

Apiculture

Long Term Production Figures British Columbia Beekeeping Industry

At the end of each beekeeping season, the B.C. Ministry of Agriculture & Lands carries out a beekeeping production survey across the province. Beekeepers registered with 10 colonies or more are sent a survey form with a pre-paid, self-addressed envelope. Since 2002, production data can also be submitted electronically. The submitted information remains anonymous. Table 1 reflects the long-term trends from 1990 – 2005:

Table 1

	1990	1991	1992	1993	1994	1995	1996	1997
Beekeeper	3,750	3,324	3,673	2,916	2,839	2,221	2,122	2,020
Colonies	50,000	45,000	43,336	44,958	44,192	41,750	45,261	45,261
Average Yield (lb/col)	102	60	79	66	104	63	79	83
Total Yield (x1,000 lb)	5,077	2,430	3,438	2,969	4,554	2,624	3,554	3,673
Value (x \$1,000)	4,706	2,308	2,838	3,066	4,740	4,493	5,525	6,859
Yield : Value Ratio	0.93	0.95	0.83	1.03	1.04	1.71	1.55	1.87

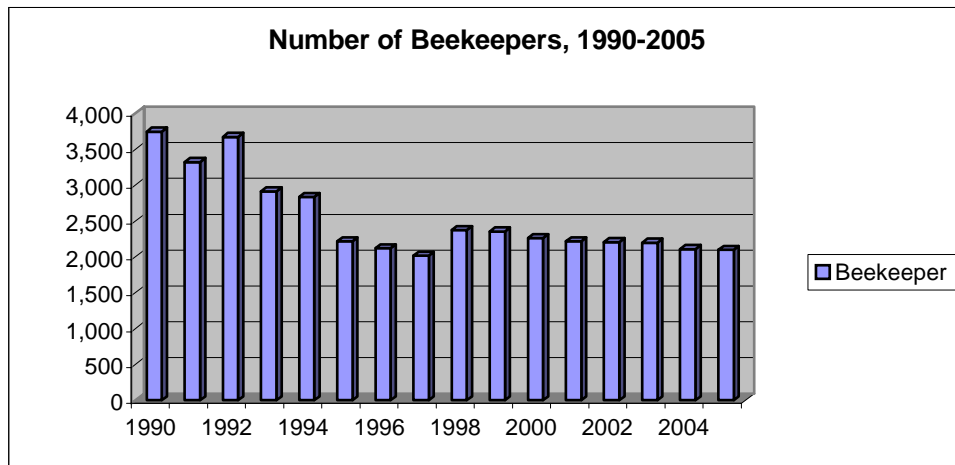
	1998	1999	2000	2001	2002	2003	2004	2005
Beekeeper	2,377	2,357	2,262	2,220	2,209	2,200	2,111	2,101
Colonies	39,742	41,615	41,968	44,723	39,870	42,194	43,126	44,645
Average Yield (lb/col)	99	54	83	65	78	74	104	75
Total Yield (x1,000 lb)	4,507	2,571	3,892	3,335	3,104	3,136	4,464	3,337
Value (x \$1,000)	6,827	4,561	8,089	7,032	7,452	7,505	11,537	9,012
Yield : Value Ratio	1.51	1.77	2.08	2.11	2.40	2.39	2.58	2.70

Beekeepers

British Columbia's beekeeping community is characterized by the majority of beekeepers operating between 1 and 10 colonies. A much smaller group of beekeepers are semi-commercial and operate up to about 50 colonies. The smallest group comprises of truly commercial beekeepers with hundreds or even thousands of colonies.

In 1990, there were 3,750 registered beekeepers in the province, comparable to the 1970s and 1980s. After the introduction of the Varroa mite in British Columbia in 1990, large changes took place. Graph 1 shows a sharp decline in beekeeper numbers as Varroa mite infestations decimated colonies throughout the province. It became apparent that successful mite control demanded far more than just the application of a control product. To maintain live colonies, early diagnosis, as well as good understanding of the biology and interaction between honeybee and mites, became essential in maintaining life colonies. Many beekeepers were overwhelmed and gave up. It was not until the mid-1990s when beekeeper numbers stabilized and have remained so since.

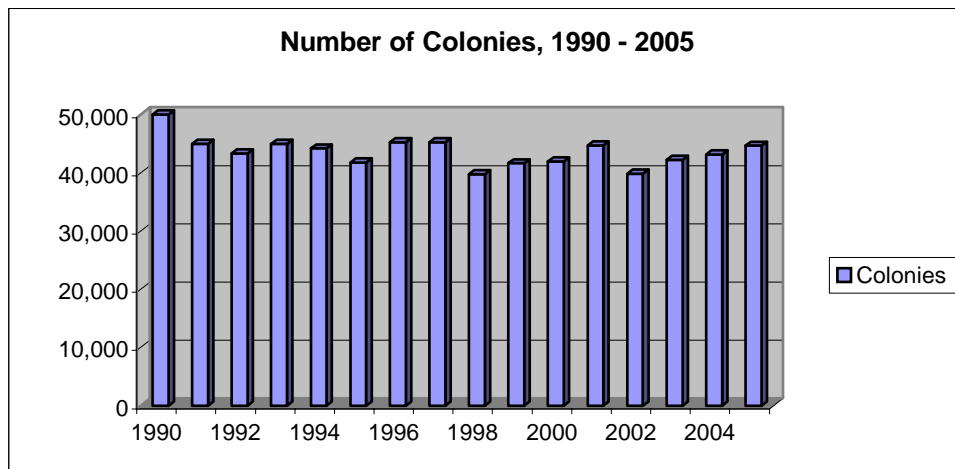
Graph #1



Colonies

In 1990, there were some 50,000 colonies operated in British Columbia. During the first half of the 1990s, the industry experienced a decline in colony numbers as a result of Varroa mite infestations and weakened honey prices. Graph #2 shows that colony numbers began to increase again after 1995. When colony numbers are compared to the number of beekeepers registered in British Columbia from 1990 to 1995, the period signifies a trend of fewer beekeepers operating larger numbers of colonies. The ratio between beekeepers and number of colonies stabilized and remained unchanged until 2005.

Graph #2



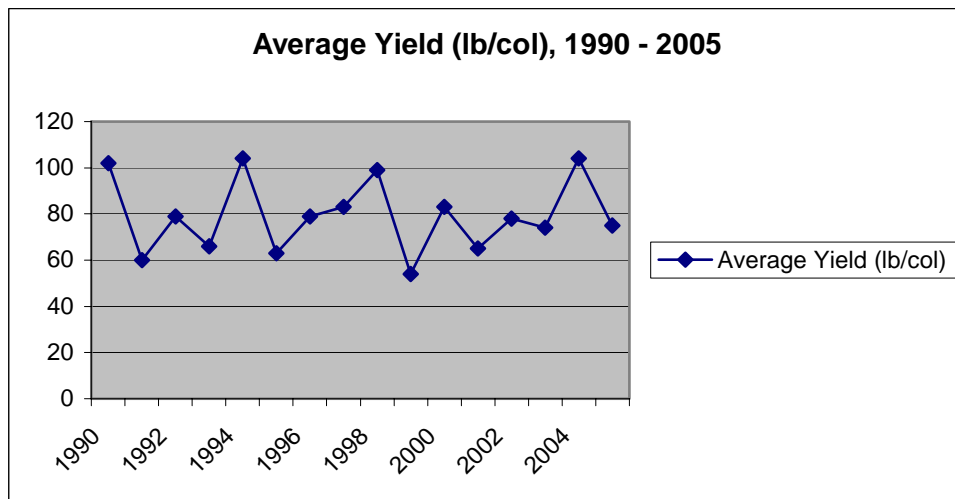
It must be noted that the colony numbers don't include Alberta colonies brought into British Columbia for wintering purposes each fall. While traditionally only a few thousand colonies were brought to southern British Columbia from northern beekeeping areas, the number has increased steadily since 2000. In the fall of 2005, almost 30,000 colonies were imported from Alberta for wintering in the Fraser Valley, Southern Okanagan and Creston area. These colonies are normally returned to their home province in April of the following year.

Average Honey Yield per Colony

Honey yield per colony is determined by many factors including management, locations, weather, presence of diseases, etc. The physical and climatic diversity across British Columbia is responsible for great variability in average honey production. The large acreage of nectar bearing plants and long summer days has made the Peace River among the best honey producing areas in the world. South coastal British Columbia, on the other hand, offers limited beekeeping opportunities because the natural vegetation provides few nectar and pollen sources except in agricultural areas.

When pooling the regional honey production figures, the long-term average yield per colony in B.C. is 79.3 lb per year (36 kg). (Note: Regional production figures can be obtained from annual "Beekeeping Production Statistics"). Graph #3 shows the average honey yield per colony per year from 1990 to 2005.

Graph#3

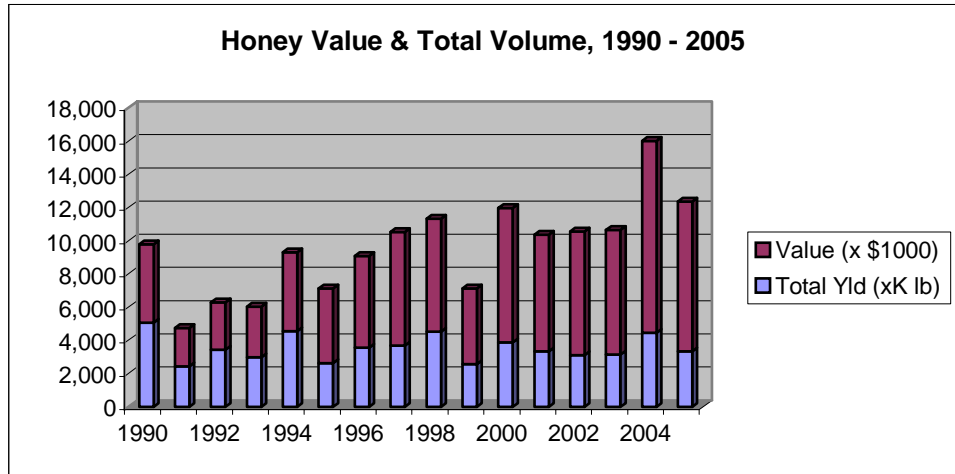


During the period from 1990 – 2005, above-average honey production years were generally far above the long-term average. While it may not be possible to predict when they occur and the resulting yield, the data indicates that above-average production years are always followed by poor years. For example, the high production years of 1990, 1994, 1998 and 2004 were followed by production years far below the long-term average. The frequency of high-production years is 37.5%, while the majority of production years is well below the average.

Provincial Honey Crop, Value and Volume

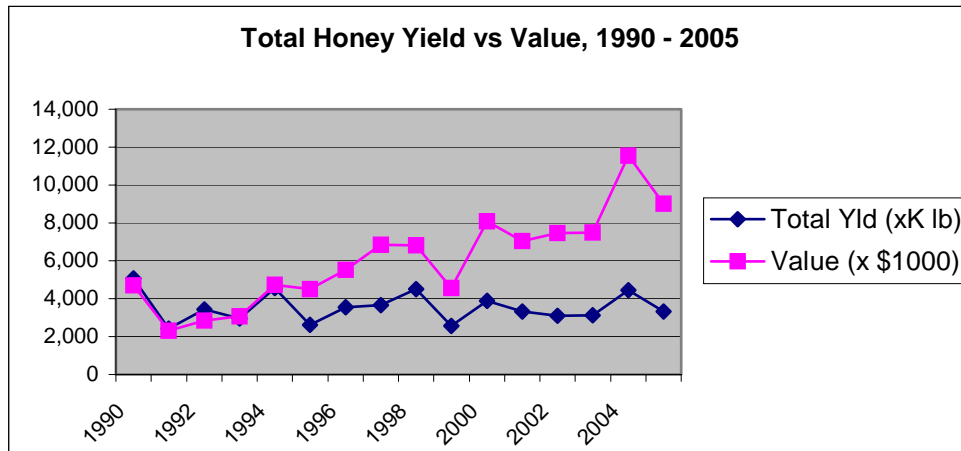
From 1990 to 2005, the overall value of the B.C. honey crop increased steadily where total harvest and average honey price determine the overall crop value. As shown in Graph #4, the 1990 crop exceeded 5 million pounds at an estimated market value of \$4.7 million. On the other hand, the 2004 crop was about 4.5 million pounds at a market value of over \$11.5 million.

Graph #4



The international market determines the price of honey, as Canada has been a significant net exporter of honey over many years. British Columbia’s honey crop, however, is small compared to other provinces, notably Alberta, Saskatchewan and Manitoba. Its unique floral sources and proximity to major consuming centers has offered B.C. beekeepers better opportunities to market their honey crop locally at premium prices, and generally far above the wholesale and international price. Graph #5 depicts the rise and fall of B.C.’s honey crop from 1990 to 2005 at a long-term average of 3.54 million pounds, against the steady increase in the value of the total honey crop during the same time period.

Graph #5



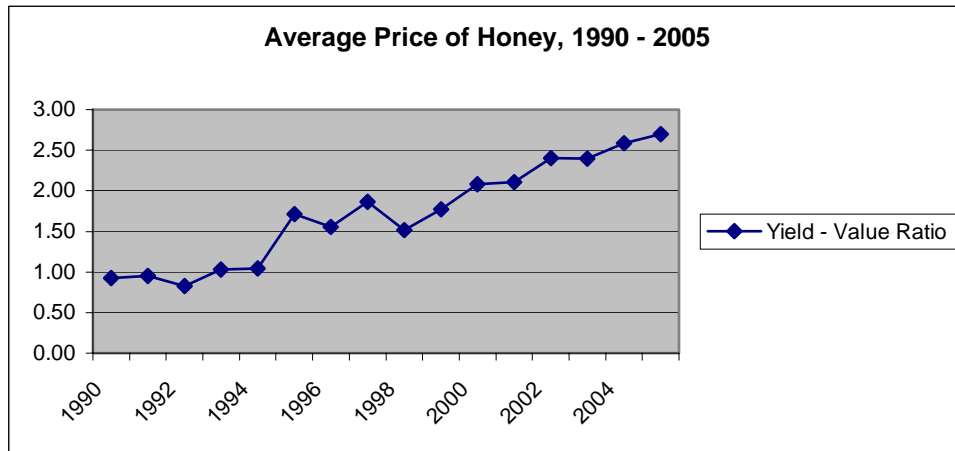
Average Price of Honey

B.C. beekeepers sell their honey to the wholesale and retail markets. The wholesale market involves large volume traders who will export to the U.S.A. and overseas markets. Honey is generally shipped in bulk or barrels. Very few B.C. beekeepers produce sufficient quantities to justify selling to the wholesaler at low prices. B.C.’s varied climate, topography and proximity to large consumer centers offer excellent opportunities for beekeepers to retail their own honey. This may involve roadside stands, farmers’ markets, retail stores, and private

sales. Most beekeepers will pack their own honey under their own label. The detailing of retail marketing commands significantly higher prices than the wholesale, bulk honey market.

From 1990 to 2005, the honey market changed substantially for B.C. beekeepers. At first, the retail market had not been sufficiently attractive or well developed. The bulk of all Canadian produced honey was sold through larger packers and traders. During the 1990s, retail marketing by beekeepers, especially through farmers' markets and local outlets, gained popularity. Consumers were willing to pay premium prices for products produced and sold locally, including specialty honeys. As demand increased, B.C. beekeepers also gained confidence in marketing their own hive products against national brands. Graph #6 shows the increase in the price of honey in current dollars from 1990 to 2005.

Graph #6



(Feb 2006)