## Oklahoma Cotton

Oklahoma agriculture does more than just feed us. It also puts clothes on our backs. Your blue jeans and T-shirts are made from cotton fibers which grow in the boll, or seed pod, of the cotton plant. Cotton, a product of Oklahoma agriculture, is the most common natural textile in use today. In 2015, Oklahoma cotton fields produced 374,000 bales of cotton. A bale is about the size of a refrigerator and weighs 480 pounds. Most Oklahoma cotton is grown in the southwestern part of the state, especially in Caddo, Beckham, Tillman and Harmon Counties.

Cotton farmers plant cotton late in the spring. They use mechanical planters that can plant seed in as many as eight rows at a time. During the growing season scouts go out into the fields to count harmful insects. If there are too many, the farmer will use pesticides to control them.

About two months after planting, flower buds, called squares, appear on the plant. Three weeks later the blossoms open. The petals change colors as they mature. First they are creamy white. Then they turn yellow, then pink, and, finally, dark red. After three days the red flowers wither and fall, leaving green pods called cotton bolls. The boll is shaped like a tiny football. Moist fibers grow and push out from the newly-formed seeds. As the boll ripens, it turns brown. The fibers continue to expand in the warm sun. Finally they split the boll apart, and the fluffy cotton bursts out.

Cotton is harvested in the fall. Most of the cotton is harvested by machine. After the cotton is harvested it is stored at the edge of the field in big mounds or loaded on trailers or trucks and carried to the cotton gin.

At the cotton gin, powerful pipes suck the cotton into the building and through cleaning machines that remove burs, dirt and leaf trash. Then circular saws with small, sharp teeth pull the fiber from the seed. The ginned fiber is called lint. The lint is pressed into 480-pound bales, about the size of a refrigerator. The bales are sold to cotton merchants who sell them to textile mills in the US or in foreign countries. At the textile mills, huge machines spin the cotton fibers into cotton thread. The thread is then woven into cloth on looms. The rolls of cloth that come off the looms are called bolts. Clothing manufacturers buy bolts of cloth. They cut jeans, shirts, dresses, and other items of clothing to sew.

Before the invention of the cotton gin, in 1793, most people wore clothes made from wool or linen. Cotton seeds are sticky and sometimes difficult to separate from the cotton fiber. The process was extremely labor-intensive. The cotton gin made cotton production more economical than wool or linen production.

The cotton gin could generate up to 50 pounds of cleaned cotton daily. This was double what could be cleaned by hand and helped make cotton production a lucrative business. It contributed to the economic growth of the Southern states of the US, a prime cotton-growing area. By 1860, cotton production represented more than half of all US exports. Some historians believe the invention also reinvigorated the slave economy and added decades to its life.

By the early part of the 19th Century, the Southern economy depended on the labor of African American slaves forced into providing cheap or free labor. In 1810 there were 1.2 million African American slaves in the US. By 1860 there were 4 million. Slaves were concentrated on the large plantations of about 10,000 big planters. Each of these plantations held 50-100 or more slaves.

The principal cotton-growing states in the South were South Carolina, Mississippi, Florida, Alabama, Georgia, Louisiana and Texas. These were the first seven states to declare their independence from the US, between December, 1860, and February, 1861. Civil War broke out in April, 1861.

After the Civil War, the price of cotton dropped nearly 50 percent. Many freed slaves remained dependent on white landowners because they had no land of their own. They stayed on the plantations and worked as sharecroppers in return for a share of the profits.

Cotton plantations required vast labor forces to hand-pick cotton fibers from cotton plants, and it was not until the 1950s that reliable harvesting machinery was introduced into the South.

In the 1890s, the boll weevil moved into the southern US from Mexico and destroyed much of the cotton crop, forcing many southern farmers to switch to other crops.

Today there are 17 states producing cotton in the US. The top 10 producers in 2015 were Texas, Georgia, Mississippi, Alabama, North Carolina, California, Arkansas, Missouri, Oklahoma and Arizona. China is the world's largest producer of cotton. China, the US and India together produce half the world's cotton. Other top producers include Brazil, Pakistan, Turkey, Australia and Uzbekistan.

The seeds of the cotton plant are also a valuable commodity. Cottonseed oil is used to make salad dressings, margarine and cooking oils.

Cotton and cottonseed ranked number eight in value of all Oklahoma agricultural commodities in 2015. It was among the first major crops grown by farmers when our state was new. There were 215,000 acres planted in cotton in Oklahoma in 2015.

## Vocabulary

**boll weevil**—a usually grayish or brown weevil that feeds on the squares and bolls of the cotton plant **bolt**—a large roll of cloth of a definite length, as it comes from the loom

commodity - a product of agriculture

cotton—a soft fiber that grows around the seeds of the cotton plant

cotton boll—the rounded seed pod or capsule of the cotton plant

**cotton gin**—a machine that separates the seeds, seed hulls and other small objects from cotton fibers **cottonseed oil**—a brown- yellow oil with a nutlike odor obtained from the seed of the cotton plant **export**—a commodity conveyed from one coun- try or region to another for purposes of trade

**fiber**—a natural or synthetic filament, as of cotton, wool or nylon, capable of being spun into yarn **labor-intensive**—having high labor costs per unit of output

lint-the mass of soft fibers surrounding the seeds of unginned cotton; fuzz

lucrative-producing wealth

**plantation**—a large farm or estate on which cotton, tobacco, coffee or sugar cane is cultivated, usually by resident laborers

**sharecropper**—a farmer who works land for the owner in return for a share of the value of the crop **square**—the flower bud of a mature cotton plant

textile-fiber or yarn for weaving or knitting into fabric