### White-Nose Syndrome

### Why are America's Bats Dying?

Scientists are currently working to determine if fungal infection is the sole cause of WNS-associated bat deaths (mortality). Since the winter of 2006-2007, at least one million insect-eating bats from at least nine states have died from White Nose Syndrome (WNS).

This disease, named for the white fungus often seen on the muzzles, ears, and wings of infected bats, poses a threat to cave hibernating bats of the United States and potentially all temperate regions of the world.

Scientifically called *Geomyces* destructans, the fungus invades the skin of bats, producing ulcers and often making bats leave their hibernation before they are ready, thereby causing starvation.

#### How you can help

You can help prevent the spread of the fungus by decontaminating your clothing, shoes and gear before and after entering caves.

Visit **www.id.blm.gov** to find out more interesting facts about Idaho's bats and about what you can do to prevent the spread of WNS!

### **Beguiling Bat Facts:**

- -Idaho is home to 14 different bat species.
- -A single little brown bat can catch 600 mosquitoes in just one hour!
- -Female Hoary Bats sometimes take their young with them when they hunt for food.
- -The Western Pipistrelle bat weighs little more than a penny! They eat small swarming insects and their pups can fly when they are one month old.
- -Some records indicate bats can live as long as 20 to 30 years.
- -In Bracken Cave, Texas, 20 million Mexican free tail bats eat 250 tons of insects nightly.
- -Bats do not contract rabies any more frequently than other wild animals, such as foxes, skunks or raccoons.
- -Nearly 40% of American bat species are threatened or endangered.
- -North America's common little brown bat is the world's longest-lived mammal for its size, with life spans sometimes exceeding 32 years.
- \*For more information: www.id.blm.gov or: www.fws.gov/whitenosesyndrome

# The Benefits of Bats



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Bat. What does the word mean to you? Vampires? Blood-suckers? Rabies? Fairy tales, horror stories and rumors have given these amazing mammals a bad rap. In reality, bats are very important, not only to the environment, but to humans and the many products we use.

# **Principal Pollinators**

Pollination is the process of moving pollen grains from the male part of the flower (stamen) to the female part (the pistil). Bats love to drink the sweet nectar inside flowers. As they drink and move from flower to flower, they pick up a dusting of pollen and distribute it to other flowers.

Bats are very important animals in ecosystems all over the world. Tropical bats are essential to the rain forest, where they pollinate flowers and disperse seeds for countless trees and shrubs.

Agricultural plants, such as bananas, mangoes, cashews, dates, avocadoes, peaches, cloves, and figs (to name a few) rely on bats for pollination. Bats also help distribute the seeds of these important plants, so they can reproduce and create more fruit for us humans to eat and enjoy.

Without pollinating and seed-dispersing bats, many ecosystems would gradually die. Plants would fail to provide food and cover for wildlife species near the base of the food chain. If these plants die, wildlife will die, causing entire ecosystems to deteriorate.

In the East African savannah, the great baobab tree is critical to the survival of so many species it is often called the "African Tree of Life." The baobab depends almost exclusively on bats for pollination. Without bats, baobabs would die, causing a collapse of one of our planet's most amazing and important ecosystems.

### **Ingesting Insects**

Because bats eat so many insects, they lessen the need for use of chemical pesticides in agriculture.

Remembering these fun facts the next time you are being pestered by mosquitoes, will help you appreciate these little mammals.

# **Human Helpers**

Scientists have been studying vampire bat saliva. It contains an anticoagulant (prevents blood clots from forming), which may soon be used to treat human heart patients.

Because bats eat large amounts of mosquitoes, they help control viruses spread by the insects. Diseases such as West Nile virus would be much more plentiful without bats.

Bats can help control the populations of beetles, moths, and leafhoppers. Many insects can hear bats up to 100 feet away and will avoid those areas occupied by bats. Some people build bat boxes and post them on their houses or sheds. If bats occupy the boxes, insects are sure to be less plentiful around those places!

Bats also produce guano (their manure) which is rich in nitrogen; this natural by-product is used to fertilize lawns and gardens.