

Cockroaches are pretty cool.

They're the ultimate survivors

and some of the most adaptable creatures on Earth. They can live without food for a month, hold their breath for 40 minutes, and even live without a head for up to a week. Cool, right?



TINA DEINES

Okay, I doubt many people would actually call cockroaches "cool." In fact, few animals universally make people's skin crawl like a cockroach. For most folks, these creatures are synonymous with disease and

infestation. But the fact is, these insects—of which there are more than 4,000 species worldwide—are completely harmless. And, they're incredibly useful ecosystem engineers to boot.

But how do you make people see this? That is the challenge that Albuquerque Biological Park (ABQ BioPark) BUGarium interpretation staff and volunteers face each day in their educational programming.

The BUGarium, part of the ABQ BioPark's Botanic Garden, is an indoor facility housing thousands of arthropods ("bugs," if you will) including tarantulas, walking sticks, scorpions, mantises, and of course, cockroaches.

The facility has a small staff and a group of about 15 docents who

introduce many of these species to the public on an intimate level. This varies from simply bringing a scorpion in a container out into the BUGarium lobby, to holding a tarantula and allowing visitors to touch it, or even presenting a mantis feeding for guests.

According to Pamela Dupzyk, Botanic Garden education coordinator, in order to help change people's minds about creepy crawlies like cockroaches, it's important to shift the focus of the conversation to the good things these animals do.

For instance, one of the BUGarium staff's main narratives for cockroaches is how these useful little creatures help clean up ecosystems by acting as decomposers. Most cockroaches feed on decaying

organic matter. (Just imagine what our world would look like if there was nothing to help with the decomposition of things.) An added benefit of this setup is that cockroach feces—with all that processed nitrogen-rich decayed organic matter-help impact forest health by feeding soil and plants. Of course, cockroaches also serve as a food source for many mammals and birds.

Jason Schaller, BUGarium curator, adds that it's important to let visitors know that cockroaches are "comically harmless" to help assuage their fears. Only one percent of cockroaches worldwide could be considered "pests." Most live in forests and not urban areas. And, even "pest" cockroaches aren't really vectors for disease, he says. That's just about the same narrative that could be used for many of the animals in the BUGarium—plenty of people have similarly strong reactions to spiders for instance, but most spiders are also completely harmless to humans.

Here at the ABQ BioPark, our staff has found that simply presenting this more uplifting narrative about "disgusting" or "scary" animals moves visitors just a little closer toward accepting them.

A hands-on approach can sometimes change minds too-docents let visitors touch some of the animals like tarantulas, stick insects and millipedes. Dupzyk says that letting guests feel the animals (or even just look at them a little more closely) helps them get over an essential fear. "A lot of people think bugs are goopy or slimy, so when they touch a dry, hard shell, they realize it's not gross," she said.

And many of our visitors seem to become energized by these experiences. "I think people want to conquer their fears," Schaller said. "They get excited—empowered because they were brave."

Bolder folks also can interact with immersive exhibits like the Crawloseum, a circular Madagascar hissing cockroach habitat with a (glass-covered) opening in the

middle where you can view the colony from the inside. This exhibit is used mostly by children, some of our easiest customers to please.

BUGarium docent Anne Manning, who talks to about 25 to 100 people a day, three days a week, says that many times children are much more open to learning about and interacting with animals. "The adults are often like 'ew," she said. And Bridgid Shaski, a floor attendant at the BUGarium, agrees that she often sees more positive changes in opinion among kids.

We haven't given up on adults, however. Although our staff probably is not going to dramatically change a lifetime of disgust or fear, our goal is to bring folks closer to accepting and understanding arthropods. And though our educators may not be afraid of cockroaches or tarantulas or scorpions, a little bit of empathy goes a long way. Just understanding, respecting, and acknowledging someone's fear can make a world of difference.

And it helps that some of our volunteers and staff know what it's like to be afraid of bugs. Both Manning and Shaski are recovered "bug" phobes. Shaski even says she was "super afraid" before working at the BUGarium. "When I first took the handling class here, my hands were shaking," she said. "I was terrified."

For her, all it took to start changing her mind was more exposure to and knowledge about these misunderstood creatures, and she believes that is true for visitors as well.

Adults (and children) may also be swayed by less stereotypically "icky" bugs like mantises and stick insects, so the BUGarium is set up to display a large variety of showy animals that will help give visitors a positive impression of arthropods.

So how do you make someone love a cockroach? Well, you probably won't. But helping people understand and respect them is certainly achievable. At the BUGarium, our recipe consists of shifting the narrative, giving chances for up-close encounters and touch, and being empathetic to our guests' fears.

ABOUT THE AUTHOR

Tina Deines is the communications officer at the ABQ BioPark in Albuquerque, New Mexico. She creates written interpretation at the BioPark and works closely with education staff, zookeepers, and horticulturists to tell the stories of all of the BioPark's plants and animals, from orangutans and lions to tarantulas and cockroaches.

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Extinct cockroach at the ABQ BioPark BUGarium