know this tiny creature that's a cousin to lobsters and crabs, sheds its crusty skin, and tickles their hands with its 14 (count 'em!) wiggly legs, the more their fascination will grow.



Awaken a sense of wonder in a child with the *Next Time You See* series from NSTA Kids. The books will inspire elementary-age children to experience the enchantment of everyday phenomena such as fireflies and pill bugs. Free supplementary activities are available on the NSTA website.

Especially designed to be experienced with an adult—be it a parent, teacher, or friend—*Next Time You See* books serve as a reminder that you don't have to look far to find something remarkable in nature.

