



HONEYBEES: PAST AND PRESENT

Humans and bees have had a long historical relationship with one another. Cave paintings in Valencia, Spain dating back to 6000 BC, show “honey hunters” robbing honey from wild honeybees. Overtime, honey hunters became beekeepers, and domesticated the honey bee.

Honeybees became a part of human civilization. So much so that even Aristotle, the Greek philosopher, wrote about bees in detail. Aristotle noted that a single bee tended to specialize in a certain flower type while foraging. A behavioral fact that has been confirmed by present day research. Aristotle however, was wrong many things, including honey, which he thought fell from the air, and was collected in the field by the bees.

During Roman Empire times there were even organized beekeeping centers and many monasteries also had bees. *Apis mellifera*, the European honeybee was and still is the most commonly used species of bee throughout the world. Honeybees however were not found in the Americas until the late 1600 and early 1700s when European settlers imported colonies to the eastern parts of the U.S. The bees made their way to Alaska and California by the early 1800’s, and eventually to Hawaii.

In the early 1850s, members of the Royal Hawaiian Agricultural Society created a committee to establish honeybees in the Hawaiian Islands. Attempts to send honeybees from Boston to Hawaii were unsuccessful due to the long trip. Shipping routes during this time went around Cape Horn, the southern tip of South America, thus honeybee colonies arrived in poor condition and failed to establish. However, a few years later the importation of honeybees to the western parts of the U.S. created an ideal opportunity to ship honeybees to Hawaii due to the shorter length of travel.

In October 1857, three colonies were sent to Honolulu, HI from San Jose, CA and arrived in good health. Dr. William Hillebrand, a physician and botanist was entrusted by the society to care for the hives, which eventually grew to nine colonies within a year. For the remaining part of the century, beekeeping with honeybees was a primarily a hobbyist activity. However, by the 1890s, the ranching industry Hawaii saw a dramatic increase in production. This led to an increase in use of honeybees to pollinate the *Albizia* tree, locally known as *kiawe*. In addition, the discovery of new nectar sources in Hawaii led to an increase of honey yields, which further stimulated the industry.

During the late 1890’s honeybee colonies were exported to Kona aid in coffee production and to increase the *kiawe* bean yield for cattle feed. By 1893, the first honey company was started by Lee and Oswald St. John Gilbert of Honolulu. The brothers started the Sandwich Island Honey Company from a swarm of bees that landed in their backyard. By 1908, the Sandwich Island Honey Company managed over twenty thousand hives on all major islands. Around this time, a second honey company, The Hawaiian Honey Company, located in Ewa managed approximately eighteen hundred colonies of honeybees, which produced approximately 180,000 pounds of honey annually.

By the 1910’s honeybee colonies were found throughout the Hawaiian Islands and a thriving beekeeping industry was established. Over 2400 colonies were managed by Molokai Ranch, which at one point, was one of the world’s largest producer of honey. Kauai and Lanai also joined in and new honey companies were created colonies during the early 1900’s, taking advantage of the boom in honey production and trade. Beekeeping on Maui reached its peak during the 1930’s where over 255,000 pounds of honey were sold.

The glory days of beekeeping took a downward turn in the 1937 with the appearance of a bacterial disease called American Foulbrood. The hardest hit island was Molokai, and from 1938 to 1948, honey production on that island virtually stopped. Over time a few surviving colonies have helped rebuild the island bee population, but Molokai is no longer the center of beekeeping for Hawaii. Instead, it is the Big Island of Hawaii that has become the site of the largest beekeeping operations on the islands. Beekeepers on this island produce honey as well as “queen bees”. The queen bees are sold commercially to beekeepers and growers in the mainland US and Canada. Roughly half a million honeybee queens are shipped every year to support pollination of mainland crops including almonds, blueberries, cranberries, and apples. Local honey production has also increased and Hawaii’s beekeepers produced some of the most unique honeys in the US. Currently, there are over 10,000 honeybee colonies throughout the Hawaiian Islands, producing over 750,000 pounds of honey each year.



This ornament, found in Crete, (dating from 2000-1700 BC) represents the Melissae or Melissai, the Greek nymphs of honey bees.

THE UH HONEYBEE PROJECT