

Sleeping Spiders

Have you ever watched a spider sleep? That’s exactly what a scientist in Germany did during the Coronavirus lockdown in 2020. Daniela Rossler observed spiders in a patch of grass in her yard. She noticed that they twitched when they slept, just like dogs and cats do when they are dreaming. She wondered, could spiders dream?

Daniela built a nursery for baby spiders in her lab. She used a magnifying glass and night vision camera to record their sleep habits. She saw that their bodies jumped and their legs curled and uncurled.

Daniela also discovered that the spiders have rapid eye movements while they sleep. These eye movements, called REM sleep, occur in humans too. This was the first time that REM sleep had been observed in an animal without a backbone.

Research shows that REM sleep is important to humans’ development of memories and survival skills. Daniela wonders if spiders also develop memories and skills while sleeping. She has not answered these questions yet, but she plans to do more research.

Other spider scientists find Daniela’s research fascinating, too. Her observations have led to more questions about brain activity in spiders and how they respond to things they can see. One scientist in Massachusetts is



using a thin wire to detect electrical activity in the spiders' brains. His team plans to use the wire to monitor eye movements in spiders while they are watching tiny televisions.

Finding out that spiders dream makes them feel more like us. As one researcher put it, "it makes them less alien, but also more worthy of respect." In the end, Daniela says, "you cannot smush a spider that dreams."



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NAME: _____ DATE: _____

1. How did Daniela watch the spiders sleeping?
 - a. With a magnifying glass
 - b. With a night vision camera
 - c. With a thin wire
 - d. A&B

2. According to the passage, how does REM sleep affect humans?
 - a. It helps them grow
 - b. It helps them form memories and build survival skills
 - c. It helps them stay asleep for longer
 - d. It makes them tired

3. Why are scientists getting spiders to watch television?
 - a. To poke them with wires
 - b. To see how their brains respond
 - c. To show them other spiders on screen
 - d. To see what TV shows they like

4. What does Daniela mean when she says, “you cannot smush a spider who dreams”?
 - a. You won’t want to kill something that is more like you
 - b. Dreaming spiders are too strong to be smushed
 - c. Dreaming spiders need to be preserved
 - d. You would rather catch the spider to study it

Instructions for teachers:

These questions can be used to assess understanding of the reading passage.

The item in bold is the correct answer for each question.

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