

Preventing Robbing

We are rapidly approaching a time of the year when robbing becomes problematic for beekeepers. When the weather allows for forager flight, but plants are not providing nectar and pollens, honey bees are apt to drop by next door and see what they can steal from the neighbors. The length of time that bees rob depends on the climate. Here, in the Davis area, we have nectar and pollen dearths in late spring and a big one in late summer and fall. We can have flight conditions throughout the winter, but the worse problem spans the time from mid-September to November.

Robbing is a problem for honey bee researchers, small scale beekeepers and beekeepers with thousands of colonies. At UC Davis, we still have the portable, four-sided, eight foot tall, folding screen cage that Dr. Laidlaw would wrap around him and a hive so that he could work in the hive, unmolested, during the fall. Otherwise, he no sooner would have the cover off the hive and hordes of robbers would descend on the combs.

Some beekeepers are convinced that if you remove all the covers (lids) from the hives at once in an apiary, robbing isn't a problem. I'm going to try that in Davis, sometime, to see if it works as well as the Canadian proponents claim that it does. I'll never hear the end of it from Susan Cobey and Elizabeth Frost if it doesn't work!

I believe that the better choice, feasible at least for those with fewer hives, is the use of robber screens. These screens interfere with robbing bees yet provide wide expanses of the entrance to be used for hive ventilation. Serious ventilation is critical on our hot fall days.

The original robber screen that I saw being used at UCD was a wooden-framed section of screen that covered about half of the entrance. A slot cut in one end held a piece of lath that could be slid down the entrance to reduce the entrance to zero, if necessary. Normally, it was left with about a 1.5 to 2 inch hole for the bees to defend. Still, if the colony behind the screen was weak for some reason, it really got targeted. A pile of freshly killed bees would be lying on the ground every day for weeks.

Then, we learned a bit more about robbing behavior and a new screen design became possible. Robbing honey bees tend to hover in front of a neighboring hive, swinging to the left and the right, as if trying to find an unguarded opening through which to enter quickly and undetected. Robbing foragers fly with their hind legs dangling down, similar to the way paper wasps dangle their legs. It does not appear that robbing honey bees enter the hive by landing on it and walking in.

Therefore, if you place a full-length screen across the front of the hive, you can block out the robbers. But, what about the hive inhabitants? Would they be screened in? Yes, if you fit the screen tightly, everywhere, top and bottom, to the hive body. Instead place a four-inch-high robber screen across the body of the hive, leaving a gap of about two inches from the screen to the hive, so the resident bees can crawl or fly over it. If you install the screen in the morning, the resident bees learn within hours to crawl up over the screen to get out and get back in.

Eventually, a number of them learn to fly diagonally across the hive entrance and not touch the screen. And, the bees have no difficulty carrying bodies of dead bees and other debris over the screen.

Intuitive behaviors are interesting. Potential robber bees leave from their original colony by going over the robber screen, but don't do the same when they try to enter a neighboring hive. They hover around the fronts of screened hives and never get in; then, they go back home over the top of their own screen. We aren't sure, but it appears that these robber screens also deter marauding yellowjackets, that can kill and eat a surprising number of honey bees around the hive entrance. Yellowjackets appear not to access this type of robber screen, either. I am still waiting for reports on the value of this screen from some beekeepers experiencing severe problems with yellowjacket predation.

It may be a bit difficult to visualize the screen I have described, so I am including a few photos (below) that should clear things up. The screens can be nailed to the fronts of the hives or held on with hook and eye latches. If nailed on, use nails with two heads on them (8d 2 ¼ inch bright duplex), so that the screen can be nailed solidly into the hive front but the nails can easily be grabbed when you wish to take them out.

You can tell from the photos that this screen was made by hand with simple tools (hacksaw, wood glue, beehive frame nails, drill, hammer, Arrow stapler and ¼ inch staples, white spray enamel paint). The bees do not have problems negotiating my crooked apparatus, as long as it is bee-tight in the right places and lets them get out behind it.



Robber Screen

Open Top

Hook and Eye Latch

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