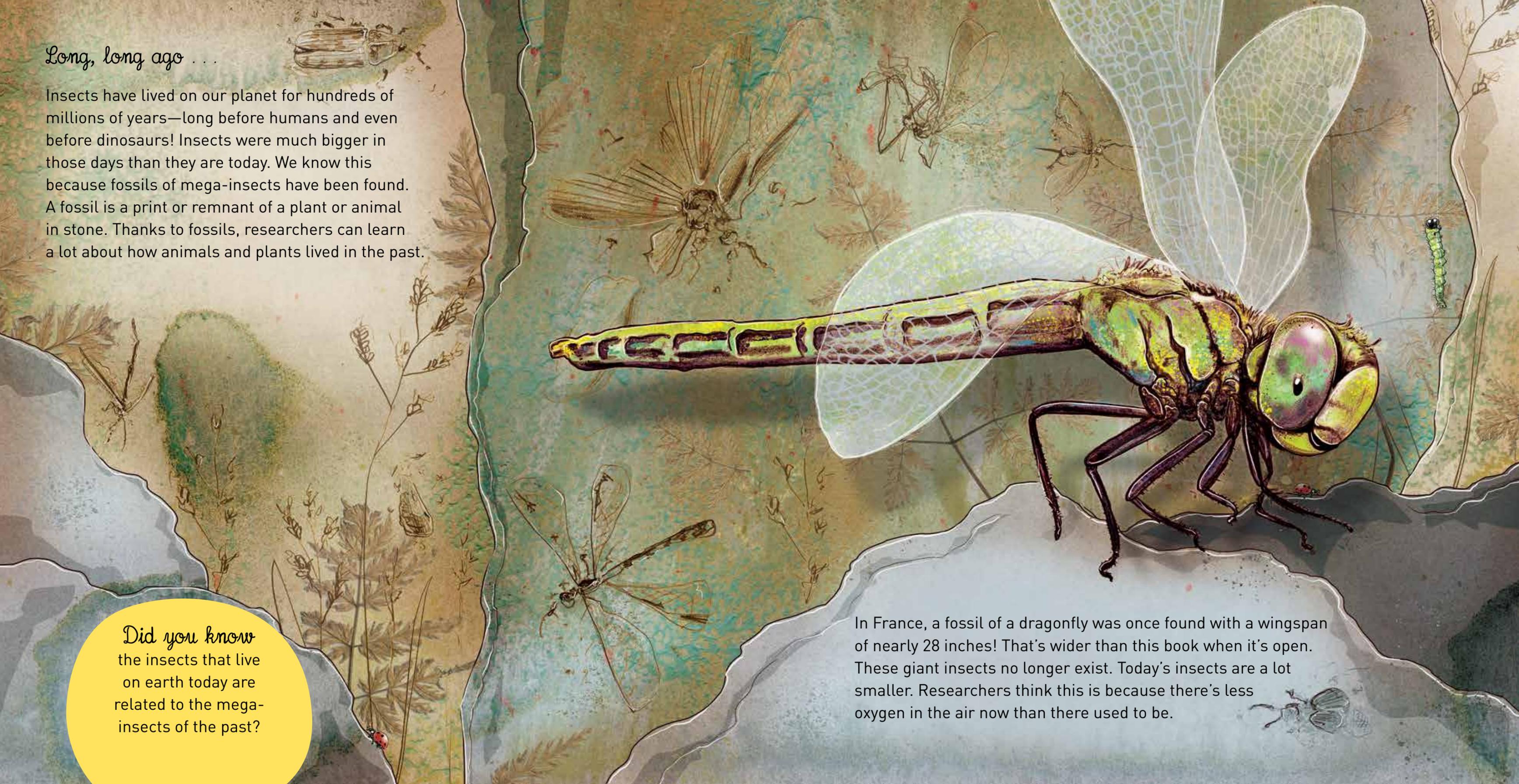


Long, long ago . . .

Insects have lived on our planet for hundreds of millions of years—long before humans and even before dinosaurs! Insects were much bigger in those days than they are today. We know this because fossils of mega-insects have been found. A fossil is a print or remnant of a plant or animal in stone. Thanks to fossils, researchers can learn a lot about how animals and plants lived in the past.

Did you know
the insects that live
on earth today are
related to the mega-
insects of the past?

In France, a fossil of a dragonfly was once found with a wingspan of nearly 28 inches! That's wider than this book when it's open. These giant insects no longer exist. Today's insects are a lot smaller. Researchers think this is because there's less oxygen in the air now than there used to be.



What's an insect?

There are lots of little critters, but not every little critter is an insect. You're an insect if you meet three requirements. You have **six legs**. You have **facet eyes**: thousands of tiny eyes together that can look in all directions. And you have a body that consists of **three parts**: the head, the thorax, and the abdomen.

This caterpillar seems to have a lot of legs, but most of them are fake. These prolegs are located on its abdomen. A caterpillar really only has six legs on its thorax. He also has facet eyes and a three-part body. He's an insect!

Is this ant an insect? It has six legs. Its body consists of three parts, and it has facet eyes. So, an ant is an insect!

And a spider? It has facet eyes! But . . . it has eight legs, and its body consists of two parts. Therefore, a spider isn't an insect.

Did you know insects have their skeleton on the outside? With humans, the skeleton is on the inside.

This is a lobster. Take a good look at him. He has no fewer than ten legs. That's how you know: this isn't an insect.

