

Critical Habitat

The Keweenaw is dotted with remnants left behind from its mining past. Among its towering rock piles, industrial buildings, and surface infrastructure, are abandoned mine shafts, connected to miles of underground tunnels. When mining operations ceased, shafts were frequently left open at the surface. The open shafts provided access to stopes and drifts near the surface, whose cave like feature provided critical wintering habitat for great lakes bat populations. However, these open mine shafts posed a safety hazard.

Beginning in the 1960's and 70's, many of these openings were sealed with concrete caps. In doing so, thousands of hibernating bats were unintentionally entombed in mines throughout the Keweenaw.

Starting in 1993, the North American Bats and Mines project began an effort to retrofit mine caps with bat-friendly gates. These gates were designed and constructed to have openings large enough for bats to fly through, but small enough to keep people and predators out. Thanks to these efforts, mines are again home to tens of thousands of bats.

The two primary species found in Keweenaw mines are the North American Little Brown Bat and the North American Big Brown Bat. As winter settles in, and hibernation begins, bats drop their body temperature and heart rate to as low as ten beats per minute. Hibernation can last more than six months, and by the time spring arrives, the bat will often lose half of its body weight.

During the spring, these bats will migrate from the Keweenaw to surrounding states and Canada. In summer, they hunt insects to build up fat reserves, which they use during the fall to return to their winter home in the Keweenaw.

Bats are important, both ecologically and economically. A recent study estimates that bats provide a 23 billion dollar a year benefit to farmers in the U.S. by controlling insects. Yet the future for bats is uncertain. White nose syndrome has killed millions of bats since its discovery in a New York cave in 2006. This white fungus disturbs a hibernating bat, causing it to awaken and prematurely deplete its viable fat stores. Mortality rates of 100% are reported at some sites. Bats across North America are at impending risk, unless a solution is found. Researchers have been able to pinpoint the fungus, and are working on how to treat a bat without disturbing it. For the most current information about white nose syndrome, and to learn what you can do to help, please visit [this website](#).