

February 2007, Volume 5, Number 2

Bats in the News - Counting Endangered Bats



A reporter from the Ashland, Kentucky, *Independent* went looking for a story on recreational cavers, and came away with an article on science and how Bat Conservation International is working to save the Indiana myotis from extinction. Down inside a limestone cave, reporter Allen Blair ran into a pair of Bat Conservation International scientists busily counting bats.

It was the annual Crawlathon weekend that, the newspaper reports, brought some “700 cavers and thrill-seekers for three days of wild cave tours” at Carter Caves State Resort Park.

But, Allen wrote, “These guys [Dave Waldien and Jim Kennedy] have come to descend into darkness on a different mission. ‘We’re doing science,’ said Kennedy, a BCI biologist. ‘We go to some of the bigger caves that have the endangered Indiana myotis and count bats in those caves every two years so we can get an idea of what the populations are doing, whether they’re increasing, decreasing or remaining stable.’”

The bat has been on the federal endangered species list for decades, with fewer than 500,000 individuals nationwide. At the state park, many thousands of Indiana myotis hibernate in Bat Cave, which is listed by U.S. Fish and Wildlife authorities as one of two “critical habitats” in Kentucky. The Indiana myotis and other North American bats are vital to the environment – and to human economies – because they consume enormous amounts of insects, including many major agricultural pests.

Kennedy and BCI have been studying Indiana myotis at Carter Caves since 1998. The park includes excellent hibernation sites for the species: complex cold-air caves with a steady climate.

A major problem in the species’ recovery is its narrow range of acceptable hibernation temperatures and conditions. Plus, Kennedy told the newspaper, these bats are extremely susceptible to disturbance. If awakened, they often die because they expend too much of the energy their bodies have stored to survive their winter-long hibernation. Flooding, mineral extraction and commercialization likely have also contributed to the Indiana myotis’ decline.

Both Bat Cave and nearby Saltpetre Cave are now gated and closed to humans during the hibernation season. BCI is also leading an effort to redirect airflows and take other corrective measures within caves that were heavily used in the past by Indiana myotis.

Saltpetre Cave is an outstanding example, Kennedy said. The number of hibernating bats in the cave has been “almost doubling every two years” when BCI conducts its population counts. The counting, coupled with other cave research, is setting the direction of recovery efforts.

Bat Cave, with some 28,000 bats, had been considered the species’ primary hibernation site in the region, although conditions there are marginal. Saltpetre Cave, however, offered better conditions but was barely used by hibernating Indiana myotis – although it showed evidence of heavy use perhaps two centuries ago. Winter tours were halted in 1998 and work to restore historic airflow began in 2003. The bats gradually began returning to the cave and now total about 6,985 (up from 475 nine years ago).

“Just looking at Bat Cave is not giving us the full picture,” Kennedy said. “There are eight to ten caves in the

immediate vicinity that bats also use. By not counting (those), we're not getting a true picture of health." The goal is to gather as many pieces of the puzzle as possible.

"Bat counts are the only way we have to really gauge our success," he said. "It's definitely working here. It's very neat, and very exciting."

All articles in this issue:

▶ [Bats in the News](#)

A reporter from the Ashland, Kentucky, Independent went looking for a story on recreational cavers, and came away with an article ...

▶ [Entertaining Education](#)

A small bat swoops down on a cactus flower, hovers for an instant, dips its long nose deep into the blossom and shoots out its ...

▶ [Saving a Rare Roost](#)

The Townsend's big-eared bat, one of the most imperiled bats in the Pacific Northwest, uses the abandoned Pitney Butte Mine in ...