Introduction to Honey Bees & Beekeeping Adam Benne & Gail Severance



Learning in Retirement March 21, 2024

Getting Bees

- Swarm
 - Capture
 - Trap
- Package
 - Just Bees
- Nuc
 - Small Hive
- Full hive







Types of Hives

- Vertical
 - Langstroth
 - Standard
 - Warre
- Horizontal
 - Top Bar
 - Long Langstroth
- Others
 - Variations of these









Other Equipment

Veil/Jacket/Suit

• Smoker

Hive Tool

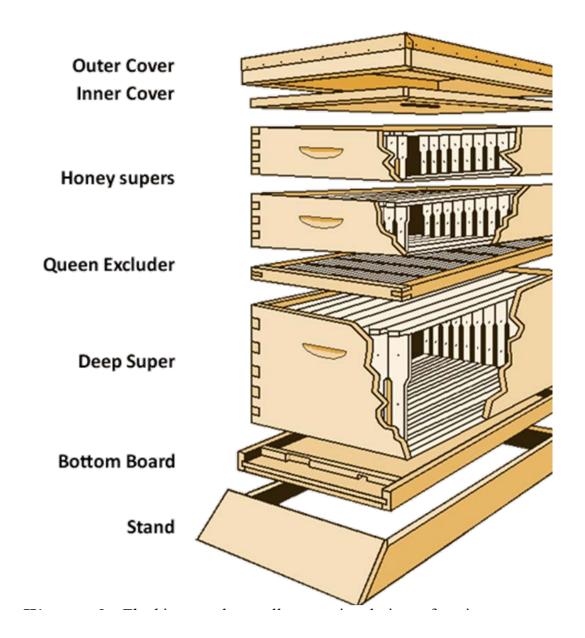
Lots of Others





















This is what most beekeepers work for:

A Beautiful frame of HONEY!



Honey Facts

- Colony of 60,000 bees fly 55,000 miles visiting 2 million flowers to collect 1 pound of honey
- A bee produces just 1/12 teaspoon of honey in her 3-5 week lifespan
- "Raw" honey has not been heated (enzymes preserved)
- "Unfiltered" honey is strained but still has pollen
- Honey never spoils If it crystalizes put in hot water to liquify
- Honey has anti-bacterial properties
- Do not feed honey to infants under 1 year







Pollination

- About 1/3 of the food eaten by Americans is pollinated by bees
- Apples
- Melons
- Cranberries
- Pumpkins
- Almonds
- Cherries
- MANY MORE

Pollination

- Crop pollination because of flower fidelity
 - Flower fidelity honey bees visit one type of flower
 - Many crops need to be fertilized by a different variety
- ~\$15 billion added crop value/production
- ~2 million colonies moved to California each year for pollination
- Crop pollination contributes about 10-20 times more agricultural value than total honey and beeswax production



Honey Bee Colonies

- U.S. total ~2.7 million colonies
 - Honey production ~126 million pounds
- Missouri total ~10,500 colonies
 - Honey production ~650,000 pounds

Honey Bees as Livestock

- Management
 - Reproduction/breeding
 - Pests and diseases
 - Sustainability/recovery from loss

3 Castes of Bees in a Colony

- Workers
- Queen
- Drones

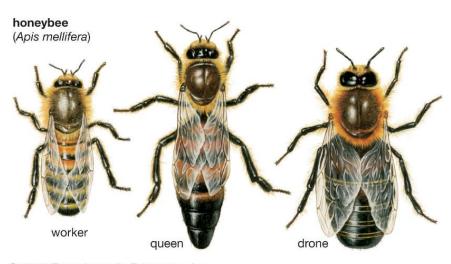
Worker

- Cleans the hive, other bees, and queen
- Feeds larvae, other bees, and queen
- Heats/cools the hive
- Guards the hive
- Collects resources



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Queen



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- Lays eggs
- Secretes pheromones that keep the colony together

Drone

- Don't make honey
- Don't pollinate flowers
- Only job is reproduction



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Want to Get Started in Beekeeping?

- Find a local club
- Take a beginning beekeeping course
- Research
 - Books
 - Beware the internet
- Get in a beehive with an experienced beekeeper
- Find a mentor to help answer questions

What can you do to help the bees?

Go easy on the pesticides



If you see a swarm, call a beekeeper!



Plant NATIVES!









Questions?

