

## Seeds of Change: the Beginnings of California Agriculture

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California has led the nation in agricultural income since 1948. It enjoys a diversity of farm crops and products that is unmatched worldwide. There was a time, however, when few recognized the state's vast agricultural potential. Even so, the early pioneering efforts in ranching and farming did much to give modern-day agriculture its present shape. Many milestones were first reached right here in the East Bay area.

A look backwards should begin with the native peoples. Why did the majority of California's Indians choose not to adopt agricultural practices? Noted anthropologist Dr. Alfred Kroeber pointed to the long, dry summers "for which . . . no amount of winter precipitation could compensate."

Others, however, suggest that the richness of the natural environment made farming unnecessary. The Native Americans developed complex ecological skills to take advantage of diverse natural resources; agriculture was simply a risk they did not need to take.

### Mission Agriculture

The California Indian way of life was transformed by contact with Europeans in the 18<sup>th</sup> century. Members of an expedition led by Gaspar de Portola made their way north from Mexico in 1769. Though not primarily farmers, they were first to introduce farming to California. These Franciscan missionaries, with their accompanying bands of Spanish soldiers, brought cattle, wheat, and farm implements to aid their survival in a foreign land. Stuck in the fur of the cattle were the seeds of exotic annual grasses that turn our summer hills a golden brown to this day.

By 1797, Mission San Jose had been established in present-day Fremont. Local Ohlone Indians were put to work in the fields, often against their will, and some were converted to Christianity. Their farm tools were crude. A crooked branch, shod with scraps of iron, served as a plow and was pulled by oxen with a beam lashed to their horns. At harvest-time, workers sharpened lengths of barrel hoops, or used split willow branches to cut the wheat and barley. Later, they turned loose a band of mustangs to trample out the grain onto an earthen threshing floor.

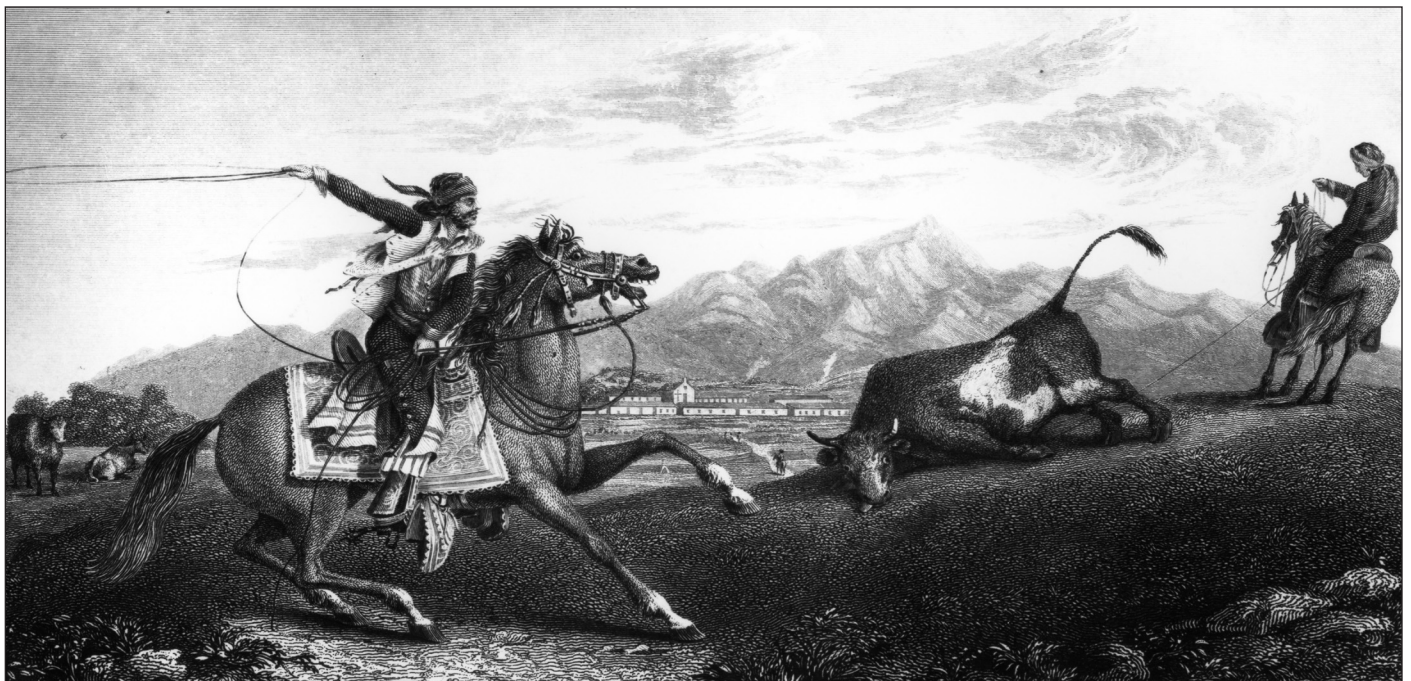
Despite its primitive nature, mission agriculture flourished. In 1821, California's harvest peaked 120,000 bushels of wheat; by 1834, livestock totaled 400,000 head. With achievements in stock raising, grain growing, and irrigated orchards and gardens, the missions demonstrated a wide range of agricultural possibilities.

### Heyday of the Ranchos

In 1835 the Mexican government disbanded the missions in order to open the padres' choice lands to further settlement. Under "secularization" mission Indians were to receive half of all mission lands. Instead, loyal soldiers and officials were issued large land grants, and the Indians were left to fend for themselves in an increasingly hostile environment.

The immense grants were measured out by a team of horsemen, and recorded on a simple map, or diseno. Grant corners were often marked by a pile of stones, and the boundaries planted with fruit trees. Great herds of cattle were allowed to roam free in the hills, and farming soon languished. In the semi-arid climate, where it took dozens of acres to pasture a single cow, the large ranches were not considered excessive.

Cattle soon became the landowners' main source of wealth. Important ranch work consisted of butchering and slaughtering. Local processing was simple: ranchers staked hides in the



*Mission San Jose, in background, circa 1835.*

Courtesy Bancroft Library

sun to dry, rendered fat into tallow by melting it in kettles, and poured the tallow into storage *botas* of green hide. Trade ships from Boston plied coastal waters, exchanging shoes, furniture, and other goods for California hides and tallow. Ships frequently entered San Francisco Bay. One account describes a twelve year-old girl waiting anxiously on the shores of Point Pinole in 1840, while her father rowed out to a trading vessel to inspect its goods.

## Ranching Fades

Several factors led to the decline of the ranchos and a resurgence of farming. American immigrants arrived in small numbers during the 1840s, but suddenly “the word rushed in” upon the discovery of gold in 1848. The private land grants of up to eleven square leagues (76 square miles) made little sense to the land-hungry settlers, and many took

color because of the dirt that settles on it.” With their cattle dead or dying, squatters occupying their land, and no clear legal title in sight, many *rancheros* sold land at ten cents an acre. Vast tracts passed into the hands of greedy land speculators, creating patterns of large-scale land ownership that persist today.

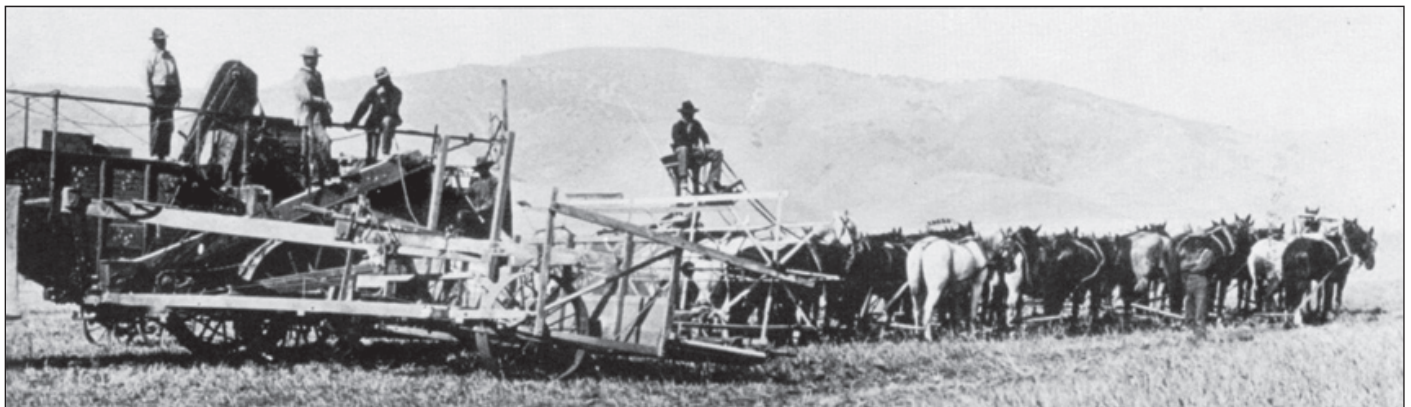
## From Grass to Grain

As ranching faded from the scene, many Californians were slow to recognize other agricultural possibilities. The *Overland Monthly* explained in 1868: “In the wild search for gold, men forgot they must eat. . . . And so, living upon the riches soil . . . we bought our bread from abroad and curse the barrenness of California. . . . For who that had lived where rain fell every month of the year, could believe in the fertility of a [state] whose parched hills bore mute witness to a six month’s drought, where agriculture has been abandoned, and nothing remained to tell of its former richness?”

Early crop yields were enormous. Records show potatoes up to four pounds each, oat stalks ten feet tall, and wheat harvests of over 75 bushels to the acre. All of this was accomplished in an era when crops were not rotated, irrigated or fertilized.

Washington Township (which includes present-day Fremont) was one of the earliest settled portions of newly-created Alameda County. Local farmer John Horner introduced the first combine-harvester to California in 1854. Shipped from Michigan ‘round the Horn, it cut 600 acres its first year, at a rate of fifteen acres a day—a good deal faster than stoop-work with a sickle, which yielded only a quarter-acre per day. Horner soon incurred the wrath of harvest laborers who were being put out of work. Undeterred, he went on to manufacture other innovative farm machines.

With its foundations firmly established, California agriculture entered new phases.



Combine in California grainfield, circa 1903.

Courtesy Bancroft Library

“shotgun” title to the land. The Federal Board of Land Commissioners offered little help to beleaguered *rancheros*; land conflicts took an average of seventeen years to resolve!

Weather dealt the final blow to ranching. The winter of 1861-62 was one of the worst on record. January rainfall in San Francisco topped twenty-four inches. Floods turned the Central Valley into a lake some 250 miles long and up to 60 miles wide. Over 200,000 head of cattle starved or drowned.

As if that were not enough, two years of drought followed. Hundreds of thousands of cattle perished from dehydration and suffocation from dust. One traveler wrote: “We have seen dead cattle by the hundreds. . . . Dust fills the air—often we cannot see fifty yards in any direction . . . we cook our dinner and cannot tell its

Agriculture was not left idle for long. Two key conditions allowed the East Bay to lead the rest of the state in its revival. First, bay and river waterways provided immediate access to the San Francisco market. Second, settlers considered the mild coastal summers more favorable to farming than those of the dry interior. In 1853 the *San Francisco Herald* proclaimed: “The fields of wheat and barley in Alameda County look exceedingly fine. The best cultivated portion of the state . . . lies between Mission San Jose and Union City. . . .”

As California’s population soared, and hordes of hungry miners swarmed the bay region, pioneer farmers found ready markets for their crops. Many of the most successful had themselves been gold seekers only a year or two before. For them, California’s gold lay in her valleys, not in the hills.

In these fertile valley soils stalks of wild mustard reached high over a rider’s head.

By 1880, its bonanza wheat ranches had become the most mechanized farms in the world. Advances in irrigation, transportation, and marketing, combined with a ready supply of harvest labor, led to the development of specialty crop agriculture, and eventually to the emergence of an agribusiness empire.

Today’s farms are quite different from those of yesterday, yet they remain inextricably linked with the past. Many East Bay Regional Parks contain evidence of our farming and ranching past, protecting and interpreting this important cultural heritage.



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