

Understanding Disease and Bats

Covid-19



Bats are not the direct source of COVID-19. While all mammals can carry the SARS virus, bats cannot transmit it directly to humans. The only plausible scenario would involve bats infecting pangolins, which then transmit the virus to humans. However, this is unlikely as pangolins' armored scales prevent them from being bitten by bats.

Rabies

While bats can carry rabies, the likelihood of contracting rabies from them is much lower compared to infected dogs or cats.

Approximately 1% of bats may carry rabies, varying by location. Therefore, it's advised to avoid touching bats, but there's no need to fear them any more than any other mammal.

Guano Safety

Bat guano is not as hazardous as commonly thought, but inhaling large quantities of its dry form can lead to histoplasmosis, a respiratory condition. To avoid illness, simply spray the guano with water before cleaning it up or refrain from disturbing it while dry. Furthermore,

bat guano can be collected and utilized as exceptionally nutrient-rich fertilizer, enriching the soil with valuable nutrients.



Busting Bat Myths



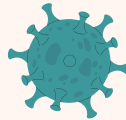
“Bats are Blind”

Bats are not blind, many have good vision. They also have *echolocation* which allows them to see at night!



“All Bats Suck Blood”

Out of 1,469 species, only 3 species of bats drink the blood of other animals for food.



“Bats Have Rabies”

You are more likely to get rabies from a dog or a cat. Only 1% of bats are infected with rabies.



“Bats are Pests”

Bats are vital to the ecosystem that they are in. They spread seeds, pollinate flowers, and eat insects.



“Bats are Bad Luck”

Other events like seeing an owl or black cat are associated with bad luck. These are all superstitions not based on fact.



“Bats Destroy Houses”

Bats don't chew through walls or wood like rats do. Instead, they prefer to use existing holes and crevices as roosts.





“Bats are Useless”

Bats regenerate forests, contribute to pollination, distribute seeds, and are natural pest controllers.



For more information on bats, their incredible diversity, what to do if you encounter bats on the ground or in your house please visit treesociety.org or relcomlatinoamerica.net

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THE TRUTH ABOUT BATS



PCMBE

Information
Brochure

YOUTH CAMPS

We organize youth camps at our facility where your kids will learn more about bats, birds, turtles, agriculture and much more! Please contact scruz@treesociety.org for more information about our camps or internships.

The Benefits of Bats

Insect & Pest Control

Bats can eat more than 1,000 insects per night, making them important regulators of insects. Crops of corn, rice, cotton and many tropical fruits are at risk of pest insects that bats help control by preying upon them.



Pollinators

Certain tropical bat species feed on nectar and spread pollen as they go from flower to flower.

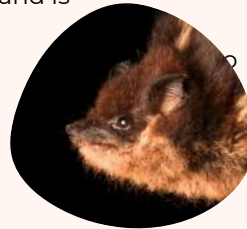
They have especially long tongues, just like hummingbirds, to be able to drink the nectar found in flowers. In tropical forests and deserts, these bats are essential to certain plants whose flowers only open at night. This includes plants like agave, which we use to produce tequila, and many tropical fruits humans consume.

Insect & Pest Control

In tropical climates, bats are great seed dispersers, doing fundamental work to keep forests healthy and growing. Bats disperse more seeds than birds in tropical forests.

We Need Bats, but They Are in Danger

- **Habitat Loss** is a large cause of the decline in bats. Deforestation affects all animals.
- **Pest Eradication** wrongfully kills bats, wiping out entire colonies at once, which severely impacts their populations due to their long lifespan (up to 60 years) and slow recovery rate.
- **Pesticides** kill all insects, bats' main source of food, and pollutes the water and their food, giving them cancers and fertility problems.
- **Wind Farms** in Western countries are killing 100,000+ bats/year
- **White Nose Syndrome** caused by a fungus infection, has killed up to 95% of bats in Eastern North America and is spreading to all insect-eating bats, pushing them to the brink of extinction.



Bats Are Not Rats



Rats



Bats

- All similarly shaped
- All share similar diet
- High reproductive rate (5-10 babies/yr)
- Short-lived (1-1.5 yrs)
- 2,300 species
- Very diverse anatomy/ physiology
- Very diverse diets
- Low reproductive rate (0.5 babies/yr)
- Long-lived (15 - 20 yrs)
- 1,469 species

Bat Diversity

Bats come in many shapes and sizes. Small ears, big eyes, little nose, big ears, long tongue, white fur, long nose, tiny eyes. They have a lot of diversity because of their diverse diets, they feed on insects, fruit, fish, or nectar. This makes them very important pollinators, seed dispersers, and controllers of insect populations.



There are 1,469 described species on earth, each one of them doing an amazing job at keeping their habitat alive and well. In Belize there are about 75 different species of bats, most of them feed on insects but others can feed on fruits, nectar, meat, blood and fish.

ABOUT US

The Toucan Ridge Ecology and Education Society is an ecological conservation organization with a research and education center in Belize, focusing on tropical ecology. We involve the community in our initiatives and offer various research and conservation programs. Our center hosts student and eco-tourism groups, providing hands-on experiences like bird monitoring and turtle studies.