

Bats and White Nose Syndrome

National Park Service
U.S. Department of Interior
Grand Canyon National Park



Grand Canyon has the most diverse bat population of any National Park in the United States. The park harbors 22 different bat species from the coniferous forests on the rim to the riparian edges of the river. Many of these bats spend over half of their life relying on caves for solitude and protection during the day, digesting between feeding bouts at night, hibernating in the winter, or giving birth in the summer. The consistent temperature and humidity within caves provides a safe haven for bats to slow their body's metabolism, saving energy for both short term in daily torpor, or similarly, over the long term during hibernation. This vital life strategy for bats has recently come under threat with the introduction of White Nose Syndrome, a fungal disease that has killed millions of bats across the country. Although White Nose Syndrome is not known to affect humans, the fungal spores, or Pd, can unknowingly be transported viably on shoes, clothing or gear from a contaminated environment into a pristine cave system. Once introduced the fungus irritates the bat causing it to arouse from hibernation. This persistent disruption results in prematurely expending its winter fat stores, ultimately killing the bat. White Nose Syndrome is not in Grand Canyon, but is expanding rapidly westward across the U.S. You can help reduce the spread of White Nose Syndrome into Grand Canyon by not entering caves.

Additionally, bats are exceptionally vulnerable to human disturbance in their roost, hibernaculum or nursery. Like the Townsend's Big-Eared Bats at Stanton's Cave, many other bat species will abandoned their roost, including their pups, as a result from inadvertent disturbances from cave explorers. A single disturbance during hibernation can cost a bat over 60 days of stored fat reserves. As such, caves within Grand Canyon are closed to ensure the protection of sensitive subterranean resources including bats.

Bat, Rabies, and You

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Less than 1% of bats have rabies, but bats that act strangely or contact humans are 10 times more likely to have rabies.

Humans can get rabies by exposure to bat saliva through a bite or scratch.

Rabies is 100% preventable in humans with medical care, but it's almost always fatal if untreated.

What Should I Do If I Come Into Contact With A Bat?

If you had direct contact with a bat, you may have been exposed to rabies.

Remember the 4C's:

1. COLLECT the bat for testing if you have been properly trained.
2. CONTACT a park official and Public Health Officer.
3. CLEAN the area of skin with soap and water.
4. CONSULT your physician for medical care.

The following resources can assist you (and your physician) in making decisions about the need for further follow-up:

www.nps.gov/orgs/1103/rabies.htm

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