Founded in 1928 as the San Diego Historical Society, today’s San Diego History Center is one of the largest and oldest historical organizations on the West Coast. It houses vast regionally significant collections of objects, photographs, documents, films, oral histories, historic clothing, paintings, and other works of art. The San Diego History Center operates two major facilities in national historic landmark districts: The Research Library and History Museum in Balboa Park and the Serra Museum in Presidio Park. The San Diego History Center presents dynamic changing exhibitions that tell the diverse stories of San Diego’s past, present, and future, and it provides educational programs for K-12 schoolchildren as well as adults and families.

www.sandiegohistory.org

Front Cover: Popular World War I poster featuring recruitment for the American Red Star Animal Relief. Public domain.

Back Cover: Photo by James Blank from the Cabrillo National Mounument showing the Zuniga Shoals Jetty at low tide.

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Articles appearing in The Journal of San Diego History are abstracted and indexed in Historical Abstracts and America: History and Life.

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VOLUME 63  SUMMER/FALL 2017  NUMBERS 3 & 4

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“Help the Horse to Save the Soldier”
The American Red Star Animal Relief Program at Camp Kearny, 1917-1919

Alexander D. Bevil

On the ten-year anniversary of Armistice Day, November 11, 1928, on a cold, wind-swept mesa a mile southeast of the Linda Vista Junction railroad station, Anita May Baldwin (1876-1939) laid a wreath of remembrance at the foot of a recently installed 12-foot-tall granite monument. Standing next to her at attention was retired Army Major General Frederick S. Strong. On the stone, a plaque commemorated the men of the United States Army’s 40th Infantry Division known as the “Sunshine Division.” It was composed of National Guard units from California and other Western states that had trained under General Strong’s command at Camp Stephen W. Kearny before shipping off to fight in France during World War I. The plaque also honored one of the Division’s heroic companies that sustained heavy losses as part of the famous “Lost Battalion.”

While history has recognized the service and dedication to duty of General Strong and the men under his command, particularly those of the Lost Battalion, Anita Baldwin’s contributions have been largely unrecorded. The daughter of multi-millionaire Los Angeles County land baron Elias “Lucky” Baldwin, Anita raised $51,859 dollars for the 40th Division while it trained at Camp Kearny. An avowed horse-lover and special representative of the American Red Star Animal Relief Program, Baldwin funneled most of that money into veterinary equipment, supplies, and training for the officers and men assigned to the camp’s remount station. Without it, they would have had great difficulty in overseeing the health
Portrait of Anita M. Baldwin, December 24, 1929. The millionaire rancher, animal breeder, philanthropist, and patriot was personally responsible for helping the Red Star’s Los Angeles and San Diego chapters to raise over $51,859 to establish emergency veterinary stations at San Diego’s Camp Kearny, North Island’s Rockwell Field, and the Army Balloon Training center on her Arcadia ranch. Although this picture was taken a decade after the war, she is still wearing a Red Star Animal Relief button under the service ribbon on her left chest. Reproduction #LC-DiG-ggbain-26036. Courtesy of the Library of Congress.
and welfare of thousands of the horses and mules that played a critical role in the Division’s training and eventual success during the war.

World War I was the first large-scale mechanized war. Both the Allied and Central Powers utilized railroads, trucks, and automobiles to transport men, weapons, ammunition, and supplies to the front. These, in turn, carried thousands of wounded soldiers back to aid stations and hospitals, particularly along the Western Front which extended along a meandering 440-mile long series of fortified trenches extending from the English Channel through Belgium, Luxembourg, and northwestern France, to Switzerland.

By 1916, however, the opposing armies were faced with a logistical dilemma. How could they transport the equivalent of two 50-wagon supply trains carrying the 1,000 tons of supplies needed to sustain an average army division of about 12,000 men for one day between the forward supply depots and the front trenches?

Anita Baldwin with two “horse marines,” c. 1916-17. She wears a standard pre-March 1918 American Red Star Relief uniform. Its light color, tightly cinctured waistline, long skirt, and high-heel shoes would prove impractical under combat conditions. This led her to design a more practical uniform that the Army approved late in the war. Reproduction #LC-DIG-ggbain-26205. Courtesy of the Library of Congress.
Likewise, how could they transport wounded men back to first aid stations and field hospitals? The armies had been using existing and new standard-gauge railroad lines, highways and dirt roads to transport and maintain large stockpiles of ammunition, food, and supplies. Heavily laden trucks, however, had gouged deep ruts into poorly maintained dirt roads due to their narrow, solid-rubber tires. After a heavy rainfall, the roads became nearly impassible mud quagmires where many trucks, sunk down to their axles, were often obliterated by devastatingly accurate enemy artillery fire.³

The solution: draft animals. Just as armies had done one hundred years earlier during the Napoleonic Wars—and over practically the same ground—the opposing forces appropriated horses, mules, donkeys, and oxen to haul wheeled artillery pieces and ammunition caissons, supply wagons, field kitchens, and ambulances. They even utilized medium-to-large sized dogs to carry ammunition, food, and medical supply paniers, as well as to pull small supply carts and one-man ambulances.⁴ Although less efficient than motor transport (it took more wagons to carry fodder for the horses than food and ammunition for the men),

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Remount Station No. 330 showing pack mules lined up behind their pack frames. At the center are supplies. Every regiment training at Camp Kearny utilized pack mules to carry ammunition, food, and supplies with them on field maneuvers. ©SDHC OP #17134-1356.
these animals afforded better traction through deep mud and shell craters under all but the worst conditions. One British sanitary officer stated, “a truck could not get into and take cover in a ditch if need be, nor could it travel slowly enough (3 mph) to keep pace with a marching column of men.” In addition, armies continued to utilize horses for reconnaissance and as dragoons or dismounted combat troops, although cavalry units no longer engaged in suicidal frontal charges against concentrated machine gun and artillery fire.\(^5\)

Due to their closeness to the front, mounts and draft animals were subject to the same dangers as the soldiers who rode or drove them. Animals were substantial targets out in the open. Their size and inability to take cover quickly often shortened their battlefield usefulness to a few days or hours. Indeed, casualty rates among military horses and mules were greater than among their riders or handlers. In addition to being killed or maimed by artillery, machine gun and small arms fire, war animals were subjected to poison gas attacks, infection, diseases, broken bones, malnutrition, and exhaustion.\(^6\)

Over the course of the war, from August 1914 to November 1918, over 8 million animals died, only 500,000 fewer than their human counterparts.\(^7\)

Sick or seriously injured war animals were treated and removed from combat zones as soon as possible. The British and Commonwealth armies, for example, in cooperation with the Royal Society for the Prevention of Cruelty to Animals, had established a chain of medical management similar to that recommended by the International Red Cross for wounded soldiers. First, officers of the Royal Veterinary Corps serving with a mounted unit or infantry brigade would try to stabilize the animal’s condition. They would then send the animal back under its own power or in a specially made horse ambulance to a mobile veterinary first aid/dressing station. From here, they transferred the animal to a larger field hospital. Located no more than four miles behind the front lines, and eight miles apart, the field station consisted of a cluster of surgical buildings with operating rooms containing 1917 veterinary surgical equipment. Outside were corrals, forage barns, and quarters and kitchen facilities for the staff of qualified veterinary doctors and trained helpers. Further down the chain, veterinary medical teams treated sick or wounded animals at larger Evacuation or Stationary Veterinary Hospitals, with facilities for as many as 2,000 animals. Under this system, the British were able to save and return about 80 percent of their wounded animals back to their units.\(^8\)

Historians have argued that Germany’s inability to replace its draft animals to haul supplies and ammunition contributed to its eventual defeat. Great Britain and France, on the other hand, which had practically exhausted their supply of native horses early in the war, had nearly unlimited sources of animals from
their overseas colonies and allied nations. Among the latter was the United States which reportedly had a reserve of about 22 million horses in 1914. Through a veiled Neutrality Act, U.S. ranchers and farmers sold and shipped over 1.5 million horses and mules to both Great Britain and France from 1914 to 1916.

Horses and mules were transported from the U.S. aboard trans-Atlantic freighters. It is estimated that 50 ships left every month. Animals that survived the trip were immediately incorporated into existing cavalry, artillery, transport or hospital units as much needed replacements. Many perished from disease or injury at sea, however, and thousands died in holding pens even before boarding the ships. This cost the U.S. government both millions of dollars and badly needed war animals. In 1916, United States Secretary of War Newton Baker wrote to Dr. William O. Stillman, president of the American Humane Association, imploring the organization to intervene to save and care for the millions of vitally important horses and mules. He requested help not only for animals awaiting shipment to fight overseas, but also for those serving in the U.S. forces.
The result was the American Red Star Animal Relief Program.\textsuperscript{11} Organizers working from their new headquarters in Albany, New York, created an ad campaign to garner funds and attract volunteers. A recruitment poster depicted Italian painter Fortunino Matania’s moving illustration of a British artilleryman consoling a dying horse after taking off its bridle harness. The poster’s title, “Help the Horse to Save the Soldier,” became a rallying cry across the country.\textsuperscript{12} Through this and other successful fund-raising campaigns, the Red Star assisted in recruiting and training experienced veterinary surgeons, stable hands, and blacksmiths into the Army Veterinary Corps. Its volunteers also distributed literature and gave first aid instructions to soldiers handling animals in battlefield conditions. Equally important, the organization played a critical role in obtaining funds to purchase and donate much-needed medical supplies to the Veterinary Corps.\textsuperscript{13}

One year after the Red Star’s creation, on April 6, 1917, the U.S. declared war on Imperial Germany and its allies. Arguably unprepared for war, the U.S. Army faced a logistical nightmare: how to acquire, process, train, distribute, and care for
an estimated 750,000 horses and mules for its existing and newly formed cavalry, artillery, and transportation units prior to and during their deployment overseas.\textsuperscript{14}

To facilitate its selection and distribution of horses and mules, the U.S. Army’s Quartermaster Corps relied on its Remount Service. Prior to the latter’s 1908 formation, the Quartermaster Corps had acquired privately owned ranch or farm-bred animals under contract from regional purchasing depots. Under the new system, the Remount Service purchased less expensive younger horses or mules directly from breeders and trained them at Army remount stations.\textsuperscript{15} In addition to three permanent remount depots in Virginia, Montana, and Oklahoma, the Quartermaster Corps established 33 additional auxiliary remount depot stations associated with the Army’s new mobilization and training centers, one of which was at San Diego’s Camp Kearny.\textsuperscript{16}

Established on July 18, 1917, Camp Kearny was an 8,000-acre war suburb of nearly 1,200 tents and structures on the Linda Vista mesa west of Miramar Ranch. Under the command of Major General Frederick S. Strong, it mobilized, incorporated, and trained over 65,000 federalized National Guard troops from California, Nevada, Utah, Colorado, Arizona, and New Mexico into the Army’s 40th “Sunshine” Infantry Division. While at Camp Kearny, troops learned to function as a cohesive unit under simulated wartime conditions prior to their deployment to France.\textsuperscript{17} Like most contemporary U.S. Army divisions, the 40th contained motorized units that included artillery prime movers, trucks, and ambulances. However, its cavalry, artillery, machine gun, ammunition, supply,
and field hospital companies relied heavily on horses and mules as mounts, draft wagon or pack animals.18

Three mobile Quartermaster Corps captains were in charge of purchasing and shipping new horses and mules from Los Angeles, Bakersfield, and Imperial Valley farms and ranches, but they also acquired some animals from as far away as the Pacific Northwest. At the camp’s new remount station, they were inspected, processed, and distributed out into the Division’s various headquarters, cavalry, artillery, transport, and ambulance units.19

Horses and mules were contained in what was officially designated as “Auxiliary Remount Depot Station No. 330.”20 Situated along a 400-foot high escarpment overlooking Rose Canyon and surrounded by natural grass-covered land suitable for ranging livestock, the remount station was located about a mile northwest of the camp’s main cantonment. A short bridge and telegraph line were its only links to the main camp.21 The complex contained separate administrative, housing and support buildings, including a fire station. A narrow canyon separated this from the animal storage area. The equivalent of a present-day stockyard, its main feature was a series of eight wood-fenced corrals. Built to standard Army regulations, each of the 150,000 sq. ft. corrals could hold and process 500 animals. Nearby were hay sheds, breeding barns, a quarantine inspection station, and isolation paddocks. There were also blacksmith shops and a large concrete storage tank that provided water to several long horse troughs.22

An approximately mile-long railroad spur extended east from the Santa Fe Railroad’s mainline at the newly built Linda Vista Station junction to a long wooden platform that facilitated the unloading of at least fourteen animal stock cars at a time into the remount station’s largest temporary holding corral.23 On the morning of September 15, 1917, nine days after the remount station’s completion, five stock car loads of 56 horses and 47 mules arrived in San Diego by rail. The following morning, five additional car loads arrived, with another six arriving that night.24 All during the unloading, the remount station’s staff culled out and sent any sick or injured animals to one of the station’s four isolation corrals where they could be treated. Once recuperated, they rejoined the healthy animal population before being disbursed throughout the division.

The Army was keen to protect its investment, with the result that an armed cavalry detail provided security. At its peak, Camp Kearny’s remount station held approximately 4,614 animals. Given an estimated average value of between $140 and $215 a head for horses and mules, respectively, this represented a combined value of over $1,637,970.25

Captain John R. Valentine was the supervising commander of the remount station. A well-known East Coast horse expert, he reportedly had high praise for
the new stock. He described the mules as “young, strong and of good size” and said that they had “shipped well” with no obvious injuries. He also noted that there were no unbroken “outlaws” in the bunch. As more and more animals came in from open ranges, however, experienced “bronco busters” would be required to “teach them their lessons.”

Capt. Valentine and his staff of two officers, fifty enlisted men, and assorted civilian employees were responsible for the animals’ grooming and feeding. They also operated a horse-handling school where dozens of Army officers, sergeants, and enlisted men learned to safely handle the animals as farriers, packers and teamsters. Additionally, the acting chief veterinary officer, Lieutenant P. O. Cooper, and seven assistant Army veterinarians were responsible for the animals’ health and well-being.

The American Red Star Animal Relief Program’s National Headquarters took an immediate interest in Camp Kearny’s remount station. Around October 3, 1917, President Stillman sent a telegraph to Anita Baldwin, the founder and chair of the
Red Star’s Los Angeles County chapter. He personally requested that Baldwin act as his special investigative agent, visit Camp Kearny, and report back about the remount station’s current condition.

A 41-year-old divorcee, Baldwin was the wealthy daughter of the late nineteenth-century California mining investor, land baron, and entrepreneur Elias J. “Lucky” Baldwin. In addition to inheriting $100,000, she acquired her father’s love for raising prize livestock at his 3,500-acre Santa Anita Ranch. Located 13 miles northeast of downtown Los Angeles, near Arcadia, the Santa Anita Ranch included the Baldwin Race Track, a stable of champion race horses, and kennels holding pedigree show dogs. As Special Agent and later Southern California Field Director of the Red Star program, she was responsible for helping create and guide the Los Angeles and San Diego chapters to raise some $51,859, half of which she donated herself. She also played a key local role in the nascent American Red Star Animal Relief Program’s national organizational framework.

Baldwin, accompanied by her ranch veterinarian Dr. Theodore J. Stover and her two young children, arrived via automobile in San Diego on the morning of October 6, 1917. She and Dr. Stover immediately proceeded to conduct an on-site inspection of the remount station with the Army’s full cooperation.

A well-known philanthropist, Baldwin channeled her love of horses, dogs, and country into the recently formed American Red Star Animal Relief Program. After arguing her case for a local Red Star chapter in the rapidly mobilizing Southern California area, Baldwin was gratified when the national headquarters approved her application on May 1, 1917. She provided free office space for the chapter’s headquarters in a downtown Los Angeles office building that she owned. As the Los Angeles County chapter’s respective president and vice president, Baldwin and Dr. Stover immediately set about recruiting a staff of mounted veterinarians and 25 animal attendants. They also procured a motor truck, horse ambulance, tents, and other essential items.

Baldwin took a leadership role in soliciting funding for the local chapter’s veterinary staff and equipment. On two Sundays, June 3 and August 5, 1917, she held eight-hour open-house receptions at her ranch in Arcadia to promote the Red Star’s work. For twenty-five cents, visitors, guided by Red Star volunteers, could walk through the ranch’s magnificently landscaped grounds, with its tropical gardens populated with 500 peacocks. Those interested in animal husbandry could tour the cow barns, pig pens, and dog kennels; they could also view the horse stables of “Rey el Santa Anita,” the four-time winner of the American Derby, and other champions. Baldwin also sponsored complimentary luncheons at a downtown Los Angeles hotel to discuss organizing an annual relief event to raise more funds to support the Red Star.
Along with several other early twentieth-century female philanthropists (like Great Britain’s Nina Douglas-Hamilton, the Duchess of Hamilton, and the U.S.’s Caroline Earle White), Baldwin used her wealth and social rank to advocate animal welfare, which provided her with a leadership role in an otherwise male-dominated society. As chair of the Red Star’s special investigative agency, Baldwin was able to speak one-on-one with authority to U.S. Army officers, as well as their boss, Secretary of War Baker.

Baldwin was also highly patriotic. One month after the federal government ordered California’s National Guard to mobilize, she offered her Arcadia ranch as a temporary camp. This included the Baldwin Race Track and her spacious ranch house, which she recommended be converted into a military hospital. On March 27, 1917, the California National Guard’s 7th Infantry Regiment—consisting of cavalry, artillery, and field hospital units from Los Angeles, Orange, Riverside, and San Bernardino Counties—agreed to set up a temporary bivouac at the 183-acre race track. A year later, as the regiment reached its full complement of 1,860
men, it relocated to San Diego where it was federalized and incorporated into the new 40th Division forming at Camp Kearny as the 160th U.S. Army Infantry Regiment. Once the Regiment vacated, the U.S. Army replaced it with the Camp Arcadia Army Balloon School/Ross Field.

Baldwin also contributed to the war effort by responding to a nationwide request by Secretary of War Baker to produce a particular breed of American war dog to accompany American troops in France. Originated by an English dog breeder, it was a mix of Airedale Terrier and Old English Sheep Dog that British troops at the Western Front praised for its faithfulness, intelligence, tenacity, and courage under fire. Baldwin successfully bred and donated five Airedale/Sheep Dog-mixes to the U.S. Army. On February 1, 1918, two dogs—Thor and Mars—arrived at the 144th Field Artillery’s headquarters at Camp Kearny. After a few weeks training with their handlers, the dogs were “ready to attack an enemy soldier on sight.” Six German Shepherd police dogs, graduates of Pasadena’s Army and Police Dog Training Center, joined Baldwin’s war dogs. A gift from Pasadena resident Freeman Ford (and worth $6,000), the German Shepherds were noted for their intelligence, strength, fearlessness and eagerness to please their handlers.

Camp Kearny’s war dogs received practical training as guards, scouts, messengers, and Red Cross rescue dogs along the camp’s simulated trench network before accompanying the 40th Division as part of General John J. Pershing’s American Expeditionary Force (AEF). Carrying first aid kits and water flasks strapped to their necks or in panniers, Red Cross rescue dogs were trained to bravely venture out into No Man’s Land seeking out wounded or dying men. Upon finding one, they stayed and notified nearby stretcher bearers via a pre-arranged cry to their locations. Larger breeds were also used to draw individual two-wheeled Red Cross ambulances carrying seriously wounded men back to first aid stations or field hospitals. To the mortally wounded soldier, the dogs simply afforded comfort and companionship during their final moments. Often subject to the same hellish enemy fire and explosions as front-line troops, a war dog’s life expectancy at the front might be measured in less than four days.

Other war animals donated to Camp Kearny included a flock of young carrier pigeons. Because no federal special appropriation had been set aside for their acquisition, Colonel Thornwell Mullally, commander of the 40th Division’s 144th Field Artillery, had purchased all but two of the pigeons with his own money. Col. Mullally also paid for the construction of the birds’ coop. Like the horses, mules and dogs, the carrier or “homing” pigeons were tactically and strategically important to the camp’s trainees. Flying at 24 mph or faster, the birds were often more reliable in relaying messages under combat conditions than radio
Along with the war dogs, Camp Kearny’s carrier pigeons were the first used by the U.S. Army Signal Corps in a cantonment west of the Mississippi. Another alleged first was the Associated Press reporters’ use of carrier pigeons to send dispatches back to camp headquarters while accompanying mobile units on field maneuvers throughout San Diego’s mountainous backcountry. While in France, the AEF utilized as many as 600 carrier pigeons. One of these, Cher Ami, purportedly saved the lives of several former 40th Division men at the Western Front during the “Siege of the ‘Lost Battalion’.”

The care and welfare of Camp Kearny’s carrier pigeons, along with the other war animals, was of primary importance to Baldwin and Dr. Stover during their October 6, 1917, inspection tour of the remount station. The veterinary units did not have enough surgical dressings, instruments or medical supplies. Baldwin assured the remount station’s commanding officer that the Red Star, which had already donated over $1,800 in veterinary supplies to other Army bases, would provide those items, as well as much-needed horse blankets, halters, and shelter tents. Before she left Camp Kearny, Baldwin donated several cases of medicines that she had purchased with her own money.

Dr. Stover, meanwhile, remained to give a series of lectures at the remount station on animal first aid and improving sanitation and handling conditions. Over the course of the remount station’s short existence, other animal health experts also gave lectures and showed films on animal first aid during actual wartime conditions at the remount station.

On October 10, 1917, Baldwin returned to San Diego to attend a meeting with local businessmen and Army officials about the Red Star program. She explained that the group had no intention of “intruding” on the remount station’s operations but sought only to assist it by providing supplies, veterinary training, and volunteers. She outlined ways in which a local office could attract members and funding to obtain those goals. A local Red Star fundraising event had been held five months earlier, but it did not have a backer with her passion or
Baldwin, meanwhile, was a seasoned fundraiser. In addition to holding fundraising events at her ranch, she organized pedigree dog shows among other activities. Her efforts, and those of other women, resulted in $50,000 for the Los Angeles Red Star’s new downtown branch office.

On March 25, 1918, the officers and men of the 160th Infantry Regiment invited Baldwin to Camp Kearny as their guest of honor at a military review. She stood next to Brigadier General Herman Hall, Commanding Officer of the Regiment’s 80th Infantry Brigade, dressed in a new Red Star uniform of her own design. The all-tan-colored uniform consisted of a wool blouse over a long skirt covering breeches or “knickerbockers.” Completing the ensemble was a military-cut woolen great coat, an officer’s visor cap, and tan leather riding boots. Distinguishing features included bronze buttons, embossed with red stars, and a white brassard on the left arm with the Red Star insignia. Baldwin also proudly wore two sets of silver colonel’s eagles on her shoulder straps and collar tabs that the regiment had given her as a token of their appreciation for her generosity, which included her donation of a fine horse to Colonel Charles M. Hutchins, the regiment’s commander.

Local San Diego businessman and dog breeder William Clayton was sufficiently impressed by Baldwin to offer her the use of an office in the Spreckels Building. President of the newly formed San Diego Kennel Club, Clayton assured
her that the club would take an active role in obtaining, training, and donating war dogs to the Army. In fact, the San Diego Kennel Club was one of the first dog clubs on the West Coast to do so. With Baldwin's assistance and guidance, the club also organized San Diego's first nationally sanctioned dog show in February 1918, known as the “Red Star Show.” To boost attendance, military personnel were encouraged to enter their own pets or mascots. As a result of this and subsequent local dog shows, many wealthy businessmen including Ulysses S. Grant, Jr., and O.J. Stough, joined San Diego’s new Red Star chapter. Their memberships, combined with attendance sales and donations, helped underwrite the purchase and delivery of bandages, medicines, and training manuals.

In July 1918, Baldwin—now Red Star’s Southern California Field Director—participated in the dedication of Camp Kearny’s new Red Star emergency veterinary station. The station included offices, storerooms, and an automobile for use by the Veterinary Corps’ Emergency Response Team. Veterinarian Major Coleman Nockolds and his staff of 25 mounted Red Star volunteer assistants wore white armbands with red stars to denote their non-combat status.

Thanks to Baldwin and the local Red Star chapter, the station had two, new, well-equipped Red Star-donated horse ambulances. Pulled by four mules, the horse ambulances were built specifically for Army veterinary teams to transport sick or disabled horses or mules from a battlefield to rear aid stations or hospitals. A four-wheeled horse stall with a rear ramp and an arched canvas roof with roll-down canvas siding, a horse ambulance contained drugs, medicines, bandages, blankets, and other paraphernalia to stabilize and comfort a stricken animal so that it could be transported back to a veterinary aid station. Because of standardization, the Red Star ambulances were notably cheaper to produce than earlier versions. Camp Kearny’s horse ambulances saw their first action on June 8, 1918, when one driven by the Veterinary Corps’ Emergency Response Team traveled 32 miles on the road toward Lake Cuyamaca to retrieve a lame mule belonging to the 115th Engineers’ supply train.

Camp Kearny’s new emergency and existing veterinary quarantine stations acted as stop-gap measures until the Veterinary Corps erected a larger base hospital. On July 9, 1918, Baldwin, Major Nockolds, and General Strong inspected and agreed on a proposed site at the remount station. Baldwin had personally travelled to Washington, D.C. to meet with War Secretary Baker to assure him that the Red Star’s National Headquarters would fund the hospital’s construction and operation. For reasons beyond Baldwin’s control, the hospital was never constructed.

After World War I ended with the signing of an Armistice on November 11, 1918, the U.S. Army began decommissioning and dismantling its western training centers, including their remount stations. First, however, the Army disposed of
“Help the Horse to Save the Soldier”

thousands of surplus horses and mules through hundreds of animal auctions held between January and March 1919. One of the earliest was held on January 10, 1919, at the Camp Kearny remount station. Auctioneers sold off as many as 900 horses, 15 colts, and 600 mules to hundreds of local and out-of-town bidders. City Councilmen Walter Moore’s and Will Palmer’s successful bid of $590 resulted in four former army mules for San Diego’s Street Department. After the City Veterinarian gave them a clean bill of health, they were christened “Pershing,” “Foch,” “Strong,” and “Fay.”

By the end of August 1919, the remount station still held some 500 mules that were transferred to the U.S. Army garrison in the Philippines. Mule handlers or muleteers were supposed to load them onto stock cars for a short train ride down to San Diego’s municipal pier, where they were loaded onto a commercial freighter, the SS Dix. A railroad workers’ strike, however, meant that the animals could not be sent by rail. Undaunted, the remount station’s new commander, Colonel David L. Roscoe, ordered 100 muleteers, each in charge of five mules, to drive the herd along the railway tracks and down to the pier in the early hours of the morning. A local newspaper reporter colorfully described some of the more recalcitrant mules as “wilder than cuckoo bird[s] at twilight.” They reached the pier six hours later. While the dirty and tired men were treated to a late lunch break on board the SS Dix, stevedores hoisted the mules onto the ship’s hold, which reportedly took eight hours to accomplish. The following day, the SS Dix left port for Manila.

The Army decommissioned and closed Camp Kearny on October 31, 1920, despite local lobbying for it becoming a permanent facility. Over the next two years, the Army held a series of auctions to solicit salvage contractors to dismantle the former camp’s buildings for their lumber, electrical, and gas fixtures. Auctions held at the remount station disposed of thousands of dollars’ worth of surplus leather harnesses, tack, wagons, and other horse-drawn vehicles, including a remaining horse ambulance. After making a winning bid, the W. D. Hall & Company of El Cajon began dismantling the remount station’s buildings and corrals in early March 1921. Lee Meachum, the company’s secretary, announced that his company would sell the salvaged lumber in all parts of the county but particularly for use in El Cajon for chicken houses. By 1942 there was hardly any trace of the remount station or the headquarters complex across the canyon with the exception of several abandoned dirt roads leading to the outlines of several building foundations and tent pads.

During their short operations, Army remount stations like Camp Kearny’s held, processed, acclimated, cared for, and distributed hundreds of thousands of animals among hundreds of training units throughout the United States prior
to their deployment to the Western Front. Although over 42,000 of the estimated 750,000 Army horses and mules died during the conflict, many others survived. According to the president of the American Humane Society, 80 percent of all wounded animals subject to Red Star veterinary first aid, evacuation, and treatment at field stations or rear hospitals had been successfully returned to the Front.⁶⁸

Baldwin continued her humanitarian and philanthropic work as president and vice-president of the Los Angeles Society for the Prevention of Cruelty to Animals.⁶⁹ On October 27, 1920, the American Humane Association’s National Board of Directors honored her for “making [the Los Angeles chapter] the foremost anticruelty society on the Pacific Coast” by electing her as its honorary vice-president.⁷⁰

She also received numerous accolades for her services during the war. In 1921, French President Millerand, King Albert of Belgium, and Great Britain’s King George V officially honored Baldwin for her Red Star work.⁷¹ Major Strong
wrote that her work with the Red Star at Camp Kearny was just as important “for the benefit of animals used in military service that the Red Cross is doing for the [military] personnel.” Secretary of War Baker sent her a personal letter thanking her for “securing [the] humane treatment of horses and other animals at Camp Kearny and for furnishing her own veterinarian for work on army animals at the [Baldwin racetrack] camp.”

Perhaps the most heartfelt displays of gratitude came from her “godchildren.” In June 1918, just two months before their deployment, the men of the 160th Infantry Regiment selected her to be the regiment’s “godmother” in thanks for her many gifts. When they returned to the U.S., “Colonel” Baldwin welcomed them home with a barbecue under the shade of oak trees at her ranch. The unit demobilized shortly afterwards.

In 1928, on the tenth anniversary of Armistice Day, Baldwin and retired General Strong returned to the site of Camp Kearny’s former headquarters compound. Standing in its place was a 12-foot-tall, triangular-shaped granite boulder sitting on a 24-foot-square raised concrete and cobblestone base. Attached was a large bronze plaque dedicated to the men of the 40th Division. A smaller plaque honored Captain Nelson M. Holderman and the men under his command who were part of the “Lost Battalion.” The memorial existed for over a decade before it was removed by the Navy during the conversion of the former Camp Kearny tent and parade ground area into Naval Auxiliary Air Station Camp Kearny.

In 1942, three years after Baldwin’s death at age 63, San Diego’s American Red Star Animal Relief program office reorganized after the U.S. entered World War II. The Red Star continues to serve as an integral component of the American Humane Association’s animal rescue team which has responded to virtually every major disaster relief effort including earthquakes, hurricanes, and local wildfires and floods.

Today, a sprawling industrial park covers the area where Camp Kearny’s remount station’s buildings and corrals once stood. The railroad wye and approximately a mile of double-track siding still exist, however, between Consolidated Way and Miramar Road. In keeping with the two-year commemoration of the 100th Anniversary of the United States’ involvement in the Great War, a local grass-roots movement is attempting to locate and reassemble the two bronze memorial plaques dedicated to the men of the 40th Division. Perhaps an additional bronze plaque would be appropriate to commemorate the patriotic work of Anita May Baldwin, who, along with members of San Diego’s local chapter of the American Red Star Animal Relief Program, helped horses in order to save American soldiers’ lives.
"HELP THE HORSE TO SAVE THE SOLDIER"

"GOOD-BYE, OLD MAN"

PLEASE JOIN THE AMERICAN RED STAR ANIMAL RELIEF

National Headquarters, Albany, N.Y.
NOTES

1. The plaques and memorial were removed some time prior to the 1940 establishment of Naval Auxiliary Air Station Miramar.


11. The American Red Star Animal Relief Program was similar to the Swiss International Red Star, the French Purple Cross, and the British Blue Cross and Fund for Wounded Horses at the Front.


13. Tams, “How Did Animals...Serve;” American Humane, “History;” “American Red Star Animal Relief to Be Beneficiary of Show,” 28; Blue Cross Fund for Wounded Horses at

14. “Millions of Horses Are Used by Armies,” 68. Although the United States Army would acquire as many as 300,259 domestic American horses and mules between January 1, 1917, and January 1, 1919, it was only able to ship about 30,329 of these to France. As a result, it would have to acquire an additional 175,185 animals from French, British, and Spanish sources to meet the American Expeditionary Force’s needs. Benedict Crowell, America’s Munitions, 1917-1918 (Washington, D.C.: Government Printing Office, 1919), http://www.gutenberg.org/files/48428/48428-h/48428-h.htm#Page_177 (accessed June 10, 2017).


20. United States Geological Survey [USGS], Topographical Map of La Jolla, California (1930); “Animal Hospital to Be Built Soon,” The San Diego Evening Tribune, March 17, 1918, 13.

“Help the Horse to Save the Soldier”

com/ (accessed July 8, 2017).


23. “Camp Kearny Remount Station,” December 1917, U.S. Library of Congress, photograph no. LC-DIG-ds-07820; “Spur Railroad Laid One Mile at Cantonment,” The San Diego Union, July 9, 1917, 1. Still in limited use, the historic spur rail line is located just west of USMC Miramar Air Station’s northwestern corner boundary, between Miramar Road and Consolidated Way. USGS, Topographical Map of La Jolla, California (1930); Topographical Maps of Del Mar, California (1943 and 2015).


25. Krenzelok, “Auxiliary Remount Depot Stations in the United States during WW1.” The inflationary equivalent for the Army’s new horses and mules would be between $2,267 and $3,481, respectively, one hundred years later. The inflated average value for 4,614 horses and mules would be equivalent to slightly over $31 million dollars today. CoinNews.net, US Inflation Calculator (accessed July 17, 2017).


27. “Horses and Mules Arrive in Camp,” 3; “Grand Review at Camp Kearny on 22nd February,” The Bakersfield Morning Echo, February 14, 1918, 4; “Train Steeds for War Work,” The Los Angeles Evening Herald, September 10, 1918, 9; “1000 Head Now in Remount Station,” The San Diego Evening Tribune, September 18, 1917, 7; “Patience and Gentleness with Animals Rule at Camp’s Big Remount Station: Get Results,” The San Diego Weekly Union, September 27, 1917, 2; “Horse Shoer and Stable Sergeants Schooled at [Camp] Lewis, The Bakersfield Morning Echo, January 4, 1918, 10; “George Burton Here on Short Furlough,” The Bakersfield Morning Echo, April 1, 1918, 3; “Expert Teamsters and Packers Turned out by Training School of Remount Station at Camp,” The San Diego Union, June 4, 1918, 6.

28. “Anita Baldwin, Colorful Figure in History of California, Dies,” The Madera Tribune, October 25, 1939, 1; “Anita Baldwin,” December 24, 1929, U.S. Library of Congress, Prints & Photographs Online Catalog, Photograph no. LC-DIG-ggbain-26036, http://www.loc.gov/pictures/item/ggb2006001450/ (accessed August 7, 2017). Reportedly the wealthiest landowner in Southern California, “Lucky” Baldwin parlayed his initial fortune in silver and gold mines into land, and once owned more than 40,000 acres in Los Angeles County alone. After acquiring the former Mexican California-era Rancho Santa Anita, he transformed it into a highly lucrative venture as a breeding center for thoroughbred race studs, with a race track on which they could


34. “Anita Baldwin to Give ‘Star Luncheon’,” The Los Angeles Evening Herald, December 4, 1917, 22.


“Help the Horse to Save the Soldier”


51. “Mrs. Baldwin Guest of Honor at Review,” The San Diego Union, March 26, 1918, 6; “Military, Army, Woman Officers at Review at Camp Kearny (c. 1918), SDHC, Photograph Archives, #8179-6; "WWI Camp Kearny, c. 1918, SDHC, Photograph Archives, #OP12244-1; “War Dept. Approves Mrs. Baldwin’s Uniform,” The Los Angeles Evening Herald, October 9, 1918, 11. Seven month later, the U.S. Army officially approved Mrs. Baldwin’s uniform as the model for all Red Star volunteers. The war would be over, however, before the order could be fully implemented.


53. “American Red Star Animal Relief to Be Beneficiary of Show,” 28. According to the latter, Red Star memberships were at the $1 annual, $25 associate, $50 sustaining, or $100 life membership levels. In today’s economy, they would cost around $20, $480, $960, or $1,915, respectively. CoinNews.net, US Inflation Calculator (accessed August 7, 2017).


58. “Animal Relief Worker to Lecture at Camp,” 6; “Animal Hospital to Be Built Soon,” The San
During the new emergency veterinary care station’s dedication, Baldwin told reporters that Secretary Baker had agreed to offer the War Department’s full cooperation with the project. “Red Star Relief Association Takes Care of Service Animals,” 6; “Emergency Station Completed,” 6.

“Baker Writes on Red Star’s Work,” The Los Angeles Evening Herald, June 11, 1918, 10. Three major reasons prevented Camp Kearny’s veterinary hospital from ever being built. First, Secretary Baker was slow to accept the Red Star organization’s help, which in turn delayed its initial funding. Second, the Army Quartermaster Corps had balked at the high payroll needed to equip and staff the hospital with competent veterinarian doctors and surgeons. Third, the war ended.

On average, Moore’s and Palmer’s successful bids resulted in roughly $147.50 each, which was slightly lower than what the Army Quartermaster captains had paid for them in 1917. “Remount Depot to Auction Animals,” The San Diego Union, January 5, 1919, 6; “Street Department Buys Four Mules,” The San Diego Union, January 11, 1919, 4. The City would have had to pay nearly $9,575 for those mules today. CoinNews.net, US Inflation Calculator.

“Thousands of Missouri Mules Will Embark on Sea Voyage,” The San Diego Union, August 12, 1919, 1. Incongruously, the newspaper article’s writer wildly over-estimated the number of mules that the SS Dix could fit in its hold.

“Wild Mules Unable to Travel Because of Strike,” The San Diego Union, August 27, 1919, 1.


Martin, “Patriotism and Profit,” 268; California Military History Online, “Camp Kearny.”


USGS, Topographical Maps of La Jolla, California (1930) and Topographical Maps of Del Mar, California (1943).


“Monument to Memory of Veterans, Memorial Park to Be Dedicated to Members of the Sunshine Division,” The Los Angeles Times, October 26, 1928, A-10; “Pay Honor to Strong at Dinner,” The San Diego Union, November 11, 1928, 1; “Will Dedicate Granite Boulder Today at Camp,” The San Diego Union, November 11, 1928, 1; “Monument to the ‘Lost Battalion,’” The Placerville Mountain Democrat, December 28, 1928, 7; “‘Lost Battalion’ Remembered,” The Los Angeles Evening Herald, January 2, 1929, 10; UCLA, Library, Special Collections, Charles E. Young Research Library, The

76. One reason why the monument may have been removed was that trainee pilots trying to lift their lumbering thirty-three ton four-engine PB4Y Liberators off the airfield’s 6,000-foot-long by 200-foot-wide southeast to northwest runway would have been unnerved to see a twelve-foot-tall upright granite boulder slightly more than a football field’s length in front of them. Martin, “Patriotism and Profit,” 269; California Military History Online, “Camp Kearny;” M.L. Shettle, Jr., “Naval Air Station, Miramar” and “Marine Corps Air Depot, Miramar,” in Historic California Posts, Camps, Stations and Airfields, http://www.militarymuseum.org/MCASMiramar.html (accessed July 22, 2017); USGS, Topographical Maps of La Jolla, California (1943, 1953 and 1967) and Topographical Maps of Del Mar, California (1953 and 1967); “War Memorial, Miramar (1938), in SDHC, Photograph Archives, #83_14541-557; “PB4Y-1 Liberator and PB4Y-2 Privateer,” SAS Index, http://www.sas1946.com/main/index.php?topic=35233.0.

77. “Anita Baldwin, Colorful Figure in History of California, Dies,”; “Anita Baldwin Dies,” The Helena Daily Independent, October 27, 1939, 7; “Social Figure Dies,” The Reno Nevada State Journal, October 28, 1939, 3.

78. American Humane, “History.”


San Diego’s Zuniga Shoals Jetty: Icon and Enigma

“The jetty at Zuniga Shoals is a finishing touch to a perfect harbor.”

_The San Diego Union_, 1899.

John Martin

In the Spring of 1969 as actor John Wayne rounded the southern tip of Coronado’s North Island returning from a fishing trip into Mexican waters, his 136 foot family yacht the _Wild Goose_ struck a semi-submerged rock pile near the harbor entry. Wayne roundly cursed the offending pile of rock and then consulted his nautical charts to determine what the _Goose_ had hit. He discovered the obstruction was a crumbling breakwater the federal government constructed.

San Diego’s Zuniga Shoals Jetty, located near secure naval weapons storage, is not accessible from the shore. “No trespassing” signs are posted to alert boaters to stay away from the structure. Author’s collection.

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at the turn of the twentieth century with a name and provenance unfamiliar to him and most San Diegans called the Zuniga Shoals Jetty.

Several theories exist regarding the origin of the jetty’s name. One version offered that when Spaniard Sebastián Vizcaíno sailed into the bay in 1602 he named the shoal after Gaspar de Zuñiga y Azevedo, the Count of Monterrey, Viceroy of Mexico from 1595 to 1603. Another account held that Captain George Vancouver took the name he attached to his chart in 1793 from Lt. José de Zuñiga of the Royal Army of Spain and the comandante of San Diego’s presidio from 1781 to 1793. One suggested a Spanish cartographer in the 1840s named it after Juan de Zuñiga, a sailor whose name the mapmaker had seen on an earlier harbor chart. The speculation remains.

In the early decades of exploration along the Pacific coast there was also confusion regarding the location of the shoal. French explorer La Pérouse located the “Bajes de Zuniga” inside the harbor on his 1786 chart, as did the map of Archibald Menzies a botanist for the Vancouver expedition that charted the harbor in 1793. The 1849 harbor chart of Andrew Gray and those of Major Alexander D. Bache who surveyed the bay for the U. S. Coast & Geodetic Survey in 1851 and 1853, labeled the shoal at the harbor entry as Zuniga. By the mid nineteenth century, nautical cartographers came to agreement on the shoal’s name and location while sailors agreed it held no significance other than as a navigational nuisance. It took forty years for that assessment to change.
Since statehood San Diego’s civic leaders had looked to transform the small Southern California town into a thriving city, but faced inherent problems. Their town was physically remote from the seat of national government and distance translated into disinterest. San Diego lacked available investment capital, had limited commercial opportunities, an unreliable fresh water supply, and despite considerable effort, local businessmen had failed to make the city a terminus for an eastern railway. All told, not a formula for municipal success. But despite the city’s liabilities after the 1870s, the aggressive leaders of the new San Diego Chamber of Commerce optimistically believed that the natural land-locked harbor would deliver their city to greatness. And as it would happen, when the city fathers opened the campaign to develop the harbor, the enigmatic shoal became a salient factor in their plans.

The Federal Jetty

San Diego’s leaders understood that for the harbor to become the city’s vehicle to prosperity, it had to safely accommodate the entry and anchorage of large vessels. Unfortunately at the end of the nineteenth century both commercial maritime and naval interests considered San Diego a shallow water port in both respects. To overcome these disparities city boosters had to develop plans to increase the water depth over the outer entry bar and deal with the large, shallow sandy middle ground shoal inside the channel. Both projects required mitigating the sand flow that sustained the main channel entry bar and the middle ground troublesome shoal. Lacking the financial and technical resources to pursue projects of this magnitude, city business leaders approached the federal government in the belief
that the harbor’s military potential recognized by the War Department and the Navy would translate into government assistance.

The government rewarded the perseverance of city strategists with an 1886 Congressional Rivers and Harbors Act that authorized a survey to prepare an estimate for a 250 foot wide by 24 foot deep channel across the outer bar of San Diego Harbor.\(^1\) The Navy steadfastly held that the entry to San Diego Bay, which charts listed at 21 feet deep, was sufficient to allow only their small and medium size vessels entry; American battleships required at least 30 feet of draught.\(^2\) In January 1888 Congress followed with an appropriation that authorized oceanic surveyor Otto von Geldern to conduct another harbor survey to determine the “direction and strength of the currents at the entrance.”\(^3\) At the completion of the survey, the War Department ordered Corps of Engineers Lieutenant William H. H. Benyaurd to compare those results and the earlier surveys of 1878 and 1886. Benyaurd’s research found little physical change in the channel but discovered that the sand that sustained the middle ground bar funneled in through a littoral channel running between North Island and the northern tip of the shoal. Benyaurd postulated that as long as sand poured through the littoral gap, the middle ground shoal would be a perpetual navigational obstruction for vessels entering the harbor.\(^4\)

With the data in hand, Benyaurd formulated a plan to address both the shoal and the entry bar. The engineer observed that two channels existed around the middle ground. Benyaurd described the westerly channel as “too crooked for safe navigation,” as it required ships to steer west inside Ballast Point, then sharply back north, a tricky 90° turn—a maneuver that was difficult for vessels not under power or in tow. The easterly channel was simply too shallow. Dredging would solve these problems, but without the construction of a breakwater to control the volume and velocity of the water over the bar and the flow of sand entering the bay, any
result would be transitory. Benyaurd presented his conclusions to Colonel G. H. Mendell, the Supervising Engineer for the West Coast and government jetty expert. Benyaurd’s plan suggested that the construction of a breakwater atop the Zuniga Shoal, which paralleled the harbor entry, would make dredging the middle ground feasible as well as increase and maintain the water depth over the outer bar.5 With Mendell’s blessing the Corps brain trust authorized Benyaurd to proceed.

Benyaurd and the Corps staff engineers designed a 7500 foot long stone jetty that would extend from the western tip of North Island, running southward parallel to the Point Loma Peninsula. The engineer categorized the breakwater as a mound of stone or in Corps parlance a “rubble-mound structure.” Engineers would construct the jetty on a 15 foot curve with the rockwork aligned either on a line along the westerly side of the shoal or on the crest of the shoal. The crown of the jetty nearest the land would measure 12 feet across with 2 foot slopes on the sides, and at the outermost limits, and where the water deepened, it would be 20 feet in width with slopes of 1 to 3 feet.

The engineers designed the jetty to close the littoral gap and control the tidal action at the outer harbor entry. The Corps estimated that the area the tidal action affected without a jetty was approximately 230,000 square feet. The jetty would reduce that to 60,000 square feet, essentially squeezing the tide through a narrower space and increasing the speed of the water flowing over the bar.6 The theory was simple. The strength of the tidal currents, running straight in and out, would scour the outer bar as well as remove any deposits near the middle ground and keep the channel clear. With the tidal action harnessed, crews could then dredge and deepen the channel. The designers believed the presence of the jetty would allow dredging projects an element of permanency and permit the effective maintenance of the channel.7 The engineers theorized—hoped really—that the sand the jetty impounded from the littoral gap would flow back along the shoreline on the east side behind the jetty, and form a beach along North Island, which might also deepen and push the entry bar farther south.

As to the breakwater proper, the engineers designed “a brush foundation in
the shape of mattresses” to create a stable foundation for the massive deposits of rock that would form the jetty. The engineers envisioned laborers placing the rock and the mats from a double tracked railroad trestle running the length of the jetty.8

The War Department sanctioned the Corps’ project in 1890 and the 51st Congress authorized the $394,400 estimated for construction. After the amateur engineers in Congress discussed the plans, however, they modified the estimate and on September 19, 1890, the House approved the first appropriation of $65,500.9 Since the federal government directed the Corps of Engineers to survey, plan, engineer the jetty, and supervise the construction, San Diegans generally referenced the prospective breakwater simply as the government jetty.

Despite the grandiose planning, the project opened with a stutter rather than a bang. The Corps had failed to acquire title to the necessary land at the base of the jetty. The desired “root” of the jetty was a point on the south shore of Coronado’s North Island about 2000 feet east of the harbor entry at Zuniga Point. A federal team had surveyed the site but the landowner, the Coronado Beach Company, had declined to sell or even discuss a price on the needed tract.10

The disagreement naturally centered on the value of the property. The county valued the land at $5.00 per acre and the owner suggested $775.00 an acre. The mutual intransigence briefly threatened the project but the parties eventually agreed to legal mediation and accepted the court’s decision. The resolution came at the middle of June 1892 and allowed the War Department to condemn and purchase 18.85 acres on the southwestern tip of North Island from Elisha S. Babcock’s Coronado Beach Company for $13,942.46.11

While the government and the landowner squabbled, the Corps engineers initiated a dredging project funded in the original appropriation. Local barge captain Albert A. Polhamus started dredging in April 1891 to create a channel at the head of the middle ground shoal to a depth of 24 feet at mean low tide. Polhamus said the completed work would “afford a straight channel” into the bay for vessels with the “deepest draft.” As expected the dredging proved temporary as the channel quickly shoaled back to fifteen feet in depth, but the engineers believed the result reinforced the value of the proposed jetty.12
With the land acquired, the government opened bids and shortly thereafter named Silas R. Smith of Portland, Oregon, the first contractor. To gain the bid, Smith submitted costs for the trestle construction at $5.91 per linear foot, assembling and placing the brush mats at $2.53 per cubic yard, and the cost of stone at $1.62 per long ton. Smith constructed an office building and started work in September 1894. Smith made little headway until he changed out his work crew, which forced the contractor to request a three-month extension to complete the initial phase, which he did in July 1894.13

Smith’s first order of business was the construction of the rail trestle. To protect the first sections of the wooden trestle Smith’s crew laid a 1000 foot revetment to form a rock shield along the shoreline from the jetty’s starting point extending westward toward the main channel. Smith sub-contracted with San Diego hydraulic expert Hiram N. Savage to supply much of the rock for this work. The engineers selected a starting point for the trestle well away from the tidal flow at the harbor entrance to mitigate any possibilities of undermining. Originally the plans called for three pile bents for the trestle, but the depth of water in the littoral channel measured between seven and twelve feet and the weight of the railroad stock forced Smith to upgrade the weight of the first eighty-four bents. As the trestle advanced seaward, the height also increased from sixteen feet to twenty feet. When the contract expired in June Smith had completed the revetment, constructed 2,464 feet of double track trestle, and laid 1,860 feet of jetty to the high water height, but still had 4,600 tons of rock to place. In his after report, Benyaard reminded his superiors that any work on the middle ground shoal would not proceed until the crews extended the jetty to a point where it cut the movement of the sand to the shoal, then and only then could the shoal be dredged effectively.14
The government awarded contractors Powell & Mitchell the second contract and scheduled their work to begin in April 1895. The bid costs were similar to the first phase with trestle construction at $5.00 per linear foot, the mat work at $1.90 per cubic yard, and the cost of stone averaging $2.25 per long ton. Benyaurd returned to the job site and observed that in the interceding eight months, the work had withstood the winter storms and was in good condition. The contractors gathered workers but encountered an unexpected delay. The issue was the quality of the timber supplied for the trestle piles. The contractors rejected the entire initial shipment as substandard, or as Assistant Corps Engineer F. C. Turner explained, “by reason of the bark stripping under the hammer.”15 The crew eventually acquired new piles and the work began in June. Powell & Mitchell extended the jetty another 800 feet to reach 3,347 feet during their contract from February 2, 1895 to October 16, 1896. This phase consumed 311,849 tons of rock from a Sweetwater quarry and enough brush from the San Luis Rey River near Oceanside to create 3,070 cubic yards of brush mats. As with the previous contract, the engineers performed no dredging on the middle ground shoal.16

As the second construction phase drew to a close, and for the first of many times, Benyaurd alerted his supervisors that the overall cost of the project was likely to increase. He explained that as the jetty advanced seaward, the “pothole” scouring action at the leading end or head of the jetty would invariably cause the bottom to erode and deepen, creating the need for more materials and thereby increasing the cost. Benyaurd’s assistant F. C. Turner also took time to record some apparent physical changes the first 3000 feet of the jetty created. Turner observed that the rock structure caused the incoming breakers to shift to the east, away from the channel and as the jetty moved outward the wave action formed...
a sand bank along the west side or inside wall of the jetty. Turner noted this as a positive result saying the infusion of sand tightened and strengthened the jetty wall. Turner also observed that the winter storms had caused a recession of the beach along the eastern shoreline of Coronado’s North Island and forced the beach eastward another 2000 feet.17

During the second phase the jetty received an unscheduled visit from California Senator Stephen M. White. The Senator arrived in San Diego in October 1895 to deal with some court matters, but the astute businessmen of the Chamber of Commerce took the opportunity to wine and dine the Senator and sell the potential of San Diego harbor. With the federal Quarantine Station just completed, the government jetty was the biggest show in town and White asked to see the structure. The Chamber quickly arranged an inspection tour that included White’s traveling hosts California congressmen W. W. Bowers and James McLachan. Local harbor pilot A. F. Dill transported the group from the downtown pier out to Ballast Point then across the channel to the view the existing 3300 feet of the jetty and trestle. On the tour Dill commented on the specifics of the project and answered questions. The tour and information prompted White to offer his opinion—informed or not—that the work had
already improved the harbor entrance. As the congressional guests departed the Chamber members lobbied pledges from the Senator and Congressmen to support the funding necessary to complete the project. The group’s endorsement was significant because White was a member of the Senate Rivers and Harbor Committee, which designated congressional appropriations, and McLachan was a projected member of the House version of the same committee.18

The War Department chose San Diegan Waldo S. Waterman, a mining engineer and son of former California Governor Robert Waterman, as the contractor for the third stage. The work ran from November 12, 1896, to April 1897 and extended the rockwork out to the 3,347-foot mark. Benyaurd and Turner remained on the job as the Corps supervising engineers as Waterman’s crew deposited 14,930 tons of stone, 1,523 cubic yards of matting, added 637 feet of trestle, and laid an additional 645 feet of submerged rock foundation. At the end of the phase, Benyaurd noted that the jetty had settled slightly and the usual scouring in front of the jetty had continued, but on the whole thought the work stood well.19

The jetty received another formal government inspection in early 1897. In January four members of a federal committee arrived in
Southern California to visit Santa Monica, San Pedro, and San Diego to identify the best location for another west coast deep-water harbor. Arriving by train from Los Angeles, Chamber of Commerce President Phillip Morse hosted the group, which consisted of two engineers, a Navy admiral, and a member of the Coastal Survey Service. The group, scheduled for two days in San Diego, toured the harbor on a cold, rainy, windy day. The jetty project was their principal point of interest and the stormy day was the perfect environment to assess how it would withstand the “sea attacks.” The visitors remarked on the “judicious” improvement of the jetty and after lunch at the Hotel del Coronado, trekked across North Island to view the jetty. Favorably impressed, the group rushed back to Los Angeles hoping to see the other harbor sites in the midst of the same weather conditions, which they believed offered a true testament to the quality of those potential sites.20

The Spanish American War of 1898 temporarily halted the project. With Congress and the Army engaged in wartime duties, the Corps closed down construction. The Annual Report of the Chief of Engineers, however, reported that the government ordered a survey to assess the status of the project. The U. S. Coast and Geodetic surveyors aboard the steamer Gedney worked west from the Hotel del Coronado in a semi-circle toward Ballast Point. Following the investigation the surveyors issued the opinion that there was indeed significant improvement in the depth in the channel as a result of the jetty work.21 The survey team sent their formal findings along to Captain James J. Meyler, who replaced Benyaurd as the Corps project supervisor. Reviewing the survey results Meyler agreed that there appeared to be considerable changes at the harbor entry, most of a satisfactory nature. The outer bar was 600 feet wide in the channel and had an overall depth of 22.5 feet. This indicated a gain of 1.5 feet of depth since the job began. The middle ground dredging cut of 1891, which started shoaling immediately after the work, was actually showing signs of improvement, which indicated the jetty had effectively arrested the movement of sand into that area. With the war concluded, in June 1899 the Rivers and Harbors Committee appropriated $65,000 and the Corps released Meyler to restart work.22
While the government agencies remained idle during the war years, the citizens of San Diego undertook their own harbor venture. In 1899 the Chamber membership raised $1000 in subscriptions and with the approval of the Secretary of War, performed an experiment on the outer bar designed to determine the feasibility and practicality of dredging the bar. The locals intended to prove to skeptical government engineers that the depth over the outer bar could be increased and maintained with dredging. Local lore held that the floor of the bar consisted of very hard material that would be difficult to dislodge. The Chamber’s scheme was to have the ocean bottom at the bar “hydraulicked” to prove their point. San Diego dredge captain A. A. Polhamus undertook the operation. A diver was dropped from a tugboat hovering over the bar carrying a hose attached to a powerful pump. The idea was to “stir up and disintegrate the upper crust” of the bar and allow the tide to carry the material away. Polhamus and his crew successfully made a cut about 100 feet wide and 5 feet deep across. Within a month the tide had refilled the furrow, but the scheme clearly demonstrated that the bar was essentially sand and mud and easily dredged.

Following the war hiatus, the Corps rendered an agreement to contractors Healy & Tibbits, an engineering and barge company from San Francisco, on October 16, 1899, for their low bid of $61,240. Corps engineers anticipated this work would be completed in about eleven months. To this point contractors had extended the jetty by exclusively utilizing the overhead rail trestle, but Healy & Tibbits specialized in the use of ocean going barges and would perform mat and rockwork from the floating platforms.

As usual the contractors failed to begin the work on the designated date. The work, scheduled to begin in December 1899, did not get underway until
April 1900. The contractors put the delay on irregularities in the contract and the unreasonable transportation rates local railways charged for hauling rock. The San Diego Union took umbrage saying the contractor’s excuses were lame and “getter lamer all the time.” The newspaper claimed the procrastination was simply a ruse to allow the contractors time to work on a deal with the government to quarry duty free rock from Mexico’s Coronado Islands. The Union claimed the island rock was no better than that of the local quarries and defended the rates rail owner Waterman proffered as fair. Apparently Healy had the necessary influence because by the time the workers constructed and placed the first mats the contractor had an arrangement for obtaining rock from the Coronado Islands that included a nominal duty fee.\(^{24}\)

Working from April to October 1900, the contractors pushed the jetty out another 1,033 feet making the overall length 5,025 feet seaward, with over 3,347 feet of the structure completed above high water. In doing so they utilized 2,543 cubic yards of matting and 5,613 tons of stone. Meyler noted, as he had the year previous, that there was “no material increase in depth or width of the channel across the bar,” but again he had no expectations in that regard. But he did explain that with the last two extensions, the jetty had arrested the action of sand over the middle ground shoal to the point where with the completion of the current work, he believed they could maintain a dredged cut. Meyler estimated it would require another 11,000 tons of rock and 7,000 cubic yards of mats to complete the final 2,500 feet of the jetty, which he hoped would come in one final contract.\(^{25}\)

Before the next phase could begin the engineers discovered that teredo and limnoria, two species of shipworms that bore into submerged wood, had attacked and damaged 160 feet of the untreated submerged wooden trestle dents. The Corps hired local builder Fred Osborne to remove and replace the defective dents, a task he started in October of 1900 and completed in December 1901 at the cost of $1445.63.\(^{26}\) As the repair work on the plies proceeded, Captain Edgar Jadwin, a future Chief of Engineers, reported to San Diego as the new supervising Corps engineer. Jadwin surveyed the project and noted to the Chief of Engineers George Gillespie that he believed that the extension of the jetty had caused erosion along the western side of North Island, as
well as at the beach at root of the jetty. Jadwin wanted bulkheads or wing dams constructed along the shore to protect the shoreline, but the lack of funding stymied the idea.27 In the report to Gillespie Jadwin said the Corps had completed no formal work on the jetty as yet, hence there was no increase in the depth over the outer bar, but observed a decided increase in the velocity of the tide flowing over the bar.28 Chamber President W. L. Fervert may have best summed the city’s sentiment of the pace of the work when he stated in the Chamber’s Annual Report that the contractors were “still pounding away” at the job.29

The government awarded San Diegan Waldo Waterman, the contractor in the third stage, the final contact. Unfortunately, he died unexpectedly before starting work. To avoid costly delays the War Department unilaterally appointed Arnold E. Babcock of Coronado, son of Elisha S. Babcock who owned the Coronado Beach Company, as the contractor in April 1903. Babcock completed the structure out to the designed length of 7500 feet in July 1904.

Understanding the urgency to complete the project, Babcock looked for several ways to increase operational efficiency. He brought in a 65 ton steam shovel mounted on a flatcar to speed up the removal the rock from local quarry trains and in 1903 built a new section of the Coronado Line to shorten the haul across North Island.30 With the jetty reaching its full length, Babcock brought in a new suction dredge and started dredging the main channel in July 1903. Babcock, an amateur whose engineering experience was working his father’s Julian gold mine, offered the opinion that if the engineers increased the length of the jetty it would surely increase the flow of the current into the channel and decrease scouring elsewhere. As the project drew to a close, Corps engineer Captain C. H. McKinstry

William L. Fervert, Chamber of Commerce President 1902-1904. Photo from Smythe’s History of San Diego, p. 627.

C. H. McKinstry, shown here as a West Point Cadet, worked on the final phase of the project. Courtesy of the Office of History, Headquarters, U. S. Army Corps of Engineers.
replaced Lt. Col. J. H. Willard in November 1903, then Captain Amos Fries arrived and directed the remainder of the work.\textsuperscript{31}

**The Jetty Components**

**The Rock**

The Corps engineers’ 1890s design called for the breakwater to be constructed on top the ridge of the existing shoal. The Corps engineers classified the breakwater as a rubble-mound or rock structure, essentially a mass of rock stacked along the mile-long crest of the shoal. The engineers determined the amount of rock required from surveys of the water depth over the shoal, which varied between twelve and twenty feet, and the littoral channel, which ranged between seven and twelve feet.

San Diego County had an abundance of rock quarries the contractors could access. Some of the stone in the first phase of construction came from the quarry near the Sweetwater Dam, but the material turned out to be of such poor quality the engineers used it mainly for the initial ballast layer on the willow mattresses. The best stone came from the quarries near Foster, a small town above Lakeside, about forty miles north and east by rail from the tip of Coronado. To access this stone the contractors built a spur line from the quarry to the terminus of the San

![A view down the tracks of the Coronado Railroad leading to the jetty shows workers placing the first four bents of the trestle in 1893. Courtesy of the Coronado Museum of History and Art.](image1)

![The Corps named Captain Amos Fries as the project manager for the final phase. He was later named Supervisor for the Pacific District. Courtesy of the Office of History, Headquarters, U.S. Army Corps of Engineers.](image2)
Diego, Cuyamaca & Eastern Railway at the station in Foster. At the quarry, derricks loaded the rock onto flatcars that hauled the material to the end of the line at N Street near downtown San Diego, a route that largely follows the present trolley route from El Cajon to San Diego.32 At that point the rock-filled rail cars moved through Chula Vista, around the southern end of the bay, up the Silver Strand, and out to Zuniga Point on the Coronado Railway. The builders also procured some rock at a site in Spring Valley, north of the Sweetwater site, and again used the National City and Otay Railway to transport the material to the job site. The NC&O hauled the rock from the quarry to 24th Street where an engine from the Coronado line took over.

Rock for the second phase came principally from the old quarry used in the 1880s for constructing the Sweetwater Dam. Mr. Eagar and Mr. McNally of the California Construction Company, in charge of collecting rock for the contractors Powell & Mitchell, decided this was the cheapest and most accessible source. At one point these rock contractors considered shipping rock by sea from a quarry on Catalina Island, but the cost proved prohibitive. As in the first phase, the contractors eventually made a deal with the National City and Otay and Coronado line to transport the “hard, heavy so-called porphyry” stone from Sweetwater quarry to the jetty construction site.33 In 1896, contractors Waterman and Gilmore made arrangements with Simpson and Pirnie of the Coyote Hill Quarry near

*A steam derrick hoisted large rocks from the flatcars then dropped them in place. Note the worker avoiding the flaying chains. Courtesy of the Los Angeles District Office of the Army Corps of Engineers.*
Foster to supply 15,000 tons of rock for the jetty.34

The construction phase from April to October 1900 was unique because the contractors brought the rock from Mexico. Despite some local rumors that the government was about to rescind the contact – which project supervisor Meyler immediately squelched – Healy & Tibbits identified the rock quarries they wanted on the Coronado Islands, some seven miles south in Mexican waters.35 This was viable because Healy & Tibbitts operated ocean-going barges and had the experience for such an undertaking.

Healy & Tibbitts gained Corps approval and negotiated with Mexican officials to arrange for the purchase and transport of the rock. The agreement produced a convoluted arrangement. The rock came from an uninhabited portion of a foreign country and then, because the rock did not enter San Diego city limits, came under the jurisdiction of the federal government. In the end the Treasury Department authorized San Diego Customs Collector William W. Bowers to determine the value of the stone and assess a duty, which generally amounted to about five cents per ton. The Mexican Consul in San Diego cleared the barge loads and collected a duty for each 1000 tons of rock delivered. With the duty paid the contractors’ vessel, the ocean-going tug Sea Witch, towed the barges directly from the islands to the jetty staging site, rather than detouring to the customhouse in Ensenada, Mexico. Nevertheless American officials required the tug and barge to pay “entrance and clearance” fees each time the boat re-entered American waters. Despite the complications the contractors concluded the deal and obtained quality, but inexpensive Mexican rock from the Coronado Islands.36

In early April 1900 the quarry crew on the island loaded the first barge destined for the jetty. The contractors quickly recognized the added time in barging the rock, and immediately increased the island work force with a vow
“to make the rocks fly.” However the rock crews did not anticipate the difficulty in loading the rock from the shore onto the bobbing, floating barges. After the first loads, Healy realized that they should have placed another barge with a derrick between the shore and the unladed barge to streamline the process. Once loaded a tug towed the laden seagoing barges to the jetty site, where another derrick on a separate barge off-loaded and placed the rocks as directed. The contractors established a camp for the laborers on the island to avoid a time-consuming daily shuttle.37

City leaders were ambivalent about the arrangement. They were pleased to see the project moving forward, but disgruntled because the contractors used rock from Mexico rather than local quarries. The businessmen of the Chamber of Commerce complained that the use of Mexican rock left local quarries idle and took jobs and considered action to “prevent the importation of foreign stone.” However with the contract ending and the jetty moving forward the complaints became moot.38
In the final 1903-1904 stage contractor Waldo Waterman again selected rock from the Foster and Sweetwater quarries. The quarry owners reopened, ramped up, and expanded their work force to meet the demands of supplying and shipping an estimated 110,000 to 120,000 tons of rock to the jetty. The SDC&E purchased additional flatcars to facilitate the job and again performed some bridge reinforcement work before bringing the heavy stone south. Waterman calculated the project would require about 60,000 tons from each quarry at a cost of approximately $2.00 per ton. He believed that once the owners manned the quarries and perfected the removal and loading techniques, workers could load and transport 40 to 50 flatcar loads a day. Waterman estimated they needed 110,000 to 125,000 tons of stone to complete the work, which meant dumping about 5000 tons per month. At that rate Waterman believed the jetty could be completed in about five months.

Once the rock arrived at the jetty, railway men maneuvered the flatcars out onto the trestle and work crews dropped the material by derrick or hand. Healy & Tibbits used the seagoing barges for the drops. The vast majority of the rock formed the foundation or “hearting” of the breakwater. The first section of foundation consisted of stones weighing under one ton each with the final 1,000 feet using larger stone. Workers used some of the smaller stone, 20 pounds or less, as ballast on the mats or to fill gaps in the foundation. The hearting was covered with another six-foot thick rock layer called the “armor.” The armor stone ranged from one ton to four ton pieces in the 300 feet.

Benyaurd’s 1887 proposal estimated the breakwater would require approximately 50,000 tons of large rock and 70,000 tons of smaller stone, but his figures fell shy of the actual amount, which was in the range of 500,000 tons. Throughout the project the cost of the rock taken from the mainland averaged $2.00 per ton and the labor to place it cost $1.60 per ton.

The Mats

The pre-construction engineering surveys revealed that the crust and upper layers of the shoal consisted of loose, sandy material, which posed a dilemma for the engineers. They worried that heavy rock placed on this unstable floor would gradually sink into the surface, shift and settle, and produce an irregular footing that would, over time, weaken the jetty base. As a solution the engineers employed a common Corps technique used in river and harbor projects where they laid down large mats woven from willow branches atop the bed of the watercourse, the shoal in this case, to establish a solid foundation for the rock bulwark. Corps engineers called the willow creations subaqueous or fascine mats.
Throughout the project the majority of the willow brush came from the Sweetwater and Tijuana creek areas. According to local historian Irene Phillips, J. E. Claus of Chula Vista supplied the brushwood for the first phase. Like the rock, Claus transported the willow first on the National City & Otay Railroad then the Coronado line to the beach on North Island. The willow gathered from the south bay cost about 85 cents per yard. One contractor considered bringing in a better grade willow from the Sacramento River area where the brush was virtually free, but with it so readily available in the nearby Otay Valley, the ease of access negated any cost savings. Powell & Mitchell in the second phase went to the San Luis Rey River valley on the north edge of Oceanside for the material, but the prohibitive cost of rail transport from Oceanside encouraged subsequent contractors to revert to using material from the Sweetwater and Tijuana River valley area.

Assembling the brush into mats was an interesting undertaking that required teamwork and muscle. The workers took the two inch or less diameter willow brush and fashioned the individual branches into an eighteen inch thick bundle. They drew the bundle together with wire to compress the bundle to about twelve inches. Workers stacked the completed bundles in two feet high piles on a wooden framework of 2 by 4 inch pine timbers called a grilling creating 3 by 5 foot rectangles. The mat makers then threaded heavy #10 black wire back and forth through the rectangles to tighten it. Teams of laborers then stacked the compacted brush rectangles, slightly overlapping them at right angles to each other.

To further strengthen the mat, a worker below the mat ran a large iron needle threaded with wire through the brush while a worker on top pulled the wire taut and twisted it around a spike. Then another mat was placed on the top layer and firmly secured with the heavy wire. To bind the brush rectangles workers forced long threaded bolts through the mats and used bolts on either end to compress them. The mats varied in size, some measuring about 60 feet long by 40 feet wide, some 37 feet by 75 feet. When weighted down with enough rock to sink it, a mat could weigh 50 tons. The Corps engineers boasted that the completed woven mats could “stand quite a sea.” Workers generally constructed the mats on the island’s sloping beaches atop raised wooden platforms so the worker could
access the bottom of the mats. Carpenters constructed the platforms on an angle so workers could attach ropes to the mats and use gravity to slide the completed product into the water or onto barges.

All five contractors employed the mat foundation system, although the method of placing the mats varied. Some contractors floated the mats, some dropped the mats from barges, others used the railway trestle, while some used all the methods. Healy & Tibbitts was the only contractor to perform the assembly solely from barges. They used a tugboat to tow a barge with the mat lashed on an inclined, sliding platform out to the jetty site where workers slid the mat into the water, piled on enough rock to hold the mat in place, then used guide lines to direct it into a pre-arranged position. Mats were often sunk two abreast lengthwise. Crews piled rock evenly across the mats to sink them onto the shoal then dropped on larger rock to form the structure. At one point Healy placed a derrick on the mat barge to handle the larger rockwork.47

Once the workers submerged the mat and working from the trestle or barges, they applied layers of larger stone and filled the gaps with smaller rock. There was no reference of men actually working in the water. The layering process continued as the workers gradually established the structure’s desired height and width. When completed the width of the top of the jetty was to be about ten feet and about double that at the base. The rock sloped naturally down the sides as the rock achieved its natural angle of repose.48

San Diego’s mild climate and the shoal’s relatively protected location accommodated the construction process. Aside from a periodic winter storm the weather cooperated and made working conditions generally good. Likewise the Point Loma Peninsula blocked the prevailing westerly wind and ocean swell, so the water was rarely too rough for a vessel or barge to safely access the work area. The tidal conditions also allowed the outer entry bar to retain a depth between 20 to 22 feet, which facilitated maneuvering the tugs and barges to complete tasks.49

Some of the willow mats assembled on the beach on raised platforms were 60 feet in length and weighed thousands of pounds. Courtesy of the Los Angeles District Office of the Army Corps of Engineers.
Jetty Postscript

Both the time of construction and the final cost of the jetty surpassed the engineers’ original estimates. Construction began in 1893 and ended in 1904, but excluding the time off for the war, the time to replace the damaged trestles, and the gaps between construction contracts, the actual time to construct the jetty was approximately four years. The cost of the project exceeded the original 1888 estimate of $394,400 by almost $150,000, with a final expenditure of $542,850. Benyaurd based his initial assumptions on the depth of water from the 1887 survey and could not account for the changes in the depths over the shoal in the elapsed six years when the job started. Nor could he account for the costs that would accrue from the change in the depth of the water at the front edge of the jetty between contracts. The engineers’ decision to increase the height of the jetty from half tide to high tide level, which expanded the height and volume of the wall and required more materials and time, also inflated the cost. Before construction began Benyaurd told his superiors that the cost of the land, the construction of the trestle, and other preliminary operations would absorb the bulk of the initial funds and suggested they secure an additional $20,000 for the appropriation of ancillary construction needs and annual repairs. These considerations coupled with the method of bidding a new contract for each appropriation affected the bottom line.

The government’s bidding routine certainly extended the duration and cost of the project. Over the course of the project each Corps supervisor implored the government to pursue the project with more urgency. The engineers viewed the project in technical terms; the quicker it was concluded the better the result. Congress viewed it in economic terms. In the government’s hidebound appropriation procedure the project moved forward disjointedly as Congress administered appropriations—$65,500 in 1890, $50,000 in 1894, $50,000 in 1896, $65,000 in 1899, $75,000 in 1902, and $192,850 in 1903—in a piecemeal manner and opened each bidding application with the selection of a private contractor. Assistant Engineer F. C. Turner grumbled to Benyaurd in 1895 about the length of the project. In a report to Benyaurd he conceded that the magnitude of the project probably rendered it inexpedient to try and complete the project through one contract, but doing so would “greatly reduce the cost.” As the project neared completion engineer Meyler repeatedly badgered his superiors to place the project under one final contract. A frustrated Meyler complained that the process deferred and repeatedly interrupted the work, but he also understood that these delays were bureaucratic in nature and beyond his purview.

The protracted nature of the project also raised the frustration level of many
San Diego’s Zuniga Shoals Jetty: Icon and Enigma

San Diegans who thought the jetty proceeded in a desultory manner. An October 1895 article in The San Diego Union chided the citizens of San Diego for being too modest in their request for harbor improvement funds. The article said civic leaders needed to realize San Diego was competing against all the other regions within the United States for a limited amount of money and must be more aggressive. The reporter urged city leaders to aggressively lobby for the remaining funds for the jetty and sign up one contractor for the duration of the project. It was a matter of economics for the city; the longer the project lingered the more the city lost in revenue from unrealized commerce. In January 1900 the Chamber of Commerce urged Congressman James Needham to create a special bill to continue the jetty work without stop. Chamber leaders complained that the government had prosecuted the jetty job over the past ten years through “intermission” and with small appropriations and groused that the gaps between contracts invariably led to the need for additional expenses. They believed the government’s strategy had extended the length of the project and made it more expensive. As the final phase approached, H.P. Wood, Secretary of the Chamber of Commerce in Washington on city business, met the Chief of Engineers, General George Gillespie, to insure that funding was available and that there would be no delay on the part of the contractor in starting the work. Complaints aside, the project ground forward.

In a project where manual labor, working in the open ocean, and huge boulders ruled, there were remarkably few incidents. The most spectacular accident occurred when Babcock’s crew decided to place a second derrick out onto the trestle. During the maneuver “something gave way” and the pile driver the derrick supported toppled into the water. No one was hurt but it took several
days to retrieve the machine and get the work back up to speed. Another incident involved Osborne’s tugboat *Santa Fe* when it ran aground while replacing damaged trestle bents. But considering the high-risk nature of the work, where cuts and bruises were commonplace, it was amazing that neither the government or the contractors reported any serious accidents, injuries, or deaths over the course of the project. The only project-related death occurred when a large rock crushed a quarry worker.

Nor were there apparently any serious labor-related issues. The only recorded incident occurred when two deck hands of the tug *Sea Witch* quit after claiming the contractors had forced them to stay aboard the vessel overnight and work long overtime hours without extra pay. Mr. Horton, the representative of contractors Healy & Tibbitts, rejected the claim, saying the men had probably been on board because the tug often sailed for the Coronado Islands very early in the morning, sometimes at 1:00 a.m. Horton also pointed out that the men were likely on duty but not actually working as the men often slept on the trip to and from the islands. There was also a rumor the company charged the quarry workers a fee to sail to and from the Coronado Islands, which likewise Horton debunked.

A tangential controversy involved the residents of the City of Coronado who blamed the jetty for the erosion of the beaches on the southern shore of North

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*An aerial view of North Island, Rockwell Field, the Point Loma Peninsula to the west and the jetty in 1940. The Army Corps of Engineers repaired the structure in the 1930s, but its deterioration continued. Note the missing rock cap of the jetty near the south end. Courtesy of the U.S. Navy Seabee Museum.*
Island. In 1901 a citizen group noted that it was the fourth time in the course of the jetty project that their beach suffered serious erosion. Jadwin had earlier reported that the extension of the jetty had caused erosion along the western side of North Island, an opinion Corps Engineer Meyler shared. The citizens’ complaints appeared justified, but with the jetty in place there was little recourse and their protests went unaddressed.59

To remarkably little fanfare, the government officially completed the jetty on July 24, 1904. Despite the best intentions, however, it quickly became apparent that the rock structure did not solve the harbor’s problems. Secretary of the Navy Morton tempered the civic celebration when he reported to the Chamber of Commerce several months later that he was “given to understand that the Engineer Department greatly doubts the efficacy [sic] of the work, in other words, they do not believe that it will tend to keep the channel scoured and certainly will not deepen it.” According to Morton the engineers advised him it would take another dredging project to achieve the desired thirty-five feet of depth and 1000 feet in width at the bar, and the engineers still needed to address the middle ground shoal.60

If there was disappointment over the effects the jetty exerted on the entry, the Corps engineers Meyler and Jadwin eagerly noted that the breakwater did create the scenario where impactful channel dredging was feasible. With that information city leaders quickly responded. Within a month of the jetty’s completion San Diego Mayor Frank Frary and Chamber President Homer Peters wrote Secretary Morton urging him to open dredging operations to widen and deepen the entry channel and cut the middle ground. They estimated the work would cost around $15,000.61 Essentially the completion of the jetty created a reversal of roles; the jetty now became peripheral to dredging.

The ravages of the ocean and the lack of maintenance gradually took a toll on the structure. A 1918 U.S. Geodetic map noted that the outer third of the jetty was submerged. By the early 1930s the outer section of the jetty had deteriorated to the point where gaps appeared along the upper crest of the structure. The Corps of Engineers conducted a survey and estimated the jetty required $374,000 in repairs, a project the Corps approved in June 1933. From October 1940 to March 1941, the Corps dumped over two million cubic
yards of material along the easterly beach near the jetty, then spent another $53,000 on concrete to seal the shoreward 500 feet of the jetty. Between 1941 and 1969, the jetty’s slopes flattened and the outermost third of the structure underwent considerable settling, which rendered portions of the breakwater totally awash or submerged at high tide. In 1970 the government spent $127,000 for maintenance and the Coast Guard placed platforms with navigational lights atop the jetty to increase the visibility of the jetty and assist boaters. Since then the government has essentially allowed nature to determine the fate of the breakwater.

After more than a century the jetty remains an enigma and an icon. Most boaters still cannot name it or even agree how to pronounce its name—is it ZOO-ni-ga (Zuniga) or zoo-NYI-ga (Zuñiga)? The structure people in the early twentieth century saw it as a formidable engineering accomplishment, a perceived vital step in developing the harbor, and a positive beginning in the furtherance of the campaign to use the harbor to lure maritime interests and hopefully the Navy to San Diego. Zuniga Shoals Jetty is now a favorite spot for fishermen and bird watchers, a point of interest on the harbor excursion cruises, a gathering place for flotsam, and a rocky barrier most pleasure boaters look upon with askance and consider a nautical nuisance.

NOTES
1. United States Statutes At Large, 1885-1886, Volume XXIV, August 5, 1886, 317; the $5000 appropriation was for surveying the San Diego, Newport and San Luis Obispo harbors.
2. San Diego Chamber of Commerce Regular Meeting Minutes, April 27, 1900, letter, Acting Secretary of the Navy, F. W. Hackett to SDCC President George Ballou, 128-129, Journal 1900. Hereinafter cited as SDCCRMM.
3. Annual Report of the Chief of Engineers to the Secretary of War, 1888, Part III, 2115-2116. Hereinafter cited as ARCE.
5. ARCE, 1888, Part III, 2116.
6. ARCE, 1888, Part III, 2117, and 1894, Part IV, 2514.
8. ARCE, 1892, Part III, 2628.
10. ARCE, 1890, Part IV, 2902. ARCE, 1891, Part V, 2961.
11. ARCE, 1892, Part III, 2628. “Local Intelligence,” San Diego Union, June 9, 1893, 5. “Real Estate Transfers,” San Diego Union, June 15, 1893, 7. In different accounts, the purchase figures vary upward from $10,000 and the acreage amounts ranged from 18.50 to 18.35 to 18.05.


13. ARCE, 1894, Part IV, p. 2514.

14. ARCE, 1894, Part IV, 2514-1215.

15. ARCE, 1895, part V, 3276.


17. ARCE, 1895, Part V, 3276-3277.


19. ARCE, 1897, Part IV, 3337.


22. ARCE, 1898, Part IV, 3154.


24. “Political Influence is Being Exerted,” The San Diego Union, March 4, 1900, 8.


26. “Along the Water Front,” The San Diego Union, October 9, 1900, 7. ARCE, 1902, Part IV, 3396.

27. ARCE, 1902, Part III, 2341.


31. ARCE, 1903, part III, 2171-2172.

32. The SDC&E ran through Lakeside, Santee, El Cajon, La Mesa, Lemon Grove, Encanto, and the Mount Hope cemetery, to N Street, which is now Commercial Street. Henry G. Fenton and other employees moved 200,000 tons of rock needed for jetty construction.


38. “Chamber of Commerce In The Past Two Years,” The San Diego Union, from the San Diego Chamber of Commerce Journal 1901, 471.


42. ARCE, 1891, Part V, p. 2961. ARCE, 1892, Part III, 2682.
45. ARCE, 1895, Part V, p. 3276.
46. ARCE, 1900, Report of D.E. Hughes, Assistant Engineer, 4186.
49. ARCE, 1900, p. 4186, Hughes Report.
50. ARCE, 1900, 4183 - 4184 and 4186.
51. ARCE, 1891, Part V, 2961. ARCE, 1892, Part III, 2629.
52. ARCE, 1900, 4183-4184. See, United States Statutes At Large and ARCE, 1904: September 19, 1890 for $65,500, designated $5,000 for repairs and $8,000 for dredging, Vol. XXVI, 434; July 13, 1892, $50,000; August 18, 1894, $50,000, Vol. XXVIII, p. 346; June 3, 1896 for $50,000, Vol. XXIX, p. 213; March 3, 1899 for $65,000, Vol. XXXI, 1132; June 3, 1902 for $75,000, Vol. XXXII, 548; March 3, 1903 for $192,850, Vol. XXXII, 1126; a total of $548,350.
53. ARCE, 1895, Part V, 3277.
56. SDCCRMM, January 30, 1903, meeting, report from Wood, Journal 1903.
60. September 24, 1904, letter Secretary of the Navy, Paul Morton to J.S. Akerman, SDCC, NARA-DC, R.G. 77, Document #10924-27. 71. Annual federal harbor dredging programs and amounts funded included, 1900, $219,000; 1902, $276,850; 1903, $38,000; 1904, $21,000; 1906, $9700; 1907, $19,700; 1909, $30,000; 1912, $123,000; 1913, $208,000; 1921, $390,000.
A Moreton Bay Fig Tree and San Diego Memory

Nancy Carol Carter

The signs of illness and decline were unmistakable. Specialists were summoned. Concern mounted. After a full examination, surgery was recommended, despite the advanced age of the patient. Post-operative treatment would continue with an infusion of fluid and nutrients. A more protective environment was deemed essential. Visitors looked on anxiously and hoped for a full recovery.

In 1988 Balboa Park’s largest Moreton Bay Fig tree¹ was sick and dying. It was ailing from a surfeit of public attention and too little breathing room. This tree was one of the park’s botanical treasures and a public favorite, but its branches had brown tips, its foliage was thin and yellowed, and it showed little new growth.² Restorative actions begun in 1989 included a trimming of branches and deep soil aeration. Fertilizer, soil amendments and mulch were added, along with generous irrigation. More oxygen, water and nutrients provided a new lease on life for the Moreton Bay Fig, demonstrated by the appearance of fresh leaves and, in time, a growth spurt. The beloved 75-year-old tree³ began to recover its health, but it was one additional corrective that brought this botanical giant into a new century of life in Balboa Park: a protective fence was installed around the tree on October 9, 1989.⁴

In every park or large arboretum, some trees die every year. In the very dry years between 2010 and 2016, it is estimated that 1,500 trees or an average of 300 per year died in Balboa Park. Few of these trees received life support; limitations of budget and park personnel understandably prevent ministrations to every

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The journal of San Diego History

distressed tree. Among all the trees in the park, including others of the same species, why has the Moreton Bay Fig tree near the San Diego Museum of Natural History received extraordinary care and nursing?

This article explores the history of Balboa Park’s oldest Moreton Bay Fig tree, a silent witness to the growth and development of San Diego. Among the few trees remaining in Balboa Park as legacies of the 1915 Panama-California Exposition, it is the largest and most celebrated. In its lifetime and near presence, young people of several generations have trained for and recovered from two world wars. While it grew and aged, San Diego became a major American city. A cultural mecca grew up around the tree and Balboa Park gained international recognition among urban parks. The survival of the tree owes much to its place in San Diego cultural memory and to efforts of Balboa Park horticulturalists.

The Power of Trees

Trees can transcend their botanical state and become, by societal agreement, symbols of something else (an icon). They can be invested with spiritual significance and serve as living totems. The supernatural reverence of humans for trees has its origins in the early Stone Age. Over time, people began ascribing
importance, power and sacredness to certain trees. Gingkos, for example, have for thousands of years been grown in temple courtyards across China and Japan. The Bo tree became revered as the Sacred Fig due to its association with the enlightenment of the Buddha. Graveyards in England are almost always planted with one or more yew trees, a tradition flowing from a Celtic and Anglo-Saxon connection of the long-lived yew with eternal life. Across Germany and Eastern Europe, a tradition of reverence for the Linden tree predates Christian times. Among other properties, the Linden was believed to promote justice so early dispute resolution occurred under its branches. The tree is the national emblem of the Czech Republic. An annual falling of cherry blossoms has gently reminded the Japanese people that life is beautiful, fragile, and short in a shared cultural understanding stretching back twelve centuries.

Trees may also be acknowledged as witnesses to history. These “witness trees” have a cultural association with a remembered person or event. England has a Magna Carta Yew, a 2,500-year-old tree that was growing at Runnymede when Magna Carta was signed there 800 years ago. In the United States, trees that were growing on Civil War battlefields when the fighting occurred are still thriving. The Andrew Jackson Southern Magnolia tree has witnessed activities from the White

One of three interpretive signs created in 2004 for display around the Moreton Bay Fig, this sign described the tree as being 80 feet tall, with a canopy 130 feet wide. The tree had been growing in Balboa Park for 89 years. Courtesy San Diego Park and Recreation Department.
House lawn since the 1830s. Other trees have come to prominence by surviving a disaster. A badly damaged Bradford Pear tree regained its health after the World Trade Center attack on September 11, 2001, and a 250-year-old “miracle pine” was still standing in a Japanese town after a devastating earthquake and tsunami in 2011. Texas has enough historically important trees to fill a recently published book.

Charles Birnbaum, president of the Cultural Landscape Foundation, has explained the importance of witness trees: “When we have something that is living—like a tree—and the tree was there for an event, it becomes a portal or a lifeway.” While these silent observers to history cannot speak, they do communicate. Human beings are strongly drawn to these living entities as a way of connecting with people and events outside their own experience. The past seems closer in the presence of a witness tree.

Southern California has many such trees. A prominent one is the California Pepper tree at Mission San Luis Rey de Francia, planted in 1830 and the oldest of the species in the state. The tree dates to a time when the mission stood alone and was fully operational. It has lived through the secularization of the missions, the United States’s conquest of the land upon which it grows, the creation of the State of California, and the gradual deterioration of the surrounding mission buildings. The tree survived to the twentieth century when the Landmarks Club of Southern California began the movement to preserve and rebuild historic
missions. It is celebrated today at the restored San Luis Rey Mission as a living link to almost two hundred years of history.\textsuperscript{11}

Balboa Park’s oldest Moreton Bay Fig tree has its own story to tell. It is deemed venerable—that is, worthy of respect—because it is old. Advanced age also means that the tree is big. In fact, it is outsized, having grown to be multiple times larger than most other trees.\textsuperscript{12} The size of this tree species sets it apart and restricts where it can be grown, making it uncommon. Local residential areas are dotted with many of the same trees grown in Balboa Park, but not the potentially mammoth Moreton Bay Fig.\textsuperscript{13}

In addition to being larger than other trees, this fig has curious natural adaptations that make it more interesting than many other species. Its light gray above-ground buttress roots are a living and growing sculpture. They are an art of nature with a purpose. Just as flying buttresses help to hold up the high walls of a cathedral, the Moreton Bay’s buttress roots help to stabilize and support the tall trunk. Other vital support comes from descending aerial roots. When these roots reach the ground they grow into strong props for heavy branches.

This tree owes its habit of long life to family origins. It is a species native to Australia’s eastern shore, growing on the lands surrounding Moreton Bay, known for its clear waters and ecological richness. Eight species of whales populate the water, along with two kinds of dolphins. The area’s protected marshes, wetlands and waterways support scores of bird species. The bay was named by Captain James Cook during his 1770 expedition to the South Seas and honors a distinguished Scottish patron of science, James Douglas, fourteenth earl of Morton, often referred to as Lord Morton. An “e” was misprinted into Morton’s name in the first published account of Cook’s voyage and the mistake persisted, with the result that Australia has a bay called Moreton and an eponymous native fig tree.

The tree was first grown in California from Australian seed imported in 1859 by San Francisco nursery owner William C. Walker (1814-1871) who was experimenting with several Australian plants.\textsuperscript{14} Moreton Bay Figs were tested in San Diego County as early as 1872\textsuperscript{15} but were still a rare species in Southern California when one was planted on the Panama-California Exposition grounds in 1915.

**Growing Up in an English Garden**

Balboa Park’s first Moreton Bay Fig tree was added to a formal English-style garden located next to the Southern California Counties building that stood at the approximate location of the current Museum of Natural History. The Southern California building exhibited goods from seven Southern California counties: Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego,
and Ventura. The coalition also sponsored the model farm and citrus orchard at the 1915 exposition.

A garden of formal English style was an incongruous adjunct to the Southern California Counties exhibit, as was the unpredictable Australian native added to the stylized garden. Inspired by London’s Kew Gardens, there were ten formal flowerbeds each surrounded by a wide band of mown lawn and enclosed by low clipped box hedges. Massed plantings of flowers were at the center. Another section of the large garden had irregular shaped planting areas filled with roses. Various trees, shrubs and specimen plants arranged near the building completed the garden. Generous pathways encouraged visitors to stroll among the ever-changing floral displays.

Captain Francis Edward Gray, a well-known Los Angeles horticulturist, designed the formal garden. It is doubtful that Gray specified the planting of this fig tree as it was incompatible with his garden design. It was tucked into the corner of one of the formal flower beds by someone who surely was unaware of its fast-growing habit. The small, dark-leafed tree can be spotted in photographs and tinted postcards from the Panama-California Exposition. A list of exposition plants published in the 1915 *Official Guidebook of the Panama-California Exposition*
includes the tree’s botanical name, *Ficus macrophylla*, but details of its size and supplier are not clearly documented.\(^{19}\)

The Southern California Counties English garden lasted for a surprisingly long time, considering its fussy design and maintenance requirements. The Moreton Bay Fig’s growth and eventual dominance of its space can be traced in photographs of the garden. It is captured in an undated photograph, taken between 1915 and 1925.\(^{20}\) In this photograph, the robust Moreton Bay Fig has shot up in height and the garden beds still have neatly clipped box hedging. A 1918 aerial photograph shows newly constructed U.S. Navy buildings in the park and gives a good view of the Moreton Bay Fig within the garden. The thriving rows of trees in the model citrus orchard from 1915 curve across what is today the Spanish Village.

Another aerial photograph taken in September 1934 captures the much larger fig tree and an almost denuded model citrus orchard (the Spanish Village would be built in 1935). Almost twenty years after its creation, the English garden of 1915 was still maintained, each bed showing a surrounding of dark hedging. The new Museum of Natural History building, completed in 1933, is center front in the photograph.

During the California Pacific International Exposition of 1935-36, the English garden was invaded for exhibit space. Three temporary installations were placed along the west side of the garden: the Life Building, a model of Boulder Dam, and the Shell Oil Information Service Headquarters. In a May 1935 photograph...
showing the temporary exhibits, the Moreton Bay Fig tree is dominating the garden bed into which it was first planted. In 1958, *The San Diego Union* published a photograph of the ever-growing tree. The clipped hedges around flower beds, as specified in the original 1915 design, are still a garden feature and clearly visible.\(^{21}\)

The last sound documentation of the original English garden is a 1961 Museum of Natural History publication describing trees around the museum.\(^{22}\) It includes a diagram of the garden holding the Moreton Bay Fig tree. The diagram closely matches the original 1915 garden layout shown on a Panama-California Exposition map.

The further history of the Southern California Counties formal garden is not well documented, but by one account it was retained as a Balboa Park feature until the early 1970s.\(^{23}\) By then, the Moreton Bay Fig was dominating the entire area into which it had been planted, a looming presence as it neared fifty years of growth. Its spreading roots were interfering with attempts to maintain the 1915 walkways and formal beds. When the roses, neatly trimmed hedges and abundant flower beds of the English garden were abandoned in favor of a plain grass lawn,
the Moreton Bay Fig tree was fortunately found to be worth retaining—the only survivor of the Southern California Counties garden. It was already a favorite Balboa Park specimen tree and recognized as a tangible link to the time when Balboa Park was first developed on a large scale in readiness to celebrate the 1915 opening of the Panama Canal.

**Crises and Survival**

When the Moreton Bay Fig tree showed signs of a serious decline in 1988, a period of more active monitoring and increased care for the aging tree was launched. At crisis points ever since, a team of Balboa Park horticulture staff and outside consultants have pooled their expertise to arrive at a diagnosis and implement a treatment plan. The fig tree has been returned to a healthy condition after each intervention.

When the Moreton Bay tree began to look stressed and dangerously unhealthy in 1988, the major cause was years of foot traffic that compacted the earth over the tree’s sensitive root system, reducing the tree’s ability to absorb oxygen, moisture,
and nutrients. Additionally, the tree’s natural growth habit of producing descending aerial roots had been thwarted by a dry climate and aspiring Tarzans who broke hanging roots before they attached to the ground to support and nourish the tree. Damage also had been inflicted by decades of tree climbers and carvers. Abrading or cutting into the tree’s notably thin bark causes a drying of the substructure that can eventually kill branches. No one climber or knife cut could harm the tree, but thousands of incursions over many years exacted a cumulative toll.

In addition to treatments that aerated the surrounding soil and added water, fertilizer and mulch, it was determined that the tree’s roots needed the protection of a fence in this busy area of the park. Balboa Park staff were aware that fencing the tree would be unpopular. Its widespread canopy created a shady haven for resting and picnics. Many Balboa Park employees regularly enjoyed their lunch while sitting on a favorite low branch. Every year hundreds of San Diegans climbed in this tree and played among its projecting buttress roots. There was something magical about bringing children to the very same tree in which the parents had played and watching the fascination and discovery of a new generation. Personal connections with this tree wound through San Diego’s civic memory and folk culture. Still, protection of the tree and its root system was an indispensable part of the Moreton Bay Fig recovery plan. For the long-term health of the tree, people had to be kept at a distance.

In anticipation of an outcry, public officials were told in advance of the fence installation. The City Manager’s Office notified the mayor and city council of the deteriorating condition of the tree and alerted them to the placement of a protective green vinyl coated chain-link fence. The circular fence, 4-feet high, was to extend 50 feet out from the tree trunk. A possibility of eventually removing the fence was mentioned, depending on the recovery of the tree.

Local newspapers helped to prepare the general public for the October 1989 fence installation. *The Evening Tribune* described the tree’s distress and warned that “soon there will be no playing, picnicking, or relaxing under the graceful umbrellalike branches of the Moreton Bay Fig tree near the Natural History Museum in Balboa Park.” *The San Diego Union* writer justified the fencing by bluntly stating that visitors were “crushing the tree to death” and treating it with “inhumanity” by carving names and obscenities into the bark.

Although dramatic improvement was seen after the prescribed course of treatment, permanent fencing was deemed advisable to ensure the continuing viability of the Moreton Bay Fig. After nine years of good health, the tree was again negatively affected by troublesome soil compaction all around the fence perimeter. Before the affliction became worse, the protected area was enlarged in 1998 and a new course of soil aeration and amendment, fertilizer, and extra...
A Moreton Bay Fig Tree and San Diego Memory

watering was undertaken. The rebuilt fence encompassed an additional ten feet in all directions, or sixty feet from the tree’s trunk.28

A major construction project became the next challenge to survival. The planned expansion of the Natural History Museum threatened the Moreton Bay Fig tree in ways that concerned the Park and Recreation Department. The location and width of a pedestrian walkway between the tree and the planned building addition was worrisome.29 Likewise, a proposed grading of the lawn for drainage and access was thought to jeopardize the health of the tree. Worst of all, roots on the tree’s south side would be severed during construction. The walkway plan was reconfigured, but in the opinion of park staff, it was still not in the best interest of the tree. The lawn grading plan was changed. An arborist certified that the tree could withstand the slicing of some roots on the south side of the tree. Park and Recreation staff wanted a consulting arborist to certify that the tree would not be permanently damaged during construction and the posting of a financial bond to guarantee the survival of the Moreton Bay Fig tree for ten years after construction.30

In 2001, the Museum of Natural History opened its 85,000 square feet expansion at the rear of the original 1933 building designed by architect William Templeton Johnson. Visitor traffic around the Moreton Bay Fig was significantly increased by a new museum entrance near the tree.

In late 2003, new signs of distress were seen in the Moreton Bay Fig tree. There was die-back on some branches and dead feeder roots. The tree was defoliating. The symptoms were pronounced on the south side of the tree where roots had been cut during the museum construction. Assertions that the problems resulted from disease, rather than construction damage, were quashed through an analysis by the County of San Diego Department of Agriculture, Weights and Measures. While identifying various fungi, nematodes and microorganisms in the tree tissue samples, the plant pathologist concluded that none were harming the tree. “I suspect the problem is most likely due to environmental conditions rather than any single disease organism,” the January 2004 pathology report stated.31

While testing was underway, Park Arborist Paul Sirois sought advice on diagnosing the tree’s ailment and a plan of treatment from experts at the University of California Cooperative Extension program, plant scientists in the Moreton Bay Fig’s native Australia, and a consulting arborist who had not previously assessed the tree. David Shaw of the University Extension service personally inspected the tree. He did not think the tree was diseased, but rather addressed problems of soil compaction and irrigation in his written report.32 After seeing photographs of the tree, a plant scientist from the Australian Botanic Gardens Trust made a strong case for improved protection of the tree. Among Moreton Bay Figs growing in
public places in Australia, similar problems and general decline were caused by “root compaction, traffic and neglect.” Foot traffic, he said, has an adverse effect on stressed trees and keeps them from recovering.33

The local consulting arborist noted the concentration of leaf shrinkage and die-off and dead roots on the south side of the tree and speculated that the tree may have been accidentally poisoned by impurities (oil or other toxic liquids) brought into contact with severed tree roots during construction to expand the Museum of Natural History.34

A larger fence enclosing almost the entire lawn around the Moreton Bay Fig was built35 and another aggressive treatment of aeration, fertilizer, soil amendment, mulch, and extra watering was undertaken. This special attention successfully addressed the problems and the tree gradually returned to good health.36 The larger fence was eventually removed, leaving the tree within the 1998 fence and its protective circle, 120 feet in diameter.

The tree had weathered two more health crises after its near-death experience in 1988-89: the minor setback in 1998 and the more serious afflictions of 2003-04.37 Guardians of the tree acted promptly in each instance. The efficacy of the various treatment plans is shown by the robust growth of the Moreton Bay Fig tree and the current vibrancy of this veteran of San Diego’s 1915 Panama-California Exhibition.
A New Chapter for Moreton Bay Fig Viewing?

In July 2017 representatives of the non-profit Friends of Balboa Park announced the organization’s interest in enhancing the setting within which the Moreton Bay Fig tree is growing. Instead of encountering a chain-link fence when approaching the tree, the proposed plan would bring visitors closer to the tree on a wide pedestrian viewing platform, complete with benches and interpretive information. The new platform would wrap part way around the tree and be well elevated above sensitive tree roots on support piers. The concept was compared to the boardwalks that give visitors access to marsh and bog viewing areas in nature parks.

While emphasizing that some protective fencing will still be needed to safeguard the tree, Friends of Balboa Park suggests that their new viewing platform will help visitors feel a closer connection with the tree, as they did before people were fenced out.38

Still in its conceptual stages, the Moreton Bay Fig viewing stand proposal must be shepherded through many levels of Balboa Park and City of San Diego approval and permitting before it can become a reality. A core consideration for Friends of Balboa Park and all concerned in approving the project is the
potential effect of this installation on the tree itself. If the viewing platform can be constructed without damaging roots or interfering with irrigation, it may provide beneficial protection of a larger area of the tree’s root system. The enduring problem of soil compaction around the fence perimeter would be mitigated by a viewing platform.

On the other hand, any change in the sensitive habitat area around the Moreton Bay Fig could have unexpected consequences. One park tree expert attributed the 1988-89 health crisis of the tree to the removal of the formal English garden in the 1970s. “That started the problem,” he said, explaining that the formal garden’s walkways and hedging kept people off the tree’s roots. While not fully protected in the original garden, the tree trunk stood within a clipped hedge that discouraged climbing and bark carving. When these protections were stripped away, the tree began a slow decline that did not become alarmingly apparent for almost twenty years. The necessity of thinking very long term is a caution and reality that should guide consideration of the proposed viewing platform, but after years of confinement within an unattractive fence, the idea of freeing this worthy centenarian will appeal to many.

A Tree to Cherish

Five generations of San Diegans have known and loved this landmark tree. On top of age, size, and uniqueness, Balboa Park’s largest Moreton Bay Fig tree is valuable. It is an attraction that draws and interests visitors, and is admired
and photographed thousands of times every year. The tree also makes a valued environmental contribution by sequestering tons of carbon dioxide and casting its broad shade in an area of urban heat. And finally, with more than 100 years of growth, this tree is irreplaceable at any price.

A more complex explanation for the drive to save this Moreton Bay Fig tree speaks to the interaction of people and trees over millennia and the way that human groups agree upon and coalesce around symbols to represent emotion and memory.40 For some people, trees like Balboa Park’s largest Moreton Bay Fig become invaluable as icons, totems, or witnesses to history. The always recognizable fig tree, a constant in a changing city, became a symbol for San Diego and particularly for the park. “It wouldn’t be Balboa Park if the tree were gone,” one San Diego mother said as she watched her children climb in the big branches before the tree was fenced.41

Although there are individuals who feel both reverence and a spiritual connection to Balboa Park’s Moreton Bay Fig, this species of tree has not moved into the lofty categories of icon or living totem in the broader culture. Yet, this particular Moreton Bay Fig is on a par with other San Diego cultural icons, taking its place alongside the Serra Museum, Old Point Loma Lighthouse, Mission San Diego de Alcalá, the Hotel del Coronado and, within Balboa Park, the Pandas, the Botanical Building, and the California Tower.42
NOTES

1. The tree is in the large genus of fig plants. Its botanical name *Ficus macrophylla* is derived from the Greek words “makro,” meaning large, and “phyllon,” meaning leaf. The small figs produced by the tree are edible, but more palatable to birds and animals than to humans. The tree was first grown in California in 1859 by San Francisco nursery owner William C. Walker (1814-1871). Elizabeth McClintock, “Trees of Golden Gate Park: 29 Moreton Bay Fig,” *Pacific Horticulture* 45, no. 3 (July 1984), 8-9.


3. This was the estimate given for the tree’s age in 1989. The tree was planted in 1914 or 1915 on the grounds of the Panama-California Exposition, held in Balboa Park. Although the age of the tree when planted has been speculated upon in some sources, it is unknown.


12. The last official measurement of the tree used in the California Registry of Big Trees was made in 1996. The tree was 78-feet tall, its canopy was 123-feet across and the girth of the trunk was 400 inches. A new measurement will be made as part of the 2017-18 Balboa Park Tree Inventory conducted by the Balboa Park Conservancy.

13. The California Registry of Big Trees uses a point system combining height, canopy width, and trunk girth to name the largest California tree of each species. At one time, Balboa Park’s Moreton Bay Fig was listed jointly with a giant specimen growing in downtown Santa Barbara. San Diego’s tree was taller, but Santa Barbara’s had a wider canopy. In 2013 both were replaced on the Big Tree Registry by a larger Moreton Bay Fig growing in Glendora. California Registry of Big Trees, http://californiabigtrees.calpoly.edu (accessed August 25, 2017).


15. A tree planted in Spring Valley in 1872 is still thriving. Moreton Bay Figs may have been planted earlier in San Diego but not survived or planting dates may be unknown. John Blocker, “Seeing the Forest and the Trees,” *California Garden* 108, no. 4 (July-August 2017), 8.

16. A January 1916 article describes the English garden of the Southern California Counties

17. The designer of the Southern California Counties garden is an obscure character in the Panama-California Exposition historical record, being referred to only as “Capt. Gray.” Once identified as Francis Edward Gray (c.1844-1929), a leading horticulturist of the day with a colorful life story, his involvement is understandable. He earned the rank of captain and was wounded in action during the American Civil War after volunteering with a Massachusetts infantry unit at age 18. He identified himself as Captain Gray throughout his life. Settling in the Los Angeles suburb of Alhambra in 1876, he became a successful and widely-known horticulturist. His Ingleside Floral Company nursery in San Marino specialized in carnations. Gray developed notable hybrids of canna lilies, gladiola and amaryllis. His roses, grown in greenhouses to produce cut flowers, were a famous California first. Victoria Padilla, *Southern California Gardens* (Berkeley: University of California Press, 1961), 75, 285. A useful profile of Gray, along with an inflated description of his role as a landscaper of 1915 California exhibitions, appears in Peggi Ridgway and Jan Works, *Sending Flowers to America* (Los Angeles: Los Angeles Flower Market, 2008), 7-8.

18. A 1916 *California Garden* article noted that one of the Southern California Counties English garden beds was augmented with a *Ficus Australis*, undoubtedly a reference to the Moreton Bay Fig tree, despite the incorrect nomenclature. The *Ficus macrophylla* was growing in other San Diego County locations, but was still a rarity when planted in Balboa Park. G. R. Gorton, *California Garden* (January 1916), 5.

19. Persistent San Diego stories identifying horticulturist and nursery owner Kate Sessions as the planter of the tree or its supplier in a five-gallon can are unsubstantiated.

20. The Southern California Counties building is shown, so the photograph was taken before the building was destroyed by fire in November 1925. Although dated “circa 1915,” the photograph is obviously later because of the growth shown in the Moreton Bay Fig tree.


24. “Moreton Bay Fig Tree in Balboa Park,” The City of San Diego Manager's Report No. 89-413, September 1, 1989, Park Archives.

25. Theskan, “Fence to Help Old Tree Survive.”


27. In a brief statement on Balboa Park history, horticulture staffing and park gardens, the Moreton Bay Fig is listed as “the most popular tree.” It was described as being 64 feet tall with a spread of 120 feet after recovering from its late 1980s decline. Kathy Puplava, “Balboa Park Horticulture, Quick Facts,” August 1995, Park Archives.

28. The cost of this larger fence was $3,980. Invoice, South Bay Fence, Inc. to City of San Diego, September 18, 1998, Park Archives.

29. When the San Diego Museum of Natural History building was extended northward, toward the Moreton Bay Fig, it was pointed out that the tree roots extended well beyond the fence around the tree. Some root trimming for the new construction and sidewalk would not be harmful to the tree, it was stated. Architects Richard Bundy & David Thompson, “San Diego Natural History Museum Expansion Project, Meeting Notes,” February 18, 1998, Park Archives.


32. Shaw suggested three interventions: a much larger fence to protect the tree, adjustments on existing sprinklers and active encouragement of aerial root growth. David A. Shaw to Paul Sirois, March 2, 2004, Park Archives.


35. Documents from the supplier show that the fence was 245 feet long and 189 feet wide and cost almost $15,000. South Bay Fence Job Ticket, January 14, 2004, Park Archives.


37. The possibility that the big tree could die was made real by the inability to reverse the decline of a different Moreton Bay Fig tree at the Golden Hill corner of Balboa Park. Despite interventions, including a protective fence, that magnificent old tree died, root and branch.


39. Karl Schnizier was in charge of tree maintenance for the City of San Diego and had observed the Morton Bay Fig tree for twenty years. Theskan, “Fence to Help Old Tree Survive.”


42. In contemporary parlance, the word “icon” has been cheapened by inappropriate applications. It is used here in the popular meaning of something that is widely recognized and held in special regard by many people. Joe Queenan, “Icons Aren’t What They Used to Be,” The Wall Street Journal, July 20, 2009, https://www.thoughtco.com/what-is-an-icon-1691049 (accessed July 30, 2017).
Overlooked by Historians: Salvador Linares and the Perils of Frontier California

Robert A. Kittle

Close by the desert badlands west of the lower Colorado River stands a stone historical marker that, due to its extreme remoteness, few people will ever see. The only way to reach it is on foot or horseback. The nearest paved road is a three-hour hike away. No trail exists to guide the unlikely visitor. Overshadowed by the high ridgeline of the Santa Rosa Mountains, the site is inhabited by bighorn sheep, mountain lions, and black-tailed mule deer. The terrain is studded with protruding

Plaque near Borrego Springs showing the birthplace of Salvador Linares. Near this spot on Christmas Eve, 1775, was born one of California’s first mestizo children. Internet photo.

Robert A. Kittle is the author of Franciscan Frontiersmen: How Three Adventurers Charted the West published in May 2017 by the University of Oklahoma Press. The author wishes to thank Laurie Hannah, librarian at the Presidio Research Center, Santa Barbara Trust for Historic Preservation, for her research assistance.
boulders, prickly barrel cactus, and spiny ocotillos, creating a barrier to man or steed. Unbroken footprints of slithering desert iguanas color this otherworldly setting. The only sound is the desert wind.

In this scraggy wilderness, nearly 2,400 feet above sea level, high enough to get an occasional snowstorm, a bronze plaque bears the name of Salvador Ignacio Linares. His story has been lost in the passage of generations, but the life of Linares—a very ordinary life, really—teaches us a great deal about the hardships borne by the steadfast settlers who occupied California in the name of the Spanish crown and the Catholic Church just as the American Revolution was erupting along the eastern seaboard. And Salvador’s progeny, a colorful cast of outlaws and respectable folk alike, illuminate the lawless era that ensued after California was wrested from Mexico and added to the Union three quarters of a century later.

The tale of Salvador Linares began in the autumn of 1775, when a beleaguered expedition under the command of Juan Bautista de Anza gathered at its staging point, the garrison of San Ignacio de Tubac, on the middle Santa Cruz River south of present-day Tucson.

This was one of Spain’s riskiest ventures—an ambitious scheme to establish two new missions and a military outpost on San Francisco Bay, thereby planting the banner of King Carlos III and staving off potential incursions by Russian explorers and English mariners. To pull this off, Anza led a sprawling caravan of 240 settlers, mostly young families with small children, across 1,200 miles of

Expedition departing Tubac with Anza and Padre Font. Author’s collection.
drought-hardened desert, mountains, and dangerous Indian territory. Among his charges were at least three pregnant women—including Salvador Linares’s mother—who were due to deliver before the colonizing train reached its destination. Many more mothers nursed their infants from the backs of mules as the expedition plodded along a sparsely marked trail that Anza had scouted the previous year.

Anza recruited his homesteaders, or pobladores, from the impoverished frontier pueblos of Sonora, Sinaloa, Fuerte, and Culiacán in northwest New Spain, as Mexico was then known. In those years the region was devastated by floods, epidemics, and recurrent Apache raids. The recruits, mostly poor families with large broods, were eager to embrace a new life in northern California and willing to brave the unavoidable rigors of five months on the trail. All of their expenses for the overland journey—the mules they rode, the food they ate, the tents they slept in, the undergarments they wore—were provided by the king’s viceroy in Mexico City, Antonio María de Bucareli y Ursúa. In addition, most of the adult males of the expedition were trained soldiers and were offered one peso a day for their services.

The roster of recruits compiled by Anza in September 1775 included Ignacio Linares, age 30. When he signed on with Anza on April 14, 1775, Ignacio was a soldado de cuera, or leatherjacket soldier, at the Tubac presidio. The term leatherjacket referred to the heavy sleeveless smocks worn by Spanish soldiers. Typically made of several plies of deerskin leather, the jacket was impenetrable to Indian arrows except those fired at very close range. Ignacio had been baptized in the Catholic Church shortly after his birth in 1745 in San Miguel de Horcasitas, Sonora. His parents, Gregorio Linares and Manuela Linares, were converted natives, or indios, who practiced Catholicism. At the age of 26, Ignacio enlisted in the army at Guaymas, Sonora, on May 1, 1771.3

For the foray across the
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The desert, Ignacio was accompanied by his pregnant wife, María Gertrudis Rivas Linares, age 22, and their three young children, María Gertrudis, 7, José Ramón, 4, and María Juliana, 3. Ignacio’s wife was born in Río Chico, Sonora, in 1752. Census records listed her as española, meaning she was descended from Spanish parents and likely was of fair complexion, in contrast to her darker-skinned husband. María was married to Ignacio around 1767 at Horcasitas. Their first two children were born in Horcasitas. The third was born in Tubac after Ignacio took up his duties there.

For Anza’s purposes, the Linares family was a perfect fit for the colonizing undertaking. Ignacio was a trained soldier and an experienced horseman who could defend the expedition in the event of an Indian attack. Just as important, with a wife and multiple children, he was unlikely to prey on native women as unmarried soldiers had done in the early years of Spain’s incursion into California. Rapes of indigenous women by soldiers inflamed tensions on the frontier, highlighting the imperative for Spanish men to be accompanied by wives and children. Many Native Americans quite naturally viewed the initial, all-male Spanish explorers as outcasts from their own lands who came in search of Indian women. Never having seen mules before, some Indians mistook them to be the wives of the Spaniards, offering them human food and speaking to them tenderly.

On October 23, 1775, Anza’s rambling convoy departed Tubac for California. Leading the file across the arid tableland of the Sonoran desert were Anza and Pedro Font, the Franciscan friar assigned by the viceroy as the chaplain and diarist of the expedition. Armed with a musket and lance, Ignacio Linares shepherded his wife and their little ones on mules. The entire party consisted of no fewer than ninety-two children under the age of 12, and ten children under the age of 1.

Font worried that the settlers were vulnerable to Indian assault because the armed escorts were too occupied looking after their children. “If the Apaches had attacked, doubtless we would have suffered losses,” he recorded in his diary,
“as our few soldiers were raw and inexperienced, and rode so constantly engaged with their little children that at times there would be one or another soldier carrying two or three young ones with him, and most of them rode with a child.”

Not long after the sojourners set up their tents on the first night, 30-year-old Manuela Piñuelas Felíz went into labor. The delivery by candlelight in a field tent at nine o’clock in the evening was difficult, with the baby turned crossways and eventually delivered feet first. All the same, it was a healthy boy who let out a lusty cry. He was sure to survive. But in these primitive conditions, the afterbirth could not be extracted from the mother. At three o’clock in the morning, Manuela was in mortal danger. Font was awakened. He administered the last rites of the church. A few hours later, as dawn glimmered faintly over the desert, Manuela died. She left behind on the trail her husband and seven children, including the newborn, who would be nursed by another lactating mother.

For María Linares this was an ominous moment because she, too, expected to deliver her fourth child in the days ahead. Her time came in December, after all of the women and children had safely forded the broad Colorado River under Anza’s guidance and with the aid of the indigenous people who lived along the waterway.

At daybreak on December 14 a snowstorm accompanied by fierce winds struck Anza’s encampment near present-day Borrego Springs, California. Coming from the warm coastal areas of northwest Mexico, most of the settlers had never seen snow. The harsh turn of the elements exacted unexpected suffering on the women and children, especially at night when temperatures dropped sharply. Making matters worse, the barren terrain was devoid of essential firewood for cooking and warmth. Some soldiers experienced hypothermia, and many livestock driven along the trail as food for the pioneers froze to death. Still, Anza pressed on, and in his journal he praised his charges for their fortitude.

On December 24, as fog and frigid weather hampered the march, María Linares went into labor in the saddle. Anza ordered a rest for the night sooner than he had wanted.

The wayfarers called Christmas Eve Noche Buena, the Good Night. To mark the birth of Christ, Anza ordered that beef be served for dinner and that each man be given a half liter of aguardiente—“fiery water,” a strong brandy. Father Font priggishly protested that Anza was encouraging drunkenness on a solemn holy day, but the commander paid him no heed. In the evening, as the settlers noisily celebrated Christmas Eve with singing and dancing, María Linares’s labor progressed. Remembering the awful death two months earlier of Manuela Piñuelas, she summoned Font to her tent to hear her last confession in case she did not survive the childbirth.
A uniquely poignant nativity scene now unfolded in the freezing wilderness. Not long before the stroke of midnight, as the cattle were lowing and the campfires were dying, María came through the delivery without harm. In her arms she cradled a boy.

A cold, dripping fog enveloped the expedition on Christmas morning and Anza ordered a day of rest. Font said Mass three times and used his sermons to castigate the settlers for the drinking of the night before. Then he baptized the newborn and named him Salvador (Savior) to commemorate the day of his birth. For a middle name, the child was given Ignacio after his father. The next morning, under a welcome bright sun, Anza resumed his trek, noting in his diary that María Linares “was better and had the pluck to march.” So it was that, just 36 hours after giving birth, the mother was back in the saddle, nursing her infant and herding along her older children with the help of her husband. Little could she know that Salvador, hoisted on the back of mule at such a tender age, was destined to become a cowboy and soldier like his father.

At this point most historians lost interest in the story of Salvador Ignacio Linares. So, whatever became of the baby born in the high desert on Christmas Eve?

For many years he was thought to have been the first child of European descent born in California. But this belief did not lift him from obscurity. By contrast, consider the historical fame of Virginia Dare, the first offspring of English parents born in what is now the United States. Schoolchildren learn her name, even though she was born a full 21 years after the first child of Spanish lineage...
was delivered in St. Augustine, Florida. Born in 1566, Martín de Arguelles is a forgotten figure, while Dare has sealed an erroneous place in American folklore as the “first white child” born in the United States.  

Research done in the twentieth century by Elias J. Cota shows that Salvador Linares was actually the third child of Spanish ancestry born in California. The first was Juan Joseph García, baptized at Mission San Luis Obispo on November 11, 1774, thirteen months before Salvador’s birth. The sacrament was administered by Father Pablo Joseph Mugártegui, a Franciscan pioneer from the Basque country of Spain. He later became cofounder of Mission San Juan Capistrano in Southern California and, ultimately, was elected to the powerful post of guardian, or superior, of the College of San Fernando in Mexico City. The second birth to Spanish parents in California occurred at Mission San Diego de Alcalá in February 1775, when Joseph Francisco María de Ortega came into the world.

At 4:30 in the afternoon on Sunday, March 10, 1776, the Linares family and the rest of Anza’s caravan finally reached the safety of the Royal Presidio of Monterey, about 100 miles south of San Francisco Bay. At that moment Monterey was the northernmost outpost of the Spanish realm, offering only a meager existence, with chronic shortages of food and other supplies. The lack of soap was a particular sore point, denying the settlers the chance to
adequately scrub away the accumulated grime of many weeks on the trail.

Ignacio, the head of the Linares household, signed on as a leatherjacket soldier, with the rank of private, at the San Francisco presidio upon its founding at the Golden Gate later in the year.13 This provided steady income for his growing family.

Despite the austere conditions and deprivations of the frontier, Ignacio and María prospered in the years ahead, raised eight more children, for a total of twelve—seven daughters and five sons. After Salvador, the next four children were born at Mission San Francisco de Asís, commonly known as Mission Dolores because Father Font discovered a fresh-flowing stream at the site on the Friday before Palm Sunday, known to the Franciscans as Viernes de Dolores, Friday of Sorrows. The Spanish census of 1790 enumerated Salvador Linares as a 15-year-old living at home with his parents and younger siblings—Mariano, 7, Santos, 6, Marcela, 9, Francisca, 8, Nicolasa, 5, María Antonia, 4, and Rosa, 2.14 (Rosa later married Don Leandro Galindo, a prominent mayordomo, or overseer, of the wealthy agricultural holdings of Mission Santa Clara. For years she faithfully attended to the daily needs of the mission church, washing and ironing the altar linens and silk vestments of the padres.15)

Starting in 1784, when the Linares family moved a short distance south to the new pueblo of San José, the last four of the children were baptized at Mission
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Santa Clara. María’s final pregnancy produced an unnamed son who died shortly after his birth. He was baptized at Santa Clara and buried in the mission cemetery on August 11, 1794—the first of many members of the Linares family to occupy a plot there.

Like 27 percent of the colonists recruited by Anza from the provinces of northwest Mexico, the Linares offspring were a blend of Spanish and Native American blood. The father, Ignacio, was listed in the 1790 census as a full-blooded Native American, although that determination was usually made by a parish priest who may or may not have been accurate in his assessment. The mother, María, was listed as descended from Spaniards, also known as peninsulares, in reference to Iberia. Ignacio and María’s mixed-race marriage was nothing out of the ordinary.

Unlike the rigid, class-based society of Mexico City, the inhabitants of the northern borderlands were a rich mixture of interrelated racial and ethnic groups. The segregation of pure-blooded Spaniards from darker-toned peoples, which was widely practiced elsewhere in Spanish America, hardly existed on the frontier, where settlers of all stripes worked side by side in order to survive. Intermarriage among those of Spanish, African, or Indian descent was the norm. The children of these interracial unions perpetuated a multihued society in which, after a few generations, most citizens claimed some fraction of their ancestry from white Europeans, black Africans, brown Indians, and a range of combinations in between.

Nonetheless, a multilevel classification system was carefully observed in official Spanish records to denote the specific racial blend of any individual. This was in part a holdover from 16th century Spain, when Jews and Moors were expelled and Catholics hastened to prove their purely Spanish heritage. Known as the sistema de castas, or simply las castas, from the Spanish word for “lineage” or “breed,” the racial code covered scores of categories signifying a person’s blood mix. For example, a mulato was the offspring of a black father and a Spanish mother. A mestizo had one Spanish parent and one Indian parent. A lobo was the product of one Indian parent and one African parent. This hierarchy was not entirely benign. People of lighter-skinned castas were generally considered socially superior to those of darker-skinned castas and expected to be treated accordingly.

A beautiful oil painting done by the celebrated viceroyalty artist Miguel Cabrera in 1763 depicts a loving husband and wife with their two small children, one riding on the back of a donkey, the other nestled in a rebozo, or shawl, on his mother’s back. The father has a heavy black beard common among Spaniards, and the mother has the delicate features and darker skin of a Native American. The painting is entitled, De Mestizo y d’India, Coyote—“from a mestizo man and
an Indian woman comes a coyote.” 

Coyote was the *casta* classification for the child of an Indian mother and a father of mixed Spanish and Indian heritage. With an Indian father and a Spanish mother, Salvador Linares was categorized as a *mestizo*. Upon reaching manhood, he followed the path of his father and became a leatherjacket soldier at the Monterey presidio. On September 26, 1795, at
the age of 19, Salvador married María Bernarda Silvas, 21, a widow who was born in Villa Sinaloa, Mexico. The ceremony, performed by Father Pascual Martínez de Arenaza from Alava, Spain, took place at Mission San Carlos. Like her mother-in-law, the bride was categorized in census records as española.

In 1781, as a child of about 7 years old, María had arrived in California with a colonizing expedition organized by Captain Fernando Rivera y Moncada. She traveled on the march with her siblings and parents, José Miguel Silvas and María Pascuala Lugo. The Rivera party was the fourth major colonizing campaign in California. Its aims were to establish a pueblo at Los Angeles; to found missions at San Buenaventura (modern Ventura), at Santa Barbara, and at present-day Lompoc (Mission La Purísima Concepción); and to build a garrison at Santa Barbara.

As Anza did for his 1775 expedition, Rivera recruited soldiers and families from Sonora and Sinaloa. The full complement set out for California from Real de los Álamos, Sonora, on February 2, 1781. The settlers, including Salvador’s future wife, reached California safely in the early summer. But Captain Rivera and a contingent of soldiers who remained behind at the Yuma crossing on the Colorado River were slaughtered by the Yuma, or Quechan, Indians in a three-day uprising in July. The native rampage was sparked in part because Rivera allowed his hundreds of livestock to trample and eat the crops cultivated by the Yumas along the banks of the river, destroying their winter food supply.

María Bernarda Silvas’s first husband was Juan Álvarez, a cowboy from the Yaqui River region of Sonora who became a soldier at Mission San Gabriel near Los Angeles. He died in Los Angeles in July 1792, three years before María’s marriage to Salvador Linares. Census records listed Álvarez as a coyote—the son of a mestizo father (mixed European and indigenous blood) and an Indian woman. He and María were married on April 26, 1789, at Mission San Gabriel. At the time of their nuptials, Juan was 48 and María was 16. Such May-December
relationships were common on the California frontier, where life expectancy was short and a widower was always eager to resume family life with an eligible woman of child-bearing age. On July 10, 1790, the couple had a daughter, María Rufina Álvarez. She was counted in the 1790 census as a two-month-old mestiza, indicating she was of mixed Spanish and Native American parents. Eight months after her husband died, María Bernarda Silvas gave birth to her second child, a daughter christened María Eusebia, who was baptized at Mission San Gabriel on March 6, 1793. In the baptismal registry, Father José de Miguel certified that the infant was the legitimate issue of María Bernarda Silvas and her late husband.

After María Bernarda Silvas’s move from Mission San Gabriel to Mission Santa Clara with her two daughters, and her subsequent marriage to Salvador Linares, more children followed. On November 27, 1796, Father Mariano Payeras, newly arrived in California as a Franciscan missionary, baptized the couple’s first child, Josef Clemente Ramón Linares, in the chapel of the Monterey presidio. The boy lived only eight months and was buried on July 21, 1797, another casualty of the high infant mortality of the era. A second son, José de la Luz Linares, was born on January 20, 1800, and baptized the next day at Mission San Antonio de Padua, a short distance down El Camino Real from Monterey. The rite was performed by Father Jacinto López, a Franciscan from Zamora, Spain, who took up his duties at San Antonio only a few months earlier and let it be known he was unhappy with the discomforts there.

Seven and a half years later, on July 24, 1807, María and Salvador were greeted with twins, Victor Pantaleón Linares and Francisco Santiago Linares. The infants were baptized the next day at Mission Soledad, south of Monterey, by Father Antonio Jayme, a Franciscan from Mallorca.

At the time of the twins’ arrival, Salvador was a soldier assigned to the Monterey garrison. Presidial soldiers often served their duty in surrounding missions and pueblos, and this likely was the case with Salvador. Beyond mundane tasks such as martial drills and sentry duty, the military men performed a host of other practical functions, such as rounding up cattle, branding, castrating bulls, and slaughtering. This meant soldiers also were vaqueros, accomplished horsemen.

Amid the joy and excitement of the birth of twin boys, unexpected tragedy loomed for the Linares family. Three weeks later, on Thursday, August 13, 1807, Salvador in spite of his well-honed skills as a horseman lost his life when he was thrown from his mount. The circumstances of this misfortune are unclear. His death record at Mission Santa Clara, recorded by Father José Viader, simply states that Salvador died “as the result of a fall from a horse.” He was 31 years old, and in keeping with the family’s Catholic faith, he was given last rites with holy oil.

A private burial took place the next day at the mission cemetery, near the
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grave of his father, Ignacio, who died two years earlier at the age of 60. He had been declared inválido, or retired from military service, in 1793. Six years after Salvador’s death, his mother, María Gertrudis Rivas Linares, was laid to rest next to her husband, on December 4, 1813.

In the two centuries that followed, the Santa Clara cemetery was abandoned, the headstones lost, the graves forgotten. Today the site is a cultivated plot at the corner of Benton and Sherman streets in the city of Santa Clara. Owned by Santa Clara University, a Jesuit institution, the land is tended by eager students who raise vegetables for a local soup kitchen. Tidy rows of lettuce, peas, cabbages, and broccoli line the garden. Plump chickens wander among the rows, pecking the dark brown soil for bits of food. Beyond the chain link fence surrounding the property is a neighborhood of pleasant bungalows and, two blocks away, the main campus of Santa Clara University.

There is no trace of what occupied this patch of dirt in 1807. But a team of dogs trained to detect human remains uncovered the answer in 2004. The dogs, from the Institute for Canine Forensics in Woodside, California, were trained to identify the scent of human remains, and taught to sit down or stand at the exact spot of the scent. On two surveying trips, the dogs sniffed out and mapped a graveyard approximately 125 feet square. What they had found was the second cemetery of Mission Santa Clara, established in 1777, the eighth of the twenty-one missions founded in coastal California. Plagued by multiple earthquakes and fires over the centuries, the mission was moved to successive locations. From 1784 to 1826, this cemetery was used for the burials of Spanish homesteaders, soldiers, padres, and converted Indians.

Widowed for a second time, María Bernarda Silvas Linares was left to fend on her own with the newborn twins, a 7-year-old son, and two teenage daughters from her first marriage. After Salvador’s death, she returned to Mission San Gabriel and married for a third time on December 17, 1809. Her new husband was José Pedro Villalobos, a corporal at Mission San Diego. Born in Mexico in 1780, José Pedro was seven years younger than María. Like María, he came to California with the 1781 Rivera expedition, in the company of his parents and siblings. The wedding took place only after Father Esteban Tapis, a missionary from Catalonia who later became the third padre-presidente of the California
missions, gave the couple a dispensation to marry, a necessary step because José Pedro was María’s nephew.

Together they had at least one child, María Dolores, born on April 15, 1810. The child died four years later and was buried at Mission San Diego. María Bernarda Silvas Álvarez Linares Villalobos died in Los Angeles on February 18, 1835, at age 62, after outliving three spouses. She was buried in the Los Angeles Plaza Church cemetery, another burial ground, or *campo santo*, lost to the sweep of time and urban development. In 2010 a building construction project in downtown Los Angeles unearthed the human remains interred there between 1823 and 1844. Rotting wooden coffins, rosary beads, and religious medals were among the artifacts uncovered. In the time that the cemetery was in use, 695 individuals were laid to rest, as documented by The Huntington Library’s Early California Population Project.29

Of the children of Salvador Linares and María Bernarda Silvas, their eldest, José de la Luz Linares, married María de Jesús García at Mission San Diego on July 19, 1819. At age 18 on January 8, 1826, one of the twins, Victor Pantaleón Linares, married Micaela García, a widow, at Mission San Diego. Five years later, on January 2, 1831, Francisco Santiago Linares married María de los Dolores de Grácia Alvarado at Mission San Diego.

In 1841, in an ironic turn of fate, Santiago Linares was buried in the same Plaza Church cemetery as his mother, but under circumstances that horrified the 2,240 residents of fledgling Los Angeles. The historian Hubert Howe Bancroft
called it “the leading event of 1841.”

On January 18, Nicholas Fink, a German shoemaker and shopkeeper who had come to California five years earlier, was found bludgeoned to death in his place of business, which had been robbed. His skull had been shattered by a blow from a gun barrel. After some of the stolen goods were found in the possession of Santiago’s “sweetheart,” according to Bancroft’s account, Santiago confessed and implicated his two accomplices, Ascención Valencia and José Duarte.

The citizens of Los Angeles were both outraged and fearful after the murder. Volunteer guards were posted in the streets and residents were required to be in their homes by a 10 p.m. curfew. The three accused killers were confined in separate cells and guarded by citizen volunteers and a detachment of eleven soldiers under the command of Lieutenant Roberto Pardo dispatched from the Santa Barbara presidio.

A judge convicted the trio and condemned them to death. In March the case was sent to Juan Bautista Alvarado, California’s hard-drinking governor, in Monterey. The paperwork included a petition signed by 33 citizens of Los Angeles seeking prompt action and severe penalties for the perpetrators. Alvarado dispatched the matter quickly, ordering that Santiago Linares and his two co-defendants be executed by firing squad within three days. He stipulated that the firing squad be composed of soldiers and volunteer citizens. After the governor’s declaration was read aloud in public, the executions were carried out at 10 a.m. on April 6. The bodies were carted off to the Plaza Church cemetery, where their victim had been buried three months earlier. For the next three days, a mounted citizens patrol guarded the streets to maintain order.

Santiago Linares was not the only son of Salvador Linares to commit homicide. In April 1826, Santiago’s twin, Victor, killed a man while Victor was serving sentry duty at Mission San Diego. The details are murky. Victor was put before a court-martial but acquitted of wrongdoing on grounds that he acted in accordance with his obligations as a sentry. On June 6, 1853, at the age of 45, Victor Linares was buried at Mission San Luis Obispo after dying of a fever.

By far the most notorious descendant of Salvador Linares was his grandson, Pio, born in Los Angeles on May 4, 1831, the second son of Victor and Micaela Linares. Leading a gang of murderous outlaws, Pio terrorized the residents of San Luis Obispo in the 1850s before meeting a violent end himself.

On December 1, 1842, Governor Alvarado granted Victor Linares a tract of land in what is now San Luis Obispo County, Rancho Cañada de los Osos (Bears Ravine Ranch), where he settled with his family, including his 11-year-old son, Pio. On May 17, 1851, Pio at age 20 married María Antonia Ortega, a widow.

The 1850s were a turbulent era in California. The Gold Rush attracted tens
of thousands of unsavory fortune seekers. The Mexican-American War, concluded in 1848, shattered the ruling order and brought in new generations of Anglo settlers who challenged the longstanding Spanish customs and property claims of the Californios, who had prospered under Mexican governance. Lawlessness, public drunkenness, and violence prevailed in many quarters, including remote San Luis Obispo, where vigilante committees were formed to enforce justice. Murders and lynchings were common. Many residents never went to sleep without a revolver nearby. In San Luis Obispo the decade was called the “bloody fifties.”

As the bad seed of the Linares clan, Pio took up with an infamous gang of bandits led by Jack Powers, an Irish-born gambler and highway robber. In the mid-1850s, the stretch of El Camino Real between Santa Barbara and San Luis Obispo was the most dangerous place in California, as Jack Powers and Pio Linares carried out a string of murders and hold-ups, dumping the bodies of their victims on the roadside. Corpses became a common sight along El Camino Real. San Luis Obispo Sheriff Francisco Castro was outgunned by the Powers-Linares highwaymen. The previous sheriff, Henry J. Dalley, had resigned in fear, saying the job was too dangerous. The gun-slinging Pio Linares, known as el pistolero, soon topped the list of most wanted in San Luis Obispo. His motto was “Dead men tell no tales.”

On May 31, 1858, Governor John B. Weller, a veteran of the Mexican-American War, offered a $500 reward for the capture of Pio, accusing him of “several atrocious murders and robberies.” The wanted poster described him as having “a slightly dark complexion, is slender, has large sleepy eyes, and without beard.”

Promptly taking the law into their own hands, the citizens of San Luis Obispo formed a vigilante committee of up to 150 armed men led by a dapper young attorney named Walter Murray, the future founder of the San Luis Obispo Tribune. The volunteers swore a vow to rid the county of Pio and his desperadoes, which
the *Santa Barbara Gazette* branded a “ruthless band of assassins.” Pio merely taunted the vigilantes, claiming his gang was stronger. On June 13, 1858, sixty to eighty members of the Committee of Vigilance surrounded the adobe house at Rancho Cañada de los Osos, where Pio was hiding out, and burned it to the ground. Pio and his confederates escaped into the woods.

The next morning, Pio and two of his followers were cornered in a stand of willow trees. In an exchange of gunfire, Murray was shot in the arm and vigilante John Matlock was mortally wounded. Pio fell dead in a storm of bullets. His two allies were captured and hanged the very next day. By the time the vigilante committee was disbanded, it had hanged no fewer than six accused outlaws. Powers, who earlier had fled to Sonora to escape a Los Angeles lynch mob, was shot to death in 1860 in a quarrel over a woman. In the mountains northeast of Hermosillo, his body was disposed of in a fenced enclosure of starving hogs.

Scholars overlooked quite a bit when they forgot about Salvador Linares after his birth on a raw Christmas Eve in the backcountry. Perhaps this was because Salvador’s life, and those of his descendants, followed the familiar patterns of early California—a time marked by hardships and the uncertainties of hunger and disease and endemic violence and dying before one’s time. Salvador and his generation merit our respect for the grit they showed in overcoming the implacable demands of the California frontier.

**NOTES**


5. Ibid., 101.


7. The ages were compiled by Anza historian Donald T. Garate. See the Tumacácori National Historic Park website, U.S. Park Service, available at https://www.nps.gov/tuma/.


10. Walt Whitman underscored this anti-spanish rhetoric in 1883, declaring that “we tacitly abandon ourselves to the notion that our United States have been fashion’d from the British Islands only, and essentially form a second England only—which is a very great mistake.... To that composite American identity of the future, Spanish character will supply some of the most needed parts.” Letter to Messrs. Griffin, Martínez, Prince, and other Gentlemen at Santa
Fe, 20 July 1883, published in the Philadelphia Press, 5 August 1883; original in The Huntington Library, San Marino, California.


21. Ibid., 84.

22. Ibid., 84.

23. Geiger, 144.


25. Ibid., entry 3301.


27. Ibid., 192.


31. Ibid., 630.

32. Bancroft, II, 548.


34. History of San Luis Obispo County, California, with Illustrations and Biographical Sketches of its Prominent Men and Pioneers. Oakland: Thompson & West, 1883.

35. Los Angeles Star, 12 June 1858, p. 2, col. 5.

36. Ibid., July 10, 1858, p. 1.

BOOK REVIEWS


Review by Robert Senkewicz, Professor, Department of History, Santa Clara University.

The most important eighteenth-century Spanish expeditions into Alta California were those led by Gaspar Portolá in 1769 and Juan Bautista de Anza in 1774 and 1775. Also, the most significant Spanish military defeat in the region was the Quechán destruction of two missions and a settlement along the Colorado River in 1781. In this well-constructed and nicely written volume, Robert A. Kittle, longtime editorial page editor of the San Diego Union-Tribune, brings these significant incidents to life in a fresh and invigorating fashion.

Much of what we know about early California comes through the writings of the Franciscan missionaries. Although this group was never the dominant force in the province and was always dramatically outnumbered by indigenous people and mestizo soldiers, it consistently included the most literate and well-educated men in California. In this book Kittle focuses on the writings of three missionaries. One was Juan Crespí, who accompanied Portolá. Another was Francisco Garcés, who participated in both Anza expeditions, explored – often with the Cochimí man known by his baptismal name of Sebastián Taraval – many regions of the Southwest, including the southern Central Valley of California, and was killed in the Colorado River attack. The third was Pedro Font, who accompanied the second Anza expedition. In vigorous and trenchant prose, Kittle engages the reader more fully than many previous writers with the lived experience of the Spanish exploration of Alta California.

The unique strength of this book is the engaging narrative Kittle constructs. Through the diaries and correspondence of Crespí, Garcés, and Font, readers feel deeply involved with the exploration parties. We share the travelers’ excitement when the Portolá expedition realized that they had reached Monterey Bay in May 1770. We experience the expedition’s relief when Kumeyaay guides led Anza’s men to water in the midst of a desert in southeastern California in March 1774. And we wonder, as we read the respectful way in which Garcés interacted with the indigenous peoples with whom he came into contact on his wide-ranging treks, if the relationships between Spaniards and Alta California native peoples might have turned out very differently from the tragedies that too often ensued.
In addition to presenting the experiences of these three Franciscan explorers, Kittle offers excellent vignettes of important episodes that set much of the context for their writings and travels. The Kumeyaay revolt in San Diego in 1775 is fully described and the author makes every effort to present the indigenous perspective. Kittle uses the writings of the French explorer La Perouse to sketch, often in damning terms, the indigenous experience in the missions. And he employs the writings of a little-known missionary, Tomás Eixarch, to provide a concise picture of native life along the Colorado River. These vignettes serve to deepen the vivid narrative Kittle constructs.

The book would have benefited from a deeper discussion of eighteenth century Franciscan theology, especially the theology of conversion. And the epilogue, which correctly points out that the complicated truth of Spanish California is found neither in the mythology of heroic missionaries and contented neophytes nor in simplistic accusations of torture and genocide, would have benefited from a more explicit acknowledgment of the consequences, even if they were unintended, of the effects of large-scale Spanish incursion on indigenous lives and traditions.

The pens of Franciscan missionaries recorded and constructed a good part of early California history. In foregrounding these missionaries and in presenting their writings in such a colorful fashion, Kittle’s book affords an excellent entry into our state’s complicated and still crucially important past.


Reviewed by Rick Kennedy, Professor of History, Point Loma Nazarene University.

Most readers of this journal know the basic facts about Ellen Scripps – one of the richest women in America, leading philanthropist of San Diego, and patron of La Jolla, educational institutions, and architect Irving Gill – but such basics barely begin to illuminate the mind and character of one of the most interesting women in California’s history. Molly McClain, Professor of History at the University of San Diego, takes us far beyond the basic facts. Writing with sensitivity and grace, often with wit and an eye for the quirky, McClain focuses on the clarity of purpose in an unmarried, highly educated woman of wealth and authority. By page thirty Scripps is pushing sixty years old. For most of the book, McClain...
Book Reviews

takes us deep into the thoughts and labors of a retired woman who has come to settle in California with a commitment to the politics of equal rights, an uneasy relationship with religion and spiritualism, an interest in gardening, literature, biology, Egyptology, and natural history, and a willingness to embed herself in women’s clubs and networks of women, including the “indestructables,” the name of a group of women “buzzing around town as busily as if they were in their teens” (p. 115).

The chapter on Ellen’s relationship to her whisky-drinking and foul-mouthed sister Virginia is worth the price of the whole book. Ellen and Virginia lived together for many years, and McClain writes that “Ellen drew strength from her outgoing and opinionated sister” (p. 111). The two having given the land and financed the construction of St. James-by-the-Sea Episcopal Church, Virginia thought of it as her private chapel and was known on occasion to interrupt the priest’s sermon: “You’d better stop talking now, don’t you see everybody is going to sleep?” (p. 114). The two having given the funds for a girls’ school in La Jolla – what became The Bishop’s School – it was Virginia who took daily interest in it, was beloved by its students, and was known, at times, to rearrange the school’s drawing room furniture.

The most important take-away from the book is that Ellen Scripps did not just give money randomly to whomever, nor did she want her gifts to be superficial or self-aggrandizing. She was very thoughtful and her philanthropy was purposeful. McClain writes that she was especially keen “to create the kinds of institutions that would encourage democratic principles, promote social progress, and contribute to what she described as ‘the evolution and uplift of the human race’” (p. 121). McClain quotes her saying, “My instincts and interests are educational” (p. 123). Her patronage of the architect Irving Gill was not fired principally by aesthetics; rather, she shared in his hope that architecture could solve social problems. Funding of Scripps Institution of Oceanography was not simply to support research for knowledge’s sake. The philanthropist shared in the founder William E. Ritter’s idealism that “the study of the ocean promised to mediate the truths found in both science and religion” (p. 72). McClain writes beautifully of Ellen and Virginia’s appreciation of kelp, having been introduced to the varieties of “sea mosses” by Mary Snyder, the botanist living in Pacific Beach (p. 64). Ellen Scripps had transcribed a popular poem about “high yearnings …welling and surging in…from the mystic ocean” (p. 73). When Ritter came looking for patronage, promoting holistic research so as to understand Life in its interconnected fullness, he met a kindred spirit in Ellen Scripps.

McClain’s subtitle, New Money and American Philanthropy, might make some readers think that her book is mired in talk of money. This biography is much
more than a study of gaining and giving away money. McClain presents Ellen Scripps as an interesting woman in her own right, a “woman who had perfected the ‘art of living,’” who also, by the way, was richer than most people can imagine (p. 218). Because of that wealth she had earned and invested for herself in the first part of her life she could then “shed the trappings of class and the boundaries of race, extending her philanthropy to institutions that promised to transform both culture and society” (p. 218).

Interestingly, for all the grandeur of her ideas, Scripps was primarily a regional philanthropist. Just as La Jolla was envisioned as “A New Town Where High Thinking and Modest Living is to Be the Rule,” Ellen Scripps chose to live modestly and focus her high-thinking locally (p. 77). Her money was mostly derived from investments in a far-flung network of newspapers, but through her, money from all over America was funneled into San Diego, and most specifically into La Jolla. She wrote “I am, heart and hand, in sympathy with the oppressed; that my life and money are in their service”; however, McClain shows how she was not an Andrew Carnegie, willing to send money to build libraries throughout America. Impressed by the nation-wide movement in support of offering the poor of diverse ethnicities places to gather and play, Scripps funded a community house and playground in La Jolla – not even funding such places throughout San Diego. (One significant exception to her localist tendencies was her funding of Scripps College in Claremont.)

Molly McClain’s book is excellent. Every chapter is full of interesting people, insightful comments, and thought-provoking situations. The picture of eccentric Virginia, standing on a rock, arms akimbo, huge hat on the back of her head, some sort of vine hanging down from her neck and shoulders, squinting at the reader, illustrates just one of the many fun parts of the book. Sadly, perhaps we who live after World War II are not near as interesting as the creators of modern California who lived in the Progressive Era. Ellen Scripps, McClain makes very clear, was one of the creators of modern San Diego. Optimistic about people and the power of education, she was an amazing woman.

Reviewed by Robert D. Miller, Lecturer, Department of History, California State University San Marcos.

Diana Bahr’s The Students of Sherman Indian School provides an institutional history of Sherman Institute in Riverside, California, from its inception as Perris Indian School in 1892 through the early months of President Barack Obama’s second term. Sherman, the last of twenty-five off-reservation boarding schools constructed by the federal government, originally adhered to Richard Henry Pratt’s desire to “kill the Indian and save the man.” Known as Sherman Indian High School since 1971, the school remains one of a handful of off-reservation boarding schools still in operation, though it now celebrates and promotes Native cultures. Bahr’s book is not the first study of a specific boarding school, or even of Sherman itself, as existing monographs examine student health, the outing system, and students from specific Native groups at Sherman in detail. (Jean Keller, Matthew Gilbert, and Kevin Whalen have explored these issues in works published in the past fifteen years.) Bahr, however, is the first to present a comprehensive history of the school through the present day.

For more than a generation, Native histories have employed the concept of a middle ground (drawn from Richard White’s work) in which diverse historical actors reached accommodations to bridge cultural barriers and misunderstandings. This approach has proven critical in emphasizing Native peoples as historical actors, not helpless victims of colonial regimes. Bahr modifies this approach by stressing what she refers to as a “middle course” in which students charted a path between the eradication of their cultures and the total rejection of United States society. Bahr notes a similarity with Cliff Trafzer’s concept of “turning the power,” as many students utilized the knowledge they acquired to defend their people and societies even though the students seldom planned to become cultural intermediaries (p. 7).

Bahr ably synthesizes existing scholarship on Sherman’s history while making several valuable contributions of her own. For example, she examines a group known affectionately as the BIA Brats, the children of Bureau of Indian Affairs employees who grew up on campus during the middle decades of the twentieth century. Even though many of these children were themselves Native, federal regulations prohibited them from attending Sherman, necessitating their enrollment in local public schools. Officials limited contact between the BIA Brats
and Sherman students and prohibited dating. These restrictions are unsurprising as Sherman retains an emphasis on discipline, even after several decades of expanding Native control over education. In her chapter analyzing twenty-first century developments, for example, Bahr notes the Sherman Indian High School Guide to Success devotes twenty-two of its fifty pages to discipline and student conduct. The continued paternalistic oversight found at Sherman, including references to AWOL students, is a reminder of the origins of the boarding school system and merits further analysis.

The discussion of Sherman’s recent history is a strength of Bahr’s work but also highlights the need for further research. Bahr’s examination of the school’s post-1971 history is laudable considering the relative paucity afforded the subject within existing scholarship. However, the closing chapters of the book place a heavy emphasis on United States senators, government reports, and documents from the school’s administrators, resulting in a reduced focus on Native voices. Though Bahr includes interviews with former Sherman graduates and analysis of student opinions within the Sherman Bulletin, a school paper, the focus on governmental and institutional leaders is prevalent. In addition, the broad scope of this text results in an over-simplification of complex subjects. For example, Bahr provides a largely positive evaluation of the Indian New Deal, minimizing Native criticism of the policy, even though the Mission Indian Federation from southern California strongly condemned the federal government’s efforts. Future scholars might determine whether the Mission Indian Federation’s activities attracted the attention or support of Sherman’s students. Such perspectives might provide new avenues to include Native voices within histories of institutions that often sought to silence divergent opinions. Nevertheless, Bahr’s work is a readable introduction to Sherman and Indian boarding schools in general while serving as an important reminder that the legacies of assimilationist federal policies continue to impact Native students in the twenty-first century.
San Diego City Father William Augustus Begole: Story of a Workhorse Pioneer.  
By Lael Montgomery. Valley Center, CA: Lael Montgomery, 2017. Photographs,  
illustrations, bibliography, endnotes, index. 122 pages.

Reviewed by Iris Engstrand, Professor of History Emeritus, University of San Diego.

It is often said that history is written by the winners. Sometimes, however, it can be written by coincidence and in this case, by a first cousin four times removed. The author, who grew up in Boston, explains, she read about her distant relative William Augustus Begole in Richard Pourade’s History of San Diego and became interested in how Begole (1826-1901) fit into her family history and into the history of San Diego.

Despite the fact that Begole served as a city trustee for five years, a city alderman for two, a city library trustee, a vice president of the Chamber of Commerce, a secretary of the San Diego Society of Natural History (forerunner of the Museum of Natural History), and was a Pacific Railroad investor, he failed to be included in the early histories of San Diego. Begole served on several key city committees including those supervising taxes, water and fire, public buildings and lighting, and the ever-important health and morals. He was a tinsmith by trade, putting tin roofs on several important buildings, and became a capitalist in the Julian Gold Mines. His colorful career touched many well-known San Diego residents.

Begole was probably a survivor of the ill-fated Donner Party that crossed the plains in 1846 and after reaching California settled in the San Francisco area. He arrived in San Diego from that city by steamer at age 43 on the SS Senator on September 24, 1869. The year before he had purchased a double lot on Fifth Street in Horton’s addition. From there Begole traveled back and forth to Julian where gold had been discovered in the Wynola Hills. He became a successful miner.

The book, which is fully illustrated, covers the local history of San Diego in depth during the late 1800s up to Begole’s death in 1901 at the age of 74. Begole was a leader in Masonic circles and master of San Diego Lodge no. 35 for six terms. His death “was felt by all the city” and he was buried in the Masonic cemetery at Mt. Hope. (p.69.) This book is an enjoyable read and demonstrates that there are people missing from recorded history who should be remembered.
BOOK NOTES

*Cattle Colonialism: An Environmental History of the Conquest of California and Hawai‘i.* By John Ryan Fischer. Chapel Hill: University of North Carolina Press, 2015. Illustrations, table, notes, bibliography, and index. xii + 280 pp. $39.95 cloth. $27.95 paper. $29.99 e-book. John Ryan Fischer’s *Cattle Colonialism* provides an environmental history of the role of domestic cattle in transforming not only the flora and fauna of California and Hawai‘i but their native populations as well. In both places, native people attempted to incorporate cattle into their own economies but were ultimately denied the chance to do so by Euro-American laws that left California Indians and Hawai‘ians increasingly marginalized.

*Golden Rules: The Origins of California Water Law in the Gold Rush.* By Mark Kanazawa. Chicago: University of Chicago Press, 2015. Illustrations, tables, appendices, notes, references, and index. xvii + 351 pp. $55.00 cloth. Mark Kanazawa, a professor of economics, explores how miners, politicians, and jurists crafted laws that attempted to enable individual enterprise while protecting property rights and promoting the public good. The book builds up to the emergence of the doctrine of prior appropriation, a legal development that drew on common law tradition as well as miners’ need for access to flowing water.

*Power and Control in the Imperial Valley: Nature, Agribusiness, and Workers on the California Borderland, 1900-1940.* By Benny J. Andrés, Jr. College Station: Texas A&M University Press, 2015. Illustrations, notes, bibliography, and index. xviii + 229 pp. $43 cloth. $24.95 paper. This volume explores how the “subjugation” of the Colorado River made possible the development of agribusiness in the Imperial Valley over the first four decades of the twentieth century. Andrés reveals how the construction of the All-American Canal laid the foundation for growers’ ability to enlist the power of the state to control not only the environment but the immigrant laborers who toiled in the fields.

*Right Out of California: The 1930s and the Big Business Roots of Modern Conservatism.* By Kathryn S. Olmsted. New York: The New Press, 2015. Notes and index. 336 pp. $27.95 cloth. $18.99 paper. Kathryn Olmsted of the University of California, Davis contends in this book that the struggle between agribusiness and farm laborers in Depression-era California played a key role in the modern American conservative movement. While some scholars have explored the influence of intellectuals such as Ayn Rand and Milton Friedman and pointed to post-World War II grassroots movements in areas like Orange County, Olmsted
suggests the roots of postwar conservatism run deeper in time and can be traced to big business interests.

Strangers on Familiar Soil: Rediscovering the Chile-California Connection. By Edward Dallam Melillo. New Haven: Yale University Press, 2015. Illustrations, notes, bibliography, and index. xiv + 325 pp. $40.00 cloth. $25.00 paper. Students of California history are likely aware that Chileans arrived in significant numbers in the first stages of the gold rush. Strangers on Familiar Soil traces the Chilean influence on California to the late 18th century and investigates the trans-national exchange between the two places. Just as Chileans brought mining expertise and technology to California, California exported crops, labor systems, and railroad technology to Chile.

A Way Across the Mountain: Joseph Walker’s 1833 Trans-Sierran Passage and the Myth of Yosemite’s Discovery. By Scott Stine. Norman: University of Oklahoma Press, 2015. Illustrations, maps, chart, notes, references, and index. 317 pp. $39.95 cloth. $29.95 paper. Joseph Walker has long been credited with “discovering” the Yosemite Valley during his 1833 journey from the Rocky Mountains to the Pacific Ocean. This book retracts that voyage, draws on primary sources (most importantly a narrative account from one of Walker’s party) as well as Stine’s own expertise, and questions the veracity of the popular myth of Walker being the first non-Native to set eyes on Yosemite.

Discovering Cabrillo: By Harry Kelsey. Saratoga, CA: Liber Apertus Press, 2017, revised edition. Maps, illustrations, and bibliography. 64 pp. $12.95 paper. This compact book traces Juan Rodríguez Cabrillo’s historic voyage north from Mexico in 1542, becoming the first European explorer to reach present-day California. Historian Harry Kelsey cuts through the myths that have shrouded Cabrillo and his voyage, and presents the truth of his discoveries based on primary sources. The maps and formatting have been enhanced and the book has been updated to reflect evidence that Cabrillo was born in Palma del Río, Province of Córdoba, Spain.
FRANCISCAN FRONTIERSMEN
How Three Adventurers Charted the West
By Robert A. Kittle
$29.95 HARDCOVER • 336 PAGES
14 B&W ILLUS.

Drawing on the diaries and correspondence of Franciscan friars Pedro Font, Juan Crespi, and Francisco Garcés, as well as his own exhaustive field research, Robert A. Kittle has woven a seamless narrative detailing the friars’ striking accomplishments.

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