COMB Courier

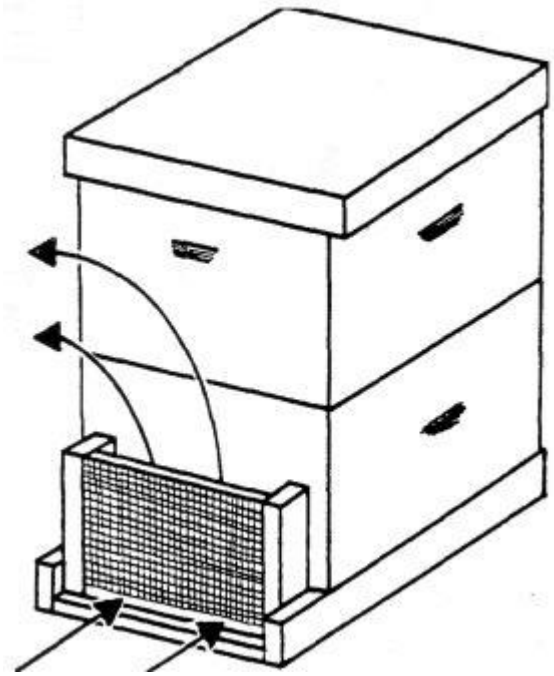
Mid-Michigan—Land of the bee

Vol. 2 No. 11 November 2015 Editor: mike ffrench

The Individual Hive Robbing Screen

By Roger Hoopingarner
Professor Emeritus MSU

I first saw robbing screens used at the U.S.D.A. Carl Hayden Bee Laboratory in Tucson, Arizona, and I was told they were an outgrowth of a design originally developed by Dr. Harry Laidlaw for queen nuclei. While I had read his queen-rearing book I had other concerns and missed this important concept. Upon my return to East Lansing from my research leave at the Tucson lab, I was greeted with a very temperamental apiary as there was no nectar available (early June). I decided to make some robbing screens that covered the front entrance of each hive in the apiary. The results were outstanding! Within two or three days we could manipulate most colonies in the apiary without getting stung, whereas before we were getting several stings per colony. I now leave the screens on the colonies most of the year. I do have upper auger holes that provide additional flight and ventilation during the major honey flows.

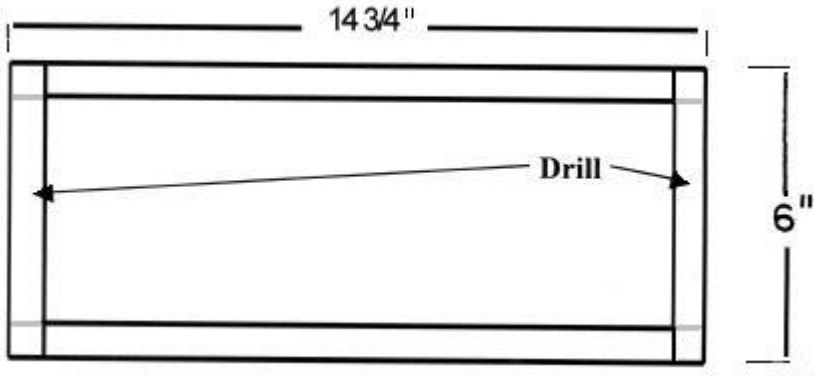


What is the principle of operation of the robbing screen? Remember that bees are instinctive animals and thus respond to certain sensory inputs. Bees that smell a source of honey within another colony arrive at the door only to find a screen covering the entrance. They fly at the odor coming from the entrance but cannot gain access through the screen. The bees from the hive learn very quickly to move up the front of the hive to exit (Fig. 1). Even though a potential robbing bee has just come from a hive with a similar screen, her instinctive behavior directs her to the screened entrance where the odor is and not down behind the screen from above.

Robbing Bees

The construction is relatively simple (Fig. 2). At that time we used common pine for the

frame and aluminum screen wire. Over the years we have switched to 8-mesh hardware cloth for the screen as the hardware cloth screens are more durable to abuse. The sides of the frame are 6"x 1"x ¾" and the cross pieces are ½" x ¾"x 14 ¾". The ½ inch cross pieces allow the bees to exit the hive, move up the wall of the hive and out the top of the screen. Thus, there is a gap at the bottom and top of the screen as it faces the hive.



I notch the end pieces to fit the cross pieces. (The 14 ¾" should be correct, but I have found that some bottom boards are a little narrower, thus I make the screens a little smaller and fill any gaps with beeswax scraps.) I pre-drill holes in the sides of the screen, in order to insert nails with which to attach the screen to the hive. These drill-holes make removing and re-attaching the screen much easier.

As I indicated above, I generally keep the screens on the year around. We have seen no reduction in honey yields though we usually have upper entrances during honey flow periods. The bees do have some trouble removing trash from the hive and about once a summer I clean the bottom boards. (With screen bottom boards this is not necessary.) The benefits of using robbing screens will be apparent from the reduction in stings, but also there could be a reduction in the transfer of diseases. For the beekeeper with more than one colony in a location, these robbing screens make beekeeping a lot more enjoyable throughout the entire year.

A couple of additional benefits come with this screen. First, the screens virtually stops skunks from bothering the hive (maybe one reason for mean bees). The skunks do not like to stand up to get to the bees as it exposes their vulnerable stomach. The other added benefit is that the screen makes for a good moving screen. Just tack a thin piece of wood across the top of the screen to close it off while moving the bees. (Duct tape would probably work as well.) The screen provides ventilation for the hive during the move.

[The original article, from which this was taken, was printed in *Gleanings in Bee Culture* Vol. 110:92,109; February, 1982.]

C.O.M.B. Monthly meeting.
2nd Monday of the month 6:30pm.
MSU Pavilion, Farm Lane, E. Lansing

6th Extinction

"News of my death has been greatly exaggerated," said Mark Twain, upon reading his premature obituary in the newspaper.

So, what else has been greatly exaggerated? Paleo-anthropologists and scientists have duly announced the 6th extinction. No time frame as yet, since all previous extinctions came as a complete surprise to its victims.

Despite the dire forecasts of bee extinctions by commercial purveyors, there appears to be an abundance of bee packages this year.

If this dire forecast has any merit, what part will *varroa* play in this extinction?

Bee Read

If you have a comment, query, problem, or an interesting story or anecdote concerning bees that you would like to share with your fellow beekeepers, here is your chance. Send it in to mjbusybee@frontier.com or debbie.foote@hotmail.com or hand it in at the meeting. Jane Carhartt may be contacted at janesbees@yahoo.com
This is your newsletter, make use of it!

~~~~~~

Bee Classifieds

If you have any bee-related items you would like to buy, sell, or trade, this section is for you. This service is free for members of C.O.M.B. You may submit ads to Mike French or Deb Foote. There will be a nominal fee for associate members.

~~~~~~

Deadline for next issue is December 4th