Navigation/Migration

Like dolphins, most bats communicate and navigate with high-frequency sounds. They hunt insects and avoid collisions at night by sending out "echolocation" beeps and analyzing the echoes that come bouncing back. Using sound alone, bats can see everything but color, and in total darkness they can detect obstacles as fine as a human hair.

This unique biological sonar system is considered far more efficient than any similar system developed by humans. In addition, bats are not blind and many have excellent vision.

In temperate regions, cold winters force bats to migrate or hibernate. Most travel less than 300 miles to find a cave or abandoned mine, where they remain for up to six months or more, surviving solely on stored fat reserv However, several species are long-distance migrators, traveling from as far north as Canada to the Gulf Coast Mexico for the winter. A few species can survive short-term exposure to sub-freezing temperatures, enabling overwinter in cliff faces or in the outer walls of buildings.

Bats usually are very loyal to their birthplaces and hibernation sites, but how they find their way over the long that often exist between their hibernating and summer caves remains largely a mystery. It appears that some o visually, using mountain ranges and other landmarks to guide them, but a few are known to have found their w when blinded. Information about how to find obscure sites, such as small cave entrances, apparently is passed generation to generation.