

Honey Bee History & Queens

History of Honey Bees to the US

- 1922 the first and only US Honey Bee Act
1. 1622 first Honey Bees arrive in the US
 - a. From England. Dark bees of Northern Europe. Only Honey Bee between 1622 to 1861 – 239 years.
 2. 1859 Italian Honey Bee by the way Germany were brought to the US
 3. 1859 to 1922 Tracheal Mites were found in the Honey Bee during this time period.
 4. 1860 's Egyptian Honey Bee, little interest and they were not developed. However, the Egyptian Honey Bee DNA was found in US Honey Bees in 1990.
 5. 1877 Carniolan Honey Bee was brought to the US by Dadant.
 6. 1880 Honey Bees came from Cyprian.
 7. 1880 Honey Bees transported from Syria.
 8. 1880's to 1890 Caucasian Honey Bee were brought to the US from the Republic of Georgia.
 9. 1891 African Species, they had bad reports and were not developed.
 10. Eight subspecies entered the US before 1922.
 11. The Africanized Honey Bee
 - a. Brazil – 1956
 - b. US – 1990
 12. Russian Honey Bee 1990's
- Before the Varroa Mites there were a large number of feral Honey Bees.
 - Because there are very little feral Honey Bee Colonies, the drone population is small. Because of this there is very little help with the commercial queen rearing.
 - Currently there are two subspecies supply queens in the US.
 - A.M. Carnica – Carniolan
 - A.M. Ligustica – Italian
 - There are about 500 to 600 commercial queen breeders in the US. They produce over one million queens a year.
 - A bee breeding program must start at the colony level.
 - There is no standard for measuring traits.
 - We must have a high level of genetic diversity. This is critical and challenging for the queen breeder.
 - Drone yards are established by the colonies in the area.
 - Queens must be hygienical
 - Queen quality
 - Size
 - Weight
 - Virgin queens are smaller and weigh less than a mated queen.
 - Good honey production with bigger and larger queen.

- Queens ovaries are more developed than workers.
- Queens can have up to 300 ovaries.
- Queens ovaries are developed after mating.
- Queens do get sick. Their health is affected by:
 - Nosema Apis and Cerana
 - Tracheal mites
- A good mated queen will have between 5 and 7 million sperm.
- If the queen has less than 3 million sperms she will die very soon.
- A queen will mate with up to 25 drones.