

# Honeybee Swarms



## Swarm Season

Hawaii's tropical weather allows for an extended swarming season compared to the mainland US.

Swarms are more common in spring and summer. That means from March to October in Hawaii. The swarming peaks occur in March/ April and late August/ early September.

Swarms are generally not aggressive, and rarely tend to sting; however, it is always best to treat a swarm with caution, keeping children and pets away from the bees. Please do not spray or disturb the swarm, as this may agitate the bees and increase risk of stinging.

These swarms are valuable resources; the bees pollinate many local crops and produce honey. Help protect this important insect by calling a local beekeeping group, the State Apiary Program or the UH Program Project no report a swarm.

**Swarms:** appear suddenly. A large group of bees, about the size of a basketball appears overnight in an exposed area. There is no apparent honeycomb or nest.

**Colonies:** have been present for more than a few days. The majority of the bees are not in the open. A steady stream of bees going in and out of a hole or crack is evident.

## What is a swarm?

Swarming is a natural process by which a honeybee colony splits into two. Swarms tend to occur when environmental conditions are favorable, when the colonies are strong, or simply when the colony needs more space to grow.

A swarm of bees is composed of thousands of worker bees and a single queen in search of a new suitable home. Swarms are often less aggressive than well established colonies. This may be because swarms have no resources, such as honey or larvae, to protect. Swarms tend to appear suddenly and are often found in exposed areas such as a low branch on a tree, the eave of a roof, or the side of a building.

The bees in a swarm need to find a home quickly but instead of flying around as a group, the exploration of the neighborhood is achieved by sending scout bees. After a swarm settles in a temporary location, it sends hundreds of scouts in search of suitable nest sites. The scouts will report to the group about all possible nesting sites they examined: whether it is a hole inside a tree, a space between the walls in a house, or even an abandoned wooden chest in a yard.

The scout bees convey their discoveries to the other bees via dances and sounds. The swarm "listens" to all new information, and additional scouts are dispatched to verify on the most appealing sites. Collecting information and selecting where to go takes time, from a few hours to a couple days, but most often a swarm will relocate within 24 hours to their new home.



*The swarm congregates in a tree while scout bees search for a suitable new home.*

# Biology and management of swarms

Colony growth, proper beekeeper practices, and public concerns

Swarming is part of the natural cycle of honeybee colony. During a swarming event the old queen takes about half of the workers with her in search of a suitable area to establish a new hive. While in the parent colony the remaining workers raise a new queen. Eventually this process results in two colonies from an original single colony.

Beekeepers can often identify signs that suggest that a colony may swarm soon. An increase in adult bee population suggests a growing colony that many need more space.

The appearance of special queen cells where young queens are being raised in anticipation of the older queen leaving. These cues signal to an attentive beekeeper that is time to split the colony.

Colony splitting is a management practice in which the beekeeper separates bee brood and adult bees into two boxes, one box with the older queen and one without a queen

but with eggs and young larvae that can be reared into a new queen.

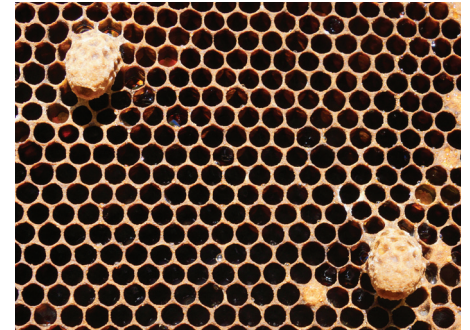
Splitting allows the beekeeper to divide a colony under controlled conditions and avoid a swarm. Splitting is an easy way to increase colony numbers in an apiary.

In comparison, if a swarm were to occur the beekeeper will most likely “lose” the swarming bees, and the parent colony from which the swarm came will be reduced in size temporarily.



*Honeybee queens are often replaced each year to ensure that the colony is healthy and lots of new bees are produced.*

Beekeepers can prevent swarms by anticipating the needs of the colony and providing space to grow and store honey. This strategy is considered “swarm prevention” and it is probably among the simplest ways to deal with a growing hive. There are times however, when a colony has already begun construction of new queen cells. In these situations a beekeeper can choose to destroy these cells. This strategy is considered “swarm control”, and may only temporarily stall the colony, especially if more space is not provided for the bees.



*Queen cells are much larger than regular worker bee cells and hang perpendicular from the honeycomb.*

## Swarm Tips

If a large group of bees suddenly appears or gathers on a tree or a building it is most likely a swarm.

Swarming bees are often very calm so there is no need to panic when a swarm appears but always be cautious as some people may have allergic reactions to bee stings. Keep children and pets at a safe distance.

Do not disturb the bees.  
Report the swarm:

State Apiary Program:  
(808) 339 1977  
[www.hawaiibee.com](http://www.hawaiibee.com)

UH Honeybee Project:  
(808) 956 2445  
[www.uhbeepoint.com](http://www.uhbeepoint.com)

Because swarms are temporary aggregations, beekeepers or bee-related agencies need to be notified immediately after the swarm appears. If the swarm is near an airport or seaport please report the swarm ASAP to the State Apiary Program

so that the bees can be inspected. It is important to verify that they are healthy and no new pests are introduced to Hawaii.

This handout was made possible thanks to these organizations:

