



The Insects & Arachnids Questions & Answers Book



Butterflies
& Moths



Arachnids



Beetles



Bees & Wasps



Parasites



THE GOOD AND THE BEAUTIFUL LIBRARY

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& Sue Stuever

QUESTION

How are moths and butterflies different?

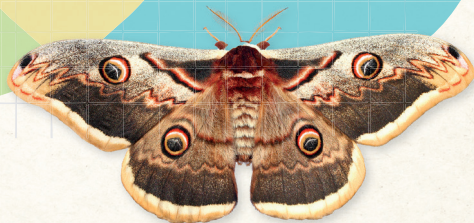
A: Moths and butterflies are very similar, but a few key differences help scientists distinguish between the two.

- Butterflies are usually, but not always, much more colorful than moths.
- If you look closely at moths, you will find that they typically have wider, hairier bodies than butterflies.
- Moths are usually creatures of the night, and butterflies are normally active during the day.
- The way butterflies and moths hold their wings while at rest is another difference between them. Butterflies like to keep them closed and upright above their bodies, and moths fold their wings over their backs or spread them out wide.
- Butterflies usually have slender antennae with small knobs at the tips. Many male moths have wide, feathery antennae, while females' antennae are typically thinner and have fine-pointed tips.



BUTTERFLIES VS. MOTHS

- | Butterflies | Similarities | Moths |
|---|---|---|
| <ul style="list-style-type: none">• Brightly colored• Rest with wings closed and upright• Active during the day• Thin antennae with a bulb at the end• Long and thin bodies | <ul style="list-style-type: none">• Six legs• Wings covered with scales• Caterpillars with 13 segments• Four wings• Eat nectar from flowers | <ul style="list-style-type: none">• Muted colors• Rest with wings unfolded• Most active at night• Feathery and pointed antennae• Wider and hairier bodies |



Extended Q&A

QUESTION

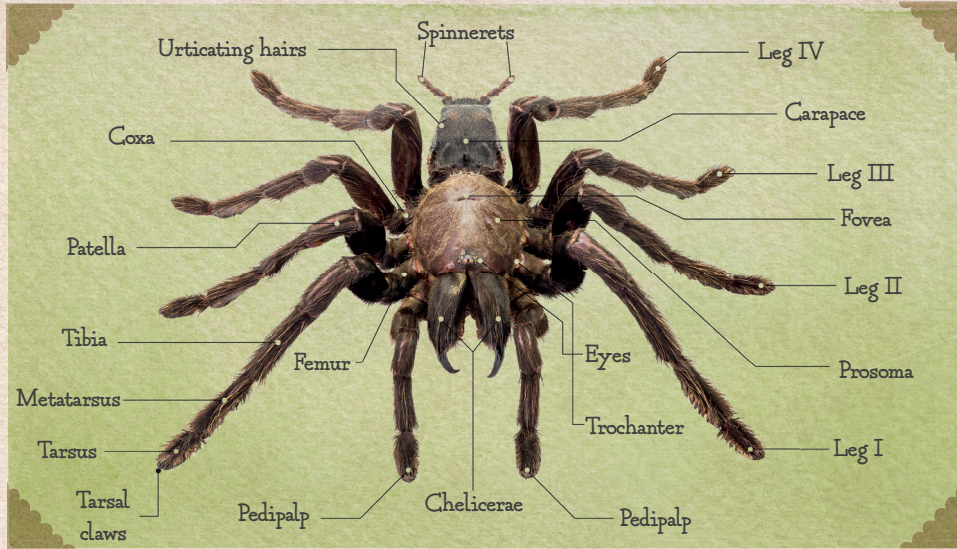
What makes the painted lady butterfly so unique?

A: Painted lady butterflies are some of the most widely found butterflies on Earth and live on every continent except South America and Antarctica. They could even be in your backyard right now, taking a sip of nectar from a thistle bloom, their favorite flower. Most painted ladies migrate to warmer climates in the winter, but the most spectacular group of migrating painted ladies are found in Western Europe and Africa. These tiny insects travel as far north as the Arctic Circle in the summer and as far south as Africa's Sahara Desert in the winter. That's up to a 12,000 km (7,456 mi) round trip and includes crossing two big obstacles: the Mediterranean Sea and the Sahara Desert, the largest desert in the world.



To make the long trip back south, painted ladies like to catch strong winds 450 m (1,476 ft) above the ground, which help them travel more than 160 km (100 mi) in a day.

Anatomy



The amazing symmetry and intricate design of a spider web remind us of the wonder of God's creation. There are examples all around that tell us how fascinating arachnids are. While some arachnids may be frightening and even dangerous, you can grow to admire and respect them as you learn more about their role in nature.



QUESTION

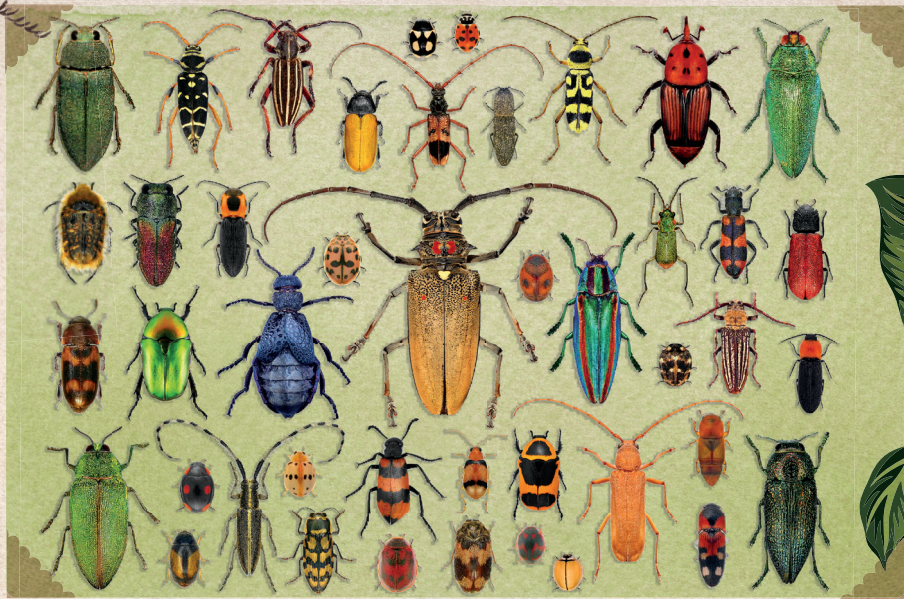
Why do southern grasshopper mice seek out scorpions?

A: Most small mammals steer clear of the menacing pose of a scorpion ready to strike, but not the tiny southern grasshopper mouse. Scorpions have a venomous stinging tail that they use to hunt prey and protect themselves from predators. A handful of scorpions have venom strong enough to kill humans. To the southern grasshopper mouse, scorpions make a tasty snack. This brave rodent is resistant to scorpion venom, and because of the mouse's quick reflexes, scorpions are quickly turned from predator to prey.





Beetle Diversity



It isn't very easy to choose one word to describe beetles. That's because they are the most numerous and diverse group of animals on Earth. With over 350,000 different species discovered so far, they make up around a third of all known animal species.

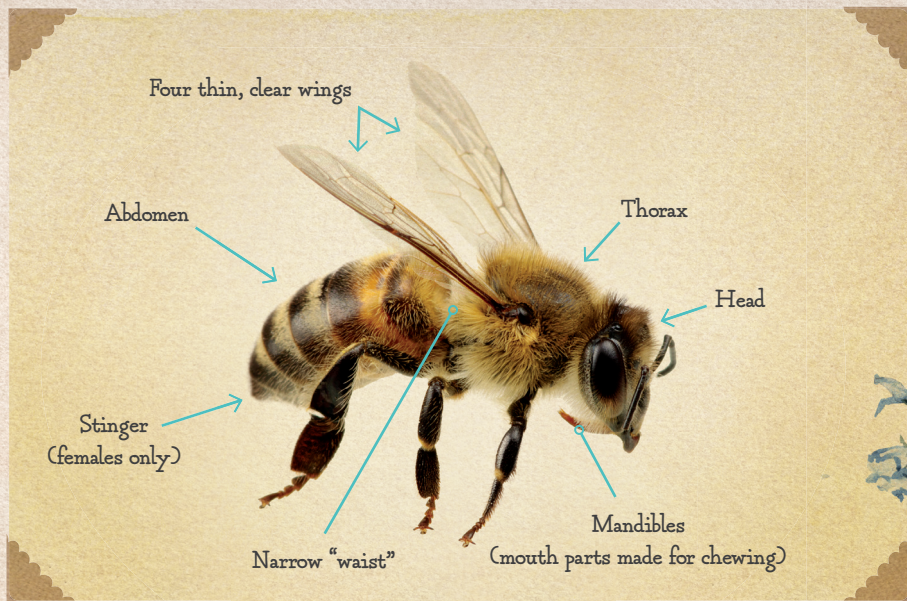




Bees & Wasps



Bee Anatomy



If you enjoy biting into a crisp, juicy apple, you might want to say “Thank you!” to an insect, for the apple tree was almost certainly pollinated by a bee. Walk into an apple orchard in the springtime when the trees blossom with their pretty pink or white flowers, and you will hear the buzz of busy bees all around you. Apple blossoms must be pollinated to grow fruit.

Extended Q&A

QUESTION

Is it true that some wasps actually grow inside the bodies of other insects?

A: Yes! This icky-sounding but cool practice is actually helpful to humans because parasitic wasps lay their eggs inside the eggs or bodies of host insects or spiders.

Once those eggs hatch, the parasitic larvae feed on insects that can be pests to humans, such as aphids and caterpillars that harm our crops and garden plants. This gives the parasitic wasp larva plenty of protein as it grows. Some farmers and gardeners purposely release these tiny agents of death into their crops to control pests.

The adults drink nectar from flowers, as well as other plant fluids.

You have probably never seen parasitic wasps because they can be as tiny as a fleck of pepper, but they live all around us. What they lack in size, they make up for in number. There are many kinds of parasitic insects, but there are thousands of species of parasitic wasps.

Parasitic wasps are deadly to their host insects, but there is good news for us. They do not sting people!





The Insects & Arachnids Questions & Answers Book

Do all spiders create webs to catch their food? Why do bees buzz? This book will spark children's curiosity about crawling creatures of all kinds, from beautiful butterflies and fierce parasitic insects to interesting arachnids and cooperative colony dwellers. Gorgeous illustrations give readers an up-close-and-personal look at the captivating behaviors of bees, spiders, wasps, moths, lice, and many more of God's creations. Children of all ages will be intrigued by the questions and detailed answers in *The Insects & Arachnids Questions & Answers Book*.



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