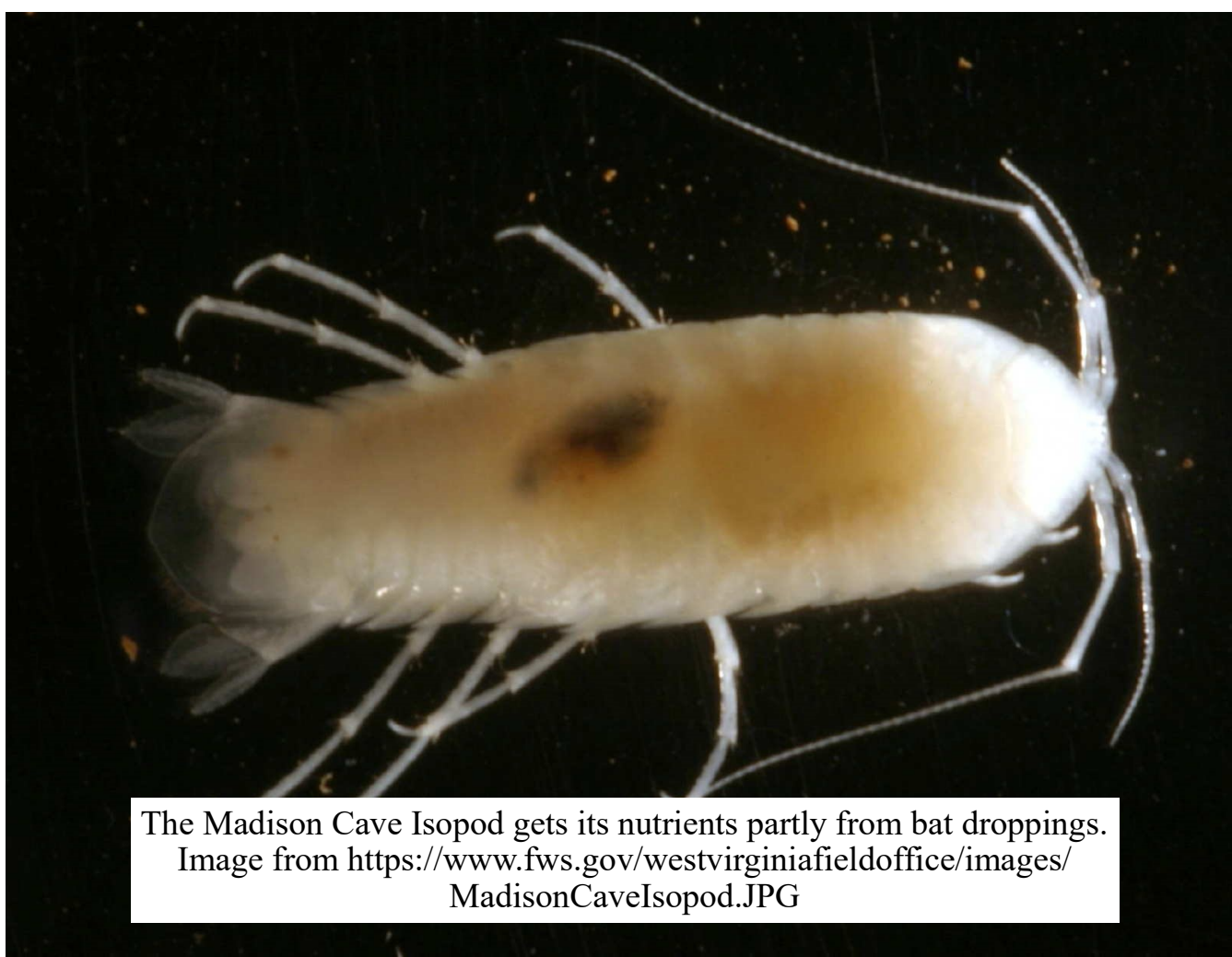




Nora Lea, Kanawha State Forest's very own Northern Long-eared Bat  
Courtesy, All Star Ecology

# The Kevin Dials Bat Trail: The Benefits of Bats

There are plenty of misconceptions, disproven legends, and outright lies about bats, most often promoted by the SciFi and Horror media. Even the great media hero Batman is depicted as having a terrifying experience with a swarm of bats during his childhood. But in the ecological scheme of things, bats have proven to be true friends of humankind for centuries. Cave bat droppings, known as *guano*, have provided agricultural fertilizer for many of the world's cultures. In areas underlain by caves, like the karst regions of eastern West Virginia, bat guano contributes to the nutrient needs of troglodytic "critters" (cave dwellers).



The Madison Cave Isopod gets its nutrients partly from bat droppings.  
Image from <https://www.fws.gov/westvirginiafieldoffice/images/MadisonCaveIsopod.JPG>

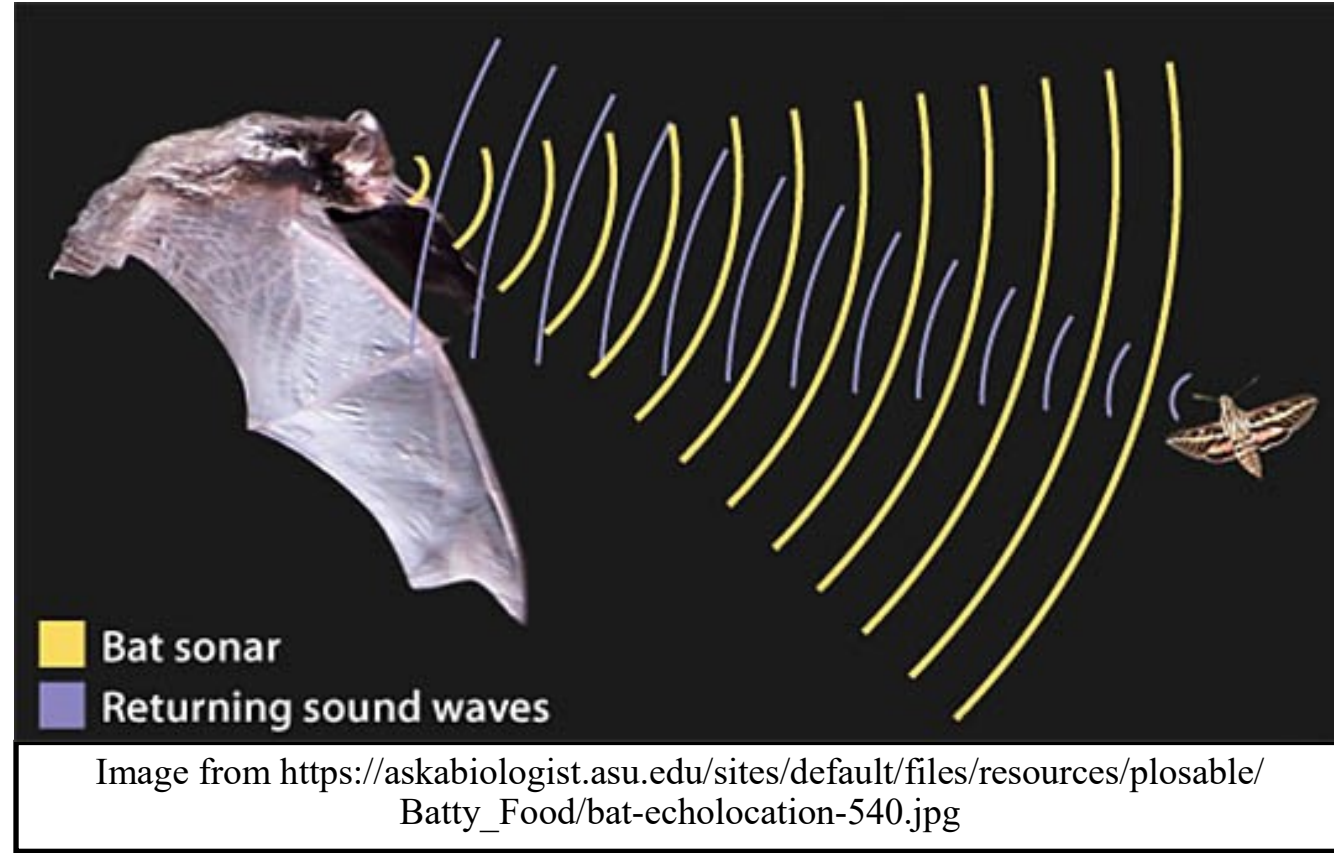
In tropical and desert regions around the world, bats play a significant role in plant pollination and seed dispersal. Bats help improve human and animal health by controlling vast amounts of biting insects that act as disease vectors. Bats also eat crop pests. In KSF, bats control tree pests, like looper moths. The Forest's threatened Northern Long-eared Bat is particularly adept at gleaning such pests directly from the trees. Nursing mothers typically eat their own weight in insects nightly.



Northern Long-eared Bats forage in trees for insect pests.  
(Photo from <http://cwf-fcf.org/assets/images/bat-species-images/brockFenton-northernMyotis-myotisSeptentrionalis.jpg>)

A relatively new bat-benefit for people is the rise of bat phenomena as tourism enhancements. Two examples are the evening flights of bats exiting the National Park Ser-

vice's Carlsbad Caverns and leaving the Congress Ave. Bridge in Austin, TX, where tourism officials estimate around 100,000 visitors annually see that phenomenon.



Bat sonar  
Returning sound waves

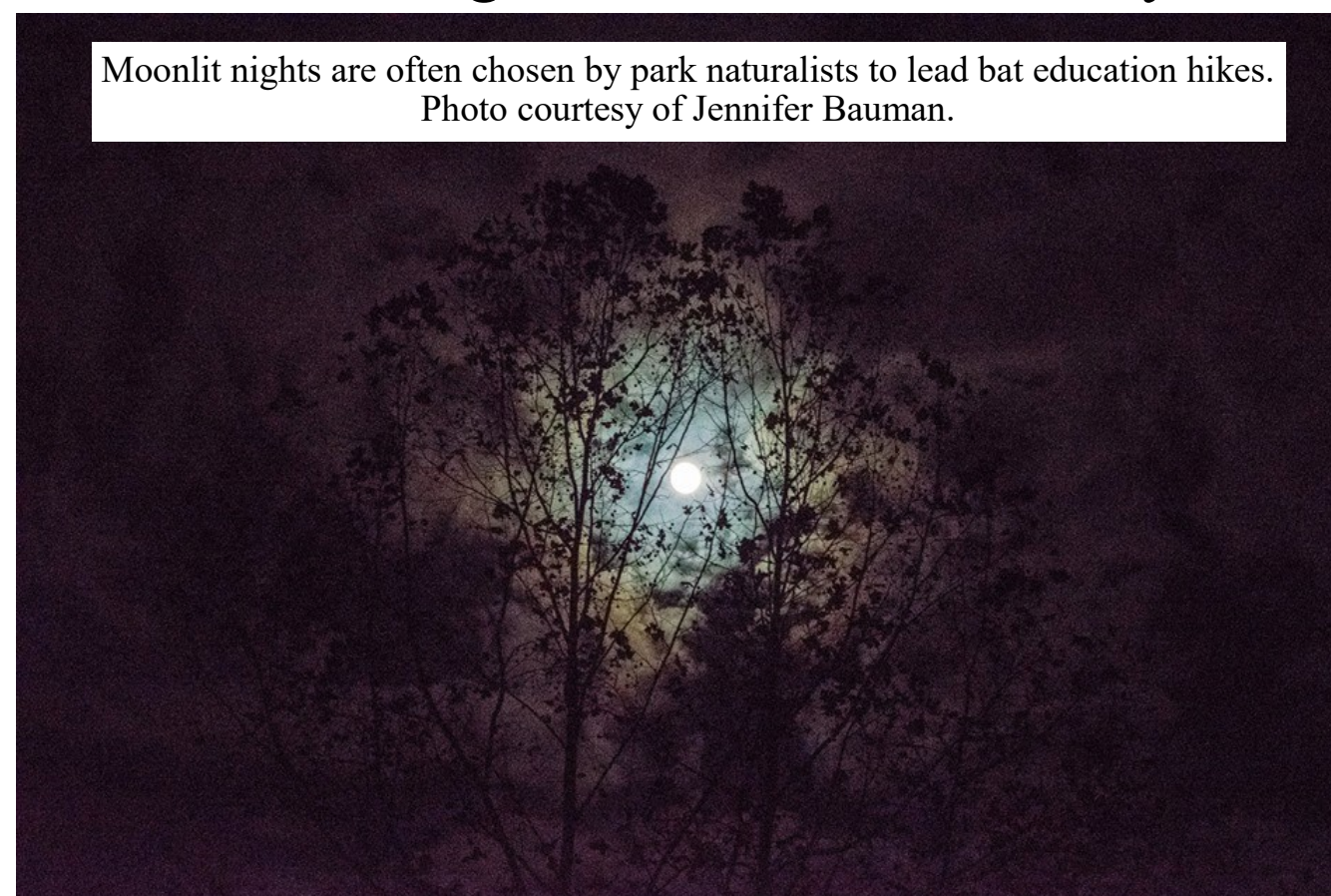
Image from [https://askabiologist.asu.edu/sites/default/files/resources/plosable/Batty\\_Food/bat-echolocation-540.jpg](https://askabiologist.asu.edu/sites/default/files/resources/plosable/Batty_Food/bat-echolocation-540.jpg)



Bat interpretive hikes, festivals, and celebrations, like this one in Charleston, are becoming increasingly popular in WV.  
Photos courtesy of Dianne Anestis.



In West Virginia, some state park naturalists have made bat-watching forays a part of their watchable wildlife offerings for guests. The fact that you are on this trail reading these educational signs proves that bats enhance West Virginia's tourism industry.



Moonlit nights are often chosen by park naturalists to lead bat education hikes.  
Photo courtesy of Jennifer Bauman.



Bat Night Celebration for children and their families at Kanawha State Forest.  
Photo courtesy of Jennifer Bauman.

Former Superintendent Kevin Dials supported many wildlife enhancements in Kanawha State Forest, including the Bat Conservation Education Project, of which this trail is a part. To commemorate his 12 years of service, this trail is named in his honor.



Supt. Kevin Dials (on left) meets with the night crew during a bat survey in 2015.  
Photo courtesy of Doug Wood.

The Kanawha State Forest Foundation project that resulted in this bat trail, these education signs, and the protective bat gate you will see further along, was given financial support primarily by the Maier Foundation, the Hot Rod Devil's Rock the Park event, and the C. C. Dickinson Family Giving Circle, a donor-designated fund through the Greater Kanawha Valley Foundation.

## MAIER FOUNDATION



Other support came from the Kanawha Valley Master Naturalists and biology classes from the University of Charleston and WV State University.



University of Charleston volunteers expertly establish the Bat Trail tread.  
Photo courtesy of Jennifer Bauman.

Jennifer Bauman

Your talents are welcomed by the KSF Foundation and other supporters to help conserve wildlife and native plants at KSF.



Jim Honaker cuts steel for the bat gate you will see further up the trail.  
Photo courtesy of Kristen Bobo.