## Trout Cave Gating Project

Story and photos by Craig Stihler

hy would 50 people spend five days hauling over two tons of steel and equipment up a steep hill to a hole in a cliff? To help protect rare bats, of course!

In September 2008, two cave gates were built at the entrances of Trout Cave in Pendleton County to reduce disturbance to endangered Indiana bats and other bats which hibernate in the cave during the winter. Trout Cave is owned and managed by the National Speleological Society (NSS)(www.caves.org), an organization dedicated to the study and conservation of caves. Based on the historic data available, it appears that Trout Cave once housed the second largest concentration of hibernating Indiana bats in West Virginia. In the 1950s and 1960s populations of Indiana bats declined across their range, and the number in Trout Cave declined to the point that none were observed in 1965. Disturbance by recreational cavers and bat researchers conducting large-scale banding studies were probably major factors in this decline.

Biennial monitoring of the bats hibernating in Trout Cave showed up to 24 Indiana bats hibernating in the cave between 1983 and 2003. The number of Indiana bats showed a significant increase in 2005, and this increase continued with158 Indiana bats observed during the 2007 winter count. However, most of the bats were in a side passage, not in the main passage where historic accounts indicate most of these bats hibernated in the past. If disturbances were eliminated, perhaps the bats would return to their traditional (and presumably more suitable) roost sites within the cave.

Construction of angle-iron gates has been very successful in protecting Indiana bats at other sites. They provide a good deal of security while using a design that is bat-friendly. After months of planning, the cave gating project was implemented last fall. Major funding was provided by a grant from the U.S. Fish and Wildlife Service's Partners for Fish and Wildlife Program, with additional funding and support provided



by the National Speleological Society, Bat Conservation International, West Virginia Division of Natural Resources, Trout Unlimited, the Environmental Sciences Program at Davis and Elkins College, and volunteers from local caver grottos associated with the NSS. Chris Sanders from Sanders Environmental, Inc. designed the gates and oversaw the construction.

**Editor's Note:** Because bats affected by White-nose syndrome were observed in Trout Cave in January 2009, the cave is closed year-round to minimize the potential of spreading WNS to other caves. See news story in Almanac section of this issue.

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Building a gate at Trout Cave was labor intensive. The long cross bars were welded together at the bottom of the hill (upper left) and then hauled more than 200 feet uphill using pulleys (lower left). When completed, the gate (lower right) will allow access by bats but will prevent human disturbance.

