

Backyard Beekeeping

September 1, 2012



Why Would You Keep Bees?

- Easy hobby
- Honey
- Increased pollination in the area
- Educational for the whole family
- **HONEY!!**



Types of Bees

- Over 20,000 types of Bees in the world
- Honey Bees (*Apis mellifera*) are just one
- Many “breeds” can be found
 - Italian
 - Most prevalent
 - Carniolan
 - Mine
 - Minnesota Hygienics
 - Caucasian
 - Russian
 - Buckfast Bees (hybrid)
 - Starline Bees (hybrid)

Queen

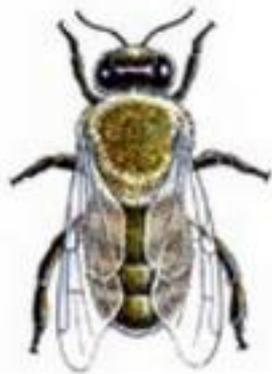
- The queen is the largest bee in the hive and there is only one per hive.
- It takes the queen bee 16 days to develop from an egg to a queen.
- She produces special glandular secretions called “queen substance”, which is a pheromone used to hold the colony together and stimulates the workers to maintain the hive.
- Queens mate one time in their life with 6-8 drones over a 2-7 day period. She does this about 60 feet in the air
- She lays her own weight in eggs every day in summer, from 1,500 2,400 eggs per day. In her lifetime, she can lay over 600,000 eggs.
- Queen bees can live more up to six years, but her usual lifespan in a hive is two years.
- The queen is fed by the worker bees, and eats up to 80 times her weight daily.
- Her majesty will live up to 3 years
- Can sting multiple times but is usually only in defense and since she rarely leaves the hive, people aren't usually going to get stung by a queen

Worker

- Worker bees are the smallest of the species, about half the weight of the queen and the drones and there can be 40-60,000 in a healthy hive.
- It takes a worker bee 21 days to develop from an egg to an adult.
- The duties of the worker bees are many and varied. They keep the hive clean, take care of the brood (eggs and larvae) such as feeding them royal jelly, attend the queen, maintain the temperature of the hive by fanning their wings, secret wax and build combs, guard the hive, and perform the all-important job of collecting nectar and pollen.
- During late spring, summer and fall, a worker bee will live only about 6 weeks (dying when her wings wear out).
- During winter, they live 4-5 months, taking care of the queen and keeping her warm.
- Bees are deaf to most sounds, and they are mute.
- Worker bees alert other bees to nectar and pollen sources by doing a "waggle" dance, which explains direction and distance.
- Will die if she stings. Has a barbed stinger that is left behind after stinging.

Drone

- Drones are the males of the species. They are recognizable by their very large eyes.
- It takes a drone bee 24 days to develop from an egg to an adult.
- Their only purpose in life, and only job in the hive, is to mate with the queen.
- Drones have no sting.
- They die when they mate, or if they have not mated by the beginning of winter, the workers bite their wings off and kick them out of the hive where they are left to die.



Drone



Queen

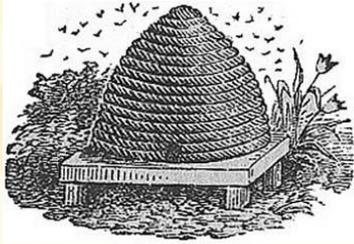


Worker

Drone

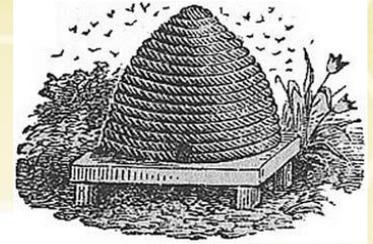
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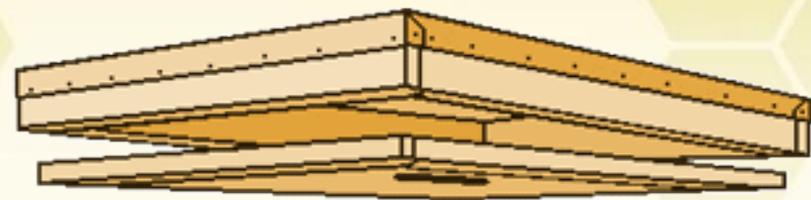
Types of Hives

Langstroth

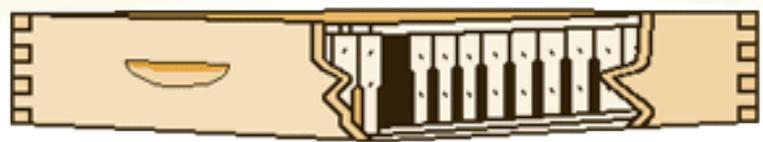


- By far, the most well known hives
 - “White boxes”
- Bees draw out comb on foundation/templates
 - Wax or plastic
- 10 or 8 Frames to a box
 - Designed to be easy to remove
- Can keep queen in specified box(es)
- Easy to rotate from one hive to another
- Allows for spinning out the honey

Outer Cover
Inner Cover



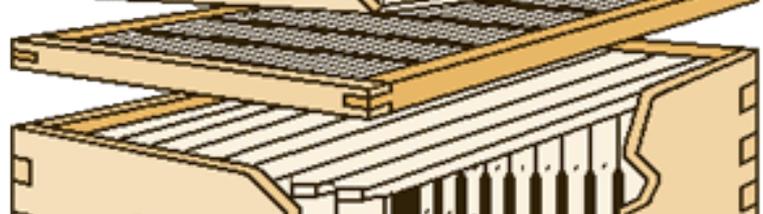
Honey supers



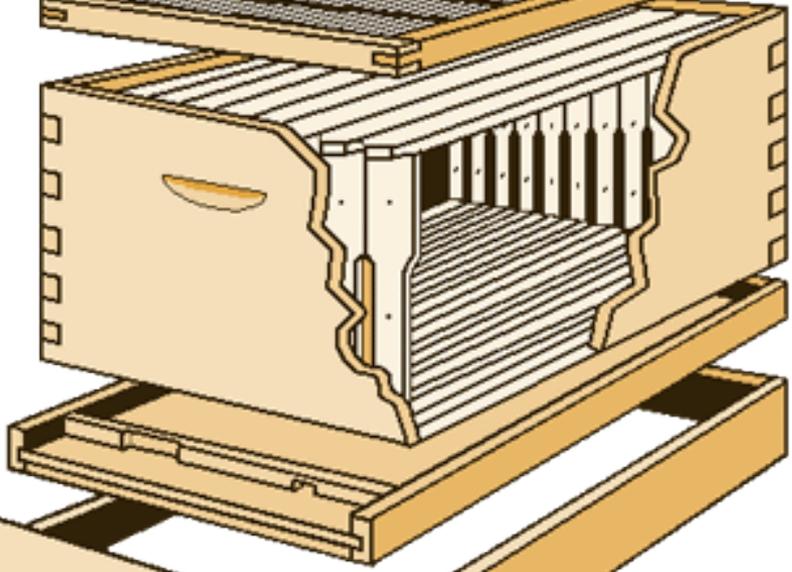
Queen Excluder



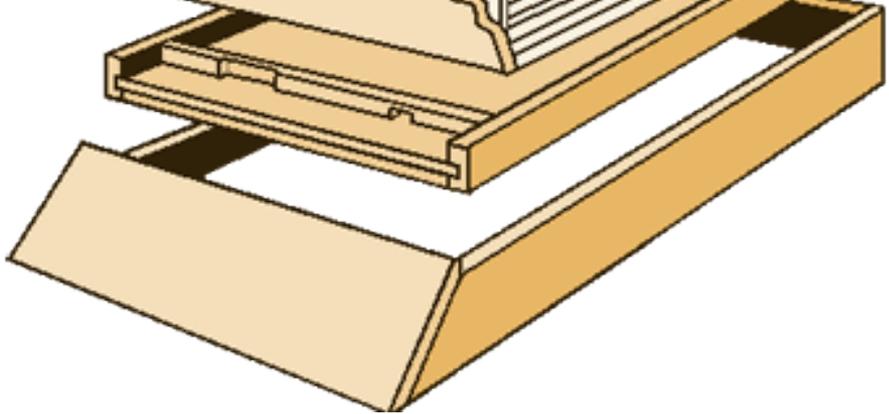
Deep Super

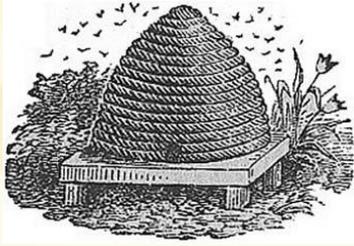


Bottom Board



Stand





Types of Hives

Top Bar



- Most “natural” way to keep bees
- Bees draw all their own comb
 - Determine their own cell size and comb shape
- Queen goes where she wants
 - Won’t pass a full honey bar
- Not as many resources or knowledge locally
- “Crush & Strain” to get honey
- Do not get as much honey





Resources

- Beekeeping for Dummies
- The Backyard Beekeeper
- The Beekeeper's Bible
- Wasatch Beekeeper's Association
 - <http://www.wasatchbeekeepers.com/>
- Utah County Beekeeper's Association
 - <http://www.utahbeekeepers.org>



Let's go see the bees!!!

