

More Information Regarding:

A Determined Lot:

Resilient Pioneers Forge a New County's Future

Feb. 16 - Dec. 7, 2008

Orange County's agricultural tradition began at Mission San Juan Capistrano. Missionaries brought familiar plants and animals with them from Spain because they knew that California's natural vegetation produced little food. In time the county experienced a complete change in agriculture and moved from livestock ranching to dry-land farming and finally to irrigation of high-value crops.

Men and women of varied backgrounds came to California looking for gold or a new start in life. Farmers, miners, craftsmen, professionals, and entrepreneurs pooled their talents so that in 1889 Orange County could separate itself from Los Angeles County as a unique political and economic unit.

American pioneers followed the models seen in earlier Spanish and Mexican gardens and learned to bring life-giving water to the fertile soil. Improvements in irrigation and engineering technology allowed for smaller crews to produce larger crops. The farmers' creative experimentation brought a wider variety of crops, and their resourcefulness solved local pest and climate problems. Railroads worked with growers' cooperative associations to open new markets across the country. With the larger farms and greater market demand, farmers sought a supplemental labor supply among new waves of immigrants.

Floods and droughts, pests and disease in turn threatened the farmers' livelihood, but they were a determined lot. Their ingenuity and resilience served them well until they faced the broader needs of urban settlements. In place of oranges or beans, communities of homes, churches, and schools sprouted on the land with an equal intent to survive

Missions and Ranchos

Time of the Missions: 1769-1826

Time of the ranchos: 1784-1864; Mexican ranchos 1821-1847

Gold Rush: 1848 into 1860s

Transcontinental railroad: 1869 (brought farmers and tourists)

Boom of the 1880s: Promotional campaigns of the railroads

Orange County established: 1889

1. Mission introduced the *Mediterranean triad*: wheat/barley, olives, and grapes; plants that grew in dry area with light, barely fertile soil and produced foods that could be dried or pressed into liquid that kept well. However, they used varieties of grapes and citrus not commercially profitable. (Riverside is on

approximately the same latitude as Crete in the middle of the Mediterranean Sea)

2. Spain always intended that missions were temporary. Only Spanish land grant in what is now OC was to Antonio Yorba and Pablo Peralta, granted in 1810: Rancho Santiago de Santa Ana. Vast ranchos profited by grazing cattle; hides and tallow and beef sold to SF markets; drought of 1863-64 ended cattle industry. Able Stearns was the largest landowner in So Cal, had acquired much mission land after Secularization Act of 1833, and lost 30,000 head of cattle to the drought. Nearly went bankrupt.
3. James Irvine I and Domingo Bastanchury were major sheep raisers to answer need for wool during the Civil War. In 1850 there were 18,000 sheep; by 1860 there were 1 million. Best breed was Merinos who gave 7# high-quality wool; sheared fall and spring.
4. The Santa Ana Valley had by 1889 become one of the strongest economic units of the LA County, but it did not have equivalent political influence. LA retained the county seat and resisted independence for the valley residents. In a national financial crisis when banks were closing in 1889, LA didn't have the necessary revenue to provide services to southern, fast-growing area, so it allowed OC to break away. It had taken 20 years. The first criminal in the new county was victim of the clash between railroad advances and agriculture.
5. English walnuts were introduced to OC by Joel Congdon; see quote. Raised nuts until other varieties with larger meats were developed then shifted to citrus. In 1923 there were 18,000 acres of walnuts in the county; ended as an industry by pests in 1940. Fullerton was a shipping center for walnuts that were grown in Placentia, the center for start of walnut industry. (Placentia Perfection still on the Arboretum grounds)

The name "San Juan Cajon de Santa Ana" means Saint John's Narrow Canyon of the Santa Ana. Anaheim, Fullerton, Brea and Placentia are on this land.

County Cornucopia

Variety of crops grown in the county is what is illustrated in this section. The year 1930 was the agricultural peak when citrus, sugar beets, peppers and tomatoes combined with livestock to yield more than \$51 million. But by 1935 this dropped to \$30 million.

Interset planting allowed families to survive by marketing the small crops that grew between the rows of young walnut or citrus trees. The Japanese saw this as quick and similar to the way of farming in Japan where multiple crops per year were usual. Anglos saw the profits and followed suit. It takes 5-8 years, depending on the type of soil, for trees to produce their first commercial crop of oranges. The quality and kind of land determined the crop's success.

The space requirements of the crops established the size of a successful farm. Smaller crops like celery, chili peppers, and cabbage give a high yield per acre and individual farmers would only need a small amount of land. Washington navels can be planted closer together than Valencias, so less land was needed for a navel grove than for a successful Valencia ranch. The number of farms in an area affected the size of local communities and the number of folks able to participate in community government.

Southern California Fruit Exchange was founded in 1892, became Sunkist in 1952; original packinghouse in Fullerton. The greatest Valencia orange acreage in history was in 1938 when there were 67,536 acres.

Early farmers used trial and error to locate a good soil-crop match; by 1910 geographers' surveys eliminated the risk. Soil would determine the type and quality of the citrus.

LaVerne Nursery is now located in Piru, California, north of Los Angeles. It started nearby in LaVerne and the Arboretum used to deal with them. Their modern facility was built to completely recycle all the water that is brought in to the nursery. The man in the video is one of the managers for the business.

Albert B. Chapman, one of the founders of the city of Orange along with Andrew Glassell, bought the first Valencia trees that came to California. Charles C. Chapman owned land in Placentia that was later annexed by Fullerton. These men were not related. Chapman Ave. in Orange is named for Albert while Chapman Ave. in Fullerton is named for Charles.

Saloons had to close down as part of Fullerton's incorporation and proponents feared the loss of \$50/yr in revenue from each of the four saloons in town. C. C. Chapman was a prohibitionist and pledged to make up any deficit in the city budget. Other businesses gladly took their places on the main street in town, and Chapman did not have to contribute extra funds to the city.

Water

"According to Virginia Carpenter in her book, Placentia, a Pleasant Place, the Cajon Irrigation Company consolidated into one company along with the Anaheim Water Company and the Santa Ana Valley Irrigation company in February of 1884. It was named the Anaheim Union Water Company. Charles C. Chapman moved to California in 1894 and later became president of the Anaheim Union Water Company. So it would seem that this was the water source for his property. I could not locate any information regarding water sources for the Hetebrink ranch. But I suspect the Hetebrink water came from the same source as Chapman's. Fullerton joined the Metropolitan Water District

in 1931. Before that time, wells served as the prime source of water for the city as they still do.”

Ken Leavens, OCHS

“The Fullerton municipal water system was formed on August 25, 1906 to serve the agricultural and domestic community. Fullerton is one of the original cities to contract imported water from Metropolitan. Fullerton's water system consists of 12 active wells, eight MWD connections and 400 miles of water pipeline.”

[City of Fullerton](#)

Evolutions of irrigations: earth dams and ditches lost water through seepage and plant encroachment; cement-lined ditches were used; then tile pipes and later concrete tiles that were mechanically produced. Date on the Anaheim ditch photo is 1895.

Artesian wells supplied water for many local cities including Santa Ana and Brea. Windmills were used later to pump the water from underground and it was stored in the tank, as you see on our own tankhouse.

Water barrels are wine barrels from Moranga Winery in Los Angeles.

In 1857 Anaheim Ditch brought water to the new community. As agricultural needs grew, other groups began to play leapfrog up the river with their own irrigation gates, north side vs. south side users. Summer heat and drought was a threat to everyone. In 1875 rancher E. W. Squires was out looking for his stray cattle. At **Horseshoe Bend**, he noticed that the water level fluctuated by nearly 2 feet from morning to afternoon, though no rain fell. He passed this information along to the feuding parties. They continued to blame each other instead of recognizing that Riverside was squeezing the water from the river before it could get through the narrows of Santa Ana Canyon.

Feb. 27, 2008 marks the 70th anniversary of the start of the rains that caused the flood five days later on March 3. Water rushed from the mountains in such torrents that in the La Jolla and Atwood areas, it is said that water rose five feet in five minutes.

Farming Families

The larger dairy photo shows the men with their milking stools, milk pails and a milk can in the open corral. In the early 20th century, milking was often done in the open corrals and not in barns. The milk from the pail was poured into a milk can and then taken by wagon to a creamery.

Between 1920 and into the 1930s California passed several laws aimed at dairy sanitation and made efforts to enforce the laws. Milking was done indoors and

milk parlors were often partially made of concrete for easier cleaning. The design of milk pails changed too, tops were partially closed to help prevent foreign matter from getting into the fresh milk. The handle at the bottom of the bucket was for ease of pouring into the milk cans. Once filled, milk cans were delivered to creameries, but in the 1920s and 30s, deliveries were by truck. As dairies got larger, creameries would pick up the milk from the farms.

During prosperous 1930, cattle and poultry represented only 3% of the county's farm income. By 1935 they accounted for more than 8%. The trend continued—18% in 1940, 32% in 1959 and 40% in 1955. The high mark was in 1960, when poultry and egg sales together grossed almost \$22 million.

The average hen lays 80 eggs per year, the best layers produce as many as 240 per year. Garden Grove was once called the "Hen House Capital" of the county.

Neighboring farmers helped one another in times of distress: for example, folks helped A. S. Bradford rebuild his barn after a fire, Ed Pankey opened his fields to neighbors when the cabbage was damaged by weather; another farmer had volunteer helpers when ducks crushed the grain that he was ready to harvest.

Children's chores were accomplished before or after school. Girls would sometime have to knit an inch before going out to play and they sewed by hand until their talent developed enough to merit the use of a sewing machine. Boys would take their guns into the groves and shoot rabbits or trap gophers.

Nature's Challenges

Early photos show vast open fields where the wind would blow unrestricted. Eucalyptus trees were introduced as wind breaks. One person mentioned hearing the ocean as a child when she lay in her bed in Buena Park.

Some grove owners used ducks to control the garden brown snail population in their groves. Others used Snail barr to keep the snail out of the orange trees. Decollate snails are good to clean up the debris on the ground in groves with trees planted close together.

Snail barr is a strip of copper that has slits at 1" intervals along one edge. The strip is wrapped around the tree and secured with a paper-clip type closure that allows the strip to expand as the tree grows. The slits are bent at right angles to the tree, and the snails cannot crawl over them. Observation indicates that some discomfort is felt by the snail when it touches the copper.

Good bugs are listed in the second column of the reference page; pests are on the longer first column. An insectary grows beneficial insects and markets them as environmentally safe controls.

The two lanterns were hung on the fumigators' belts so they would have a little light to help them during the nighttime fumigation. This work was done after the sun set to prevent the gas from burning the plant leaves.

If you like, help the children to pack the "cabbage" into the containers as tightly as possible. If they want to take it home with them, they may. We're undecided on if they can leave them here, (which would be an encouragement to return and bring other family members to see their container but might prove to be overwhelming.)

Mention the homeopathic medical practice of Dr. George Clarke and his office that guests can also visit on Sundays. Homeopathic medicine basically administers medicine in diminishing doses to produce the same symptom that the patient has, fighting fire with fire so to speak.

Men and Machines

Floods bring large amounts of sand and sediment that clog the river and change the riverbed itself. The sediment also spreads out over the cultivated fields and can travel all the way to the ocean. The Wow-of-a-Plow had a huge blade that was needed to mix the soil and sediment.

"The Peat shoe is not unique to Orange County, but this version is. In farrier texts we observed, most shoes of this type were held in place by a series of leather straps and stays. I recall seeing examples of these in the scrap pile remains from my Great-grandfather's blacksmith shop in Wisconsin when I was a small boy. This shoe is bolted together as opposed to strapped.

About the shoe itself, the shoe is three pieces.

1. *A normal slick shoe turned and punched for nails. The shoe was then punched and threaded to receive the bolts.*
2. *The board was no doubt cut from a standard 12-inch board. We consulted older farriers who would have knowledge of shoes such as this and we determined while it was not ideal thickness a one-inch thick board was used because of the weight of the total package¹. The board was cut to size and marked for holes that would be drilled to receive the bolts. The "X" on the board indicates where the functional center of the horse's foot would be. A half moon was cut out of the back of the board to keep the horse from stepping on it with a hind foot.*
3. *The top or retaining plate was turned but not punched for nail wholes. Holes were punched for the bolts to go through. We made several incarnations of this top plate and the one attached to the shoe, while not consistent with the picture, was the one that worked out the best. The amount of bumping¹ the blacksmith who shod the horse in the picture*

would have had to do to the shoe in the picture is a testament to what a talent he must have been.

In conclusion, this shoe is wholly impractical. The 12-x12 square would have no doubt not lasted a day in the field. . . .

I would like to believe that this shoe was not typical of the time but the exception. I would believe that the majority of the horses who worked the marshes wore shoes of this particular type, but that the farmers and the blacksmiths would have realize that a horse could have an appropriate amount of buoyancy going through the Orange County marshes with boards that were more hoof-shaped. In this instance, I will be liberal with the quote from 'the Man who shot Liberty Valance': When the legend becomes fact, build the legend. That's what we did."

Tom Trosin
