Bat Houses and Wasps

By Mark Kiser

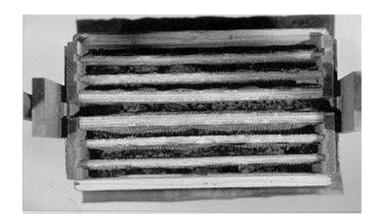
One of the most common maintenance problems for bat house owners is caused by mud daubers and paper wasps. These wasps are beneficial, and bats will coexist with them in bat houses, but they can pose problems if they become too numerous. In extreme cases, wasps may prevent bats from occupying a bat house or force them to abandon one. Routine inspection of your bat house is recommended to ensure no serious problem develops. Using 3/4 -inch roosting chambers will help reduce occupation by wasps.

As the name implies, mud daubers use mud to build nests that resemble long tubes. Mud daubers are solitary hunting wasps (family Sphecidae) that build nests on or in buildings, under bridges, in crevices, or on rock faces. Nests contain eggs along with paralyzed insects and spiders on which the developing larvae feed. Left unchecked, mud daubers can fill virtually all of the roosting space in a bat house with nests, leaving little room for bats.

Mud daubers typically are not aggressive but may sting if provoked. To avoid injuring bats, or being stung, wait until after all bats have left for the season or for the evening (make sure no pups are present), to begin cleaning. Dried nests are easily broken up with a yardstick or similar long, thin object. Wear goggles to prevent falling debris from getting in your eyes, and thoroughly scrape out all nest material. Cleaning at least once a year, or more often if mud daubers are especially persistent, is the best way to keep wasps from outnumbering your bats. The following story is a good example of the importance of regular inspection and cleaning.

In 1997, Carol and Baxter Adams had 200 free-tailed bats in their back-to-back pair of nursery houses. In June 1998, however, they noticed few bats using the houses. We inspected the houses and observed that the roosting chambers had become so clogged with mud dauber nests that only five bats remained. After dark, when the bats were gone, we removed all of the nests with a yardstick. By the next morning, to our surprise, 50 bats had already returned. The following day 50 to 100 bats were back, and there were more than 350 just one month later. By this time, there was little room for mud daubers to return.

Paper or red wasps (family Vespidae, the social wasps) use a mixture of wood pulp and saliva to construct nests, which hang from a stem-like pillar. In bat houses, nests are typically built at the top of the roosting chambers, especially where a gap is left between the roof or ceiling and the partitions. When bats and wasps occupy bat houses at the same time, they may segregate into separate roosting chambers, as bats can be killed by wasp stings. Honorary Research Associate Cal Butchkoski reports that when using the same chamber, bats may leave "travel lanes" open for wasps to come and go. To prevent wasps from building nests at the top of the roosting chambers, extend the partitions all the way to the ceiling or roof, so wasps will not have space to build nests. Nests can be knocked down using the same method described above. However, because paper wasps are more aggressive, cleaning is best done in winter, when the colony has died off. Use this opportunity to inspect your houses for other maintenance problems, such as loose boards or mounting hardware, and deteriorated caulk or paint.



Wasps and mud daubers may prevent bats from using a bat house. After the nests were cleaned out of this pair of houses (which had been almost completely blocked off) the number of bats rebounded from five to more than 350.