

## **Arizona's Five C's**

### **Cotton**

According to cotton historian, Stephen Yafa, "cotton was domesticated simultaneously in India and Peru some 5,500 years ago." Cotton, and cloth made from it, gradually moved west to Europe and north to Mexico and beyond, so that when Christopher Columbus arrived in the Bahama Islands in 1492, he found cotton growing there.

Cotton was a "prime motive for the colonization of the New World," provided "economic muscle" to the textile industry in newly independent America, and remains one of the most important crops in the country. Ninety-five percent of all the cotton grown around the world today is the short-fiber upland variety.

#### **Cotton in Early Arizona**

Cotton moved north into Arizona from Mexico more than 2,000 years ago. There is archeological evidence of cotton growing, cloth making, and cottonseed cuisine in southern Arizona as early as 400 BC with the Desert Culture, and continuing with the Hohokam and Native Americans that followed. When Father Kino first explored the Santa Cruz Valley in the 1690s, he found Native Americans growing, wearing, and eating cotton.

Cotton growing continued in Arizona throughout the Spanish Colonial, Mexican, Arizona Territorial, and early Arizona Statehood periods. This was upland cotton – sometimes called Mexican cotton – produced mostly for local consumption – not as a cash crop for a large market.

Then, in the last decades of the 1800s, long-fiber cotton was developed in the hot, dry climate of Egypt. Egyptian cotton added a soft, silky feel, important to high-end cloth manufacturers in America, and also added durability, making it attractive as an industrial fabric. But long-fiber cotton required a longer growing season than the humid Cotton Belt of the southern United States could provide.

So in 1900 Egyptian cotton was introduced into the Egypt-like environment of Arizona's Salt River Valley. Federal engineers began tinkering at an experimental farm in Sacaton, cultivating cotton hybrids until achieving a new cotton variety, with extra-long fibers and super durability, named Pima after the Pima Indians who grew it.

Pima cotton was released into the market in 1910 and reached 7,300 acres of production by 1916.

#### **Cotton Boom and Bust**

During World War I, "an embargo was placed on Egypt, the main supplier of industrial strength cotton, which was needed for airplane wings, tires, and dirigibles." Pima cotton was the answer and a cotton boom started in Arizona.

Goodyear Tire and Rubber Company bought thousands of acres southwest of Phoenix and brought them hurriedly into production, pioneering the conversion of desert to irrigated farmland. The company

opened a factory next to the cotton fields and soon the town of Goodyear developed. Firestone and Dunlop soon joined Goodyear in the Valley. Farmers in Yuma and the Santa Cruz Valley joined the boom.

By 1920 there were almost 230,000 acres of cotton in the state. Arizona cotton was so valuable and so profitable that farmers stopped producing almost all other crops to concentrate on cotton.

But the boom didn't last. With the end of World War I, the military canceled many of its contracts, and Egyptian cotton flooded the U.S. market and drove the price of Arizona's Pima cotton down to below the cost to grow it – creating financial havoc. Between 1920 and 1925 the farm population of Arizona dropped 20 per cent. Some farmers returned to wheat, barley, and alfalfa or planted citrus groves.

### **Cotton Recovery**

But as Thomas Sheridan says in his Arizona history, "Nevertheless, cotton remained Arizona's most important crop." Many farmers renounced Pima long-fiber cotton and planted short-fiber upland cotton. Cotton acreage gradually increased, there was a resurgence during and after World War II, and cotton planting peaked in 1953 at 690,000 acres.

Since the peak, cotton acreage in Arizona has had its ups and downs, but in recent years has declined to about 200,000 acres in 2012, not even in the "top 10" of other U.S. state cotton producers. Much of the previous prime acreage was taken over by the "urban sprawl" of Phoenix suburbs to the east and west, beginning in the 1970s and 1980s.

Today cotton is grown in nine of our fifteen Arizona counties, but mostly in Maricopa and Pinal Counties south of Phoenix to Eloy – and even at reduced acreage, remains an important Arizona crop. According to the U.S. Department of Agriculture, cotton production, mostly upland cotton, supplied about \$300 million in cash to the state economy in 2012. Cotton Marketing Services estimates that cotton provides 11,000 jobs in Arizona.

Future requirements assure that cotton will continue to be a significant cash crop for Arizona. The world today uses more cotton than any other fiber – in an almost unbelievable number of ways. Besides clothes and household fabrics, cotton is used in industrial products like plastics, high quality paper, mattress padding, furniture, and automobile cushions. Cottonseed, when crushed, produces oil for shortening, cooking oil, and salad dressing; and meal and hulls for livestock, poultry and fish feed, and also as fertilizer. Cottonseed is also used as high-protein concentrate in baked goods and other food products.

### Cotton Facts ...

Cotton is considered a fruit because it contains seeds.

Cotton was once commonly grown in colors, including brown, rust, and light purple.

U.S. paper money is a blend of 75% cotton and 25% linen.

A mature cotton boll (seed pod) is about the size of a golf ball.

An average cotton boll contains 500,000 fibers of cotton and each plant may bear up to 100 bolls.

A 500-lb cotton bale can make 215 pairs of jeans.

**Selected Sources and Information:** Arizona Annual Crops, U.S. Department of Agriculture, 2013; Arizona Cotton and Pima Cotton, calcot.com; *Arizona – A History* (Thomas E. Sheridan, 2012); *Big Cotton* (Stephen Yafa, 2005); Cotton 101 – Facts about Cotton, janiceperson.com; Five C’s Supported the Arizona Economy, arizona100blogspot.com; Cotton Today and The Pima Cotton Boom, arizonaexperience.org; The Story of Cotton: History and The Importance of Cotton, cotton.org; Story of Cotton – the Plant, cottonsjourney.com; 7 Little Known Facts about Arizona Agriculture’s Cotton, Arizona Farm Bureau, 2013.



*This “real photo” postcard shows cotton picking in southern Arizona, circa 1930s.  
(Postcard courtesy of Al Ring)*