

Southern Appalachian Creature Feature Podcasts

USGS – the value of bats

Greetings and welcome to the Southern Appalachian Creature Feature.

As the bat disease white-nose syndrome continues decimating bat populations as it spreads across North America, a question many people have, is...so what? They're just bats, what good are they?

According to a recent article in the journal Science, they're worth at least \$3 billion to U.S. agriculture. The value of the pest-control services to agriculture provided by bats in the U.S. alone ranges from a low of \$3.7 billion to a high of \$53 billion a year, estimated the study's authors, scientists from the University of Pretoria, U.S. Geological Survey, University of Tennessee and Boston University.

A single little brown bat, which has a body no bigger than an adult's thumb, can eat 4 to 8 grams, or about the weight of 2-3 pennies, of insects each night. Although this may not sound like much, it adds up — the loss of one million bats in the Northeast has probably resulted in between 660 and 1320 metric tons of insects no longer being eaten each year by the region's bats.

Although these estimates include the costs of pesticide applications that aren't needed because of the services bats provide, the researchers did not account for the detrimental effects of pesticides on ecosystems nor the economic benefits of bats suppressing pest insects in forests, both of which may be considerable.

For WNCW and the U.S. Fish & Wildlife Service, this is Gary Peeples.