

Bat conservation is important for the global community

Bat conservation has significant global importance; while food supplies and economies are strained as a result of the pandemic, bats continue to play a vital role in restoring our natural ecosystems and supporting human economies across the world.

Bats provide key ecosystem services around the world that support ecological and economic integrity, including consumption of insect pests, pollination of plants, and seed dispersal.

- There are more than 1,400 species of bats worldwide, roughly 20% of all mammal species are bats.

Bats consume agricultural insect pests around the world, which helps farmers reduce pesticide usage and improves crop yields.

- Bats play an essential role in keeping populations of night-flying insects in balance worldwide.
- Each bat consumes a slightly different group of insects, so supporting diversity within the species amplifies the benefits bats have on pest control.
- Reducing the amount of pesticides farmers use minimizes environmental damage and health risks to people.

The economic benefit of bats eating agricultural insect pests is estimated to save American farmers billions of dollars each year.

- The consumption of insects by bats is valued at roughly \$22.9 billion per year in the United States alone, according to one estimate.¹
- Most, on average, can eat up to half their body weight in insects, while pregnant or nursing mothers will consume up to 100% of their body weight each night.
- Fewer pests increases yearly crop yields.²
- The millions of Mexican free-tailed bats at BCI's Bracken Cave in Central Texas help target an especially damaging pest called the Corn Earworm Moth (aka cotton bollworm, tomato fruitworm, etc.), that attacks a host of commercial plants from artichokes to watermelons.
- Corn protected by bats has fewer fungal infections, which are harmful to the livestock consuming the grain, further increasing the value of crop yield.

Globally, bats pollinate many different species of plants.

- Bats are natural pollinators because they spread pollen from plant to plant as they feed.
- Bats create genetic diversity within plant species, as compared to cloned crops that function as a cheap alternative to the natural pollination processes.
- Without genetic variation, plants are at risk for fungal infections that have the ability to wipe out entire crops.³



- Plants with cultural and economic value to local communities, such as durian fruit in Asia and agave in Mexico, are both pollinated by bats.

In tropical rainforests, bats disperse seeds of many tree species helping to maintain and restore forest health.

- 95% of “pioneer plants” grow from seeds dispersed by bats in cleared Latin American rainforests.
- The regenerative processes carried out by bats is imperative to the regeneration of rainforests.

Additional facts!

- Bats pollinate, disperse, and protect valuable cash crops including bananas, guava, durians, cashews, dates, figs, cacao, sugar, corn, and the agave we need to make tequila!
- Bat poop, called “guano” is a valuable natural fertilizer high in nitrogen.
- Most bats only have one pup each year.
- Bats inhabit all continents except Antarctica.
- There are 500 terrestrial vertebrate species at risk of extinction, causing scientists to worry about the acceleration of the human caused sixth mass extinction; this is of particular concern given that bats makeup a large percentage of mammals.⁴

Bat conservation is part of the solution. When we protect bats, we stay safer, too.

Sources:

¹ <https://science.sciencemag.org/content/332/6025/41.summary>

² <https://www.sciencemag.org/news/2015/09/bats-are-worth-1-billion-agriculture>

³ <https://www.npr.org/sections/thesalt/2017/10/29/560292442/bats-and-tequila-a-once-boo-tiful-relationship-cursed-by-growing-demands>

⁴ <http://www.batcon.org/pdfs/13596.full.pdf>