Bat Conservation

EDWIN GOULD

Since we know that some bat populations attain astronomical size, bat conservation may seem inconsequential. However, during the past 10 to 20 years, some bat-banders and other mammalogists have reported a decrease of bats in hibernating cave colonies. In general, summer colonies of most species of bats are dispersed; from these sites migrating bats converge on relatively few caves in which they hibernate. Some species are probably most vulnerable in at least the following four situations.

1. Hibernating bats that roost in caves or mines may be destroyed by teenagers or adults who have no concern for the bats.
2. Reproducing females in summer colonies, especially in houses, are destroyed by home owners and exterminators who are perfecting more effective techniques for killing bats.
3. The effects of insecticides have not yet been evaluated; from what we know of birds we may suspect that bats are affected by some contaminated insects.
4. Selective collecting by mammalogists, physiologists and biochemists.

First, we as individuals can contribute to bat conservation by being responsible during our own “harvest.” On the one hand, students of bat biology have a responsibility to inform the public of the possible dangers of bat rabies; on the other hand, we have an equal responsibility to inform the public of bats’ inherent benefit to potential insect control and their intimate relevance to the ecosystem. For those people searching for a more concrete value to pass on to the layman: an average colony of 100 small insectivorous bats consumes at least 24 pounds of insects between June and September. One big brown bat may fill its stomach to its 2-gm capacity in a matter of one hour. (100 bats times 2 gms times 120 days equals 24,000 gms or about 52 pounds.)

Davis* (1967) emphasizes the need for responsible people to handle the commercial sale of bats for research. Thousands of bats killed and discarded by exterminators could be used for research. Many ideas about bat conservation are superbly discussed in the pages of Bat Research News edited by Wayne H. Davis, University of Kentucky.

Department of Mental Hygiene, School of Hygiene and Public Health, The Johns Hopkins University, Baltimore, Maryland 21205.