

Robber Bees

By Khalil Hamdan
Apeldoorn, The Netherlands

Honeybees laboriously gather their food (nectar and pollen) from flowers in bloom and store it in the hive for use when needed. When nectar sources are scarce or unavailable locally they are attracted by honey in neighbouring hives. They make raids on hives that are unable to defend themselves and steal their honey or sugar syrup. This behaviour of thievery as opposed to the customary colony gathering nectar for itself is termed robbing in Apiculture.

Robber Bees' Behaviour

Generally, robbing occurs especially during a dearth of nectar. Bees will never rob during a nectar flow and as long as an abundance of nectar is available in the field. Robbing intensity depends upon the availability of natural sources of food, the more scarce or unavailable nectar become, the more the intensity of robbing increases. It is the strong colonies that make onslaughts on the weak ones or those that are poorly guarded (have few guards). The robber bees are the forager bees. They are after honey – they do not steal pollen.

The tendency to rob varies with the race and strain. The Italian bees are particularly much more prone to rob than the brown or black races.

Robbing may occur between colonies in one apiary or colonies of different apiaries. Sometimes it is possible to see several colonies in the apiary robbing one another simultaneously.

Robbing behaviour is usually more aggressive than normal and can develop into deadly fighting and the destruction of a hive.

Robber bees are nervous, noisy, and fly timidly and shiftily. They alight cautiously on the alighting board at the entrance, and dodge when the guards catch them.

Robbing starts with the robbers forcing their way into a hive, taking their fill of honey/sugar syrup, and flying off. Upon returning to their hive they alert their hive mates to the honey source and taste and recruit a large number of bees to take advantage of this honey. The recruited bees are attracted to the scent of honey which is emitted from the entrance of the hive or any open spaces between supers. They frantically hover up and down before the entrance attempting to enter the hive. When robbers are about the local bees will be actively on guard chasing away intruders who seek entrance. Combats will take place between the robbers and the defenders of the hive leading to the death of a large number of bees from both colonies.

Should the robbers succeed in overpowering a colony, they will strip it of all its honey; they rip the caps off the honey in the combs and sip the honey, leaving the surface torn and messy.

After a colony once has succeeded in robbing honey, it may again continue to rob from weak, nearby hives.

Times and Situations Leading to Robbing

- During periods of dearth, and food shortage in the hives.
- In the spring before the main nectar flow, between nectar flows, and occurs more often in late summer and autumn.
- After the cessation of a nectar flow.
- When all the harvest is done and honey supers are removed.
- Careless feeding (splashing syrup or honey about to the outside of the hive or the ground).
- Feeding bees watered down honey or sugar syrup.
- Feeding essential oils during a dearth of nectar may incite robbing.
- Feeding weak colonies in daytime with sugar syrup provokes bees from adjoining colonies to rob the syrup.
- Prolonged inspection of a colony with combs of honey during a period of nectar shortage, or having hives open for too long during manipulation. Bees are immediately attracted when a hive is opened and honey supers are exposed
- Exposing frames of honey outside the hive.
- Robbing may start in the apiary if supers are left uncovered when the harvest is removed.
- Leaky hives.
- Weak colonies and nuclei or queenless hives are usually subjected to robbing.
- Giving sticky honeycombs after extracting process back to the bees to clean up the remaining honey still stuck to the cells wall. Bees are highly attracted to the scent of recently extracted honeycombs.
- Colony collapse disorder (CCD) is an excellent opportunity for robbing.

Dangers of Robbing

Robbing disrupts colonies, increases the aggressiveness of bees and can cause the stinging of people and livestock in the area. It can badly weaken or even destroy a colony. Colonies that are victimized cannot grow in strength and have little chance to survive in the winter. A colony that has lost all its honey and syrup by robber bees will quickly perish of hunger. In extreme robbing, queens are often attacked and killed.

Robber bees are the most dangerous disease spreader, especially of AFB, as they will take germs home if they are robbing a diseased colony. Robbing also poses a danger to queen mating yards, as it may result in the loss of numerically weak nuclei and young queens.

Robbing is a bad habit and the beekeeper should not keep a colony that shows a strong tendency to robbery. It is worth requeening it from a more docile colony.

Signs of Robbing

- There are plenty of bees hovering around hunting in all cracks and in front of the hive entrance looking for a chance to get in.
- On first approaching a hive, the robber bees sway back and forth in front of the hive who wish to rob.
- Robber bees are distinguished by their loud buzzing.
- Guard bees are unusually active defending their hive.
- Occasional clashes at the entrance.
- Dead bees in the front of the hive.
- Many bees entering and leaving the hive being robbed in haste.
- Wax bits seen at hive entrance.

Note: On approaching the hive to be robbed, robber bees fly with legs extended behind, when coming out of the hive with honey load, they fly with hind legs bent forward, they do not fly as ordinarily bees do because of the weight; instead they fly downward near the ground before rising.



Hive is being robbed. Robber bees are trying to find a way to get in and steal the honey they smell inside the hive.

Photo courtesy Terry Small



Guard bees attack a robber.
Photo credit: BasicLiving.com

Preventive Measures

Prevention is the best treatment for robbing. It is much easier to avert robbing rather than to stop it after it has started. There are several means of preventing or minimizing robbing.

- Avoid situations that lead to robbing.
- The best defence against robbing is to have strong colonies. Equalize colonies' strength and keep your colonies as strong as possible. Robbing behaviour is rare if all colonies are kept strong. Weak colonies can be boosted by transferring some emerging brood combs from a strong hive and shaking off some nurse bees from the strong hive into the weak one. A weak colony that is slow to build up can be combined with a strong colony.
- Reduce the size of entrance of weak colonies. Weak colonies cannot defend their entrances, and are usually the victims. A small opening allows the guard bees a better chance of fending off robbers.
- When a dearth is setting in, reduce the entrances on all hives.
- When feeding, great care must be taken not to spill syrup around, especially during periods of dearth. Spilled syrup or honey should be cleaned up immediately. Feed in the evening after the bees have ceased flying for the day. The food must be placed in the hive. By that time there is no risk of robbing, as bees from other hives are not driven by instinct to gather food.
- Do not allow honey to drip from uncapped frames or broken combs down the sides of the hive or into the ground. If stranger bees find a drop of honey, they sense a food source and in a trice will be buzzing around looking for food. They can fly into the open hive and rob it.
- In times of scarcity of nectar, do not keep a hive open long, or robbing may be the result.
- Avoid manipulating hives during dearth periods.

- **During harvesting, work fast and never leave honeycombs exposed.**
- **Make sure that hives are bee-tight. Bees can pass through holes with 0.4 cm (5/32") in diameter or more. Close cracks or holes in the hive bodies with adhesive tape.**
- **Weak colonies and Nuclei must always be guarded as they are usually vulnerable to robbing. Contract the entrances to 2,5 cm (1 inch) or less to hinder robbing.**
- **Watch out for robber bees in late summer and autumn.**
- **If bees start to rob a hive during manipulation, stop work immediately and reduce the entrance to only one or two bee spaces and wait until another day.**



**Nucleus protected with a robber screen while it is being fed.
Photo by Randall Austin**



**This photo shows the results of leaving boxes of honey unprotected in the apiary when the harvest is removed.
Photo by Richard Underhill**

How to Stop Robber Bees

When robbing has commenced, prompt action must be taken to stop it. Here are some ways to stop it and help the colony that is being robbed.

1. Reduce the entrance of the hive being robbed allowing only one or two bees to pass in or out at a time so the attacked hive has a better chance of defending itself.
2. Stuff grass or straw into the entrance and leave it for a day or two. The robbers cannot get in and eventually give up. Remove the grass when the robbing has stopped.



A hive entrance being stuffed with grass to stop robbing.
Photo by Sara Dunham

3. Another way of deterring robbers is to hang a wet sack in the front of the hive.
4. Set up a piece of glass, board or mesh wire before the reduced entrance in a sloping position to allow space around the sides for exit and entry of the hive occupants. This confuses the robbers. They will keep beating themselves against the glass and eventually will get tired of trying and give up.
5. Install the entrance with an anti-robbing screen. This tool stops the robbers from entering the hive through the entrance, and allows sufficient ventilation. The robbers who are attracted to the scent of the hive keep bouncing away at the screen and eventually give up. The bees of the hive leave and enter through the opening on top of screen. The robbing screen is also used for stopping wasps and transferring bees.



Anti Robbing screen for use on Beehive Entrance.
Photo credit: bushfarms. com



A hive with robbing screen.
Photo by Toni Burnham

6. Some beekeepers reduce the entrance dramatically, preferably with screen wire and spray the alighting board of the victimized hive with a salt solution. The robbers will resent it and return to their own hive. Some use Vicks Vaporub around the entrance to confuse the robbers from approaching the hive because they cannot smell the hive.
7. Spray robbers with water using a garden hose to help slow robbing.
8. Some beekeepers recommend taking the covers off the robber hive and dredge generously with flour, thus causing the bees to engage in cleaning the flour and defending their own hive rather than be out robbing others. To identify the robbing colony, sprinkle with flour a few of the robbers at the entrance of the robbed hive, and determine where the floured robbers go.
9. If one hive is attacking another persistently, put the robber hive on the stand of the robbed hive and vice versa. This baffles the robbers and at the end of the day robbing will cease.

10. In severe robbing remove either the robbed hive or the hive of robbers to a distant site at least a mile away for few days.

Note: It is not recommended to resort to the use of chemical repellents at the entrance of a hive to keep robbing bees away, for instance, Carbolic acid or phenol. Carbolic acid is rough on the bees. Both the bees living in the hive and the robbing bees would not like the odour. Since it is at the entrance, it can be fanned out by the bees inside the hive, but that vapour trail is going to override the odour of the hive, which the field bees use to find the entrance of their own hive.