

Calling All Spiders!



David Roberts/Photo
Researchers

Tarantulas are found in warm regions, including the southwestern United States.

Does thinking about spiders and their hairy bodies, long legs, and sticky webs make your skin crawl? Many people shiver at the thought of spiders.

That is not the case for Rich Bradley, a real-life Spider-Man. He can't get enough of the creepy crawlers. Bradley is an **arachnologist** (ah-rak-NAH-luh-jist). That is a scientist who studies spiders. Bradley has spent the last 10 years identifying and studying spiders in his home state of Ohio.

Spider Seekers

So far, Bradley has uncovered 583 **species**, or types, of spiders living in the Buckeye State. He and his team of volunteers have a sharp eye when it comes to collecting the creatures indoors and outdoors. "They move really fast," he told *Weekly Reader*.

Scientists say about 3,500 species of spiders live in North America, and nearly 35,000 live worldwide. Spiders live in different places, including gardens, water, deserts, and caves.

Hairy Hunters

Many people think spiders are insects, but they are actually **arachnids** (ah-RAK-nidz). Ticks and scorpions are also arachnids.

Along with fangs and eight hairy legs, a spider has two body parts--a head and an abdomen. The abdomen contains **spinnerets**, organs that produce silk. A spider uses its silk for many purposes, including weaving webs, protecting its eggs, and catching food.



Damon Hart-Davis/[DHD Multimedia Gallery](#)
A spider uses its silk to weave a web.

Spiders are **predators**, or hunters that eat other animals. They dine mostly on insects. Some larger spiders also eat lizards, frogs, and even snakes.

To capture their food, some spiders spin webs. Other types of spiders chase down their **prey**. The **venom**, or poison, from their fangs helps paralyze their food.

Fear Factor

Although the hairy creatures spook many people, there isn't much reason to be afraid of spiders. "Most spiders are not very dangerous," said Bradley.

In fact, most are timid creatures that are unable to give humans more than a harmless bite. Although spider venom is deadly to insects, it often has little effect on humans because of our larger size.

Myth-Conceptions

Spiders may have a bad reputation for being scary, but they are important to us. Bradley hopes his work shatters some **myths** about spiders. (A myth is a false idea that many people believe is true.)

Spiders eat mosquitoes and other insects that harm farmers' crops and carry diseases. Bradley's research is teaching scientists more about how spiders help control **ecosystems**, or communities of plants and animals. If spiders didn't exist, there would be a lot more insects!

"Spiders are your friends," Bradley said. "They make our life more pleasant."

Spider Mania

Get caught up on some different types of spiders. Spiders come in all shapes and sizes. Crab spiders, jumping spiders, and orb weavers have made Rich Bradley's Ohio count. Find out more about them and other spiders.

☐ Crab Spider

Can you guess how this spider got its name? It may not live in the ocean, but it looks like a crab. The crab spider lives on flowers. It can match its body color to the flower's color. That allows it to sneak up on insects.

☐ Jumping Spider

What a leap! The jumping spider can jump between 10 and 40 inches. To catch an insect, this hunting spider sneaks up on its prey and pounces.

☐ Trapdoor Spider

The trapdoor spider lives in a tunnel. The spider, common in the southwestern United States, lines the tunnel with silk and fashions a door made of silk and dirt. It peeks out of the slightly open door and grabs passing insects.

☐ Tarantula

The tarantula is a large, hairy spider found mainly in warm regions, including the southwestern United States. Although the tarantula's bite is painful, it is not very poisonous to humans. Tarantulas hunt insects, lizards, mice, toads, and frogs.

☐ Orb-Weaving Spider

E. B. White's famous spider Charlotte was an orb weaver. The orb-weaving spider spins a wheel-shaped web. When an insect flies into the web, the spider races toward its meal.

Name: _____ Date: _____

1. Which action was NOT described in the passage as a spider's use for its silk?
 - A weaving webs
 - B making clothes
 - C protecting its eggs
 - D catching food

2. Which of the following *describes* a type of spider that Rich Bradley has found in Ohio?
 - A a large, hairy spider with a painful bite that is found in warm regions
 - B a spider that can jump between 10 and 40 inches
 - C a spider that lives in a tunnel it lines with silk and grabs passing insects
 - D a spider that creates the world's largest and strongest webs

3. According to the passage, spiders have a bad reputation for being scary. Why might people be afraid of spiders?
 - A They think spiders are soft and furry.
 - B They know spider silk is good for catching insects.
 - C They don't think spiders have enough legs.
 - D They don't know how spiders are important to humans.

4. Read the following sentences and answer the question below: "'Most spiders are not very dangerous,' said Bradley. In fact, most are timid creatures that are unable to give humans more than a harmless bite."

In this context, what does the word **timid** mean?

- A dangerous
 - B happy
 - C shy
 - D helpful

5. The primary purpose of this passage is to
 - A inform the reader about different kinds of spiders
 - B persuade the reader that spiders are scary
 - C describe the personalities of scientists that study spiders
 - D list all types of spider species in Ohio

6. According to the passage, why are spiders important to humans?

7. Review the photo of the spider weaving a web. How could the web help this spider catch food?

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

People should not be afraid of spiders _____ most spiders are shy and can't hurt humans.

- A because
- B so
- C but
- D although

9. Answer the questions based on the sentence below.

Rich Bradley, an arachnologist, has spent the last ten years studying spiders in Ohio.

Who? Rich Bradley, an arachnologist

(has) What? _____

Where? _____

10. Read the vocabulary word and definition below and complete questions 10a, 10b, and 11.

Vocabulary Word: reputation (rep · u · ta · tion): what a person or thing is known for.

10a. Read the five sentences below and underline the word **reputation** in each sentence.

1. The store owner had built a good business reputation because he charged fair prices and was always good to customers.
2. The actor had a reputation for being fun on movie sets after he threw a party for his film crew.
3. The superhero had a reputation for helping people, because every time someone was in trouble, he was there to save the day.
4. The computer company had a reputation for excellence, because its products were always the best in the market.
5. With a reputation for giving surprise quizzes, the teacher made sure that his students studied every night.

10b. Which person has a reputation for being a hero?



11. If a student had a reputation as a bully, how do you think other kids would treat him?

Teacher Guide & Answers

Passage Reading Level: Lexile 900

Passage Text Structure: Descriptive – the writer explains, defines or illustrates a concept or topic

Passage Summary: “Calling All Spiders!” focuses on spiders and Rich Bradley, an arachnologist that studies spiders in Ohio. Details about spiders are provided, as well as examples of different kinds of spiders.

1. Which action was NOT described in the passage as a spider’s use for its silk?
 - A weaving webs
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 - A a large, hairy spider with a painful bite that is found in warm regions
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3. According to the passage, spiders have a bad reputation for being scary. Why might people be afraid of spiders?
 - A They think spiders are soft and furry.
 - B They know spider silk is good for catching insects.
 - C They don’t think spiders have enough legs.
 - D They don’t know how spiders are important to humans.**
4. Read the following sentences and answer the question below: “Most spiders are not very dangerous,” said Bradley. In fact, most are timid creatures that are unable to give humans more than a harmless bite.”

In this context, what does the word **timid** mean?

 - A dangerous
 - B happy
 - C shy**
 - D helpful
5. The primary purpose of this passage is to
 - A inform the reader about different kinds of spiders**
 - B persuade the reader that spiders are scary
 - C describe the personalities of scientists that study spiders
 - D list all types of spider species in Ohio
6. According to the passage, why are spiders important to humans?

Suggested answer: According to the passage, spiders eat insects that harm farmers’ crops and carry disease. If there were no spiders, there would be more insects like mosquitoes that could make us sick or ruin our food crops. [paragraph 12]

7. Review the photo of the spider weaving a web. How could the web help this spider catch food?

Suggested answer: Since spiders eat insects, an insect might fly into the web and get stuck, which would give the spider enough time to use their venom to paralyze the insect. [paragraph 7, 8, photo 2]

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

People should not be afraid of spiders _____ most spiders are shy and can't hurt humans.

- A because
- B so
- C but
- D although

9. Answer the following questions based on the sentence below.

Rich Bradely, an arachnologist, has spent the last ten years studying spiders in Ohio.

Who? Rich Bradley, an arachnologist

(has) What? **spent the last ten years studying spiders**

Where? **in Ohio**

10. ReadWorks recommends that you teach this vocabulary word to the whole class out loud using the four steps listed below.

Vocabulary Word: reputation

Step 1: Introduce the word

- a. Teacher writes the word on the board and divides it into syllables: (rep · u · ta · tion)
- b. Teacher says: "This word is reputation. What is the word?" [All students reply together out loud: "reputation."]

Step 2: Provide a child-friendly definition

- a. Teacher says: "Reputation is what a person or thing is known for. In the passage, spiders have a reputation for being scary, because most people know them for being scary."
- b. Teacher says: "What is the word?" [All students reply together out loud: "reputation."]

Step 3: Practice the word

Teacher provides examples and additional opportunities to repeat the word. Read the 1st sentence out loud to your students. Begin reading it again and when you come to the vocabulary word prompt students to say the vocabulary word out loud. Then, finish reading the sentence out loud to your students.

- 10a.**
1. The store owner had built a good business reputation because he charged fair prices and was always good to customers.
 2. The actor had a reputation for being fun on movie sets after he threw a party for his film crew.
 3. The superhero had a reputation for helping people, because every time someone was in trouble, he was there to save the day.
 4. The computer company had a reputation for excellence, because its products were always the best in the market.
 5. With a reputation for giving surprise quizzes, the teacher made sure that his students studied every night.

Step 4: Check for student understanding

This step can be completed as a whole class activity or as an independent practice.

- 10b.** Which person has a reputation for being a hero?



- 11.** If a student had a reputation as a bully, how do you think other kids would treat him?

Suggested answer: The students would probably not be very nice to him, or at least they would probably stay away from him.

Suggested Additional Vocabulary: shiver, purposes, weaving, myth, timid, mania, pleasant