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# Beekeeping and the Honey Program

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Many Americans perceive honeybees as useful only to produce the honey we eat in liquid or creamed form or use as an ingredient in a wide array of food products. The National Honey Board reports that 493 different honey-containing products were available to consumers in 1988. (The Board is an industry group appointed by the Secretary of Agriculture that coordinates a national marketing research, advertising, and promotion program for honey.) In most supermarkets, today's shopper can usually find 40 to 50 of these items, including bakery goods, beverages, candies, cereals, condiments, dairy products, desserts, entrees, spreads, and side dishes.

Manufacturers of these products prominently advertise their use of honey, listing it in bold letters in the names of many honey-containing items. "Honey Graham Crackers," "Honey Nut Cheerios," "Honey Raisin Bran," "Honey Wheat Bread," and "Honey Bran Cookies" are just a few.

However, honeybees (*Apis Mellifera* L.) play a more important role than mere honey producers. They assist in the production of a wide variety of commodities, such as apples, melons, cucumbers, almonds, flax, sunflowers, and clover. These and other fruits, vegetables, tree nuts, and field, seed, and forage crops require, or benefit directly from, bee pollination. For U.S. agriculture, the value of honeybees as pollinators far exceeds the value of the honey and beeswax they produce.

In addition, honeybees are important to the production of plants that provide food and shelter for wildlife, control soil erosion, and beautify the environment. To ensure an ample supply of honeybees

for pollination, the Government has supported the price of honey for nearly 40 years. It was deemed impractical for the Government to subsidize beekeepers through payments for pollination. The alternative is to support honey prices at levels that make it possible for beekeepers to maintain viable operations.

## History of the Honey Program

The price support program for honey was established by the Agricultural Act of 1949 and put into effect in 1950. The Act mandated honey supports at a level between 60 and 90 percent of parity. (*Program terms are explained in the Glossary.*) The program was established because depressed prices and overcapacity within the industry developed after sugar rationing was terminated at the end of World War II. Congress also recognized the importance of beekeeping to pollinate our crops.

Under the 1950 program, honey packers signed contracts with USDA whereby they agreed to meet certain standards regarding the cleanliness, moisture content, and flavor of the honey. USDA agreed to pay contracting packers the support price for all the honey that could not be marketed through regular channels. USDA also paid the expenses incurred by packers for handling, storing, and any processing requested by the Department. Beekeepers were paid 9 cents per pound for honey delivered to participating packers who met program requirements. A similar program in 1951 introduced a price support differential of 1.1 cents per pound between honey of "general national acceptability" and "limited acceptability" for table use.

From 1952 through 1985, the price of honey was supported through a loan and purchase program set up on the basis of class (table or nontable honey) and color (white, extra light amber, light amber, and amber). Under the loan feature of

the program, participating producers and marketing cooperatives received an initial loan disbursement on a portion of their crop. This was equal to the established loan rate per pound times the eligible quantity, which was up to 90 percent of farm-stored honey or 95 percent of honey stored in Commodity Credit Corporation (CCC) approved warehouses. Participants received price support for the additional 5 or 10 percent of the crop when the loan was settled.

These nonrecourse loans enabled producers to store their honey and wait for a more advantageous market price. They had until the end of the marketing year, which runs from April 1 to March 31, to sell their honey in the marketplace and repay the loan with interest. However, if borrowers were unable or unwilling to market their honey for a price sufficient to repay the loan, they could forfeit the honey to the CCC.

Under the purchase feature of the program, beekeepers designated a quantity of honey to be sold to the CCC and made delivery according to instructions. At the end of the marketing year, the beekeepers participating in the purchase option received payment from the CCC based upon the support price and the quantity of honey delivered. Although beekeepers were not obligated to deliver any honey to CCC, the CCC was required to accept as much as 110 percent of the eligible honey covered by the agreement. For beekeepers who did not need the working capital provided by nonrecourse loans, purchase agreements were an ideal means of receiving price support for their honey.

## Current Honey Program

The Food Security Act of 1985 made several changes in the honey program. The new law eliminated the parity formula and progressively lowered support

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National Honey Board

prices for the 1986 through 1990 crops. The 1986 national average support price was set at 64 cents a pound, down from 65.3 cents for the 1985 crop. The average loan rates for 1987, 1988, and 1989 were 61 cents, 59.1 cents, and 56.36 cents a pound, respectively. In addition to the 5-percent annual reduction required for 1986-90 crops, the Budget Reconciliation Act of 1987 further lowered the loan rate 2 cents for the 1987 crop, 0.75 cent for 1988, 0.5 cent for 1989, and 0.25 cent for 1990.

The 1985 Act also authorized a lower loan repayment option for the 1986 through 1990 crops. This feature allows a honey producer to repay a loan at a rate below the support price. The option, discretionary on the part of the Secretary, was put into effect for the 1986-89 crops. Since October 8, 1987, honey loan repayment levels have ranged from 40 cents per pound for white honey to 33 cents for nontable class honey. These repayment

rates are based on current market conditions, as well as honey price support activity. To further encourage use of the repayment option, the purchase agreements allowed under earlier programs were dropped.

### Impacts on U.S. Honey Producers

Beekeepers strongly support the honey program because it smooths out price fluctuations and provides a market for honey at an assured price. Since 1981, prices paid by CCC under the support program have exceeded those in the domestic market, thus providing additional benefits to producers.

Much of the program's history has centered around loan activity rather than CCC purchases. That is because the wholesale price of honey in 60-pound and larger containers, the minimum quantity eligible for delivery under a loan or purchase, usually exceeded the price support level. However, beginning in the

early 1980's and continuing through the 1985 crop, support prices rose above average domestic wholesale and world prices due to high parity prices.

Consequently, beekeepers found it profitable to forfeit their honey to CCC, while packers and industrial users imported honey for domestic use. As a result, forfeitures grew from 6.0 million pounds during the 1980 crop year to 106.4 million pounds in 1983 (table 1). For fiscal years 1980-88, CCC spent an estimated \$525.6 million to operate the honey program. Through August 31, 1989, about 532 million pounds of honey were forfeited to the CCC from the 1980-88 crops.

The repayment option announced by the Secretary for the 1986-89 crops increased participation in the program and significantly reduced honey imports. The number of loans increased from about 6,300 in 1985 to 11,600 in 1987. For the 1988 crop, 15,090 loans were made through August 31, 1989, for 206.7 million pounds, nearly 98 percent of U.S. production. Nearly half of the honey placed under loan was in California, Florida, Minnesota, North Dakota, and South Dakota.

With the reduced support price and lower loan repayments, CCC acquisitions of honey dropped significantly. Acquisitions of 1986 crop honey were 41 million pounds, down from 98 million in 1985. Of the record 216.4 million pounds of 1987 crop honey placed under loan, CCC acquisitions are estimated to be about 52 million pounds. This is up slightly from 1986, but still about 47 percent less than 1985 crop forfeitures.

### Effects on Consumers

Calculations of domestic honey disposition include commercial sales and Government sales and donations. Commercial sales increased from 1985

**Table 1. Costs of the Honey Program Rose Tenfold Between 1980 and 1984**

Crop year <sup>1</sup>	Honey placed under loan	CCC acquisitions
<i>Million pounds</i>		
1980	41.1	6.0
1981	55.2	35.2
1982	88.4	74.5
1983	113.6	106.4
1984	107.5	105.8
1985	102.0	97.6
1986	180.4	41.0 <sup>2</sup>
1987	216.4	52.2 <sup>2</sup>
1988	206.7	13.3 <sup>2</sup>
<i>Estimated cost</i>		
Fiscal year	Total outlays <sup>3</sup>	Net Government expenditures <sup>4</sup>
<i>Million dollars</i>		
1980	26.5	8.7
1981	29.1	8.4
1982	38.7	27.4
1983	58.1	48.0
1984	97.4	90.2
1985	85.8	80.8
1986	96.9	89.4
1987	114.9	72.6
1988	179.5	100.1

<sup>1</sup>The crop year for honey runs from January 1 to December 31. <sup>2</sup>Estimated as of August 31, 1989.

<sup>3</sup>Includes loans, purchases, storage, handling, and other costs. <sup>4</sup>Outlays less receipts.

Source: Agricultural Stabilization and Conservation Service.

CCC honey stocks are disposed of through the National School Lunch Program and the Temporary Emergency Food Assistance Program (TEFAP), operated by USDA's Food and Nutrition Service. TEFAP generally involves donations of honey to food banks distributing emergency food assistance. The Bureau of Prisons also receives CCC honey stocks.

The honey program also provides indirect benefits to consumers because it helps maintain sufficient honeybee colonies in the United States so that many important food and fiber crops are pollinated. An estimated 15 percent of the plant-derived portion of our diet comes from plants dependent upon, or helped by, insect pollination. Beef and dairy products also rely somewhat on an adequate U.S. bee population since cattle consume a variety of forage crops, such as alfalfa and clover, that benefit from insect pollination. In total, about one-third of the human diet is derived directly or indirectly from insect-pollinated plants.

The United States has been a net honey importer almost every year since 1967, with the exception of 1973 (*figure 1*). Since 1981, China, Mexico, Argentina, and Canada have accounted for about 85 percent of U.S. honey imports. Because of the loan repayment option under the U.S. price support program, American honey is regaining a substantial portion of the domestic market. In 1988, 20 percent of the honey consumed in the United States was imported, compared with nearly 50 percent in 1984.

### Marketing Honey Under the Program

Honey moves to consumers through several marketing channels. Some producers sell their entire crop in bulk containers to cooperative marketing associations, packers, or dealers. Others use smaller containers and sell their

honey directly to retail stores, consumers, or both. Processing honey beyond the extraction stage may be done by the producer, the packer, or both.

Processed honey is generally marketed by three types of suppliers:

- *Producer-packers* bottle and sell part or all of their honey crop. They generally market their honey from roadside stands, their homes, local stores, or door-to-door. Some employ brokers to move the honey into retail chains.

- *Cooperative marketing organizations* process, pack, and distribute members' honey under the cooperative label. Some cooperatives pool and market their honey in bulk containers.

- *Bottlers* are generally large, well-organized firms that distribute advertised brands of honey or provide private-label packing for retail chains. These firms buy honey from domestic and foreign sources and may blend the final product to keep color and flavor as uniform as possible.

Industrial users primarily purchase honey in bulk from processors, but some comes directly from producers and importers. The major industrial users are the baking, dairy, cereal, confectionery, pharmaceutical, and tobacco industries, the restaurant trade, and other processors of sweetened products.

The honey program influences the procurement decisions of processors and industrial users. With the high support rates characteristic of the early to mid-1980's, manufacturers found it more profitable to use imported honey. However, the lower loan repayment option and reduced support prices for the 1986-89 crops have made domestic honey available to manufacturers at prices competitive with imports. (Manufacturers are using more higher quality domestic honey and less imported honey.) This has reduced imports and raised domestic honey sales (*table 2*).

through 1987 because declining support prices and the loan repayment option lowered market prices. In addition, the recent promotional campaign by the National Honey Board has likely stimulated honey use in the United States. Domestic disposition was estimated to be a record 331.2 million pounds in 1987, up from 291.4 million in 1986. However, disposition declined to 275.6 million pounds in 1988, as smaller amounts of forfeitures led to reduced Government donations.



Figure 1. U.S. Honey Imports Increased Dramatically in the Early 1980's

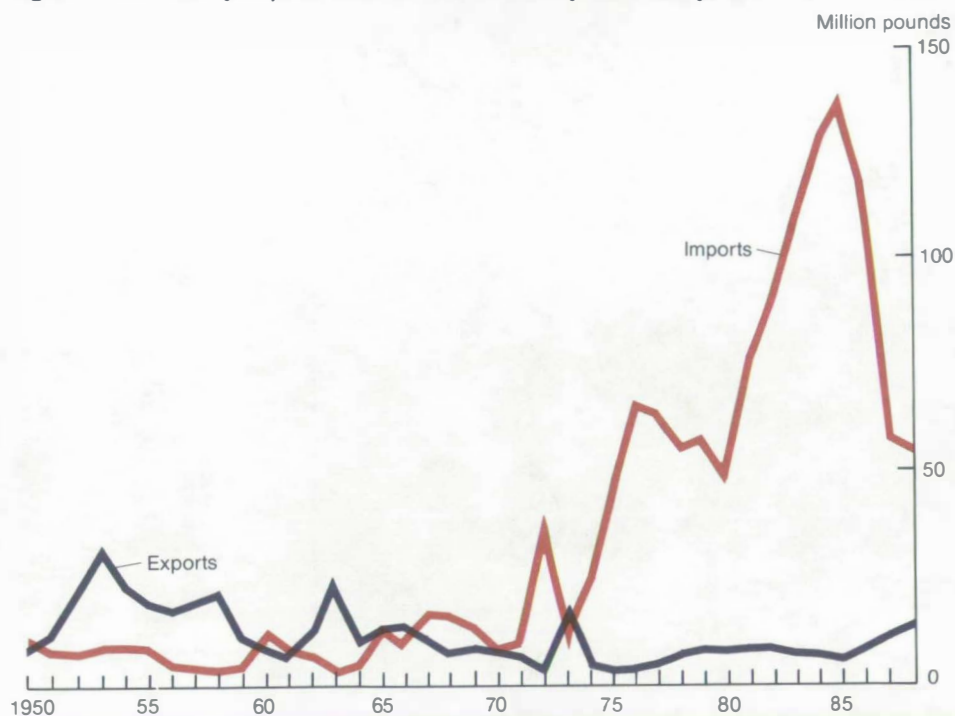


Table 2. Domestic Production Accounted for a Greater Share of U.S. Honey Use in 1987 and 1988

Item	1985 <sup>1</sup>	1986	1987	1988
<i>Thousands</i>				
<b>Number of colonies</b>	4,325	3,200 <sup>2</sup>	3,190 <sup>2</sup>	3,186 <sup>2</sup>
<i>Pounds per colony</i>				
<b>Yield</b>	34.7	62.5	71.1	66.4
<i>Million pounds</i>				
<b>Supply</b>	479.5	534.7	519.1	442.9
Beginning stocks	191.2	215.9	234.1	175.5
Production	150.1	200.4	226.8	211.5
Imports	138.2	118.4	58.2	55.9
<b>Utilization</b>	263.6	300.6	343.6	289.5
Domestic <sup>3</sup>	257.1	291.4	331.2	275.6
Exports	6.5	9.2	12.4	13.9
<b>Ending stocks</b>	215.9	234.1	175.5	153.4
Commercial	22.8	25.0	26.0	22.5
Outstanding loans <sup>4</sup>	52.7	122.4	108.7	107.0
CCC inventory	140.4	86.7	40.8	23.9

<sup>1</sup>Estimated due to lack of production data. <sup>2</sup>Beekeepers with five or more colonies. <sup>3</sup>Commercial sales and Government sales and donations. <sup>4</sup>Honey used as collateral for price support loans.

Lower market prices for domestic honey, increased consumer awareness of the nutritional and taste benefits of honey, as well as the expanding promotional activities by the National Honey Board, have encouraged food manufacturers to develop and market new honey-flavored products. In turn, these products have stimulated the recent growth in U.S. honey consumption. ■

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