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Living Her Dream: The Aviation Career of Ardette Cadwallader Mottern

By Richard Mottern and Walt Bethel

When Ardette Cadwallader was eight or nine years old she took her first airplane ride with a barnstorming pilot. She remembered it as a central moment in her life: she wanted to fly. But dancing was her first career choice, for which she dropped out of high school and relocated to St. Louis. A tendon injury sidelined her, but when she saw Lindbergh's airplane in its namesake city in 1927, it rekindled her interest in aviation.

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The Branding Iron

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The Branding Iron is always seeking articles of 2,500 words or less dealing with every phase of the history of the Old West and California. Contributions from both members and friends are welcome.

Editor's Corner...

We steal a march on our forthcoming *Brand Book* this time with Richard Mottern and Walter Bethel's article on 1930s aviatrix Ardette Cadwallader Mottern. Our 23rd edition of the *Brand Book* will focus on the story of pre-1940 aviation in Los Angeles County. Former Sheriff Eric Nelson is at the controls for this literary flight.

Limericks continue to fly around us like so many blunt objects — and not just at our recent Fandango (see page 11). This one arrived in our in-box a few weeks ago:

There once was an old man named Warren Whose limericks were frequently borin' When he traveled about People set up a shout That he'd be far better off whorin'.

Usually one has to attend a Clampout to encounter that level of refinement.

We learned quite a few things in getting out our first issue of *The Branding Iron* this spring, and hope to go on learning as we go along. It is an adventure.

-Phil Brigandi ockid@netzero.com

Living Her Dream . . .

(Continued from Page 1)

She was in tune with the times. Lindbergh's flight that year, and his subsequent nationwide tour, helped promote public air-mindedness. Federal air mail contracts, authorized by the Kelly Act of 1925, had made scheduled air transport commercially viable. Aviation infrastructure education and research, instrument flying, weather forecasting, and ground-air communication got help from the Daniel Guggenheim Fund for the Promotion of Aeronautics, which also sponsored Lindbergh's tour. The Air Commerce Act of 1926 empowered the federal government to erect strings of beacons to aid night flying; by 1929, 881 of them lighted twenty-seven different air routes nationwide.

Ardette began a systematic course of flying lessons in 1931. By then the Great Depression was devastating the economy, but Ardette found enough money to pay for a series of brief training flights of twenty to thirty-five minutes each. She soloed in July, after a total of only seven and a half hours of instruction, and earned her pilot's license in September.

Ardette would later tell people that when Amelia Earhart saw a newspaper article about her solo, she recommended her for membership in the prestigious Chicago Girls Flying Club, for which Ardette soon became vice president and social secretary. She also joined a national flying organization, the 99 Club. In November, 1931, she was sufficiently skilled to participate in formation flying for a charity air show on the Chicago Lake Front. Ardette maintained her membership in the Chicago club even after moving to California, and flew back to Chicago at least once for a club event.

Ardette was one of about 500 women who had pilot's licenses in the 1930s, roughly one thirtieth of American aviators. Aviatrix Amelia Earhart probably had the highest recognition among the general public, and her quiet, self-confident poise enhanced the image of women in aviation. Ardette recalled meeting her "a couple of times," a "nice,

down-to-earth person." In 1932 Earhart became the first woman, and the second person, to fly the Atlantic solo, and the first woman to fly coast to coast nonstop. But many other women aviators achieved at least as much, if not more. In an age when racial exclusion was a social norm, the Chicago Girls Flying Club notably inducted Willa Brown, who became the first black aviatrix to earn a commercial license and a mechanic's license and head an aviation school. Ardette was in good company.

Ardette's mother, Eva Cadwallader, initially disapproved of Ardette's flying, but on September 27, 1931, she became Ardette's first passenger, an event Ardette joyously recorded in her flight log in her always flawless handwriting. Ardette remembered that her mother had a great time.

In February, 1932, Ardette left Chicago to fly to California with the hope of doing stunt flying for movies. On the trip out she made a forced landing near El Paso, a not unusual event in those days, and finished her trip to Los Angeles by rail. Though she wasn't able to get aviation work in motion pictures, she had fun working as an extra in Joan Crawford's 1932 film "Rain," at the isthmus on Catalina Island. In her log book she variously records practicing "stunts, spins, stalls, spirals, and wingovers," perhaps in hope of movie work, or perhaps for the sheer joy of it.

Ardette flew from a variety of Los Angeles area airfields. In the early 1930s the Los Angeles basin was still largely undeveloped, and inexpensive tracts of open land easily accommodated facilities for the light aircraft of the day. Many runways were less than 2,000 feet long, and because airplanes typically had tail skids that acted as the only brakes, runways were usually unpaved. Most of these airports had only one or two hangars, a small wood-framed building that served as a general office, and a windsock or a "T," the last being an airplane-shaped piece of wood visible from the air that was sometimes pivoted to indicate wind direction. A 1929 survey mapped about four dozen small fields, and there were still eighteen recorded in a 1940 survey.

Ardette flew from such nearly forgotten fields as Dycer and Burdette, but she usually flew from the new major private-sector air terminals at Glendale, Alhambra, and Burbank. Grand Central, in Glendale, opened in 1929 and was used by Ford trimotors lettered for TAT and Maddux, companies that were folded into TWA in 1930 along with much of Western Air Express. TWA and, after 1934, American, used Grand Central and the first DC-3 flights originated there. Western Air Express had relocated from Vail Field, in Montebello, to their expensive new Alhambra Airport in 1930, but a short runway and hazardous power lines limited its usefulness, and no airlines used it after 1934. United, in Burbank, also opened in 1930. Boeing's vertically integrated United Aircraft and Transport conglomerate built it for subsidiary United Airlines. By 1934, when the Black-McKellar Act broke up the big aviation holding companies, the airport was renamed Union, and the remnant of Western Air Express had relocated there. Better sited than Alhambra and Grand Central, it had room for expansion and continues as an important air terminal today. Ardette also logged flights from Mines Field, which was a popular name for Los Angeles Municipal Airport. It became



Ardette and her mother, Eva Cadwallader. (Courtesy the Richard Mottern collection)

today's LAX, but no scheduled airlines flew from there until December 9, 1946.

Ardette recalled that in those days flying was informal. She didn't even have to file a flight plan; just rent a plane and fly. Most of her flights were local, but in 1934 she flew back solo to Chicago. Her trip east was made in a series of brief flights of a little over 200 miles each, which may have been due to her plane's limited fuel capacity. Her log records her hitching a ride into town to get gas after a forced landing at Needles. The trip took about three days. In Chicago she overflew the World's Fair and exchanged waves with a fellow aviatrix who was making an endurance flight.

In July, 1934, Ardette flew to Fort Wayne, Indiana, near the Ohio state line, and she flew there again in September. Then she headed east for the Cleveland Air Races, solo, taking off at 10:30 at night. At 1:45 a.m. her flight was cut short just across the Indiana-Ohio border at Mark Center, Ohio, where her log records another "forced landing — out of gas — ... miserable weather, low ceiling, etc." She made a few more flights from Fort Wayne, but her log is silent about her trip back to California, which she presumably accomplished by other means. She was flying from United Airport by the end of September.

After October, 1936, Ardette's log records mostly local flights based at Grand Central Airport, usually flying Aeroncas, for which her employer, Joe Plosser, was the California distributor. Plosser, a former airline pilot, had operated the Grand Central Flying School since September, 1932. It specialized in teaching instrument flying, and its pupils included Howard Hughes, Jimmy Doolittle (who had himself pioneered the skill), and Wallace Beery. Ardette recalled chatting with Katharine Hepburn in the office while she waited for Hughes. Ardette's job may have included flying as well as secretarial work. In 1936 Plosser had a contract with Fox Studios to bring exposed film back from a movie location in Death Valley, and Ardette's log records one flight there and back. In 1937 Plosser became manager of Pomona and Oxnard airports and operated satellite flight



Ardette at Joe Plosser's Flying School. (Courtesy the Richard Mottern collection)

schools there. Ardette's log records a flight to Oxnard with Plosser in June, in an Aeronca as usual.

But Ardette found Plosser's management style overbearing, and she finally quit her job over it. Thereafter she kept her license current and occasionally flew as copilot with her aviator husband, Jerry, who first appeared in her log book in 1934. During the War he served as a flight instructor at Thunderbird Field, near Phoenix, and after the war flew briefly for the Civil Aeronautics Administration (CAA).

During the War Ardette considered joining Jacqueline Cochran's Women Airforce Service Pilots ("WASPs"). The WASPs flew all types of military aircraft, testing and delivering warplanes in this country and overseas, transporting military personnel, and towing targets. The WASPs were civil service employees, but they trained to the same standards as air cadets, were governed by military law, and wore uniforms. Over a thousand women completed the training program, and thirty-eight of them died in the line of duty. But Ardette was by then married with a son, and she felt that motherhood

ruled out so risky an occupation.

Ardette worked until retirement as a secretary in Burbank, living under the take-off path from Lockheed Air Terminal, where she had flown when it was called United. While she had never accomplished any aviation firsts, she was spunky and determined enough to have lived the dream of flying, for a while, that had brought her to California. She always remembered it as an adventure, and a lot of fun.



The Chemistry of Mining

by Gordon Morris Bakken

The mining west is changing and Montana is a prefect example of that change. Kim Murphy's "Cyanide's Bitter End in Mining for Gold" article in the November 17, 1998 Los Angeles Times announced to the West that times had changed. She focused on the town of Zortman that had to "turn to a new municipal water source after the old one was polluted with 50,000 gallons of cyanide." The Zortman tale was not Montana's only bout with cyanide and in 1998 "Montana voters struck back." A ballot initiative banning new cyanide heap-leaching mining in the state won voter approval. The New York Times in a November 9, 1998 story entitled "Voters and the Environment" spread the news east. The Sacramento Bee's "Backlash in Montana" stories of November 24, 1998 observed that this radical voter sentiment as a "message to Congress" to do something about mining pollution in America. Yet as Kim Murphy observed cyanide head-leach mining was "a century-old technology." Mining had not changed that much except in its special scope, yet history did stake out markers that went largely unnoticed until the environmental movement of the 1970s focused on the downstream costs of mining chemistry.

Extracting gold, silver, and lead from ore involved a great deal of chemistry. Cyanide and mercury could be used to pull gold from crushed ore. Complex ore processing could yield a concentrate suitable for smelting. Silver and lead processes similarly involved chemistry and smelting. Each process had its advantages and its dangers. Cyanide and mercury were toxic. Lead poisoning was a by-product of lead mining and smelting.

Cyanide process was old in principle and known in the United States by the early nineteenth century. The gold locked in a rock matrix is crushed and subjected to a cyanide solution producing a gold cyanide ionic complex. The complex reacts with zinc producing a gold solid and a zinc cyanide complex. There was the obvious danger of

working with a toxic material, but in the nineteenth century working with a coating of oil or coal oil" was "an effective protection for skin." If inhaled the recommended antidote was chlorine gas, ammonia or ether. Both cyanide and the cure could be deadly. Yet cyanide caught on as a process for gold bearing ore in the 1890s after the development of a process of treatment of ore crushed to a powder in 1885. Miners around Bodie, California erected cyanide-leaching plants about 1890 that "made it possible to leach the tailings profitably and property owners down the creek" built such plants. In 1897 Robert Chester Turner described how those plants got rid of waste: "Here in Bodie all solutions (cyanide, etc.) are emptied into creek which flows through town and cattle, dogs and Indians drink the water 300 yards below plants without injury."

"One of the first mills to successfully use the cyanide process on an operations scale" was located in Brigham, Utah. Otis E, Young, Jr. observed that "cyanidation set off a gold rush" about 1890, "but this boom attracted little attention because it was devoid of what the public considers glamour. There was no prospecting except by attorneys among the dusty patents of defunct mining companies." Further, cyanide was not a foolproof process. As Robert L. Spude observed for the Bradshaw Mines of Arizona, the installation of a cyanide mill was ineffective because zinc and copper in the ore "fouled the cyanide solution." What was needed was more chemistry.

In Grass Valley, California a new cyanide plant created a stir, particularly for William Sampson, the mine's chemist and assayer. On September 6, 1903 he wrote excitedly to Edna Dahl Sampson in San Francisco telling her that "Mr. Foote is going to put in a cynide plant out at the mill." What that meant to him was "lots more work." Meanwhile, he went about the business of extracting gold. In October 1903 he found a "very rich speci-



Iron Rod Cyanide Mill, Iron Rod, Montana (Courtesy the Pioneer Museum, Bozeman, MT)

men at the Central shaft...to rich to send to the mill so I pounded them with a mortar and pestle." Some of the specimens "were almost sold gold." He pounded them "as fine as possible, then put the broken pieces in the furnace to roast off the sulphates." His furnace was a miniature smelter for this purpose and "when the sulphates is roasted off, I take the rock, while it is red hot, and throw it in cold water: By doing that the rock crumbles: after that we screen and pan it." Sampson also used mercury to extract gold. In 1904 he reported that "we didn't have very good luck with our oil burners the other day, one of them kept getting choked, and we took the gold out of the retort before all the mercury was driven off." Recognizing the health hazard, "we tied wet towels over our mouths and didn't get any silver in our system." Temperature control in processing also was a problem. On one occasion, "we got too hot a fire and melted the bottom out of the retort and all the gold went into the fire." In April 1904 the cyanide plant was up and running "at the North Star" and it

was "something new in the cyanide process, and if it is successful it well be a big thing." The process was good for profits, but hard on livestock. On April 21, 1904 Sampson supposed that "the stock that got poisoned must have taken a drink from the tail race. Cyanide is one of the deadliest poisons." The toxicity of cyanide was not a mystery, but again even the scientifically trained had little regard for the disposal of toxic substances.

Cyaniding continued to be popular and profitable, but more environmental questions arose over time. In 1897 Robert Chester Turner of Bodie worried more about public relations and liability than pollution: "Nevertheless, while there is no danger of contaminating [the] lake, yet there is danger of an outcry & we must make every effort to have a guarantee clause, covering the point, included in contract [to work the Stonewall tailings and dump with cyanide]." In 1933 L.W. Shotwell, superintendent of the Fort Belknap Indian Agency at Harlem, Montana wrote to G.W. Worthington, manager of the

Little Ben Mining Company regarding plans for a cyanide milling operation:

The Indians of this reservation expressed concern over the possible damage that might occur through the discharge of cyanide solution into the steams or the washing of tailings on the reservation.

Shotwell sought an alternative asking whether "it is possible for you without a great deal of expense, to dump your tailing and discharge solution into another gulch which leads south and away from the reservation." Worthington sought legal advice and got it: "if the cyanide process results in damage, then an injunction may issue or damages may be recovered." He responded by requesting a meeting with the tribal council so that he could explain his now smaller project with "retaining dams." The fact of legal liability for cyanide pollution also caused mine owners to increasingly insert no pollution clauses in mine lease agreements. For example, the lease of the Hale and Last Chance placer claims in 1922 in Montana stated that "said water shall be returned to said channel free from all contamination by tailing or anything that might be used in or about said mill in the use of said water" and more specifically, "free from all cyanide and all other poisons, and said party of the second part is hereby forbidden to use poisons of any kind in the use of said water." Lawyers hoped to use this language to insulate their clients from pollution claims downstream. Law and business practice in toxics sometimes merged.

Mercury was another commonly used chemistry kit to extract gold. William Z. Walker noted in his diary on November 7, 1849 that he "cleared off fine worked with a Quicksilver machine took out 1/2 pound of gold." Quicksilver was readily available in California from the New Almaden Mine and the gold rush pushed it into increased production to meet the demand. As late as 1970s mercury was still mined in California, but its heritage was "the Napa-Sonoma-Lake County region has hundred of small, idle, and abandoned mercury deposits."

Silver and lead deposits held the potential for lead poisoning for those that mined it, but for the early smeltermen, lead poisoning was a greater certainty. A study of patients at St. Mark's Hospital by Dr. Ralph T. Richards at the Salt Lake Clinic revealed that 47% of patients admitted, 1872-92, suffered from lead poisoning. Richards found that between 1870 and 1900 twenty-five smelters were built in the Salt Lake City region to process silverlead ores. Four of them persisted and sent hundreds of men to hospitals. The Germania sent 592, the Morgan 134, the Hanauer 394, and the Mingo Furnace Company of Sandy 151 in the nineteenth century. The total number at St. Mark's in the period was 6,394. A.B. Young, Metallurgical Manager, International Smelting and Refining Co. of Salt Lake City wrote to Dr. Richards on May 28, 1946 and described the "cases of lead poisoning at Toole for the years 1914 to 1945. In 1914 one hundred fifty men visited the hospital, in 1915 one hundred twenty-six, and in 1916 one hundred eight. Thereafter the number of cases declined and in 1931 a new plant and equipment reduced the number to no more than five per year. Dr. A.J. Hosmer described the period 1906-28 to Richards in a 1947 let-

In the early years we saw about 100 cases of lead poisoning each year.

In 1917 in conjunctions with the engineering department and the safety first department of the plant we began the installation of fans and ventilation systems in the roasting department and the smelting department of the plant, supplied the men with clean suits daily, installed washrooms and insisted on cleanliness. By 1924 we had cut our lead poisoning cases to 25 a year.

I have seen the suffering of the victims of these industrial poisonings and the debilitating after effects of these illnesses. I have known the men who because of their dependents and no other place to make a living had to go back to work under the threat of further poisoning and it gives me great satisfaction to believe that I helped somewhat to over-

come this hazard.

Dr. Paul S. Richards of Brigham, Utah saw the lead poisoning among "leasers" who would "never leave their working environment." The "compulsory use of the change room" virtually eliminated the problem.

Dr. Steele Baily of the Tintic Mining District saw self-help as well as debilitation from lead poisoning. He told Richards in 1946 that

About 1907-08 the Knight mines came into heavy production with high grade lead carbonate ores and a smelter was built between Mammoth and Silver City to treat these ores and due to poor designing and ventilation there was a high incidence of a very severe type of lead poisoning....

Many of the foremen had chronic wrist drop and would have to rest at times on account of colic. They dosed

themselves with salts and a few drops of croton oil along with potass. iodide and rigged up extension elastic straps on arms and continued to work. Have never seen anything more severe than colic amoung miners for as soon as they became constipated and had pains they quit, sought treatment and stayed away from lead.

Clearly there was a class dynamic going on there because foremen persisted in using poisons and smeltermen found another line of work when poisoned.

Dr. J. H. Peck of Toole, Utah told Richards to beware of statistics in lead poisoning cases. He enclosed a tabulation of "lead cases of the last twenty years" noting "a sudden drop in 1931, which was due to the building of a more modern establishment for the handling of lead bullion." His caveat on statistics was one based in practical medicine.



Looking south from the Iron Rod Cyanide Mill, Iron Rod, Montana. (Courtesy the Pioneer Museum, Bozeman, MT)

Never at any time did the I.S. & R. Co. ever hide any lead cases from their reports, however their Medc Dept. did. The reason was as follows, The personal dept. and the medc dept were never on very good terms. When we would report a man with lead they would assign him to the yard gang and maby the next day send him into the bad-house to work where he would get more exposure than any place on the plant.

The personal man was any one, clerk schoolteacher or what have you and he was also the safety engineer tho he knew nothing about safety. Therefore we had an underground method of reporting the man sick with heart trouble or something that scared them and arranging with the foreman to change him to the machine shop or some other safe place....

Regardless of this protective underground means of treating lead poisoning cases, Dr. Richards noted that the 1941 Utah Industrial Disease Act reduced lead poisoning case at Holy Cross Hospital to one in 1942. It only required seventy years to effectively deal with the problem, again demonstrating the strength of inertia in law.

Mining men allowed poisoning to pass with minimal notice. Edgar M. Smith at the Mammoth Mine in Goldfield, Arizona wrote to George U. Young in Phoenix in 1912 telling him that he was "in a rather bad fix myself. Poisoned my left hand by mine water & it is in bad shape." The problem was a stuck bucket and failed mine water pumps. Smith fixed the problem at the cost of his hand, but unwatered the mineshaft spewing the poisoned water on the surface without comment. Walter S. Schuyler's primary concern on October 14, 1914 was an armed miner:

A prospector came this morning with blood in his eye and a gun in his hand and accused every body of having poisoned his dog with cyanide. He was mollified when he found there had been no cyanide put in his creek.

Simply put, the cyanide discharge from

the Alaska Gold Mine in Pike, California went into another creek. Two years later, Pike had "not more than three or four families." When he viewed the area in 1917, he only saw beauty and enterprise.

Here we dismounted for about 15 minutes and lay down on the hillside. From the ridge we had a wonderful view of the Santa Clara Valley and across the top of Mt. Hamilton and its white observatory. Below us were the hills, like a relief map, in which are the quicksilver mines of Guadaloupe and New Almaden, the dumps and buildings of the first were in plain view. On the other side we could see over the intervening mountains the bay of Santa Cruz.

The leaching of poisons from the dumps into the ground water and watercourses was invisible.

Fuel could shut down mines and create ghost towns. The King of Arizona Mine in the Kofa Mountains in central Yuma County, Arizona Territory used 250-ton cyanide vats to leach its ore, but by August 1911 the ore became too low grade and fuel problems abounded. "Mexican woodchoppers stripped Kofa area of its first growth ironwood." The wood was critical. "The mill and the wells ran on wood-burning steam plants. They depended upon the ironwood the Mexicans cut, and they scoured the country around for many miles." But their efforts were futile. "One of the factors in final closing of the mine, when ore values dropped, was the cost of the wood." Looking at the landscape stripped of trees exterminated for the fuel that drove the failed engine of enterprise, we see another ghost town with its latent toxic waste.

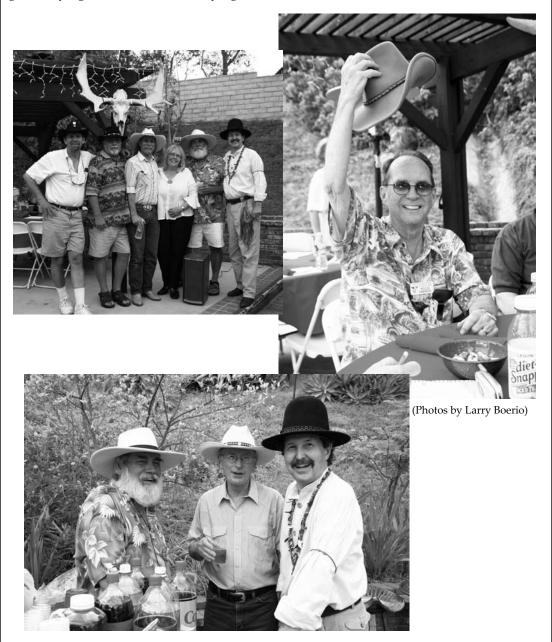
The latent waste problem was noticed after Earth Day. Arizona's Burro Creek was polluted by the Cypress Bagdad Copper Mine that dumped "heavy metals" into the watercourse from which livestock cannot drink and hawks lay eggs that will not hatch. The tailings pile graces the land-

(Continued on Page 18)

Fandango 2008

More than 50 members and guests attended the Los Angeles Corral's annual Fandango, held Saturday, June 21st, at the home of Gary and Vicki Turner in Northridge.

Once again, cowboy poetry and limericks were on the agenda, following a hearty meal. Poems seemed more popular than limericks this year, with a number of Westerners and guests trying their hands at "versifying."



Breaking New Ground

The Early Years of Knott's Berry Farm

by Phil Brigandi

Long before thrill rides and Halloween Haunts; long before Independence Hall and Camp Snoopy; even long before Ghost Town and the Chicken Dinner Restaurant, Knott's Berry Farm was an actual berry farm. The story of the transformation of a roadside fruit stand into an internationally known tourist attraction is unique. In the early years, the little farm grew largely out of necessity - and the boundless energy of Walter Knott.

Walter Knott was born in 1889. His father, Rev. Elgin Knott, was a Methodist minister who owned an orange grove in La Verne. Walter's mother, Margaret Virginia Knott (1866-1954), was from pioneer stock. She had come to California in 1868 in a covered wagon.

But young Walter's life was turned upside down in 1896 when his father died. The orange grove was sold, and the family moved to Pomona.

Even as a boy, Walter Knott knew he wanted to be a farmer. In 1908, after just two years of high school, he set off for the Imperial Valley to find work in the rich farmlands there. A year later, he and a cousin leased 20 acres in the Coachella Valley to grow vegetables. Through the dint of hard work, Walter made the farm pay.

Back in Pomona in 1910, Walter took a job with a local cement contractor. He built a house (which still stands at 1040 West Fourth Street), and in 1911, he married his high school sweatheart, Cordelia Hornaday. Two years later, they welcomed their first child, Virginia.

A Desert Homestead

But Walter was looking for new opportunities. In 1914 he moved to a homestead near Newberry Springs, out on the Mojave Desert. Farming proved almost impossible there, so while Cordelia stayed behind to look after

their growing family – son Russell, born in 1916, and daughter Rachel (Toni) born a year later – Walter was forced to find other work. It took three and a half years of struggle before Walter could prove up his homestead.

Still itching to be a farmer, Walter turned down a chance to return to his old job in Pomona. Instead, he moved to the little town of Shandon, in San Luis Obispo County, where the owners of a big cattle ranch were looking for someone to raise crops to feed the ranch hands. So Walter Knott became a tenant farmer.

Walter went to work and soon was not only feeding all the ranch hands, but had excess crops to sell in town. After three years of hard work, he had \$2,500 in the bank. The children were getting older by then, so Walter started looking for a new opportunity near a bigger town, with better schools.

That's when another cousin, Jim Preston, approached him with a proposition. Why not go into the berry business with him at a place called Buena Park?

Preston & Knott

Preston & Knott leased 20 acres along Grand Avenue, and late in 1920 the Knotts moved to Buena Park. Their youngest daughter, Marion, joined the family there in 1922.

While Jim Preston was the senior partner, it seems clear that it was Walter Knott who was the one on the ground, doing most of the work. In fact, it's unclear if Preston even moved down from home in Glendora.

Looking for ways to bring in more money, around 1923 Walter decided to start selling berries direct to the public from a little roadside stand. Preston & Knott also started a catalog business, selling root stock to other growers.

The Advance Blackberry was Preston & Knott's first big variety. By 1924, they had 19



Knott's Berry Place, circa 1933 (Courtesy the Orange County Archives)

acres in Advance Blackberries, along with three acres each of red raspberries, strawberries, and dewberries, two acres of Loganberries, and two acres of Macatawa blackberries.

But Walter was driven to keep looking for new ideas – and new berries. His next big find was the Youngberry. By 1927, Preston & Knott were pushing them hard, selling both fruit and root stock throughout the Southwest.

Knott's Berry Place

1927 also marked the end of their lease in Buena Park, and Preston & Knott decided to break up their partnership. Preston moved to Norwalk, and started a new berry ranch. But Walter Knott was determined to stay in Buena Park. He approached his landlord with a proposition.

"I offered our landlord fifteen hundred dollars an acre for the ten," Knott later recalled. "'It isn't worth fifteen hundred an acre, and you know it,' he said. I said, 'But I'll give you fifteen hundred an acre anyway.' Then I sprang the catch. 'I can't pay anything down,' I told him, 'because we need our

money to operate on and to put up a pie-and-coffee room and a larger berry market.'

"'Well, with nothing down,' he said, 'it is worth fifteen hundred an acre."

\$1,500 an acre was a lot of money, but prices had been driven up by the oil boom of the 1920s. Even the interest on the land would be more than Preston & Knott had been paying in rent. But Walter was determined to own his own farm.

Ready to expand, during the winter of 1927-28, Walter built a new business building along Grand Avenue, with a home for his family out back. The 80-foot stucco structure included a nursery on the south end, a berry market in the middle, and a "tea room" on the north, with seating for 20. The tea room was where Cordelia could sell sandwiches, fresh baked rolls, and berry pie. The place was designed so their home kitchen opened up into the tea room. In 1928, the new Knott's Berry Place opened for business.

Then came the Depression. Sales dropped off, and land prices plummeted. The land Walter had promised to buy at \$1,500 an acre was now worth \$300 an acre at best. But Walter had made his deal, and he was going to stand by it. He even expanded his operation, renting adjoining farms and buying more

land. And when the Depression was at its worst, he still found the money to pay an advertising agency to keep promoting Knott's Berry Place, and was buying ads in newspapers, magazines, and on the radio.

The Boysenberry

All through the late '20s and early '30s, Walter Knott had been on the lookout for the next big berry, importing new rootstock from around the world to give it a try. Then in 1932, George Darrow of the U.S. Department of Agriculture came to see Walter Knott. Back in the late 1920s, Douglas Coolidge, a Pasadena nurseryman, had told Darrow about a wonderful new berry, developed by a man by the name of Boysen. Now Coolidge was dead, and all that Darrow knew was that Boysen was supposed to living somewhere in Southern California. He figured an experienced berry grower like Walter Knott would know where to find him.

But Walter had never heard of a berry grower named Boysen. He checked the county directory, but the only Boysen he could find was Rudy Boysen, the park superintendent over in Anaheim. So Knott and Darrow went to see him.

Yes, Boysen said, he had developed a new berry variety – it was a cross between a blackberry, a Loganberry, and a red raspberry. They were huge (by berry standards), juicy, and they shipped well. Coolidge had even tried to market them back around 1927 as the "Sensation Berry of the 20th Century." But then Coolidge died and Boysen broke his back in an accident, and that was the end of it. The last he'd seen of the berry, there were a few vines growing on his in-law's orange grove north of town, but the family had long since sold the property.

Would you take us there? Walter asked. Boysen agreed, and amazingly, down in the weeds by an irrigation ditch, "two or three ... rather scraggly" plants survived. There was no fruit on them at that time of year, but Walter still had to give them a try. With the permission of the new owners, he returned to get some cuttings. And in 1933, he had his first small crop of what he called the Boysen-

berry.

In 1934, with just 100 vines, Knott's Berry Place produced 2,200 baskets of Boysenberries. They sold for twice the price of the old Youngberry, and it only took about half as many to fill a carton. By 1935, they had four acres in bearing and were ready to start selling root stock to other growers. The Boysenberry was on its way.

Fried Chicken

Meanwhile, the Depression was dragging on, and money was still tight. To try and lure in more people, Cordelia decided to expand her tea room menu by offering a home cooked fried chicken dinner.

All the cooking was done in her home kitchen, and her "Special Southern Chicken Dinner" was the only entree on the menu. From the start, it came with salad, vegetable, Cherry Rhubarb, drink and desert. The price? 65¢. Not long after, ham was added for anyone who didn't want chicken.

But most everyone seemed to want chicken, and the little tea room began to grow – first to 40 seats, then out into a patio area with 30 more. In 1937, two new rooms were built, and a real kitchen was added, bringing the total seating to 225.

At first, the tea room was only open during the berry season, but in 1937 the Knotts decided to try keeping it open all year round. By 1938, Cordelia had 35 people working for her in the kitchen, while her daughters managed a dining room staff of 55. Two more dining rooms were added that year; now 400 diners could be seated at one time.

A Roadside Attraction

As the crowds grew, and the lines stretched down the street, the Knotts started looking for ways to keep their guests occupied during the long wait.

Early in 1938, a rock garden was added on the west side of the building, with ferns and a waterfall. Next to the rock garden, Russell Knott set up a display of fluorescent minerals he had collected on his many trips to the desert. In another room, a collection of antique music boxes were on display.

In 1939, the restaurant was expanded yet again, including a new wing on the west side of the building. That presented a problem.

"There was a real eye-sore right outside the new room's windows," Walter Knott later recalled, "— an unsightly stand pipe that stood some 10 or 12 feet high. Now we had to irrigate our fields and the stand pipe was a very necessary part of our irrigation system, so there was no way we could eliminate it. We just had to figure out a way to make it look more attractive. I spent several days analyzing the problem trying to think of every possible solution. Then I just stopped thinking about it. One morning while I was shaving the answer came to me — we'll make a volcano out of it and put a desert cactus garden all around it!"

Built of 18 tons of volcanic rock, the volcano featured a boiler to create steam, a rum-

bling noise machine, and a little red devil who turned the crank to make it go.

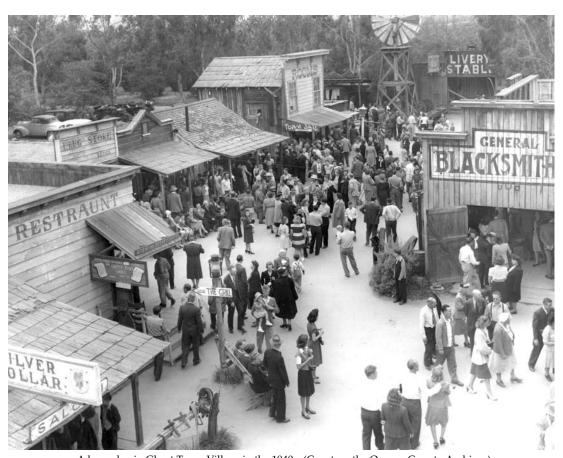
By 1941, the displays had grown to include a 200-year-old grandfather clock, an old millstone, a huge slab of redwood, a hive of honey bees, a Mexican carreta, an old stage coach said to have been robbed by Black Bart, and a replica of one of George Washington's fireplaces at Mount Vernon.

Knott's Berry Place had become a road-side attraction.

Ghost Town Village

But all of those early exhibits would pale next to Walter Knott's next idea.

Walter Knott had always been fascinated with the pioneer days of the Old West. He had grown up on the stories of his grandmother, who had crossed the desert by covered wagon in 1868. Now he wanted to tell



A busy day in Ghost Town Village in the 1940s. (Courtesy the Orange County Archives)

that story to a new generation of Americans.

In 1915, at the Panama-Pacific International Exhibition in San Francisco, Walter and Cordelia had seen a cyclorama – a curved painting, with scenery and props built in front of it and special lighting to give it a realistic, three-dimensional effect. Why not tell the story of the pioneers that same way?

But the idea kept growing. Why not a western building to house the painting? In fact, why not an entire western ghost town, re-created at Knott's Berry Place?

Work on "Ghost Town Village" (as it was originally known) began in 1940. At first, Walter thought it might take six months or a year to build. In fact, he went on building for nearly two decades. He wanted Ghost Town to be both entertaining and educational.

Knott sent men out who "drove through California for months, buying up old barns, buggies, tools, furniture, door and window frames – everything they could find that might fit into Ghost Town."

As Walter explained in 1942, "[W]e are continually seeking materials with which to reconstruct the ghost town here at Knott's Berry Place. By securing a building here, part of another there, an old bar in one place or something else somewhere else we add to the picture we are attempting to portray – a composite picture of the ghost towns of the west as they appeared in '49 and the early '50s. We are not collecting museum pieces nor is it the intention to build a museum. Our thought is to collect a town but as that is impossible we try to do the next best thing – build or reconstruct a ghost town that will be authentic and show life as it was lived in the early days."

By mid-1941, Ghost Town was ready to open to the public. In July, Knott's began a big advertising push, not just in the newspapers, but in their own magazine, the *Ghost Town News*. The magazine was published until 1946, and featured stories of the Old West, some by well-known writers and historians.

But the cyclorama that started it all was slow in coming. An artist had been hired to paint the 50-foot curved canvas, but the work dragged on for months, with no end in sight. Finally, another artist, Paul von Klieben, stepped in to finish the job, adding the fore-

ground and a fluorescent night scene. In just a few short weeks, the 20 x 50 foot painting was complete.

On Washington's Birthday, February 22, 1942, the "Covered Wagon Show" opened to the public for the first time. Like all of Ghost Town, the pre-recorded, three-minute presentation, was free to the public.

The Man Behind it All

While the entire Knott family contributed to the success of Knott's Berry Farm, there seems little doubt that it never would have happened without Walter Knott. He was a man who wasn't afraid of hard work, and was willing to sacrifice to get the job done. He was focused – almost driven – as he pushed forward to reach his goals.

Yet he was also imaginative, inventive, and always willing to try something new. The things that worked, he kept; the things that didn't, he dropped. He understood the value of publicity, the need to understand what your customers wanted, and the importance of setting goals.

During his early years, he learned how to make the most of a bad situation, and how to grow in response to outside challenges and opportunities.

Walter always credited Cordelia for her part as well. "My wife has always been a hard working but cautious and practical woman," he said in later years, "and as such, she acts as a good balance for me. I'm a bit optimistic and impulsive. If a man has a tendency to charge ahead too fast, it does him a whale of a lot of good to have to sell his ideas to his partner and convince her that he can pay for them. I did a better job of outlining and considering my position when I knew I'd have to justify it with my wife. Cordelia and I have always worked as a team; I apply the gas and she applies the brake."

Cordelia Knott died in 1974. Walter Knott died in 1981, just short of his 92nd birthday. Their children and grandchildren continued to run Knott's Berry Farm until it was sold in 1997. It remains one of America's most popular theme parks.

Westerners Meet Ramona



(Photos by Larry Boerio)



Despite a bus breakdown (which fortunately came at the beginning of the trip, rather than halfway there), a group of Westerners, family, and friends had an enjoyable trip to Hemet on April 20, 2008 to witness the annual Ramona Outdoor Play. The trip, organized by past-Sheriff Paul Rippens, included an *al fresco* barbecue lunch at the Ramona Bowl before the show.

2008 marks the 85th Anniversary of the Ramona Outdoor Play, which is the oldest annual outdoor play in the United States. Based on Helen Hunt Jackson's classic 1884 novel, the play dramatizes the treatment of the California Indians during the mid-19th Century.

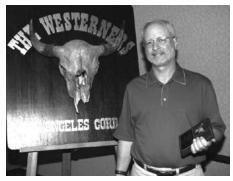
The play is presented in a natural amphitheatre, with a cast of more than 300. Almost all of the actors and backstage personnel are local volunteers. Some of them have been involved with the show for more than half a century.



Monthly Roundup APRIL 2008

(For excerpts from Phil Brigandi's talk on the early years of Knott's Berry Farm, see his article beginning on page 12.)

MAY 2008



Allan Axelrad finds deep implications in James Fenimore Cooper's 1826 novel, *The Last of the Mohicans*. Axelrad, an emeritus professor at Cal State Fullerton and an unabashed Cooper fan, describes the story as "a parable of lost opportunity for peaceful co-existence" between the American Indians and European settlers.

On the other hand, he argues, the 1992 film version turns the story on its head, ignoring much of the Indian side of the story, and ending with the ascendency of the new settlers.

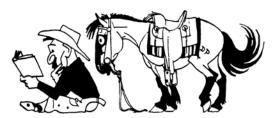
Cooper's novel is much more complex, he explained, a tale of violence and vengance, racism and rape. The title was meant "as a metaphor for the general fate of the American Indians," he says. The phrase has become proverbial, and is heard around the world

Chemistry of Mining . . .

(Continued from Page 10)

scape and it is "discharging waste in Burro Creek during periods of heavy rain." The heritage of mining continued.

In addition to the dawning of environmental awareness, at least in Montana, people recognized that mining pollution hurt the economy. Lorna Thackery's "Cultural Tourism Helps Fuel Recovery of Montana's Economy, Economist," in the February 26, 1999 edition of the Billings Gazette quoted Larry Swanson, an economist at the Center for the Rocky Mountain West, who maintained "one of the fastest growing elements of the region's economy is tourism, and cultural tourism has become a significant factor in the growth." Blighted landscapes and dead fish were not tourist attractions. Mining no longer spelled jobs for all of Montana



Down the Western Book Trail . . .

Historical Atlas of California, by Derek Hayes, University of California Press, 2007, Hardbound, 256 pp. Order from www.ucpress. edu/books

The author used nearly five hundred historical maps and other illustrations, from rough sketches drawn in the field to commercial maps to beautifully rendered works of art. This lavishly illustrated volume is the first to tell the story of California's past from a unique visual perspective. This atlas covers five hundred years of history from the point of European contact, through the Gold Rush and up to the present. The maps are accompanied by a concise, engaging narrative and

by extended captions that tell the stories and personalities behind the map's creation. This a wonderful reference as well as an adventure through history and presents a fascinating chronicle of how California came to be what it is today. This proves again that history can only be taught effectively with maps.

-Thomas R. Tefft

Land, As Far as the Eye Can See: Portuguese in the Old West, by Donald Warrin and Geoffrey L. Gomes. Spokane: Arthur H. Clark Company, 2001. 352 pp. Maps, illustrations, notes, bibliography, index. Cloth, \$39.50.

This book contributes to the view of the West as a focus of opportunity for people of diverse backgrounds, races, and ethnicity. Although the Portuguese numbered at most only a fraction (California excepted) of the people who settled in the West, they made notable contributions in economic activities. Portuguese place names dot the Western landscape: Portuguese Bend, California; Portuguese Canyon, Oregon; Portuguese Pasture, Wyoming; and many other places. An almost stereotypical "Portuguese Joe" appeared in many Western territories.

Donald Warrin and Geoffrey L. Gomes present a largely anecdotal account of Portuguese in the West (despite the subtitle, the authors carry their history well into the 20th century). This approach is probably the most practical way to deal with the topic, as the small number of Portuguese makes it possible to tell the life stories of individuals who came to Western America to seek their fortune. The authors note that most Portuguese came not from mainland Portugal but from the Atlantic islands, especially the Azores. The islands early produced sugar and had plantation slavery; intermingling of African slaves and white owners ultimately created the "Black Portuguese," descendants of whom experienced racial prejudice on coming to America. For the most part, however, most Western communities viewed Portuguese as somewhat exotic transplants, and over time the Portuguese were admired for their dedication to hard work, frugality, and

support for their adopted country.

Portuguese immigrants became fur trappers, cattlemen, sheepherders, and merchants. A few became influential and successful in their states and territories. Most achieved a modest success for their efforts. Some returned to their places of origin, either to take a wife, pay a visit, or retire. Although most Portuguese lived ordinary lives involving hard work, investment, and personal achievement, a few appear - sometimes unexpectedly - in some famous Western episodes. Manuel Brazil was instrumental in the pursuit of Billy the Kid and was involved in the Lincoln County War. John Phillips (born Manuel Felipe Cardoso) rode 2,000 miles from Fort Kearny to Fort Laramie to bring word of the disastrous Fetterman defeat on the Bozeman Trail, a ride that assumed legendary proportions in Western folklore. Less sensationally, Thomas Luz de Freitas had the first play published in Idaho, the printing done by Gem State Rural Printers, better known to Western Readers today as Caxton Printers.

Portuguese prospectors participated in significant numbers in the California Gold Rush and followed the dream to other mineral strikes in the West. No account of Western ranching, sheep raising, and business enterprise would be complete without noting the presence of Portuguese, and the authors successfully make their case. The Arthur H. Clark Company continues in its fine tradition of putting footnotes at the bottom of the page, crisp editing, clear typography, and sturdy binding, points I note if only because so many commercial publishers seem to have abandoned any pretense of maintaining standards in these areas.

- Abraham Hoffman



The River of Doubt: Theodore Roosevelt's Darkest Journey, by Candice Millard. New York: Doubleday, 2005. 417 pp. Maps, Photographs, Notes, Select Bibliography, Index. Cloth, \$26. Order from Random House, Inc., Department of Literary Marketing, 280 Park Avenue (11-3), New York, NY 10017; www.doubleday.com

This fascinating book answers the question of the most extreme thing a former President of the United States could do leaving office. Ex-presidents have played innumerable rounds of golf, written their memoirs, and established foundations. Theodore Roosevelt, only 49 years old when he left the presidency, went on a safari to Africa, then unsuccessfully ran again for president as leader of the Bull Moose party. By 1913 he looked for other ways to expend his seemingly inexhaustible energy. When the opportunity came to head an expedition mapping the unexplored course of the Rio da Duvida, the "River of Doubt," a major tributary of the Amazon River, Roosevelt enthusiastically embraced the proposal. Little did he realize that the experience would define the limit of his energy and demonstrate that his iron will notwithstanding, the trek down the river would ultimately defeat him.

In 1913 most people might have argued that apart from the Northwest Passage, Antarctica, and such regions as Alaska, the Yukon, and Siberia, there wasn't much "frontier" left on the planet. Roosevelt had successfully taken the measure of interior Africa. The Amazon rain forest, however, had been barely scratched in terms of geography, ecology, and biota. In accepting the proposal and with the endorsement (and funding) of the National Geographic Society, Roosevelt and the organizers made their plans. They woefully underestimated just how difficult the journey down the river would be. Candice Millard does far more than trace the hardships Roosevelt and his companions endured. She digresses (always with relevance to the central narrative) on the insects, fish, snakes, Native peoples, diseases, humidity, perils of the frequent rapids, and other background information that the expedition sorely lacked.

Although Roosevelt ostensibly was co-commander of the expedition, the real leader was Candido Rondon, a Brazilian army officer and explorer who had extensive experience in exploring his country's interior. Dedicated and competent, Rondon had a strong personality that only occasion clashed with Roosevelt's. Fortunately, Roosevelt backed off in the face of greater experience, and it is a good thing he did. As Millard reveals, Roosevelt was hopelessly in over his head on this expedition into the unknown. His companions, especially Father John Zahn (who was unceremoniously excluded as too old and incompetent to make the down-river trip) and Anthony Fiala, an unsuccessful Arctic (!) explorer charged with ordering supplies and equipment, proved inept at their tasks. Given the mistakes these men made in organizing the expedition, it is almost miraculous that any of the 21 men who headed down the river on February 27, 1914, emerged alive. In fact, three did not.

Millard brings the personalities to life in her compelling narrative. From Roosevelt and Rondon to the Brazilian camaradas (laborers) who manned the oars and portaged dugouts and supplies, these men become much more than names in a work of history. Each had his strengths and weaknesses. Of special interest is Kermit Roosevelt, the ex-president's second son, who had accompanied his father to Africa and was now charged with the duty of keeping him alive. It turned out to be a close call for Roosevelt. Wracked with fever and a suppurating leg injury, he lost 55 pounds during the six-week trek. After he returned to New York he was never able fully to regain his health, and it may be argued that the expedition shortened his life, since he died just five years later at age sixty. This book is a non-fiction page-turner, and readers should make plenty of time for it, as the book is hard to put down.

-Abraham Hoffman