

Strawberry Industry Overview and Outlook

Feng Wu

Research Associate

Gulf Coast Research and Education Center

University of Florida

fengwu@ufl.edu

Zhengfei Guan

Assistant Professor

Gulf Coast Research and Education Center &

Food and Resource Economics Department

University of Florida

guanz@ufl.edu

Alicia Whidden

Extension Agent

Hillsborough County Extension Service

University of Florida

awhidden@ufl.edu

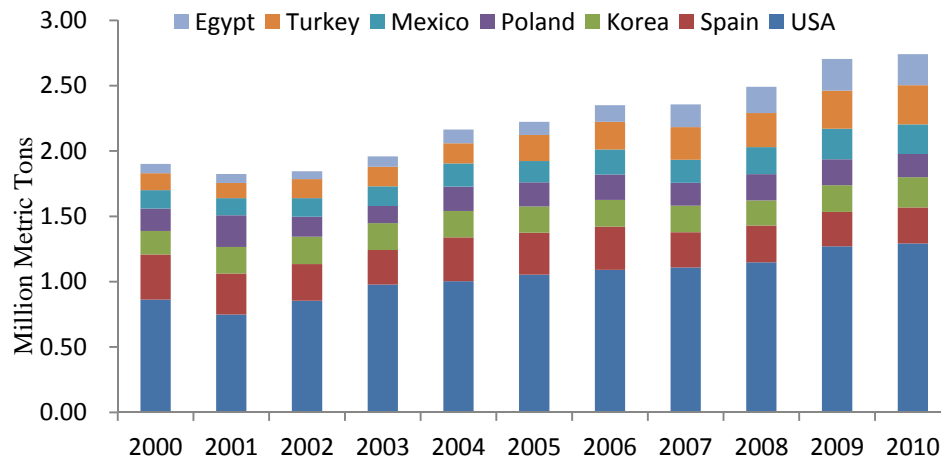
November 2012

Strawberry Industry Overview and Outlook

World Strawberry Production

According to Food and Agriculture Organization (FAO) of the United Nations, world production of strawberries has exceeded 4 million tons since 2007. In 2010, approximately 28 percent of the total production came from the United States, the largest producer among countries where statistical data are available. Other major strawberry producing countries are Turkey, Spain, Egypt, Korea, Mexico, and Poland (see Fig. 1). Although Spain, Korea, and Poland still have a high production, the growth has been slow or even negative. For example, Spain's production in 2010 was 275,000 tons, down 12 percent from ten years ago. Korea showed an upward trend, but only grew 14 percent during the same period. In contrast, Turkey, Egypt, and Mexico experienced a high growth in the same period. Production in Egypt increased more than 3 times from 70,000 tons to 240,000 tons, and Turkey's production rose from 130,000 tons to 300,000, becoming the second largest strawberry producer in the world.

Figure 1: World Major Strawberry Producers, 2000-2010

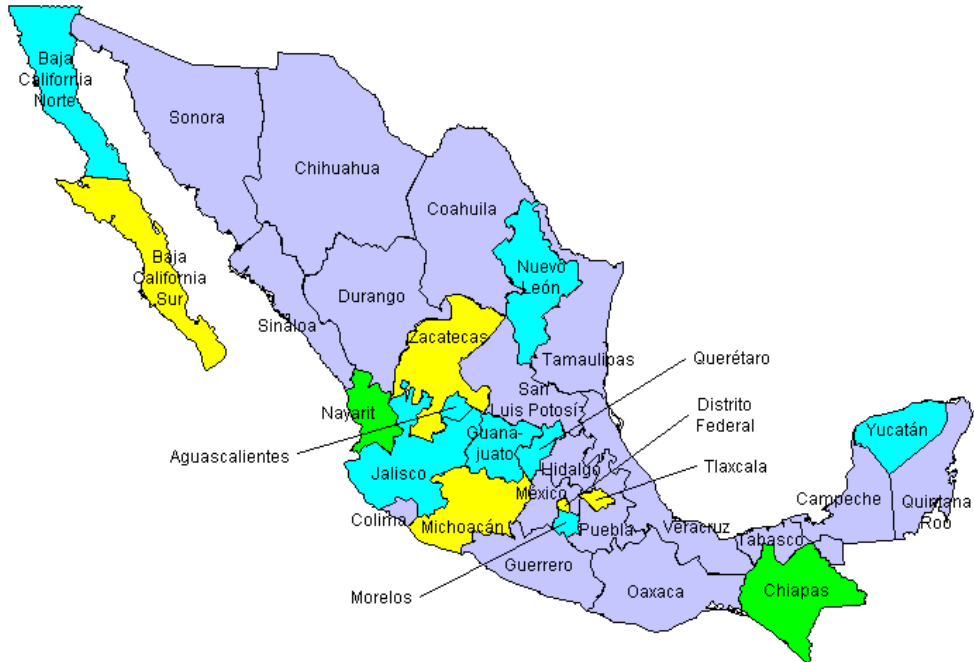


Source: Food and Agriculture Organization, the United Nations

Mexico's Production

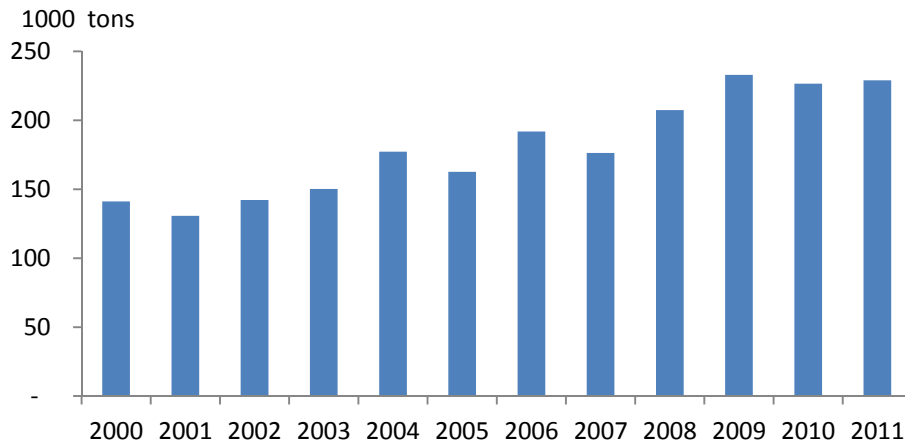
Mexico was the sixth largest producer of strawberries in 2010, behind the U.S., Turkey, Spain, Egypt, and Korea. Although Mexico's production only accounted for 5% of world production in 2010, it is the largest exporter to the U.S. market. Its exports have increased dramatically in the last two years. Mexican strawberry production was 229,000 tons in 2011, slightly up from 2010 (Fig. 3). Total production data for 2012 are not available at the time this report was prepared, but the supply on the market showed that production has increased significantly as a result of quick expansion of acreage and favorable weather in the 2011/2012 season.

Figure 2: Map of Mexican States



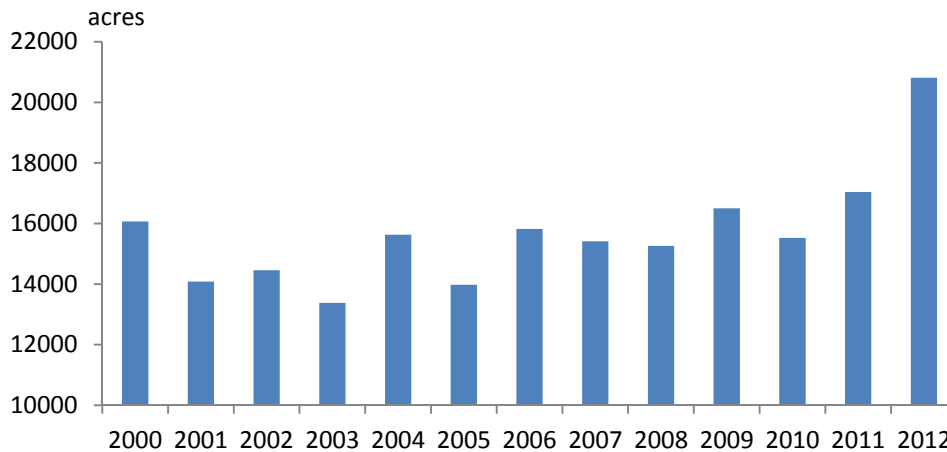
Mexican strawberries are produced mainly in three states, namely, Michoacan, Guanajuato, and Baja California (Fig. 2). Michoacan is the most important growing area for the winter window. During this window, growers receive higher prices, which has caused rapid increases in strawberry planted area. The California Strawberry Commission's 2012 *Acreage Survey*, released in August, 2012, reported that Mexico acreage was estimated at 15,814 acres in Central Mexico, and 5,000 acres in Baja. The total acreage is dramatically up compared to estimated 17,038 acres in 2011 (Fig. 4). This, combined with the favorable growing weather, has led to record production in 2012.

Figure 3: Mexican Strawberry Production, 2000-2011



Source: Food and Agriculture Organization, the United Nations (2011 production estimated).

Figure 4: Mexican Strawberry Planted Acreage, 2000-2012

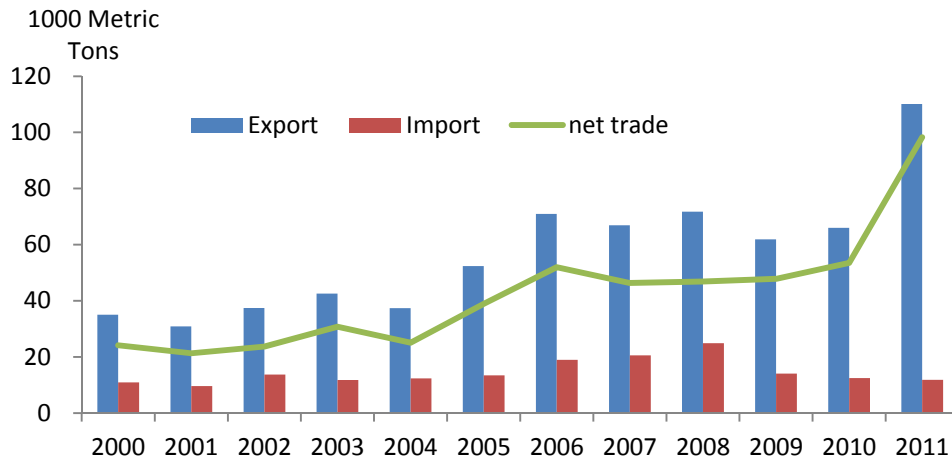


Source: Food and Agriculture Organization, the United Nations
2011 acreage estimated; 2012 acreage from The California Strawberry Commission: *2012 Acreage Survey*

Mexico's Strawberry Trade

In 2010, Mexico was the fourth largest fresh strawberry exporter in the world in terms of volume. The majority of Mexico's exports of fresh strawberries go to the United States. 2011 saw a large increase in export -- up 67 percent from the previous year (see Fig.5). Exports continued to climb in 2012, causing oversupply in the U.S. market and created tremendous pressure on the U.S. strawberry industry.

Figure 5: Mexico Trade in Fresh Strawberries, 2000-2011



Source: Food and Agriculture Organization, the United Nations and Bureau of the Census, DOC

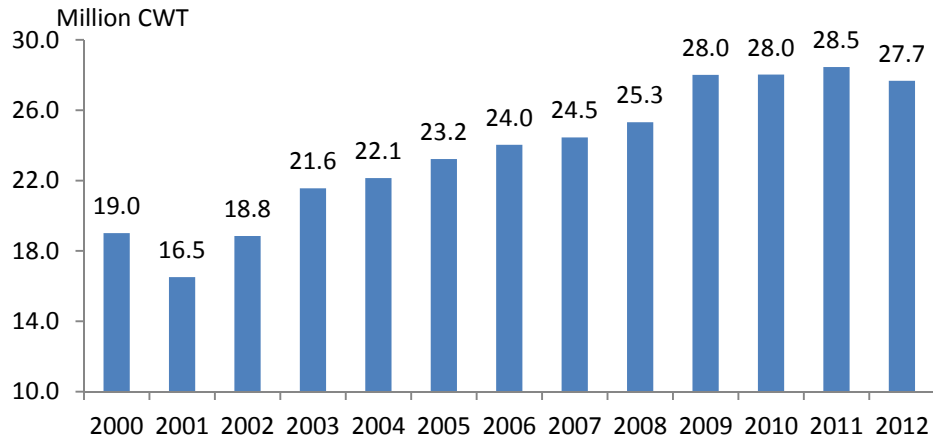
Mexico imported strawberries mainly come from the United States. Imports of fresh strawberries have been winding down since 2008 (Fig. 5). In 2011, Mexico imported 12,000 tones, only half of imports in 2008. Given its rapidly increasing production capacity and improving quality, Mexico’s import is expected to decrease in the coming years.

U.S. Strawberry Industry

Strawberry Production

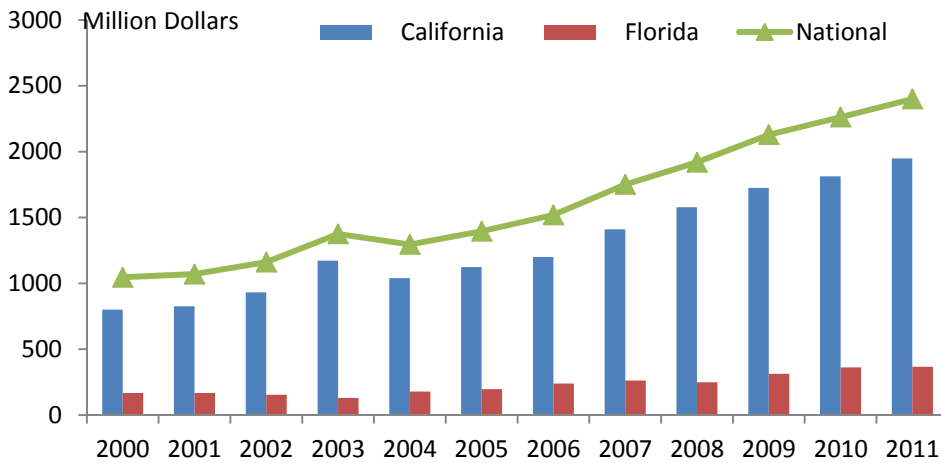
According to *Vegetables* report released Sept 6, 2012 by the National Agricultural Statistics Service (NASS), U.S. Strawberry production in 2012 was about 27.7 million cwt (1 cwt=100 pounds) (Fig. 6), down 3 percent from 2011. Area harvested, at 49,300 acres, was down 1 percent from last year. Strawberry yield was 561 cwt per acre, down 9 cwt. Production value was at an all-time high in 2011, amounting to \$2,4 billion (Fig. 7). There might be a relatively large decrease in the 2012 value due to lower prices growers received.

Figure 6: U.S. Strawberry Production, 2000-2012



Source: National Agricultural Statistics Service, USDA

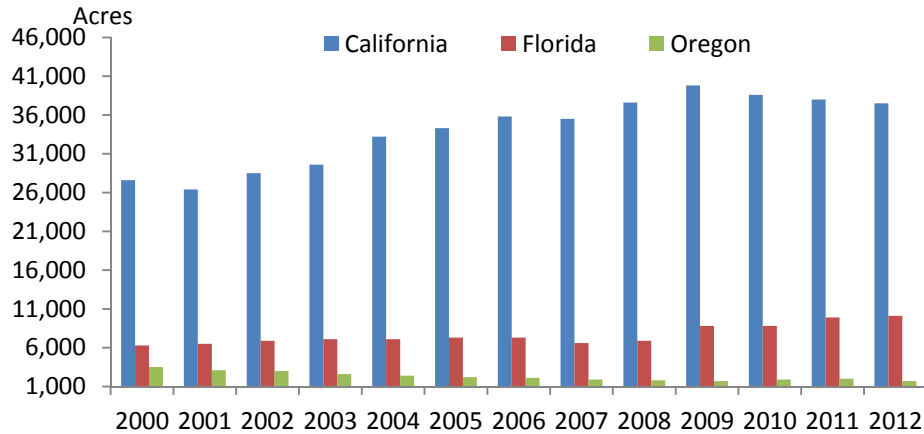
Figure 7: U.S. Strawberry Value, 2000-2011



Source: National Agricultural Statistics Service, USDA and Noncitrus Fruits and Nuts Summary

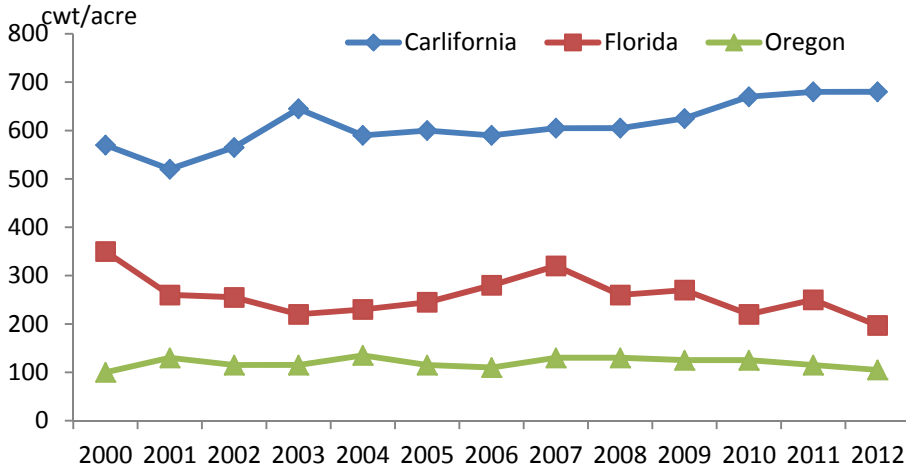
California, Florida, and Oregon are the top 3 strawberry-producing states. California production in 2012 was down 1 percent from a year ago to 25.5 million cwt, accounting for 92% of total volumes. The decrease in production was due to the smaller harvested area, down 500 acres (Fig. 8). As the second biggest strawberry producing state, Florida saw a declining trend in yield coupled with an increase in number of acres harvested between 2006 and 2011. Florida yield in 2012 declined to 197 cwt per acre, down 21% from 2011 (Fig. 9). Low market prices caused substantial amount of yield to be abandoned in the field. This decline in harvest resulted in a 20% drop of total supply from Florida compared to last year even though the harvested acreage was up 2%. Oregon produced 0.17 million cwt strawberry in 2012, down 21% from last year as a result of reduced harvested acreage and yields.

Figure 8: Harvested Acreage in the Top 3 Strawberry Producing States



Source: National Agricultural Statistics Service, USDA

Figure 9: Yield in the Top 3 Strawberry Producing States, 2000-2012



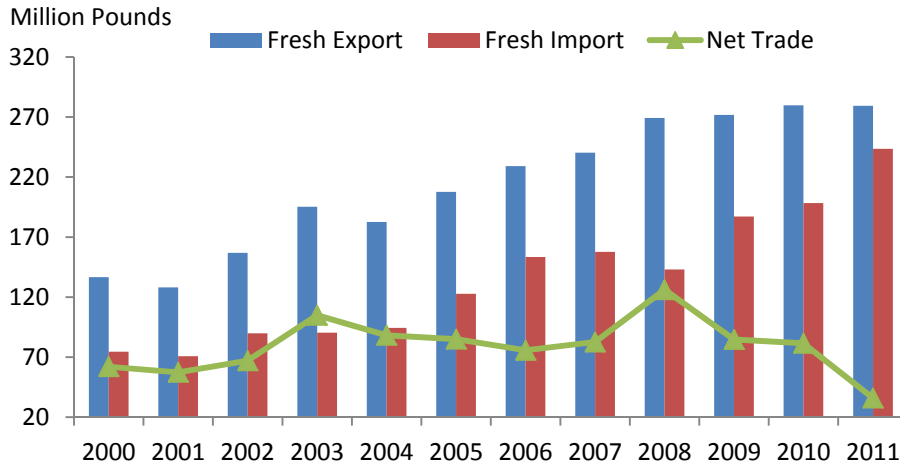
Source: National Agricultural Statistics Service, USDA

Information from the Florida Strawberry Growers Association (FSGA) indicated that the state’s 2013 strawberry acreage is expected to drop below 10,000 acres from 10,100 acres in 2012 (The Ledger, 2012). The change is due mostly to Mexico competition and oversupply of strawberries in the U.S. market. In February 2012, strawberry retail prices collapsed as Mexican strawberries poured into the market. In the coming years, strawberry production in Mexico, which has the same production window as Florida, will continue to increase, which will pose further challenges to Florida strawberry industry.

Exports

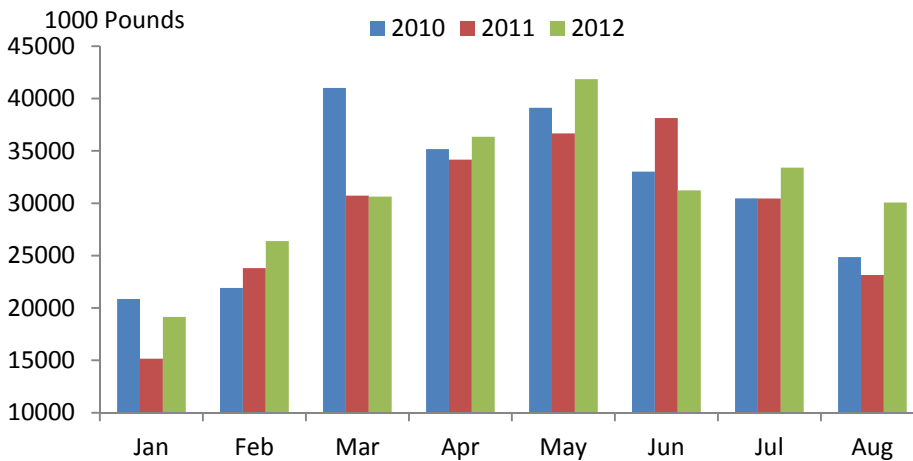
The U.S. is the second largest exporter of strawberries following Spain. In 2010, U.S. fresh strawberry exports totaled 279.8 million pounds valued at \$359.8 million—the highest on record (Fig. 12); and the export volume in 2011 was about the same as the previous year. In the first 8 months of 2012, U.S. fresh strawberry exports increased 7% (Fig. 13).

Figure 12: U.S. Trade Volumes in Fresh Strawberries, 2000-2011



Source: Bureau of the Census, DOC

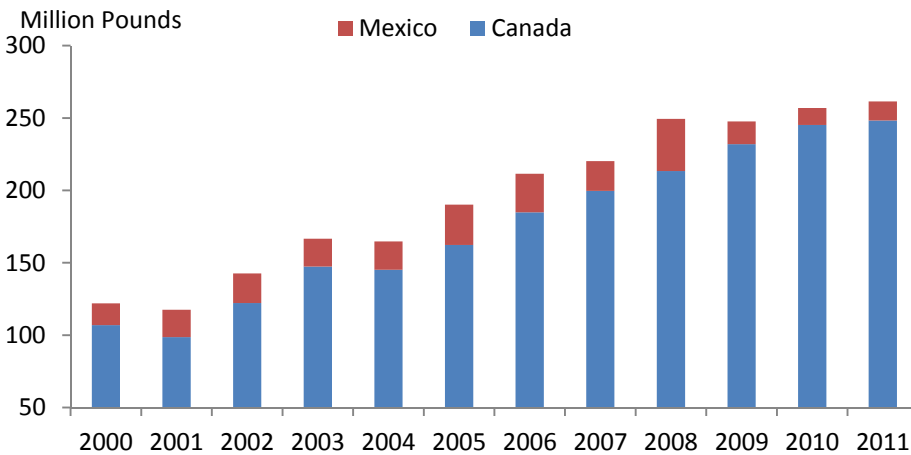
Figure 13: U.S. Monthly Fresh Strawberry Export, 2010-2012



Source: World Trade Atlas

Canada is the major export destination of U.S. strawberries. Demand from Canada has shown remarkable growth in the last ten years and remained strong in recent years (Fig. 14). But exports to Mexico were down through August as a result of the fast expansion of Mexican production. More competitive local strawberries will continue to squeeze the market share of U.S. strawberries.

Figure 14: Top U.S. Fresh Strawberry Export Markets, 2000-2011

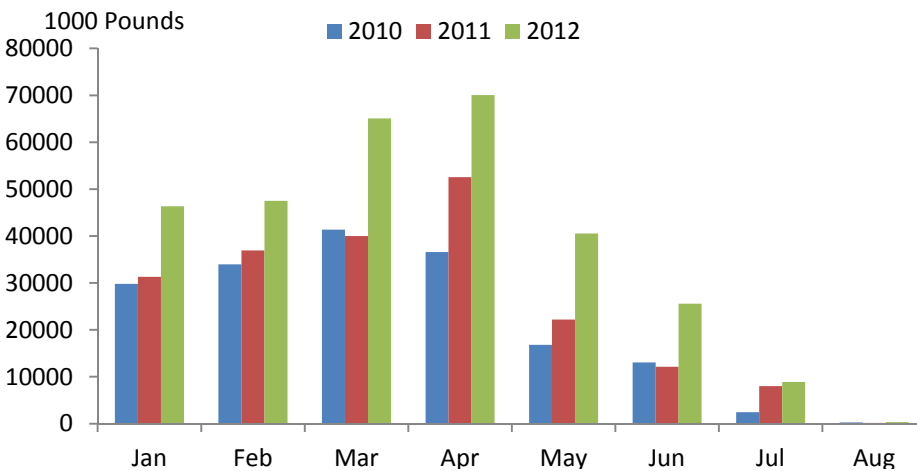


Source: Bureau of the Census, DOC

Imports

The U.S. is not only the leading strawberry producing country, but also the fourth largest importer of fresh strawberries. Fresh imports increased more than three folds during the past 12 years, reaching a record 243.5 million pounds in 2011 (Fig. 12). U.S. imports remained strong early into the 2012 season. Fresh imports increased 48 percent during the first month of 2012 over the 2011 same period reported by U.S. Census Bureau (Fig. 15).

Figure 15: U.S. Monthly Fresh Strawberry Import, 2010-2012

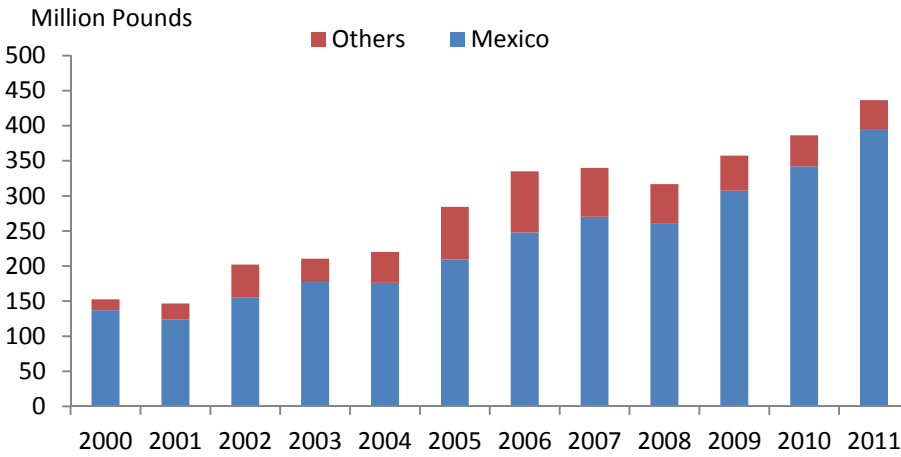


Source: World Trade Atlas

Mexico is by far the largest supplier providing the majority of total imports. Fresh strawberry imports from Mexico reached 231 million pounds in 2011, accounting for 95% of total volumes imported (Fig. 16). It is expected that imports from Mexico will continue to increase as its production expanded quickly in the last few years. Mexican strawberries have overlapping production seasons with Florida. Most of Mexican strawberries are produced and imported in

winter time. The large supply of strawberries of lower production cost from Mexico is squeezing the margin and market share of Florida strawberries. The competition will further intensify in the coming years as production in Mexico continues to climb.

Figure 16: U.S. Import from Mexico and Other Countries, 2000-2011



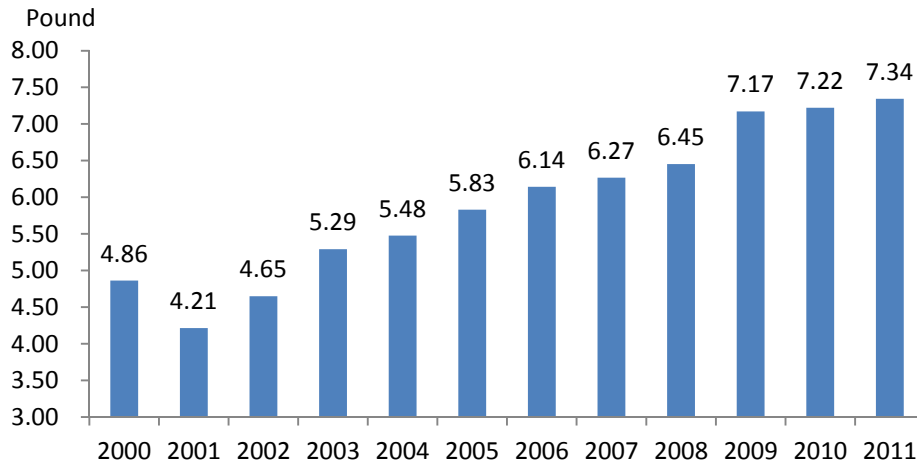
Source: U.S. Census Bureau, DOC

As U.S. exports stagnate while imports increase quickly, the net export has dropped dramatically (72%) during the last few years since it peaked at 126 million pounds in 2008 (Fig. 12). The U.S. Census Bureau data showed that U.S. net export in 2011 was 36 million pounds, down 56 percent over the previous year. The U.S. will turn into a net importer of strawberries in the near future if the current trend continues.

Strawberry Consumption

Continued increases in strawberry imports have helped meet the growing consumption demand for fresh strawberries in the United States. Fresh per capita consumption kept growing in the past decade. But the growth has slowed since 2009 when the per capita consumption reached 7.17 pounds, going slightly up to 7.22 pounds in 2010 and 7.34 pounds in 2011 (Fig. 17). Compared to 4.21 pounds in 2001, the consumption almost doubled. Total strawberry supply in the U.S. market (domestic supply plus imports) has been increasing and the trend is expected to remain strong, mainly due to the increased shipments from Mexico. With larger supply and lower prices, per capita consumption is expected to remain high.

Figure 17: U.S. Strawberry per Capita Consumption, 2000-2011

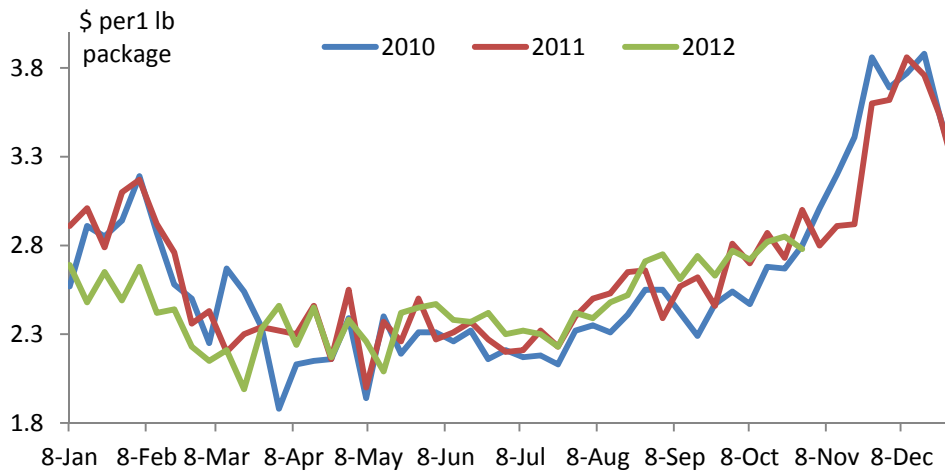


Source: Economic Research Service, USDA

Strawberry Prices

Along with larger planted acreage in Florida and California and increased shipments from Mexico, retail prices dropped significantly early 2012 (Fig. 18).

Figure 18: U.S. Retail Advertised Prices for Strawberries



Source: USDA, Agricultural Marketing Service, National Fruit and Vegetable Retail Report

Overall mild temperatures in the winter season and larger planted area in Florida increased strawberry yields and market supply. The shipments were over 30% higher compared to the previous year. The increased supply and heavy volume moving from Mexico have led to the significant drop in market prices. The weekly average strawberry retail advertised prices during the first three months in the 2011/12 season were all lower than those in the previous years according to statistics from USDA Agricultural Marketing Service (Fig. 18). The prices averaged \$2.58 per pound in January 2012, 13 percent lower compared to \$2.95 per pound in January

2011, and further declined to \$2.44 in February and \$2.17 in March, down 13 percent and 6 percent, respectively, relative to the same periods in 2011.

Rain in April 2012 delayed California strawberry entering the market and led to shipment volume 6% below the April 2011 level. The delay strengthened strawberry retail prices for the month, but prices weakened again in May when larger supplies from California were brought to market. Retail prices in June and July 2012 were slightly up due to falling supplies. Seasonal decline in supplies drove prices up in August to October from the previous months, but remained similar to the level in the previous year. Overall, the average retail price in 2012 will be lower than that of 2011. Increased supplies and falling prices are causing wide spread pessimism in the industry, especially in Florida where Mexican competition has shown to be devastating to local growers in the past season.

Reference

Bouffard, K., 2012. "Florida Strawberry Farmers Face Increasing Competition from Mexico." The Ledger, Aug 25, 2012.

<http://www.theledger.com/article/20120825/NEWS/120829590?p=1&tc=pg>