Agricultural Issues Center
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Commodity Profile: Peaches and Nectarines

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Overview

Cultivation of peaches is said to have begun in China as early as 2000 B.C. Later, Greeks and Romans spread the peach throughout Europe. Subsequently, Portuguese and Spanish explorers brought the peach to North and South America (Rieger).

Today peaches are commercially produced in 29 U.S. states while nectarine production is limited to California alone. In 2004 the U.S. peach crop was valued at $461 million, making peaches the fourth ranked non-citrus fruit behind grapes, apples, and strawberries in terms of value of production. The value of nectarine production in 2004 was $86 million, down from $119 million the previous year. Nectarine production is typically about one-fourth the tonnage and total value of peach production (National Agricultural Statistics Service (NASSa).

Marketing

While essentially all nectarine production is destined for the fresh market, peaches are marketed for both the fresh and processing uses. Freestone peaches are the most common fresh market variety while clingstone peaches are predominantly used in processing. With clingstone peaches, the flesh "clings" to the pit of the peach making it difficult to separate and therefore more suitable for mechanical processing. In the freestone variety, the pit separates more easily from the flesh which is ideal for fresh consumption. The majority of peach consumption occurs in the form of the processed product (55%), while the remainder (45%) is utilized as fresh production. Within the processed peach sector, canned peaches account for roughly 75 percent of utilization. Frozen peaches account for roughly 17 percent of the processed peaches, dried peaches just 1.5 percent, and other uses including pickling, wine, baby food, and brandy account for 6 percent. (Economic Research Service (ERS) 2004).

Marketing seasons for peaches differ by variety and location, with the California season occurring between June 1 and September 30 and Georgia and South Carolina marketing season lasting from May 20 to August 31 (NASSa).

Demand

Between 1970 and 1980 per capita consumption of fresh peaches grew quickly, surpassing per capita consumption of canned peach consumption in 1978. Since 1978 fresh peaches have remained the leading source of U.S. peach consumption. However, total peach consumption has declined since 1980 (Figure 1). In 2003 peach consumption was 9.4 pounds – a decrease of 3.7 pounds from the 1980 high of 13.1 pounds. Fresh peach consumption has decreased since a peak of 7.1 pounds in 1980 while canned peach consumption has continued to decline since 1970, falling from 6.8 pounds in 1970 to 3.4 pounds in 2003.

Supply

The top three peach producing states in the United States are California, South Carolina, and Georgia, however most of U.S. processed peach production and all of U.S commercial nectarine production occurs only in California. California accounted for 97 percent of processed peach production in 2004 and 48 percent of fresh production. South Carolina accounted for about 10 percent of fresh production as the second largest fresh peach producing state, (NASSa).

U.S. fresh market production of peaches and nectarines has remained relatively stable over the last decade. In 2004 U.S. tonnage of peaches used for processing totalled 1.3 billion pounds while peaches used for the fresh market totalled 1 billion pounds. Historically, tonnage of peaches used for processing has been slightly higher than tonnage for fresh market use. U.S. tonnage of nectarines has been much less than that of peaches, fresh or processed (Figure 2). In 2004 nectarine production totalled 546 million pounds. According to ERS statistics, by 2002 the entirety of nectarine production went to the fresh market.

According the 2002 Agricultural Census Data, the number of peach farms has decreased by 16 percent since 1997, from 17,330 to 14,526 while the number of total acres in peaches decreased by 3 percent. Changes in the nectarine sector were less dramatic with a 6 percent decrease in total number of farms from 2,414 to 2,261 but with a slight increase in acreage (less than 1 percent). In 2002, of the leading peach producing states, California accounted for 17 percent of total farms and 51 percent of total acres while South Carolina accounted for 3 percent of total farms and 8 percent of total acres, followed by Georgia with 2 percent of total farms and 7 percent of total acreage (NASSb).

In 2004 bearing acreage of U.S. peaches totalled 146,000 acres, down from nearly 165,000 acres in 1995. Nectarine bearing acreage was roughly a fourth of peach bearing acreage at 36,500 acres. California accounted for 47 percent of total U.S. bearing peach acreage with 37,000 acres dedicated to freestone peach production and 32,000 acres dedicated to clingstone production. National Agricultural Statistical Service statistics show that South Carolina accounted for about 10 percent of acreage with 14,500 acres and Georgia, 8 percent, with 12,000 acres (NASS).

Globally, in 2003 the leading peach and nectarine producer was China, accounting for 38 percent of world production, followed by Israel with 10 percent, and the United States with 9 percent (Food and Agricultural Organization of the United Nations (FAO)).

Exports

The world's largest peach and nectarine exporting countries in 2003 were Spain, Italy, France, and the United States, in that descending order. The largest importing nations in 2003 were Germany, France, Italy, and the United Kingdom (FAO).

U.S. exports of peaches and nectarines historically account for less than 20 percent of total harvested peach tonnage. In 2004, the total value of U.S peach and nectarine exports was $134.2 million, making the United States a net exporter (exports less imports) of peaches and nectarines by $34 million.

The three major destinations for U.S. peaches and nectarines in 2004 were Canada, Taiwan and Mexico. Fresh peaches accounted for 75 percent of the total value of peach exports. The remainder was processed peach exports. Canada was the leading export market for both fresh and processed peaches and accounted for half of total U.S. peach exports in 2004. Taiwan was the second largest export destination for U.S. peaches, accounting for 21 percent of total peach exports and Mexico received 15 percent. As illustrated in figure 3, exports to Canada have been increasing, while exports to Taiwan have decreased, and exports to Mexico increased early on but have changed little between 2003 and 2004.

Imports

U.S. imports of fresh and processed peaches and nectarines totaled $100 million in 2004. U.S. fresh peach and nectarine imports have been increasing since 1993 and reached a record level in 2004 of nearly $60 million. In 2004, by value 60 percent of peach and nectarine imports were fresh. Chile accounted for 99 percent of the fresh peach and nectarine import value.

Although the United States is a net exporter of processed and fresh peaches overall, it was a net importer of processed peaches and nectarines by about $8 million in 2004 (FAS). Imports of processed peaches and nectarines nearly doubled between 2000 and 2002, from $27.2 million to $43.2 million. In 2004, processed imports were valued at $40.5 million. Thailand was the leading exporter to the United States of processed peaches, accounting for 43 percent of the processed peach import value. China accounted for an additional 15 percent and Chile 13 percent. Formerly Greece was the leading supplier of processed peaches and nectarines to the United States, accounting for nearly 79 percent of the total value of processed imports in 2000, but by 2004 supplied just 9 percent. The decrease in Greek imports was due largely to a decrease in Greek peach and nectarine production and a decrease in subsidies from the EU to Greek producers. Also of consequence was the strengthening Euro against other currencies, including the dollar, which effectively raised the price of imports from Greece (FAS 2002).

Prices

Average prices for fresh peaches and nectarines (in inflation-adjusted year-2000 dollars) have been variable over the last few decades, although historically prices for nectarines have remained lower than fresh peach prices (Figure 4). Canned peach prices are much lower than both fresh peach and nectarine prices, however prices for fresh peaches and nectarines have decreased in recent years while canned peach prices have not seen as dramatic a decrease. The price for fresh peaches peaked in 1996 at $709.1 per ton, but since decreased to $502.3 per ton in 2004. Nectarines were valued at $313.5 per ton in 2004 (down from $583.13 in 1995) and processed peaches, $221.8 after reaching a low of $97.5 the previous year.

Average nectarine price data combines that of processed and fresh grower prices. Before 2004, the lowest price for nectarines was $314.7 per ton but in 2004 prices dropped even lower to $313.5 per ton. Although processed nectarine prices have always been much lower than those for fresh fruit, processing has made up a relatively small percentage of production and by 2002 all nectarine production was sold for fresh market uses. The USDA average retail price marketing spread shows that the percentage of retail price going to peach growers has steadily declined, from 29 percent in 1989 to 19 percent in 2003.

Sources

Food and Agricultural Organization of the United Nations (FAO). Statistical Database-Agriculture. Available at: http://faostat.fao.org/faostat/collections?subset=agriculture

Reiger, Mark. Peach – Prunus persica. Universitiy of Georgia. Available at www.uga.edu/fruit/peach.htm.

United States Department of Agriculture. Economic Research Service (ERS). Fruit and Tree Nuts Outlook and Yearbook 2004. Available at: http://www.ers.usda.gov/publications/fts/

United States Department of Agriculture. Economic Research Service (ERS). Food Per Capita Consumption Data System. Available at http://www.ers.usda.gov/data/foodconsumption/FoodAvailQueriable.aspx

United States Department of Agriculture, National Agricultural Statistical Service (NASSa). Commodity Reports. Available at: http://www.usda.gov/nass/pubs/estindx.htm

United States Department of Agriculture, National Agricultural Statistical Service (NASSb). 2002 Census of Agriculture. Available at: http://www.nass.usda.gov/Census_of_Agriculture/index.asp

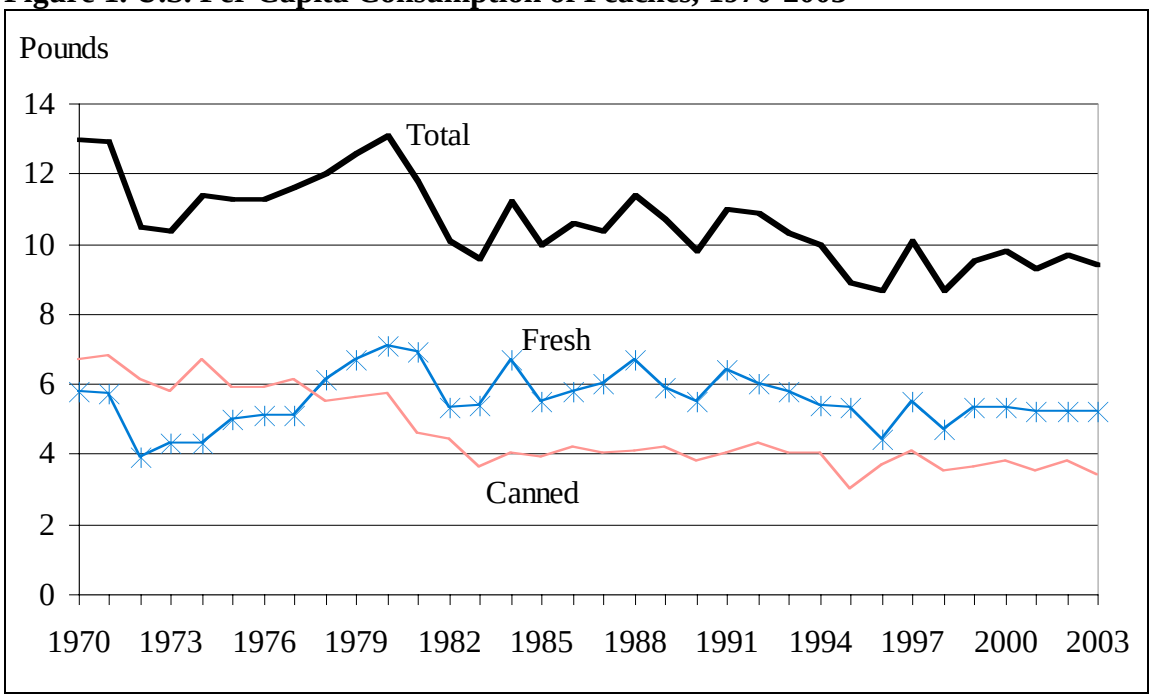
United States Department of Agriculture, Foreign Agricultural Service. “Canned Deciduous Fruit Situation in Selected Countries.” 2002. Available at:

http://www.fas.usda.gov/htp/Hort_Circular/2002/02-11/Canned%20Fruit.htm

United States Department of Agriculture, Foreign Agricultural Service. Trade Data. Available at: http://www.fas.usda.gov/ustrade/

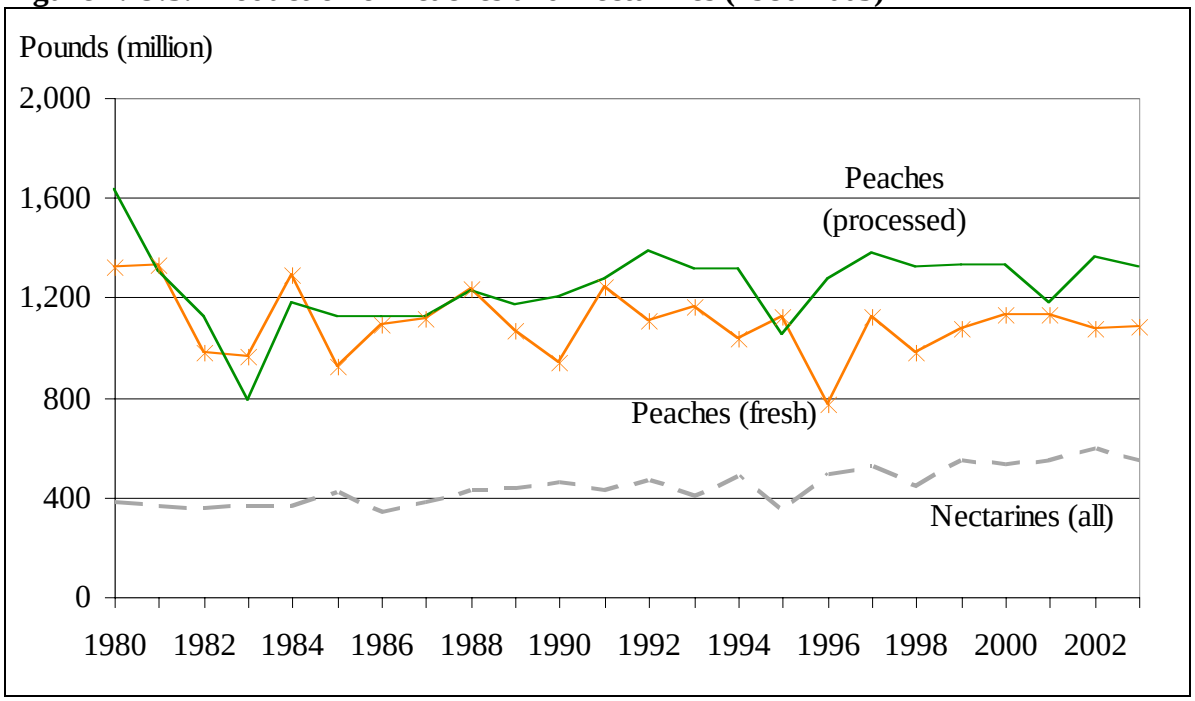
FIGURES

Figure 1. U.S. Per Capita Consumption of Peaches, 1970-2003



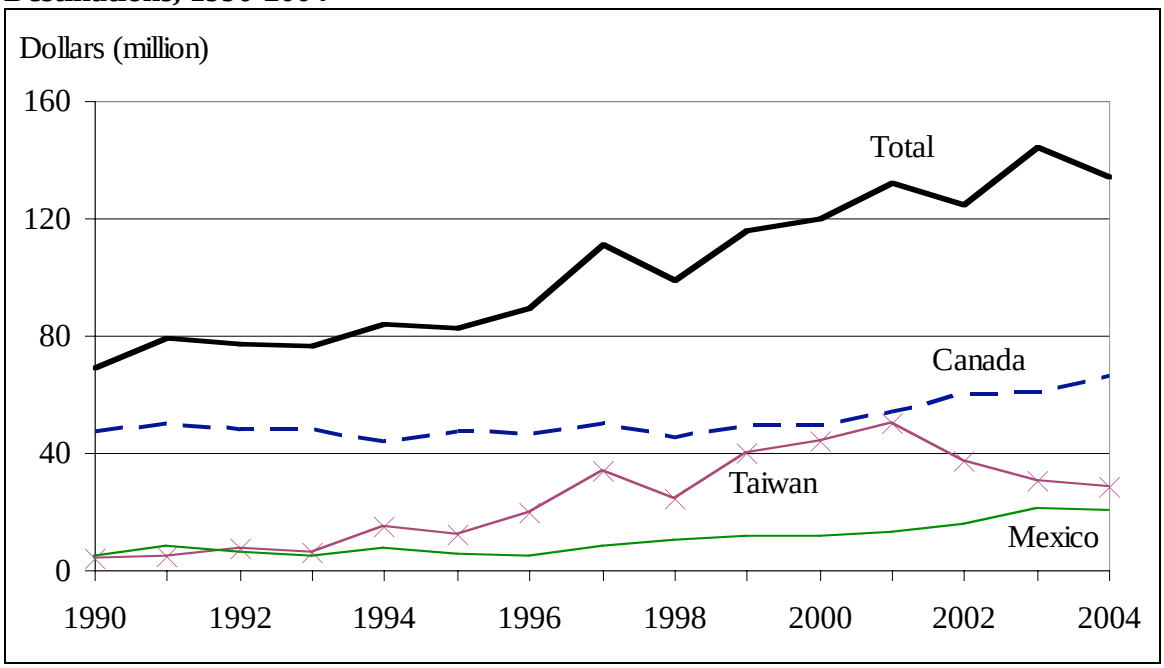
Source: USDA Economic Research Service, Vegetable and Melons Yearbook

Figure 2. U.S. Production of Peaches and Nectarines (1980-2003)



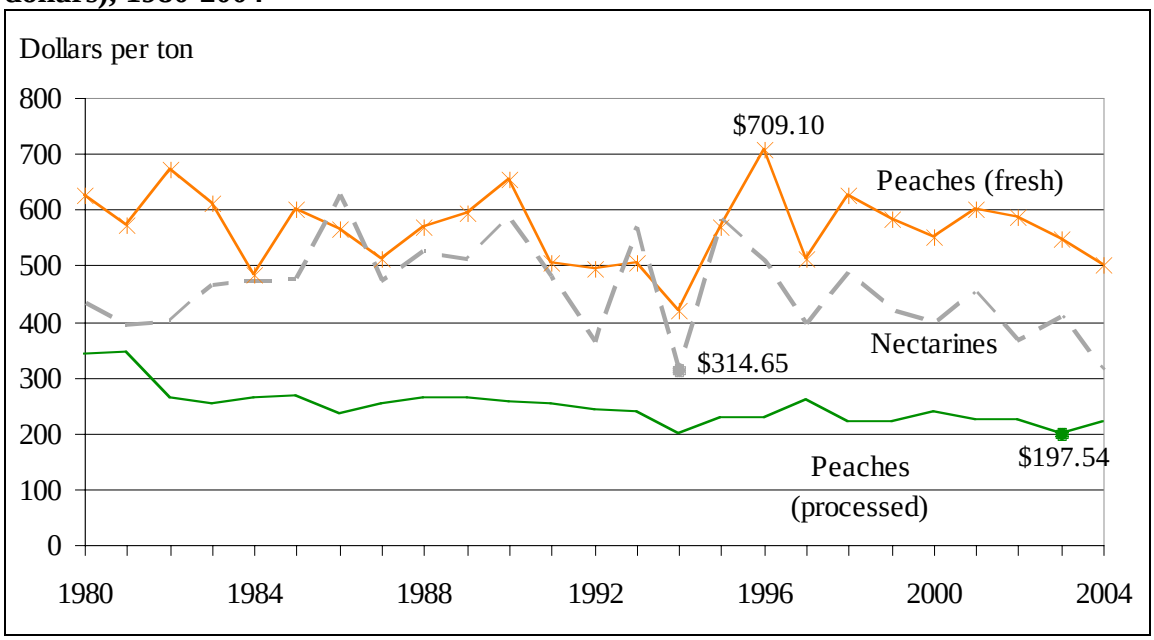
Source: USDA Economic Research Service, Fruit and Nuts Yearbook

Figure 3. U.S. Exports of Fresh Peaches and Nectarines, Total and Major Destinations, 1990-2004



Source: USDA Foreign Agricultural Service

Figure 4. Average U.S. Peach & Nectarine Prices (in year-2000 inflation-adjusted dollars), 1980-2004



Source: USDA Economic Research Service, Vegetables and Melons Yearbook