

Why should I care about a stinky old bat? By Renata Platenberg

When I tell people I work with bats (and frogs), they tend to grimace or shudder. Some visibly gag in disgust. “Oh, I hate them” is a common response. But if you are a Stewards subscriber, you are likely already somewhat versed in the benefits of bats. You likely already know that bats are important ecosystem service providers in that they eat enormous amounts of insect pests, pollinate the tropical fruits we like, are solely responsible for tequila, and produce the richest fertilizer around. But here are a couple tidbits of information that you might not already know.

First, bats play a critical role in human health. Bat numbers across agricultural lands in the US have plummeted due to a fungus that causes White Nose Syndrome. The use of pesticides has increased leading to mass mortality within hibernating bat populations[1]. As a likely consequence, human infant mortality increased by a whopping 8% in the investigated areas where bat populations have declined[2]. Not to mention the increased cost in growing food without the free pest-control that bats provide. In places where debilitating viral diseases (e.g., dengue) are spread by mosquitoes, fascinating studies using DNA have shown that bats eat these mosquitoes, digest them, and the virus perishes in a pile of guano, never to be passed on to human hosts[3]. We know people can catch some pretty bad diseases from bats, like Ebola and coronaviruses (e.g., SARS & MERS), but honestly, these transmissions could be reduced if humans avoided interacting with wildlife and their habitats. Did you know that bats die from rabies, just like we do? They are not carriers, but like the hapless unvaccinated dog that encounters a skunk or raccoon, bats can get rabies and if you get bit, it’s bad (don’t touch a downed bat.)

Second, bats are cute in pictures but are even more adorable in person. I used to do “Bat Labs”, where school classes would join me for an evening’s work. I always ask: “what do you know about bats?” (the usual myths, they suck blood, get stuck in hair); “what do you think bats are like?” (smelly, dirty, aggressive); and, “do you like bats?” (NO!!!). Then we go through the process of setting up nets, listening to the songs of the bats, watching them fly, and carefully removing them from the nets before we weigh, measure, and tag them for release. I ask the kids to smell the animal nestled in my gloved hand. “You may touch this bat, but only on the back of the head,” and tentative fingers reach out. As the bat flies off to return to her evening activity of finding nectar or eating insects, I ask one final question: “Now what do you think of bats?” The responses are now “I love them.” Yep. Me too.

Third, bats are the longest-lived mammal for their size. Some can live up to 30 or 40 years old!

1 https://scse.d.umn.edu/sites/scse.d.umn.edu/files/moen_paper_1_100419.pdf

2 https://www.science.org/doi/10.1126/science.adg0344

3 https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0005537