

# WORKER BEE JOBS

## Types of bees

A honeybee hive contains three different kinds of bees.

### 1. **Worker bee:**

These sterile female bees do all of the worker to keep the hive runnings.

2. **Queen bee:** Each hive has only one queen bee who is in charge of all of the egg laying and population control within the hive.

3. **Drone bee:** The male bees whose only job is to mate with a queen from another hive.



“It looked like two bees were dead and other bees were picking them up and dragging them away. Do they do that?”

When you watch a honeybee hive, you’ll see the honeybees doing what might seem like odd activities. I mean, why would they be dragging around a dead bee?

There’s a perfectly rational explanation though. These were undertaker bees, just one of the many jobs that a worker bee goes through in her lifetime. When I say her, it’s because all worker bees are female.

A worker bee and queen bee start off as the same fertilized egg. In the first few days of development, they are both fed royal jelly, which a protein-rich excretion secreted from nurse bee glands.

Any cells chosen to become queen bees are then filled with royal jelly. It helps the larvae float in an elongated queen cell, and these queens are then also only fed royal jelly throughout the rest of their development. Worker bees are fed a mash of beebread and honey, called worker jelly.

Scientists once thought that royal jelly was the thing that switched larvae into a queen bee, but it seems now that research is showing that it’s actually the addition of beebread and honey that is what switches larvae into a worker.

Worker bees typically go through each of the different jobs in the hive during their six-week lifespan, but how long they spend in each job depends on the needs of the hive.

### 1. **Nurse bee**

Once a worker bee hatches, she immediately cleans out her own cell — drones, or males, need assistance with this task — and then her hormones kick in to start her off in her first job, a nurse.



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**Dickinson County  
Nature Center**

22785 Nature Center  
Road, Okoboji

712-336-6352

[www.dickinsoncountynaturecenter.com](http://www.dickinsoncountynaturecenter.com)

## 2. Undertaker bee

The honeybee hive doesn't know if a bee died of old age or if it was sick, so all dead are cleaned out of the hive to prevent the spread of any illness.

## 3. Architect bees

These are the bees that are in charge of making honeycomb in the hive, and that honeycomb is used as brood cells and to store honey and pollen.

Honeycomb is made from wax created by worker bees midway through their lifespan. When bees eat honey, they have glands that convert it into wax through pores on the abdomen. Other architect bees will chew off the wax flakes on their co-workers and soften that wax, which is then formed into honeycomb.

## 4. Cleaning bees

Unlike undertaker bees, these bees don't clean up the hive. Instead, they clean each other. When foragers return to the hive, cleaners collect the pollen and nectar from them, pack it into cells and store it for later.

Some of these bees are also in charge of taking the nectar and fanning it down to create honey.

## 5. Queen's attendants

Only a select group of about a dozen bees are chosen as the "ladies in waiting" of the colony. These bees groom and feed the queen as she goes about her business of laying eggs.

## 6. Guard

Some bees will stand guard over the hive's entrances to make sure that no foreign bees — sensed through pheromones — get in to steal honey and to protect the hive from other intruders, including bumblebees, wasps, raccoons and even humans.

## 7. Forager

The final job of a worker bee is definitely the most visible, since foraging bees are the ones that we see out in the wild visiting flowers to gather pollen and nectar. Honeybees usually stay within about a 1-mile radius of the hive.

Foraging is the last job because it is brutal for the bee, and most succumb to exhaustion at some point and die outside of the hive.

