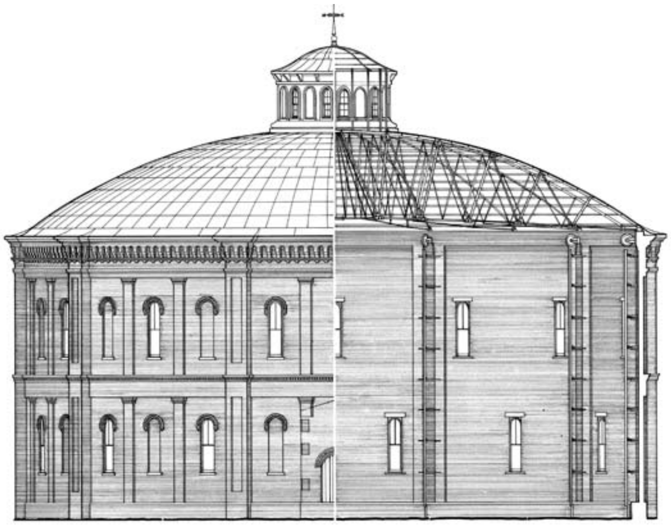

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Tour 4 – Cannery Life

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The focus of this walking tour is the fruit and vegetable packing and canning industries in the Santa Clara Valley, and the people who worked in the canneries. It is an "on the ground" tour inspired by the Cannery Life web site: http://www.historysanjose.org/cannerylife/index.html.
The website was developed by History San José and sponsored by KB Home, developers of Monte Vista, located at the site of Del Monte Plant #3, the last cannery to close in San José, as mitigation for the development. Our last stop will be at Monte Vista.

We're standing in front of what was the District Office for Calpak, the California Packing Company, better known by its signature brand, and eventual corporate name, Del Monte. The staff in this office administered all the plants in the Santa Clara Valley, including the purchase of the fruits and vegetables that were the input to the canneries. Although by the time this building was in operation, most of these purchases were part of long term supply contracts, still the amount of paper work in the days before computers, or even punch cards is interesting to consider. "When high tech was carbon paper." Consider, for instance, the large number of workers who had to be paid.

This is now (or was until recently - there was a sign up about a month ago that the office had closed until further notice) the sales office for the Centex Homes Fifty One project, a condominium complex being developed in Del Monte Plant 51, a former dried fruit processing plant constructed in 1913-4. Much of the external structure is being retained. We'll talk more about that soon.

Fruit canning and drying in the Santa Clara Valley started in the 1870's. Bumper harvests in the late 1860's saturated the modest local market, causing significant economic disruption among the orchardists and farmers. The completion of the transcontinental railroad in 1869 created the possibility of reaching nationwide markets if techniques and technology for the economical processing of fruit and vegetables that would allow them to be shipped long distances could be developed.

Direct shipment of slightly nearly ripe prize fruit was the simplest technique, but it was limited by the ripening time. Fruit was wrapped in specialty paper to avoid bruising. It was packed in crates and shipped as soon as possible. Specialty paper was one of the products of the Lick Mill in Santa Clara during this period.

Fruit drying was also relatively simple. In the beginning, freshly picked fruit was simply left to dry on racks in the orchards. Sulfur dioxide from burning sulfur was frequently used to preserve the fruit before drying. Some varieties, notably apricots, were split and pitted before drying. (Apricots were good candidates for drying because they have a very short shelf life and too much would spoil before canning. What could be canned and/or converted to nectar was used in that way – the projected excess was dried.) Others fruits, like prune plums, were simply dried whole from fully ripened fruit that contains a sugar concentration of at least 15%. Before drying, the prune is usually submerged briefly into an alkali solution that prevents future fermentation by preventing microbes from growing on the surface of the skin. Raisins are sun dried for three weeks in the vineyard between the vines on paper trays, which are often treated with chemicals to prevent rotting. What's the difference between golden and dark raisins? Golden raisins are treated with sulfur dioxide to retain their color – both kinds start out as Thompson seedless grapes, which are green. After drying, the fruit was taken to packing sheds for cleaning and sorting before packaging and shipment.

Canning was a much more complex process that required considerable capital investment. Although the process steps are similar, industrial canning is vastly different from home canning.

Dr. James Madison Dawson, his wife Eloise Jones Dawson, and their son Thomas Dawson are credited with the first successful commercial canning operation in the Santa Clara Valley. Their first pack in 1871 was 300 cases of peaches, apricots, pears and plums, processed in a woodshed in the Dawson's backyard. (It's on The Alameda at Taylor St., about a mile from the District Office. *Point in the direction away from town up The Alameda.* That's where *The Beautiful Way* tour on Sunday starts.) The company was founded in 1872 under the name JM Dawson & Co., and later incorporated as the San Jose Fruit Packing Company. As a physician, Dr. Dawson was particularly concerned with the safety of canned food and applied his scientific knowledge to cooking and preserving methods. Mrs. Dawson managed the cooking process with scientific input from her husband. Tom Dawson's skills as a tinsmith were applied to developing efficient canning processes. The experiments of this family partnership solved many of the challenges of the early canning industry.

Depending on your source, this happened in 1871 or 1872. It is given as 1872 in The History of Santa Clara County, California[1], written in 1881 and available on Google. The 1871 date is probably more credible for the early experimentation, which produced 300 cases of canned fruit. In 1872, Dr. Dawson joined with W. S. Stevens and Lendrum, Burns & Co. to form J. M. Dawson & Co. They rented at corner lot at Fifth and Julian, northeast of downtown, and built some rough buildings, procured a boiler, and produced about 4000 cases of canned fruit in 1873. (This is about a 10x improvement in 2 years. Moore's Law?) In 1874, they added another partner, Wilson Hays, and "enlarged their works and products". In 1875, the San Jose Fruit Packing Company was formed. By 1881, when the History[1] was written, it was, "Employing over 300 hands, mostly women and girls, during the running season and canning about one million cans a year, which involves an outlay in the county of over eighty thousand dollars annually for help and fruit alone. Under its present able management the enterprise is flourishing and prosperous." This is an extraordinary growth! In these years, all steps along the production line were done by hand, including steaming, peeling, cutting, slicing, sorting, packing in cans, cooking, soldering, labeling and warehousing.

For the first 40 years of the industry, all of the work was done manually. The canneries adopted assembly line procedures in the 1910s where product flows through the process almost continuously. The first continuous process automated sterilizer was developed from 1913 to 1920 by a team led by A.R. Thompson of the Anderson-Barngrover Company of San Jose, California. Anderson-Barngrover was acquired by FMC in 1928.

At about the same time, Sprague-Sells was brought in as well. They were an Illinois manufacturing of vegetable canning equipment.

There was constant innovation to improve efficiency and product quality, particularly in the automation of manual tasks. By the time the last plants closed in 1999, almost all of the production tasks were automated.

Plant 51 was originally constructed in 1914 by the Griffin & Skelley Co. Dried Fruit Packers, one of the predecessor firms that went on to form Calpak in 1916. It was constructed on the site of the Pacific Wine Company. The small building in between the north and south buildings was originally part of this wine company. Plant 51 served as a dried fruit packing plant and warehouse. Plant 3, where the tour will end was a cannery.

It was heavily modified in the 1930s. The building was idled when fruit drying here became unprofitable, and in 2004 Centex Corp. began a project to turn the plant into 265 condominiums. The building was constructed from masonry, so a temporary “exoskeleton” was created to reinforce the structure and allow the creation of new foundations. Construction is now about 70% complete, but the project has been hit by the slump in the housing market, and on 31 Mar 08, Centex sold the property, along with 8,500 lots in 27 developments across11 states to RSF Partners Inc. Reportedly, over $100 million had been spent on the development, but sales had been very disappointing.

This area was a mixed use neighborhood, with Del Monte Plant 51 being one of the larger structures. It is adjacent to the SP tracks and Diridon Station, built in 1935, a National Register building.

We are now in a section where there were auxiliary buildings to Plant 51. These were redeveloped without any mitigation for historical loss, but the developer did put in this park. Recent high density housing near the light rail corridor has been done with less consideration for recreation/play space.

Back to the story -
The early days of the industry were marked by vigorous competition and unstable markets. In particular, every year, hardball games had to be played between the growers and the packing/canning companies, and there was fierce competition among the canners, including allegations of illegal acts (Gasp!) like stealing crops. To bring stability, the growers formed cooperatives, pledging not to sell crops below an agreed upon price.

In San Jose, there was the Famers Union. *Pass around the 1874 picture.*
The Farmers Union Corporation, established in this building in 1874, was once indispensable to San Jose's farming community. It served as an agricultural cooperative bank and, throughout the late 19th and early 20th centuries, was chief general merchandiser to rural Santa Clara County. The hardware store weathered the depression by expanding its scope, selling "everything for the home, garden, and farm." In 1961, with the waning of the agriculture in the valley, Farmers Union President John P. McEnry made the decision to develop the corporation's holdings as the new San Pedro Square.

There is still a Famers Union sign on the west side of the street. Tom McEnry, former mayor of San Jose, was the son of John P.

Many other valley businesses grew out of this cooperative movement. One example -- The Orchard Supply Hardware Company (locally known as “OSH”) was established in 1931 as a supply cooperative for farmers residing in the Santa Clara area. The company remained a farmer's cooperative for the next two decades, then began selling general hardware merchandise during the 1950s. By the late 1970s, after shedding the cooperative vestiges of its past and moving into the retail sale of general hardware goods, Orchard Supply comprised seven stores, all located in this area. W.R. Grace & Co. purchased Orchard Supply from its original owners in 1979. They grew it to a 19-store company by July 1986, when Santa Monica-based Wickes Companies, Inc. acquired the retailer. Sears purchased OSH in the 1990s, but has announced an intention to spin it off. As part of the Sears acquisition, they have added appliances to their stores in order to remain competitive with Lowes and Home Depot. Newcomers and visitors today probably simply assume that the OSH on the corner was founded by the Orchard Family ;-).

Through the late 19th and early 20th Century, there were many improvements on the farm/input side of the business. In 1883, retired inventor John Bean set out to build a better insecticide spray pump. In 1884, he patented his high-pressure continuous action spray pump and sets up shop behind his house. Later he brought in his son-in-law, David Crummey, and Crummey becomes the first president of the Bean Spray Pump Company. Meanwhile, John continued to experiment and in 1901, at the age of 82, John Bean creates the Magic Pump, a vertical pump that yields a higher pressure than any other pump on the market. This was the origin of the FMC Corporation that later operated in the full life cycle of fruit and vegetable production, from the fields through the processing plants.

At the same time as the famers were organizing and mechanizing, canners and packers grew to be large corporations through mergers and acquisitions. These corporations matched the power of the grower cooperatives in setting prices. (This is the standard countervailing power principle at work.) The California Packing Company was created in a complex series of mergers, including the San José Fruit Packing Company, in 1916. Eventually, to ensure a dependable supply of high quality fruit and vegetables, Calpak and the other large canning companies entered into long term contracts with the cooperatives or simply purchased the farms and orchards that supplied them.

Calpak realized the power of brand marketing, and established the Del Monte brand for a full line of high quality products shortly after forming the company. In April 1917, Calpak launched a national advertising campaign for the Del Monte brand.
Calpak’s first fifty years of operations attested to the success of this strategy – Del Monte became a household name and preferred brand. Even when consumers knew they were eating the same peaches, they expressed a preference to buy the can with the Del Monte label over a generic one. In 1967, Calpak changed its name to the Del Monte Corporation, a title it has held through further mergers and acquisitions. Del Monte has

in many ways set the standard for the development of brand identity and brand consciousness.

There were other specialty industries that supported the fruit and vegetable canneries, such as Muirson Label, the subject of another History San José developed web site, Label Legacy, http://www.historysanjose.org/labellegacy/index.html sponsored by Cinnabar Commons, LP an affordable housing project that was developed on the Muirson Label site. This (perhaps with other high tech communities) established the precedent of making a website as all or part of the mitigation for replacing historic buildings. This site not only talks about the building, but it also covers the people and processes for making labels. This is a very important issue that should be discussed in the IA community. Websites have the advantage of being fairly cheap to create, almost universally available and free, and they appeal to “normal” people who stumble on them. They have the disadvantages of not being academically rigorous and they can vanish unless the sponsoring organization is stable – but so many of the other mitigations also are ephemeral. Out prominent local example is “The Great Mall of the Bay Area” located in Milpitas, which was originally a Ford plant. The transportation themed displays put in as mitigation were lost in first remodeling of the mall.

The Muirson Label buildings were designed by renowned local architect William Binder. Existing buildings in San Jose that were designed by Binder include Le Petite Trianon Theatre, which he built as a house of worship for the Christian Assembly in 1923 and the Jose Theatre built in 1904.

Muirson Label’s single story industrial buildings had sawtooth roof that held scores of windows, allowing the design and printing operation of Muirson Label Co. to be performed with natural daylight.

Muirson Label played an important role in San Jose’s agricultural industry, creating the images of the Valley of Heart’s Delight seen worldwide via the colorful labels on fruit crates and cans. These labels and crates are now highly collectible pieces of canning history. Many were designed by Ralph Rambo.

George Muirson, founder and owner of Muirson Label Co., was the patriarch of a family that dominated the San Jose printing industry for generations. George learned the printing trade and became the business manager for the San Jose Morning Times. He operated a printing company, bringing his nephew Theodore McKay Wright into the business. The company was known as Muirson Wright Printing. According to one family member, when Wright went to work one morning he found the presses already turning out still another fruit label. He remarked in disgust: Is that all we're going to print, box labels? Shortly after, the business divided. Muirson Label was formed to print the labels, Wright-Eley Printing handled the more traditional printing assignments.

The Muirson-Wright-McKay clan and its offspring dominated the business for generations. The business continued into recent times with younger family members taking over as older ones retired. Muirson Label was bought out by International Paper in the 1960s, but the business continued under fourth generation Whitney Wright until the plant was finally closed in the 1970s.

Now we’ll walk through a typical Valley neighborhood – for the time – on our way to the cannery.

Here on San Fernando, note the bungalow on the right at 835 W San Fernando. It's easy walking distance to work at CalPak. This type of home is seen throughout the valley – particularly near the downtowns of Sunnyvale, Mountain View and Campbell.

There are a few interesting buildings here from various periods.

Note the old creamery directly adjacent to the blue Victorian. When the Victorian was built, this are was almost certainly unincorporated. The City of San Jose only extended west to the Guadalupe. It's not clear how the creamery building was approved, if anyone considered it at all.

This area is an example of typical city patterns in San José in the cannery era. Small homes housed cannery workers were in close proximity to the plant (and several others in the area). As the city expanded outward during the explosive growth under legendary City Manager A.P. "Dutch" Hamann (city manager 1950-1969), these central city neighborhoods survived, as it was much cheaper to build in the surrounding fields and orchards. They are now starting to enjoy a renaissance, though it can be hard to tell sometimes.

Many of the homes (although not necessarily these) were not absorbed into the city during the expansion. Pockets of unincorporated streets remain in the Buena Vista and Burbank neighborhoods to this day. These are only now being considered for inclusion in the city. You can see this clearly on AAA maps – note the white pockets. The Buena Vista neighborhood will be explored on a Sunday morning tour.

The City has identified a few of these homes as historically significant. The Italianate former E.L. Bradley residence at 145 Sunol was constructed in 1876.

Unless someone objects, the steps by the homes on the east side of the street might be a place for some to sit while worker housing and some associated topics are discussed, including "gender issues". Please remain calm…

These are largely worker houses built over a long period. The cannery provided both stable permanent jobs (mostly to the men) and dependable, reasonably well paid seasonal jobs to both sexes. There were cannery jobs within walking distance or a short walk to public transit on The Alameda and San Carlos Street. The opening of Cahill (now Diridon) Station in 1935 meant that workers could to commute to Peninsula and San Francisco jobs on the train. Even before that, there were options dating from the late 19th Century to ride the San Francisco San Jose Railroad by picking up the streetcar on The Alameda.

An important point is that a lot of worker and manager housing sat side-by-side in the Valley. There were some 'fancy' developments in the area – notably in Shasta-Hanchett, the Rosegarden, and at Naglee Park on the near East Side – but those were mostly occupied by business owners and professionals. The first and second tiers of management were here among the workers. By the way, some of the ‘fancy’ homes will be seen on the “Beautiful Way” tour on Sunday.

The canning industry, by its very nature, required the employment of a flexible workforce which grew and shrank with the fruit and vegetable harvest seasons. When the harvests of spinach, pears, peaches, or whatever came in, they had to be processed immediately to insure high quality. When no vegetables and fruits were ripening – for example from November until mid-March – there was almost nothing to do at the cannery. There were also downtimes in May and June, after the spinach was canned but before peaches were in. During each canning season, the plants operated around the clock, with three shifts of workers per day. Seasonal workers had to maximize their income while the jobs were available, so most made sure to be at work every single day they could. This might mean coming to work sick, staying at work even after an injury, or leaving children unsupervised.

Some of the more progressive – or paternalistic, depending on your bias - processing companies provided additional services to workers and their children. John C. Ainsley in Campbell employed up to 750 people in the peak season, and this cannery provided a nurse to the workers, on-site nursery and kindergarten for their kids and worker housing. Similarly, the Campbell Fruit Growers Union, which became the George E. Hyde Company in 1909, provided day care and men’s and women’s housing.

Some migrant workers picked in the fields in the early part of the season and transitioned to the cannery when the lines started running. In 1937, seasonal workers gained unemployment benefits, giving them a measure of financial stability through the winter months.

> “Sometimes we worked right straight through the whole week. During apricot season we didn’t get any days off because you know it was right there and they didn’t want to waste it.” Plant #3 worker, Nina Flores.

Work in the canning industry throughout the twentieth century was characterized by two major considerations: the gendered division of labor and the seniority system for work assignments and promotions.

The California Packing Corporation, (CalPak), like almost all its contemporaries in industrial production, rigidly defined jobs for men and jobs for women. Men were assigned to do the heavy lifting, including work in the warehouse, inventory, delivering produce to the canning lines, and monitoring the labeling machines. Much of this work was staggered to supply a steady stream of product leaving the cannery year-round, so it was not dependent on the seasons. These job assignments rested on the assumptions that

1. Only men were capable of the physical labor required; and
2. Men needed full-time year-round work to support their families.

Women were assigned to the food preparation tasks on the production line, including peeling, cutting, sorting and can filling. This work was also entirely seasonal. Job assignments rested on the assumptions that

1. Women were especially capable in food preparation because of their experience in the home; and
2. Women were working only to earn “a little extra” and so did not need year-round employment.

In looking through news clippings, it is clear that even after labor was organized, these assumptions continued. One of the union/management settlements contained the rates of pay, and they were not separated by job descriptions, they were classified as “men’s rates” and “women’s rates”.

The production lines were also supervised by women, called “floorladies” or forewomen. This pattern persisted even after most of the food preparation tasks were mechanized. In the last twenty years of its history, Plant #3 did experience a relaxation of these gender boundaries, with more women moving into full-time, year-round work in all areas of the cannery.

In the early days, before child labor restrictions, some of the seasonal food preparation work was also done by children. One anecdote from a woman in her sixties was that her grandfather had worked at Libby McNeil Libby in Sunnyvale after school beginning when he was nine years old.

The separation between women workers, who worked seasonally, and men workers, who worked year-round, was reinforced by the plant’s seniority system. Seniority was intended to reward long-time employees with steady work, promotions and pay increases. Seniority at Del Monte was difficult to figure because so many people worked for only 4-6 months out of the year.

For seasonal workers, seniority meant a job each season, though it did not guarantee a specific job. Seniority often meant getting the day shift instead of evening or swing. Some seasonal workers felt that seniority should decide who got the best spots on the assembly line. But more often, discretion in job placement was left entirely to the floor ladies and supervisors. Full-time, year-round workers had the advantage in seniority. If a year-round worker with seniority was without a job, that worker was entitled to any job on the line, even if it displaced a seasonal worker who had been in the same job for several years. The system also favored year-round workers in pay scales.

> “I would try to work the whole season but then my, my number was very low so I would be bumped, as they say. One lady came up and told my mom that there was a little Portuguese girl on the line and she wanted my job, and that was the way it worked because she had a higher number. In other words she worked there more years than I did.” Plant #3 worker, Angela Jones.

This same division between men and women that came due to “preparation” tasks versus “industrial” tasks was reinforced by the definition of “skilled” work. This division also resulted in some job differences by race and nationality.

As mentioned earlier, women did the food preparation, which was considered unskilled. Before mechanization, they worked at large tables, where men brought them crates of fruit to be peeled, pitted, sliced or cut. Women were paid based on how much was processed at each table, so the table often worked together as a team to process fruit quickly. As early as 1875, canneries were actively recruiting young women to work during the summer months, promoting it as a way to earn extra money and work with their peers.

In addition to the heavy lifting, the skilled work in the canneries was typically done by men. Skilled tinsmiths and machinists developed the canning technology, and built and maintained the machines. Unskilled male workers brought the produce into the cannery, loaded cans, and warehoused the finished products. Both of these jobs were likely to be year round, since warehouse and machine work could be done during the slow times between harvests. In the early 20th century, immigrant men from southern Europe dominated the canneries’ unskilled labor market. American-born men were more likely to hold skilled technical jobs or management positions. Asian-American men were hired for cannery work, but were typically restricted to unskilled warehouse, labeling and non-packing jobs. Some canneries and packing houses even advertised that their product had been packed “by white labor only,” in line with the virulent anti-Asian racism of this period.

Note that some of the features of Del Monte #3 have been preserved, though only enough to give a flavor of the plant. One plant feature that is commonly retained is the water tower, as space on it can be sold to cell phone companies for their antennas.

Looking across the street, you can see Sam’s Downtown Feed. Now it mainly provides pet supplies, but hay, grain and other livestock products are still available. The thing to notice here is how quickly the city broke down to mixed used areas and then to a rural landscape. We are at this point only about a mile west of the hotel, but are right at the edge of the city in the early 1900s.

There was another neighborhood, less than a mile west of here, clustered around the DiFiore Cannery on West San Carlos on a site that is now a strip mall and a used car lot. The Worker Housing Tour on Sunday will be in that area. (There are actually two small neighborhoods: Buena Vista and Burbank that were near DiFiore.)

San Carlos became a major connector in the late 19th Century, linking San Jose to Cupertino. The village of Cupertino sprang up at the crossroads of Saratoga-Sunnyvale Road (now DeAnza Boulevard) and Stevens Creek Road, which is an extension of San Carlos. It was first known as West Side, but by 1898, the post office at the Crossroads needed a new name to distinguish it from another similar town. Cupertino was the name of a local winery, which in turn was given in recognition of the name bestowed on the nearby creek by Pedro Font of the De Anza Expedition in honor of St. Joseph of Cupertino, Italy..

Del Monte #3 operated from 1893 to 1999. The plant site was heavily modified over the years with very little, if anything, of the original 1893 structure remaining when the plant closed. The plant that remained was constructed in 1941. It was a low, reinforced concrete building. As part of the redevelopment process the City required that some of the representative elements of the plant be retained, though they are just a hint of what was there.

In 1893 the San José Fruit Packing Company constructed a state-of-the-art cannery on Sainsevain Street (now Auzerais Avenue) near downtown San Jose. The triangular site was bordered by Los Gatos Creek to the east, a railroad spur to the west and Sainsevain Street to the south. The original cannery consisted of three large two-story timber-frame buildings and many smaller structures. The main warehouse, later called Building “F,” was located on the railroad spur. Building “F” functioned as the packing, shipping and canned fruit warehouse. Building “G” housed the steam bath and cooking room. Building “H” contained the fruit preparation department and empty can storage. Building “C” was for jelly manufacturing. The plant complex also included a receiving room, a can warehouse, and offices. In the late 1890’s it was the largest fruit cannery in the world, shipping 275,000 cases (6.6 million cans) in 1895 alone.

Shortly after being formed, Calpak decided to expand operations at the site, and in 1917 constructed a new warehouse. The site had excellent rail connections, easy access to a large potential workforce, and ample room to grow. Construction continued over the years with a major expansion in 1941, basically covering the entire site with buildings. The surrounding blocks were also developed, mainly as warehouses.

The demands for canned products during WWII were enormous; the Government purchased over 50% of the plant’s output. This created serious labor shortages, so aggressive recruiting efforts were made. At some points soldiers were detailed to the cannery.

In the earliest days of the canning industry, the workers were considered part of agriculture and were not covered by the emerging industrial health and safety laws. Of particular note was the notion of “piece-rate”, workers, esp. the women doing food preparation were paid by weight or volume of the fruit or vegetables they produced. This persisted even after the advent of automation took most worker initiative out of the process. In 1916, the California Industrial Welfare Commission began to regulate the canning industry, including rules on piece-rate, lighting, restrooms and other safety issues. They established a maximum 10 hr day and a 60 hr week, but compliance was voluntary and widely ignored during the canning season.

It was a challenge for the growing union movement to organize the cannery workers. Most of the workforce was seasonal, and valued these fairly well-paid jobs even if the work was hard. The jobs were still classified as agricultural, and did not have the worker protection and collective bargaining rules that industrial jobs had. Cannery jobs were sought after, and often came as a result of family connections. As a worker built up seniority, the jobs became more secure and better. The unions began serious organizing in the 1930s. One of the strategies was to seek recognition of the increasingly industrial character of cannery work, as automation took on more and more tasks. This would allow the work to be subject to the 1935 National Labor Relations Act. This strategy eventually succeeded, and in 1937 Calpak and other companies signed an agreement with the AF of L to represent the workers and begin a series of reforms in the industry.

A big issue for the unions was worker safety. The work always required vigilant attention. Automation increased the hazards, as workers had to keep up with powerful machines that lacked the safeguards we take for granted today. The nature of the processes meant that the floors were often wet. The large plant filled with automated machinery was also very noisy, and the impact of noise on long term ear damage was under appreciated, as it was in many other industries. The workers took these hazards in stride and would often return year after year for the seasonal work.

To succeed economically, the canneries had to be creative. One area of constant attention was the utilization of otherwise wasted aspects of the processing. Del Monte #3 included a warehouse for fruit pits that were made into charcoal and fertilizer. The juice from the processing of fruit was captured and packed as fruit juice or nectar.

The origins of the most visible aspects of these efforts, fruit cocktail, are cloudy, with several canneries claiming credit for it. Whatever the actual origin, Del Monte #3 made a lot of fruit cocktail from fruit that would have otherwise been rejected for damage. The king of fruit cocktail manufacturing, however, was Libby McNeil Libby in Sunnyvale. The only remnant of that plant, which at one time was the largest fruit cannery in the world, is the giant water tower that shows off their Fruit Cocktail label. Let’s all sing --- “If it says Libby-Libby -Libby on the label-label-label, you will like it-like it,-like it on your table-table-table…”

The canneries were mostly served by rail. One can find traces of the rail network throughout the various cannery areas of the Valley. Not until the 1950s when the road network began to improve dramatically did truck traffic begin to replace rail.

Raw fruit (and vegetables) arrived by truck or rail to the canneries. Although the details differ for different crops, the basics are that the fruit is put through a steam bath to remove the skin, pitted and cut, placed into cans which are then filled with juice or sugar syrup, sealed and sterilized, and then labeled and boxed. The process for vegetables was similar, but they were peeled and cut, then cooked by steam heat before canning. The vegetables arrived for canning hot, and could cause injuries to the workers. Reportedly, spinach was the worst to handle. Each of these steps required experimentation and refinement to produce high quality product economically. Companies like FMC developed sophisticated machinery to improve the efficiency of processing.

The rail line here served other packers and canneries. Just about a quarter mile from here at Race was the Contadina plant when it opened in 1918. It went through several other owners before it closed in the early 1980's. Further on is the town of Campbell, once known as the Orchard City. There were three major plants there: Ainsley, Hyde and Sunsweet.

The large brick warehouse at the southwest corner of Sunol and Auzerais is identified as a Standard Oil "station" on the City historic buildings inventory. It dates from the early 20th century, judging by its masonry structure, although its exact dates are unknown (it's on the 1915 Sanborn's but not the 1891 issue). The 1915 Sanborn map shows the complex along the railroad track as being all Standard Oil.

Several factors contributed to the decline in the canning industry in the Valley. The first was the changing tastes of consumers, and the increasing ability to ship fresh produce to markets throughout the US. The second was the declining amount of local agriculture due to the growth of area cities. Produce needed to come from the Central Valley, increasing costs and reducing quality. The growth of high paying, steady jobs in the electronics industry made it harder to attract and retain cannery workers. Finally, the City of San José proposed significantly increasing the cost of sewage treatment for the canneries, or they would have to install some of their own treatment facilities. Canneries used more water and made it dirtier than the electronics and semiconductor companies. As a result, canneries all over the Valley began closing as early as the 1960s, with the last major cannery, Del Monte #3, closing in 1999.

In the early 1960s, one cannery became quite creative in handling the decline. It formed US Aqua Company and canned water that they claimed was impervious to nuclear fallout and they marketed it for military stockpiles. This was over on East Julian, somewhere near where the canning industry had its first factory.

One topic left to be covered is the cans --

The cans themselves were often made in factories near the canneries, like the American Can plant near the Barron-Gray cannery just south of downtown San José, or the Continental Can plant near the canneries of the Japantown area. Empty cans are inefficient to ship and reasonably fragile until the tops are put on, so it was generally the case that they were made locally.

After the French invented canning using glass in the early 19th Century, the British responded directly to this development. If Napoleon's troops were able to extend their marches by carrying preserved nutritious supplies, His Majesty's forces must be prepared to do likewise. Peter Durand was awarded a patent for his idea of preserving food in "vessels of glass, pottery, tin, or other metals or fit materials." but he elected to try tin plate instead of glass. Like glass, tin could be sealed airtight. But, tin was not breakable and was much easier to handle. Durand himself did no canning, but two other Englishmen, Bryan Donkin and John Hall, used Durand's patent. After experimenting for more than a year, they set up a commercial canning factory and by 1813 were sending tins of food to British army and navy authorities for trial.

For almost 100 years, tin cans were made by hand. It was a laborious process, requiring considerable skill and muscle. Artisans cut the rectangular body and round ends from a tin sheet, bent the body around a cylindrical mold, and then soldered the seams along the sides and ends. A small circular hole was left in one end through which the food was forced. Finally, the artisans closed the hole with a soldered metal cap.

As the industrial revolution took hold in the United States, the demand for cans increased, and machines began to replace the artisans' handiwork. A good artisan could make only 10 cans a day. Mechanical end seaming and other improvements increased that number to as many as 60. In 1846, Henry Evans invented a die device for making a can in a single operation. His invention, combined with a machine that machine stamped the cans, and another for a pendulum press, enabled the production of cans to be increased from 6 to 60 per hour.

In 1900, the "sanitary" can was developed in Europe. Its ends were attached using what is called a double seam. This meant that the edges of the can walls (or body) and end were folded together, then folded again to form a strong seal. The double seam permitted greatly increased manufacturing speeds and removed the soot of soldering from can making and packaging plants.

True production progress in can making began in the early 1920s, when American engineers perfected the body making process. New methods soon increased production of cans to as many as 250 a minute.

The eastern edge of Del Monte #3 is Los Gatos Creek, which flows from the Santa Cruz mountains to join up with the Guadalupe River near the HP Pavilion. Water is a central issue in all of the arid west, and San José is no exception. The area receives an average of 14 in of rain per year, almost all of it falling in the winter. The long, mild summers are ideal for growing things, if only there were enough water.

The explosive growth of the fruit drying and canning industries in the late 19th century massively increased the demand for irrigation. Initially, the Valley was blessed with artesian wells. An impermeable layer of clay across the Valley meant that the natural level of the aquifer was above ground level. Just drill though it, and a fountain of water was available. However, as the aquifer supplied more water to the orchards and farms, the level dropped rapidly. The artesian wells stopped flowing, so the water had to be pumped. USGS estimates that the water table in the Northern part of the Valley dropped by some 60 feet from 1919 to 1928. Removal of the water allowed the collapse of the alluvial soil in the aquifer, leading to the subsidence of the land. Some parts of the Valley dropped by as much as 13 feet. Efforts to halt the subsidence began in the 1930s with the construction of local dams, reservoirs and groundwater recharge basins, “percolation ponds” that can be seen along many streams. Because of these dams and the ground water recharge ponds, Los Gatos Creek is now a year round stream, with an active riperarian ecosystem in the middle of a bustling urban area. These only slowed the subsidence, but didn’t stop it. Later, water from the Sacramento – San Joaquin delta was brought into the Valley through a tunnel in the southern part of the county, both reducing the demand on groundwater, and allowing additional recharge of the aquifer. By 1969, subsidence had been stopped. One small unintended consequence has been the occasional artesian well coming back to life under freeways, necessitating costly and inconvenient repairs.

There are bike / hiking paths along about 12 miles of the Creek, that are heavily used for recreation. There are plans in the works to connect the Los Gatos Creek paths to the Guadalupe River Park trail system, but with the current budget crisis, this may be a long time coming.