## An Historical Look at Beekeeping in Bermuda

Beekeeping in Bermuda has a long and colorful history. About thirty

part-time hobbyists and one commercial apiarist continue the tradition today. A new marketing strategy for local honey and a planned live bee exhibit at the Bermuda Aquarium, Museum and Zoo are stimulating new interest and should partially offset the detrimental effects of continued habitat destruction in the years to come.

Many people incorrectly consider Bermuda part of the Caribbean. In fact, it is 750 miles northeast of the Bahamas. The closest land is Cape Hatteras, North Carolina, 600 miles to the west-northwest. Seven main islands, now connected by bridges, form a fishhook-shaped cluster twenty miles long and one mile or less in width. The Gulf Stream passes near Bermuda and moderates the climate; temperatures rarely exceed 90\* F. The islands were first colonized in 1609 when a hurricane forced settlers bound for Virginia to take refuge here. The first bees were imported seven years later.

The major historical events in Bermuda beekeeping are listed below.

1616 -- A Mr. Robert Rich receives bees sent to him from England by his brother Sir Nathaniel Rich. He writes, "the bees that you sent do prosper very well." Bees were not imported into the American colonies until six years later.

1622 -- Honey and beeswax were exported in small quantities from Bermuda to the West Indies and sometimes to the American colonies.

1852, 1857, 1865 -- The invention of moveable frame hives, wax-comb foundation, and centrifugal honey extractors revolutionized beekeeping around the world. Though I know of no records indicating when these items were first brought to Bermuda, it was probably relatively soon, as there have always been close commercial ties with the United States and Great Britain. In recent decades virtually all Bermuda's honey bees have been kept in modern movable frame hives.

1875 — A giant toad, <u>Bufo marinus</u>, was intentionally introduced to the colony from British Guiana in the hope it would help reduce the number of cockroaches on the island. This toad, which grows to the size of a cantaloupe, is now abundant and has become a serious honey bee predator. They have a voracious appetite for bees, especially on warm nights in the summer when bees cluster outside the hive entrance. Mr. Jock Stewart, a former Government Bee Inspector, dissected toads from a bee yard and found dozens of stings embedded in their tongues, and stomachs distended to the size of a child's fist with a solid mass of bees. To minimize toad problems, beehives in Bermuda are elevated at least 20 - 24 inches above the ground.

1897 -- Mr. John Hurdis in his writings on Bermuda's natural history, noted that honey bees were "frequent in sugar warehouses in the town." He also mentions that Bermuda honey was of good quality (it still is) and sold for two shillings per quart bottle.

1949 -- The Bermuda Beekeepers Association (BBA) was formed. Today most of the island's beekeepers belong to BBA and 8 - 15 typically attend bimonthly meetings. In the early years this was a whites-only club, but now membership is about equally divided between blacks and whites. The current president, Mr. Norris Caines, became the first black president of BBA when he was elected in 1982.

1953 -- The Argentine ant, <u>Iridomyrmex humilis</u>, was accidentally introduced in imported nursery stock. This ant is now island wide, though its distribution is patchy. Occasionally bee yards are seriously infested and colonies may suffer considerably from ant robbing. For a short time beginning in 1953, the Department of Agriculture and Fisheries (DAF) bought honey wholesale (3 shillings/lb) and resold it at the Government Marketing Center.

1956-57 -- A large bird commonly known as the kiskadee, <u>Pitangus</u> <u>sulphuratus</u>, was introduced from Trinidad as a means of controlling lizards, <u>Anolis</u> spp., which were themselves introduced to control Mediterranean fruit fly. Unfortunately, the birds have wide-ranging eating habits and include many honey bees in their diet.

1973 -- DAF offered a beginner beekeeping course taught by Dr. I. W. Hughes. Fifteen new beekeepers were initiated.

1975 -- American foulbrood was first detected in Bermuda and an annual inspection program was initiated by DAF. Mr. Jock Stewart held the position of Government Bee Inspector from 1975 to 1982. The infection rate is now 1% to 3%.

1986 -- A bee beard demonstration at the annual Agricultural Exhibition was enthusiastically received and generated considerable publicity. BBA has a display including an observation hive at this event whenever possible. For the first time in memory there was a surplus of honey this year. An excellent crop averaging approximately 120 lb. per hive combined with a widening differential between the price of imported honey (\$ 1.75/lb.) and local honey (\$ 3.00/lb.), led to a surplus of some 500 gallons in June when local stocks are normally gone. DAF began looking for alternative markets for local honey.

1987 - Hurricane Emily swept over the island on September 24 with winds in excess of 100 mph. The fall honey flow (mainly Brazilian pepper tree, *Schinus* sp.) was interrupted and approximately 30% of the island's vegetation was destroyed. The 1987 honey crop was reduced by more than 50% from normal and the effects of the hurricane may linger for years while the vegetation recovers.

1988 — With the assistance of DAF, Ms. Caroldey Douglas, a beekeeper herself, formed a new cottage industry bottling local honey in 9 oz. and 3 oz. jars to be sold as souvenirs to tourists. The initial response has been excellent. Several of the large resort hotels have expressed an interest in single-serving 1.5 oz. bottles to be used on their breakfast tables. Mr. Randolph Furbert, owner of 50% of Bermuda's total of 400 hives, opened a commercial-scale extracting facility — the first in Bermuda.

1989 -- A new Invertebrate House, scheduled to open in June at the Bermuda Aquarium, Museum and Zoo, will feature a large observation hive and educational information which should entertain and hopefully spark the interest of young Bermudians for many years to come.

In spite of these promising recent developments, the long-term future of beekeeping in Bermuda is not bright. Sixty thousand residents now crowd onto Bermuda's 20 square miles. Undeveloped land is quickly disappearing, as is cultivated land (down to just 300 acres, a 90% reduction from early this century.) Unfortunately for the bees, nectar-producing plants are less abundant in artificial landscapes. In addition, it is becoming more and more difficult for beekeepers to fine suitable sites for their hives. Though their numbers may decline in the coming decades, I'm sure there will always be beekeepers in Bermuda; after all, the island is known for it' beautiful flowers, and flowers and bees were made for each other!

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