Commodity Fact Sheet

Strawberries

Information compiled by the California Strawberry Commission

How Produced – Strawberries thrive along California's coast because western ocean exposure and Pacific winds insulate the fields from extreme temperatures and weather, providing the ideal conditions for growing strawberries almost year-round. Strawberry plants are grown in stock nurseries and then transplanted into fields where they grow for another three months before they begin producing fruit. Strawberries are grown all year long in California, with the peak strawberry season occurring from April through August when volume rises from about two million trays per week to over eight million trays. That is about 72 million pounds per week.

All strawberries are picked, sorted, and packed in the field by hand. Trays of strawberries are then rushed to shipping facilities where they are cooled to 32°F. Within 24 hours of harvest, fresh market strawberries are loaded on refrigerated trucks for delivery across the country. This unique and sophisticated distribution system ensures this highly perishable fruit reaches consumers in fresh-from-the-field condition.

History – Strawberries can be traced back as far as the Romans, and perhaps even the Greeks. Medieval stonemasons carved strawberry designs on alters and around the tops of pillars in churches and cathedrals, symbolizing perfection and righteousness. During the same time period, strawberries were served at important state occasions and festivals to ensure peace and prosperity.

The most common explanation for how the strawberry got its name is that children in the nineteenth century threaded the berries onto straws and offered them for sale. Fresh strawberries began to flourish in California in the 1950s due to improved cultural technologies.

California strawberry growers are leading research in ways to conserve water, protect the soil, and reduce fertilizer and pesticide use. One of the first agricultural groups to adopt drip irrigation technology to conserve water, they continue to invest millions of dollars in non-chemical farming methods. Progressive and sustainable farming practices include innovative integrated pest management (IPM) strategies that work with nature to control pests, advanced irrigation management practices, and new strawberry varieties that resist pests and diseases.

Varieties – Different varieties are suited to particular climates and growing regions. Southern California varieties are adapted for warmer temperatures and shorter daylight hours for early fruit production. Northern varieties have been selected for a longer production cycle, which extends through the fall. For more than 70 years, commercial varieties have been developed by pomologists at the University of California. Successes include the development of new commercial strawberry varieties now grown throughout the world and precedent-setting solutions to disease and pest control.

Commodity Value – Strawberries are among the top three most frequently consumed fruits, and consumption is steadily increasing. Kids and adults report strawberries as their favorite fruit, with U.S. household consumption rising to nearly 71 percent. In 2021, strawberries produced in California accounted for 88% of the U.S. strawberry production. Over 38,000 acres are devoted to strawberry production in California. Canada and Mexico are primary export markets for fresh and frozen California strawberries. Today, strawberries represent a $2.8 billion industry in California.

Top Producing Counties – California harvests more than two billion pounds of fruit annually. The leading counties in strawberry production include Santa Barbara, Ventura, San Diego, Monterey, Santa Cruz, and San Luis Obispo.

Nutritional Value – California strawberries are an excellent source of vitamin C, providing more than 100% of the recommended daily value, and are a source of potassium, folate, and fiber. Naturally low in sugar, a one-cup serving of strawberries has only 45 calories and fits well in a diabetes meal plan. Research shows eating eight strawberries a day may support heart and brain health.

For additional information:
California Strawberry Commission
(831) 724-1301
Website: www.californiastrawberries.com

CALIFORNIA STRAWBERRY COMMISSION

08/22 Learn About Ag

This is one in a series of fact sheets composed by the California Foundation for Agriculture in the Classroom (CFAITC). For additional educational materials: CFAITC, 2600 River Plaza Drive, Suite 220, Sacramento, CA 95833-3377 (916) 561-5625 Fax: (916) 561-5697
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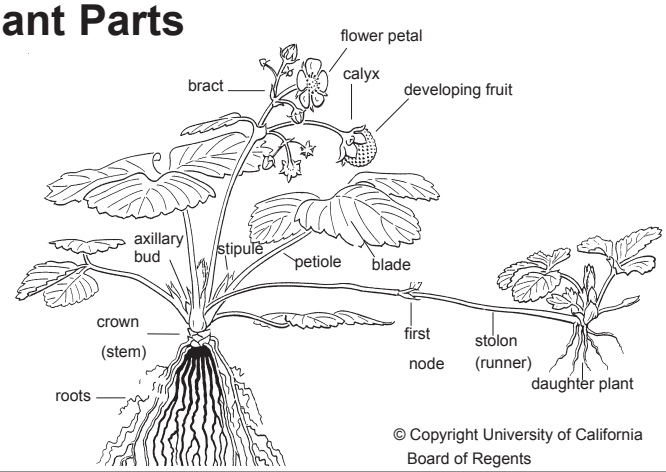
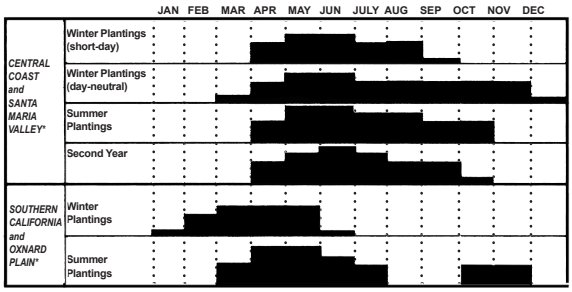
Strawberry Activity Sheet

Plant Parts



Growing Season and Peak Production



*** Strawberries are also grown in the San Joaquin and Central Valleys.**

Lesson Ideas

- Create a map of California highlighting the major counties where strawberries are grown.
- Estimate the number of seeds on a strawberry and devise a simple method for determining the number of seeds.
- Calculate the surface area and volume of a strawberry.
- Discuss different pests that affect strawberry production and methods for controlling these pests.
- Devise a method of estimating the quantity of strawberries produced on an acre of land.
- Write a paper entitled, "California—The Strawberry Capitol of the United States." Use *www.calstrawberry.com* for your research.
- Discuss the advantages and disadvantages of hand and machine harvesting. Invent a machine to harvest strawberries.
- Analyze the economic impact export markets have on the California strawberry industry.

Fantastic Facts

1. The average strawberry has 200 seeds.
2. Strawberries are harvested by hand.
3. Strawberries are typically propagated using vegetative reproduction.
4. One serving of strawberries contains more than 100% of the recommended daily value for vitamin C.
5. Strawberries do not continue to ripen after harvesting.
6. During California's peak production, 72 million pounds of strawberries can be picked in one week.
7. An average acre of California farmland can produce 21 to 27 tons of strawberries.
8. Strawberries are perennial plants, but are often planted annually.
9. California grown strawberries account for 88% of the nation's production.

Lesson Plan: Make Your Own Strawberry Leather

Introduction: Strawberries can be used to make several tasty and nutritious snack foods.

Objective: Students will demonstrate measuring, food processing, and food safety skills as they make a strawberry treat.

California Standards: CC ELA: RI.3-5.3, 4; RST.6-12.3, 4
CC Math: 3-4.MD.2, 5.MD.3

Materials: Strawberries (1½ cups per group of 4 students), light corn syrup, lemon juice, jelly roll pan, blender or food, masking tape, food processor, plastic wrap.

Procedure:

1. Place 1½ cups of clean strawberries in a blender or food processor and process until smooth.
2. Stir in ½ teaspoon lemon juice and 1½ teaspoons light corn syrup.
3. Line a jelly roll pan with heavy-duty plastic wrap, taping the plastic wrap to the corners of the pan with masking tape.
4. Pour the strawberry mixture into the pan, spreading evenly. Leave at least a one-inch margin on each side.
5. Dry in an oven at 150°F for seven to eight hours or until the surface is dry and no longer sticky.
6. Remove the leather and plastic wrap from the pan while still warm (hands must be clean and dry) and roll up in a jelly roll fashion. Cut into logs and store in plastic wrap for a maximum of five days. Have the students take their strawberry leather home or enjoy it as a class snack.
7. Math extension: Write the cooking measurements in standard units, such as milliliters, liters, or cubic units.

08/22 This Fact and Activity Sheet was developed by California Foundation for Agriculture in the Classroom in conjunction with California educators and meets the required education standards of the California Department of Education.