

THE FIRST BOOK OF



WRITTEN &
ILLUSTRATED BY

**MARGARET
WILLIAMSON**



Bugs Bugs



Everywhere



A special thank you to Dr. N. J. Berrill, Ph. D. Sc., F,R,S,C, Strathcona Professor of Zoology at McGill University in Montreal, not only because he carefully checked this book for its scientific accuracy, but also because he first introduced the author-artist to the adventure in a bug's world.

Thank you also to Mr. George Moore, custodian of the Lyman Entomological Collection at McGill University, and to Mrs. E. E. Terrill, Librarian of the Blackader Library of Zoology at McGill University, for their assistance.

M. W.



This edition published 2022
by Living Book Press

ISBN: 978-1-922950-73-4 (hardcover)
978-1-922950-66-6 (softcover)

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about

BUGS

Not all the tiny creatures you see creeping and crawling and flying are truly bugs. When somebody says, “Ooh, look at the bug!” he might be pointing at a beetle with six legs, or a spider with eight legs, or a centipede with many legs. Or he might be pointing at a stink bug, which belongs to the only family scientists call bugs. But in this book, let’s call them all bugs to make it easier, and, often where a bug is magnified, the outline beside it shows you about how big it really is.

If you watch a bug as it goes along about its business, you can find out what a bug’s world is like. You can see what kind of legs and wings and feelers it has and how they work, and you can hear the noises it makes.

If you wait and watch long enough, you may even see it creep out of the hard, stiff suit of armor that all bugs wear, and walk off in the new and bigger suit that has been growing, all wrinkled, underneath the old one.

If you wait still longer, you might see how a bug’s young are born and how they grow up. Perhaps you may even find out who its enemies are.



mud dauber wasp



centipede

squash bug



rove beetle





Bugs are so small that it is hard to imagine they can be strong enough to fight their enemies. But some of them can run or jump quickly, while others can fly away.

mexican squash bug



A bug may have a sting, to sting its enemies, or strong jaws to bite them. Some bugs can run or jump quickly, while others can fly away. Even so, lots of bugs are killed. But there are always more. There are more bugs in the world than all the people and animals you can think of. That's mostly because bugs are born by the thousands—much faster than their enemies can eat them up.



stink bug

Bugs do not think about things or make plans as people do. They are born knowing everything they need to know about getting food, and fighting their enemies, and building their houses.

Even a young spider builds its first web perfectly, although it may never have seen another spider web. Its mother does not ever need to show it how.

Not even scientists have figured out exactly how a bug knows these things. That is still a bug's secret.



may fly



ladybugs



silverfish

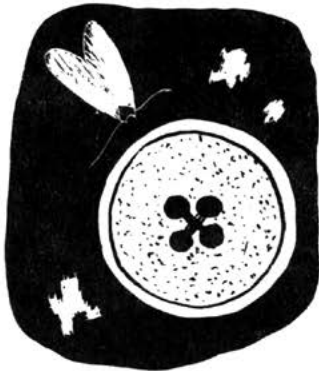


Sometimes people get angry at bugs. Clothes moths chew up their swimming suits and mittens, cockroaches crawl over dishes in the sink, potato bugs eat holes in potato vines, Japanese beetles ruin the prettiest roses and termites chew wooden stairs in houses.

But bugs are valuable, too. After all, the honey for your waffles comes from bees, and silk for your dresses from silkworms, and the shellac that makes your furniture shine comes from scale bugs.

Even those same termites who tunnel through wooden stairs in our houses, eat old dead wood in other places where it is not wanted and make it part of the earth again. In that way, they save people the trouble of burning or burying lots of rubbish, and they make room for new animals and plants as well.

No bug really intends to be harmful or useful. It just lives its own life. Now you're going to see how some bugs live, what they eat, where they sleep, how long they live, and how they have fun.



clothes moth



termites tunneling through wood

CRICKETS and their COUSINS

Best of all, a cricket likes to sit in the sun and make music. If he's frightened, he'll stop playing, and jump like a jumping jack.

A cricket has a fiddle and a bow hidden in his two top wings. The top of each wing has ridges on it and the bottom of each wing has a row of small teeth like a file. To make his music, he crosses his wings one over the other and saws them back and forth.

A cricket can fool you. When he plays loudly, he sounds as if he were right beside you. But he can play very softly to make himself sound far away.

In the springtime, Mr. Cricket plays a love song to a lady cricket, who listens carefully with her knees. That's where crickets' ears are. She can't play music because she has no fiddle in her wings. Besides, after a while she is busy laying dozens of eggs in holes which she digs in the earth with her sharp pointed shovel. Later, she dies, but the young crickets can get along perfectly well from the minute they are born, even while they are in the egg.



The sun bakes the earth that covers the eggs and keeps them warm. When the young crickets have grown too big for the eggs, they push with their heads till the lids on their eggs fly open, and out they pop. They look just like grown-up crickets, but they are much smaller, and have no wings. They are curious, and push their way out of the earth to go adventuring. If they are lucky, and are not gobbled up by an ant or a lizard, crickets wander all summer long, hiding under leaves and stones, and usually waiting until night to hunt for food.

A cricket eats so much that soon its hard black suit, which cannot grow at all, splits open down the back and it creeps out in its new and bigger suit. Before the summer is over and a cricket is full-sized, it grows out of four or five suits.

In the fall, it digs itself a house in the earth. It digs and scrapes and sweeps and rakes with its legs, and lifts pebbles out of the

