

Beth Shillibeer
Social Psychology
July, 2022



Compassion for the Most Despised Among Us

Compassion is a response to suffering, so in the context of this assignment, I first had to think where I might find suffering. Living in Canada, I have a relatively easy life and, although there is suffering in every country in the world, I wasn't guaranteed to be confronted with it overtly on my "Day of Compassion."

Coaxing thoughts to a wider scale, an inspiration came: What is the most despised thing on earth? Not many things unite humanity, but feelings of revulsion toward cockroaches are nearly universal. No matter what culture and geographic area, cockroaches tend to be despised by humans. These insects, perhaps more than any other creature, are met with a visceral "thin-slice" rejection based on appearance, supported with social and pseudo-scientific vilification. Cockroaches routinely endure human efforts to kill them on sight and even exterminate them, which suggests that they would benefit from more compassionate treatment. I had finally found my project!

On my Day of Compassion, I spent time learning about cockroaches and trying to see them in a positive light. After all, if this exercise proved successful in helping me feel compassion toward cockroaches, I would presumably be in a better position to feel compassion toward all others who cross my path, both human and nonhuman.

As part of this effort, I forced myself to look carefully at photographs of cockroaches. I learned facts about the positive and negative effects that cockroaches have on human life. I also tried to see cockroaches as beings in their own right—without reference to humankind. As a result, I transformed a particular form of speciesism into a new relationship of coexistence based on respect. I turned an outgroup into an ingroup. And I came up with some ideas for how to reduce dissonance between my new-found respect and my future behavior towards these creatures. I hope that this report likewise encourages readers to develop greater respect for cockroaches and a more compassionate norm for how to treat those we dislike.

Amazing Facts About Roaches

Cockroaches thrived on earth roughly 80 million years *before* the dinosaurs—proof of their adaptability and strength. Later, they evolved in partnership with mammals, serving as "janitors" in an interdependent relationship. From the nests of mammals, cockroaches consume a variety of food scraps, mold, mildew, and eggs of lice and fleas, in return leaving a cleaner habitat (Wojcik, 2009).



Glow-in-the-Dark Roaches (Source credit: [Peter Vršanský and Dušan Chorvát](#))

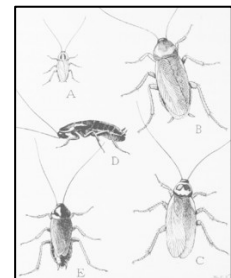
Although the human mammal has long detested these uninvited janitors, the roaches that actually live with humans make up fewer than 0.5% of more than 5,000 known species (Bittel, 2016). Nearly all cockroach species live far removed from humans and serve a crucial role in the decomposition cycle of many ecosystems. But we are more than the work we perform, and it turns out cockroaches have a rich social life, too. Research shows that cockroaches exhibit sophisticated social skills such as collective decision-making, chemical communication, and even distinct personality characteristics ("Cockroach," 2022). Some, like the subfamily *Perisphaeriinae*, nurture their young. If threats to a mother's brood appear, she can roll up all the nymphs inside, turning her body into a fortress.

Cockroach expert Joe Ballenger says, "Personally, I'm fascinated by their social interactions." As he explains, "Cockroaches are not loners. They hang out together, cooperate, and even make decisions with one another. Just like people, it's clear they suffer when they're isolated" (Bittel, 2016).

Cockroaches and Human Health

Since ancient times, cockroaches have been widely seen as disease spreaders. Surprisingly, however, a World Health Organization report entitled *Public Health Significance of Urban Pests* found that "definitive evidence that cockroaches are vectors for human disease is still lacking" (Bonney, Kampen, & Sweeney, 2008, p. 64). It is true, however, that people can have allergic asthmatic reactions to cockroaches—just as people can be allergic to dogs, cats, mice, and dust mites—and that cockroaches can contaminate food and spread pathogenic organisms. Still, in many cases a fear of disease can actually raise health risks rather than lower them. For example, according to the World Health Organization report, more than 90% of the pesticides applied in apartments are directed at cockroaches, and a heavy reliance on spraying surfaces with insecticides may end up creating serious human health problems.

Moreover, researchers are learning things from cockroach physiology that have the potential to improve human health. From studies on special transporting proteins found within their bodies to possible discoveries of new antibiotics to research into the molecular process of limb regeneration (yes, cockroaches can grow a new leg!), the study of roaches may help us treat or cure human health problems (Ballenger, 2016; Ter-Mikaelian, 2016).



The Final Frontier: Cockroach Cosmonauts

Cockroaches have been used in traditional Chinese medicine for centuries, and new applications are solving even more problems in modern China. Cockroach factories are providing solutions to health, environmental protection, and even food shortage problems (Liu, 2018). Another innovative use is in search and rescue. Cockroaches with radio-controlled devices have been used to search under rubble for earthquake survivors (Ter-Mikaelian, 2016).

One cockroach even has the distinction of being the first earth creature to give birth in space. On September 14, 2007, a Russian cockroach named Nadezhda was sent into space in the Foton-M bio-satellite, where she successfully hatched 33 eggs in microgravity (RIA Novosti, 2007).

Can a Cockroach Be Cute?

Louis M. Roth would probably say "yes." A world-renowned cockroach expert from Harvard University, Roth grew to love the roaches he studied so much that he frequently hid them in his pockets when going to social gatherings,



much to the surprise of the other guests (Entomological Society of America, 2012).



In the photo at left of a pill cockroach, expert photographer [Melvyn Yeo](#) shows that it's all in how you see it—this roach is adorable!

(Photo reprinted with permission of Melvyn Yeo, all rights reserved.)

In addition to entomologists and photographers, there are other cockroach enthusiasts who don't mind getting up-close and personal. In fact, 9-year-old Shelby Counterman from Oklahoma loves them so much that she keeps them as pets and has elaborate burial grounds for her small friends. See her [YouTube video](#) for details.

But it is an anonymous woman in Buenos Aires, Argentina, who takes the prize when it comes to improving the image of cockroaches and helping people understand these maligned creatures. Her [video of hand-feeding a cockroach](#) droplets of water shows a surprising tenderness that invites us to think differently, and her "[Roach Trip](#)" Facebook page describes its purpose as "Promoting love and compassion for all living beings."

Acting on This New Information

Having seen what a varied and beneficial creature the cockroach is, how can I change my behavior to reflect this new information? I'm not ready to go as far as Louis Roth and carry around cockroaches in my pocket, but I can certainly evolve in response to new knowledge. For example, if I find a cockroach roaming my house, I can choose to capture it with a container and release it unharmed outside. I can also create appealing habitat, such as a compost heap, far from the house, where cockroaches can do their work in peace. I can seal cracks and keep my home clean to lower the risk of a cockroach infestation, and I can use lemon juice and bay leaves to repel cockroaches near entry points.

Equally important, I can share information about cockroaches with other people to promote compassion, reduce ignorance, combat speciesism, and let people know how valuable these animals are. My Day of Compassion is dedicated to our cockroach cohabitants of the planet—creatures who have walked the earth more than 1,500 times longer than our species has.

A Concluding Note

My Day of Compassion was in turns disturbing, funny, and fascinating. Starting with a simple decision to suspend judgment and look with open eyes, I was able to transform my feelings toward cockroaches from fear and disgust into a newfound respect and admiration for their adaptable genius. I highly recommend the process. If we can change our beliefs and actions toward a despised creature like the cockroach, just think what we can do with less distant outgroups! My experience with this assignment suggests that in some cases, the very act of open-minded learning can transmute areas of misunderstanding and lead to a more connected and inclusive world.



[Archy the Cockroach](#) first appeared in Don Marquis' daily column in *The Evening Sun* and has been described as "the most famous insect in American literature."

References

- Ballenger, J. (2016, July 31). [Cockroach milk is not the next superfood. It could be a lot more important than that.](#) Ask An Entomologist.
- Bittel, J. (2016, August 29). [I am officially in love with cockroaches.](#) *Smithsonian Magazine*.
- Bonnefoy, X., Kampen, H., & Sweeney, K. (2008). *Public health significance of urban pests.* Copenhagen, Denmark: World Health Organization.
- Cockroach. (2022, July 9). Wikipedia. <https://www.wikipedia.org/wiki/Cockroach>
- Entomological Society of America. (2012, May). [Louis M. Roth, ESA Fellow \(1952\).](#)
- Liu, Y. (2018, June 3). [Cockroach sushi? Inside a farming revolution that could cure cancer, compost waste—and shake up menus.](#) South China Morning Post.
- RIA Novosti. (2007, October 23). ["Hope" the Russian cockroach gives birth to first space babies.](#) SPUTNIK International.
- Ter-Mikaelian, M. (2016, October 28). [3 astonishing facts that will make you appreciate cockroaches like never before.](#) Medium.com.
- Wojcik, J. (2009, June 26). [The 5 most hated creatures on the planet \(don't deserve it\).](#) Cracked.com.

Resources to Learn More

Videos

- [Why cockroaches are so hard to kill](#) (4:32, *Science Insider*)
- [Cockroaches survive squeezing, smashing, and more](#) (1:24, *National Geographic*)
- [Cockroaches](#) (3:45, Ilse Knatz Ortabasi)

Images

- Melvyn Yeo's [Cockroaches Album](#)

Articles

- Schulz, C. (2013, November 29). [If cockroaches are conscious, would that stop you from smushing them?](#) *Smithsonian Magazine*.
- Nuwer, R. (2014, April 2). [A loving touch triggers cockroaches to make babies faster.](#) *Smithsonian Magazine*.
- Blakemore, E. (2015, February 4). [Cockroaches have personalities, too.](#) *Smithsonian Magazine*.

Books

- Bell, W., J., Roth, L. M., & Nalepa, C. A. (2007). *Cockroaches: Ecology, behavior, and natural history*. Baltimore, MD: The Johns Hopkins University Press.
- Lockwood, J. A. (2013). *The infested mind: Why humans fear, loathe, and love insects*. New York: Oxford University Press.
- Nischk, F. (2023). *Of cockroaches and crickets: Learning to love creatures that skitter and jump*. Vancouver, Canada: Greystone Books.