



The *Hotbox* newsletter updates members, volunteers and the general public about activities, work events and volunteer opportunities at The Railroad Museum at Ardenwood. Questions or comments can be directed to info@spcrr.org, or call 510-797-9557.

The Museum's mission is the preservation, restoration and interpretation of regional narrow gauge railroad history, including Carter Brothers—a pioneer railroad car builder in California. The Museum is located at Ardenwood Historic Farm, 34600 Ardenwood Blvd, Fremont, CA. Our mailing address is: SPCRR, PO Box 783, Newark, CA 94560. Trains operate on Thursdays, Fridays & Sundays; as well as special event Saturdays and Monday holidays between April & November. See our Calendar on the last page for workdays. To make a donation, become a member, or find out more information, go to our website at www.spcrr.org. Newsletters are distributed six times a year.

An Amusement Park Ride???

Jack Burgess, Vice President

If you hear something about an amusement park ride, what comes to mind? Disneyland? Yes! Great America? Yes! Our railroad at Ardenwood? No way! Well, yes. According to the State of California, our historic narrow gauge railroad is a “Permanent Amusement Ride,” just like the train at Disneyland.

Last summer, some of our members raised the possibility that we might be considered a “Permanent Amusement Ride.” But our railroad doesn't go upside down nor drop riders 90 feet nearly straight down into a splash pool—it only runs about 3 mph over nearly level track. But we eventually discovered that the State of California does have regulations that confirm that we are a permanent amusement park ride just like the railroad at Disneyland, Roaring Camp Railroad, and the 15” gauge railroad Redwood Valley Railway at Tilden Park. So what to do?

The first step...a letter was sent to the Sacramento office of the Permanent Amusement Ride division of the Division of Occupational Safety and Health (DOSH) explaining that we had been operating a historic railroad since 1985 using a restored historic flat car and a draft horse, and that we had only been using a locomotive for the past few years.

The Senior Engineer in charge of that unit called me the next day and was very helpful. He fully understood that we are operating with restored historic railroad cars (and he is also a rail fan). He followed up with a long email outlining the general requirements. Bottom line, we needed to receive a Certificate of Compliance from the office of the Permanent Amusement Rides before operating. To do that, we needed to have our mainline between the Ardenwood Station and the Deer Park/Corp Yard grade crossing certified, as well as Katie and our two excursion cars (repairs to flat car 1725 are currently underway so it could not be certified yet).

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After not operating for over two months, we hauled 2,000 passengers on Memorial Day. Photo: Barry Lependorf

Buy tickets in advance at www.eventbrite.com

"Katie" Train Activities Day

Designed for children ages 6 and under

Brought to you by



The Railroad Museum
at Ardenwood



Ardenwood Historic Farm
East Bay Regional Park District

Saturday, June 2, 2018

10 am - 3 pm

at Ardenwood Historic Farm

34600 Ardenwood Blvd, Fremont, CA 94555

KATIE ACTIVITIES

Unlimited train rides behind Katie
Operate trains on our wooden train layouts
Design with Nuts & Bolts
Saw and Hammer at Tool-Time for Toddlers
Build with Jumbo Waffle Blocks
And many, many more activities!
**Safety First: To participate in activities
children must be supervised by an adult**



Tickets: \$9/ages 2-17, \$10/adults

includes ALL special activities, train rides, and park admission
Cash & Credit Cards accepted

Patterson House tour is a separate fee - space is limited
Food and drinks will be available for purchase at the Farmyard Cafe

For more information: call 510-544-2797

OTHER UPCOMING RAILROAD EVENTS: Rail Fair/Sept 1, 2,3 (Labor Day weekend);
Railroad Adventure Day/Saturday, Oct 6 (train rides); Haunted Railroad-for all ages (Oct 19, 20, 21; 26, 27, 28)

An Amusement Park Ride??? - continued from page 1

In addition, we needed to retain a licensed mechanical engineer to inspect our railroad. We also needed to have a number of documents prepared. The documents included:

- Training documentation for personnel responsible for maintenance, maintenance inspection, and maintenance training
- Training documentation for the personnel responsible for the ride operation
- An Operating Fact Sheet
- An evacuation plan
- Documentation on the source of replacement parts
- Current certification in first aid and cardiopulmonary resuscitation for the train crew
- A daily pre-opening inspection check list
- An accident Report conforming to their requirements

Supporting these documents meant also developing forms for tracking locomotive maintenance, car maintenance, and track maintenance. For example, once a rail car is certified for public operation, all maintenance on that car needs to be documented including the source of any parts used in that maintenance.

The Operating Fact Sheet is a very important document for the agency and one is needed for every ride in a regular amusement park. Of course we have only one “ride.” The requirements for this document include:

- Specific ride/device operation policies and procedures with pertinent information from the manufacturer’s instructions
- Description of the ride or device operation
- Duties of the specific assigned position of the ride, device operator or attendant
- General safety procedures
- Additional recommendations of the Owner/ Operator
- Specific emergency procedures in the event of an abnormal condition or an interruption of service.



New automatic brake valve in Katie.

We retained the services of Jakes Associated Inc. in San Jose to do the licensed mechanical engineer inspection of our railroad. This was a fortunate choice since the firm did the same required inspection for Roaring Camp Railroad. After their inspection of our track and equipment, they had no concerns since they recognized that we are running at very slow speeds and only maintenance-level track corrections were needed. Installation of the diesel engine in Katie wasn’t complete at the time of his inspection so that was done later. However, the State inspector found a number of items which he felt needed to be corrected in addition to the paperwork. That included:

- Secure the battery in the locomotive and make sure that the terminals are covered
- Label the buttons, switches, and controls inside locomotive
- Have the air tank inspected by the State (another agency)
- Secure the benches to the floor inside the passenger cars
- Replace one truck on passenger car #5
- Correct the track maintenance issues

All of these items were completed and we passed the final inspections on May 22, the Tuesday before Memorial Day weekend. Going forward, our track, equipment and documents will be inspected every year, although these inspections will be done by Jakes Associated Inc. We will also be visited by the State for a yearly unannounced inspection which will be checking to see if the Conductor provides the safety instructions, the train is being operated safely, etc.

I want to recognize the work that volunteers did to correct all of the items on the State list: Gene Arrillaga, Gene Bobik, Andy Cary, Bob Dike, John Goldie, Barry Lependorf, Jay Martinez, Rich Nealson, Tony Peters, Bob Pratt, Brook Rother, John Stutz, and David Waterman. We could not have met the deadline for the final State inspection without all of their help. 🇺🇸

Curator's Corner: Picnic Cars - Part 2

continued from the March/April Hotbox

Kevin Bunker, Curator

Hey There, Not so Fast!

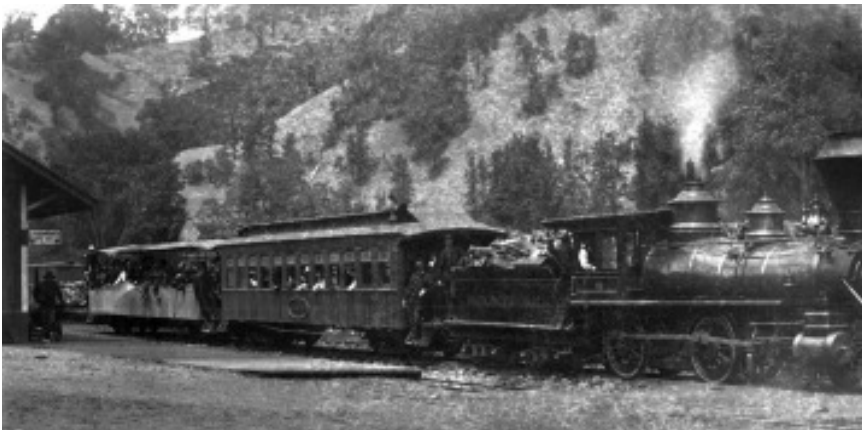
But the forced “end” of July 4th was premature. In fact, the North Shore dropped the picnic charter trains ban very quickly. Here's why: at that time the railroad was constantly in the Marin County superior court weighed down by at least a dozen tort lawsuits occasioned by several bad wrecks involving regular and special passenger trains that either derailed and turned over, or were badly wrecked in one or another collision. Injuries and fatalities resulted and the victims or their survivors wanted justice—and a lot of money.

Also at the same time the North Shore was pushing hard to build the White's Hill Cutoff with its long tunnel, and was just finishing its spanking new electrified standard gauged tracks and suburban trains that would link Sausalito, San Rafael, Mill Valley and San Anselmo. It was also building faster and larger new ferry boats. Bad press it didn't want and didn't need. As it was, the railroad's lawyers kept pressing for lawsuit continuances (in attempts to wear down the plaintiffs and bring settlements) while the company struggled to maintain control over all situations. By 1904, they were back to running picnic trains without as much protest all around.

It needs to be said that the North Shore of 1904 was not the same one as the original 1902 version. Its chief backer, R. R. Colgate (the New York soaps and industrial syndicate titan) pulled out in October 1903. With his influence vanished, the rest of the North Shore syndicate began seeking a way out. That finally happened when E. H. Harriman finally came out of the shadows. Having already stealthily taken over the “broad gauge” California Northwestern Railway (lessor of the San Francisco & North Pacific)—Harriman rapidly bought up all the outstanding and secured North Shore stock, “60,000 shares of stock for a total of about \$800,000.” Suddenly, the North Shore was in the figurative hands of the Southern Pacific Company, just like the South Pacific Coast Railroad. Unlike the SPCRR, however, the NSRR wasn't leased, but bought lock, stock and switch stand.

Harriman's influence spurred giant changes in the narrow gauge's present and future. The North Shore founders' syndicate departed before the end of summer 1904 and a new figurehead president and board were installed. Lingering tort cases in court were thereafter settled one by one. Large capital-intensive projects were finished and improved, and new (and astonishing) westerly expansions of the suburban electric lines were planned in tandem with figures who had recently bought up huge swaths of land on Tomales Bay. New 60-pound steel rails and fresh cross ties were being put in between Point Reyes and Cazadero.

The second generation of North Pacific Coast picnic-excursion (or “observation cars” as local newspapers called them) were built around 1888 and only three were made, if latter-day equipment rosters can be trusted as accurate.



This one may or may not be shown in a fully finished state, but at least it has end platforms and steps, making it easier to load and unload. Even with these improvements upon the plainer “toast racks,” these were only a stopgap measure.

Photo: Marin Free Library, Anne T. Kent Room collection.

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Picnic trains resumed running, but with preference given to church and school groups. For example, one charter requested in May 1905 by St. Peter's Church parishioners, all 2,000 of them from San Francisco, wound up requiring 30 cars to get everyone to Camp Taylor. That may have been the train that demanded four (!) locomotives to get the heavy train over the railroad, one of them the North Shore's unique cab forward 4-4-0 No. 21. But let's set that all aside and take a look at the picnic cars in greater detail.

The Next Generations

Even before the North Shore Railroad was formed in 1901, the North Pacific Coast in its last few years of independence knew that it needed far better rolling stock for its seasonal picnic and excursion trade. Thus, its next generations of "observation cars" (as the Sausalito News called them) came into being. It seems that the first group of three cars came into existence c.1888 and were much more formally planned gondola-like cars with permanent sides. Whether these were fabricated in the Sausalito Shops (the town had changed its name



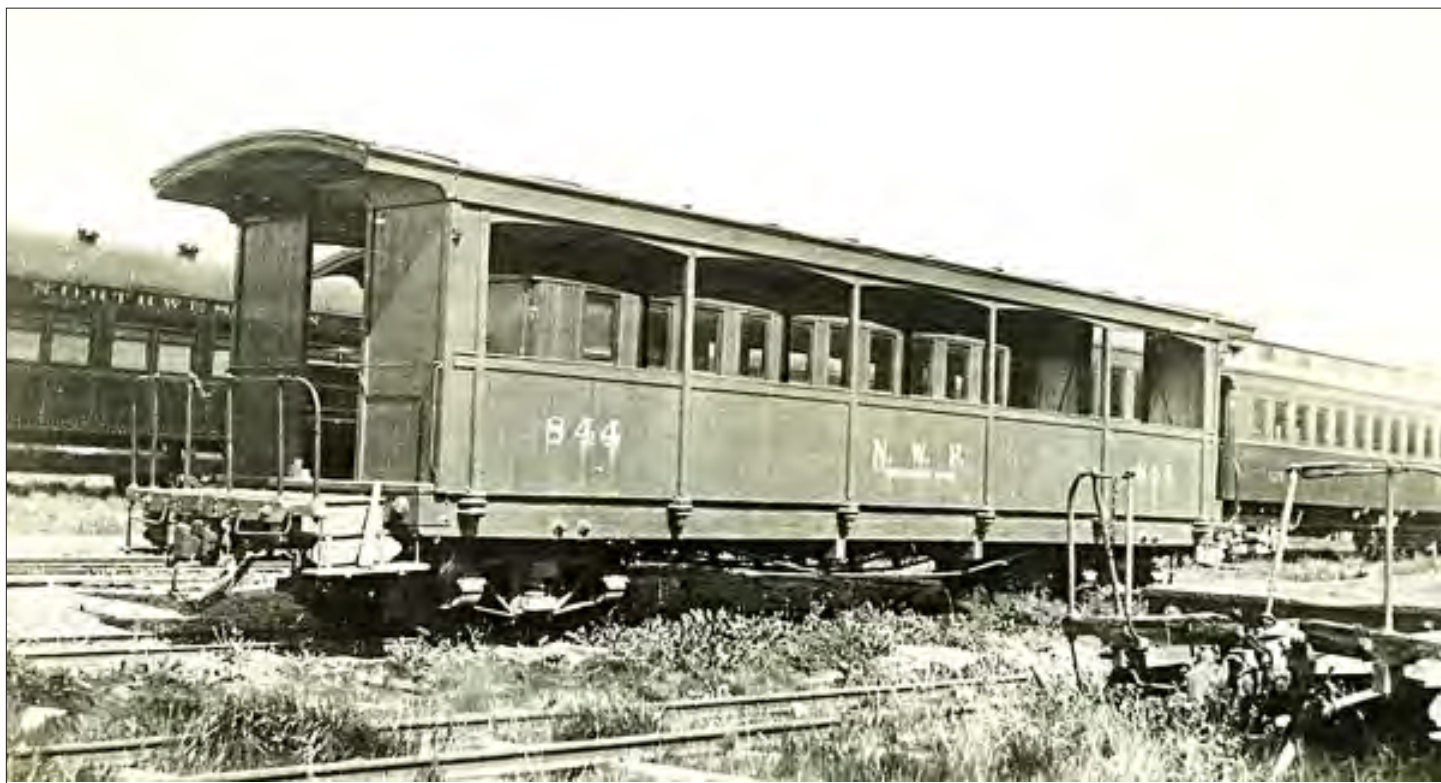
At top, one of the same group of four large 25,000-pound cars was under construction inside the Sausalito Car Shop in 1894 or early 1895. Northwestern Pacific's picnic-observation car 825—termed a "second class coach" by the railroad—was one of the four giants shown under construction. NWP 825 began life as NPC 42, becoming North Shore's car with the same number in 1901 or '02. It is seen above at Sausalito yards between charter trip runs c. 1908.

Top photo, Bruce MacGregor collection.
NWP RR 825 official record photo, Fred Stindt collection.

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in 1888) or by Hammond remains open to debate, the railroad's none too clear records notwithstanding. As with the "toast racks" these had canvas roofing, but the cloth was stretched over a metal (perhaps gas pipe?) framework. This had coach-like end platforms and steps and would be easier for passengers to use. They all probably rolled on arch bar freight trucks. The sole photo of a representative example is simply not clear enough to



NWP's second class picnic-observation coach 844 was one of the final eleven NPC-built cars of 1895. Seen close to retirement at Sausalito yards c.1920. It was finally sold for scrap in 1923. Photo courtesy of PacificNG.org.

tell us much more about it or its kind, and there are no known mechanical or financial records covering this small group's existence. These bore NPC numbers 2, 4 and 5 and could each seat between 40 and 48 people (Fred Stindt, *The Northwestern Pacific Railroad Vol. 1, [1964-1982] page 236*), more perhaps if standees were allowed. Why the capacity variations? Again, there is no good answer, sorry to say.

Picnic service capacity remained mostly unsolved, that is until 1895. That year the North Pacific Coast got dead-serious and attacked the conundrum head-on. The nation and California were gripped by a deep economic depression. While NPC's stock dividends proved elusive, the company had an enormous debt load and taxes that had to be paid annually. So once again it had to foster its passenger services in every way possible.

With substantial numbers of folks either out of work or working for less pay in those hard years, day escapades if cheaply priced made life a little easier. Here again, picnics in the countryside were balms for the worried. To ensure that as many picnickers could be pressed into as few cars as possible, while still being protected (more or less) from sun and weather, the NPC shops drew up sketches for the last two generations of cars that were better-tailored for the purpose.

The first four such cars, NPC numbers 42–45, were real "whoppers" in size: each weighed 25,000 pounds empty (almost as much as an 1870s narrow gauge day coach with conventional seats and windows) and nominally seated 60 people. In order to pack in such a crowd, back-to-back longitudinal benches occupied the center of each car, while narrow bench seats facing the center were affixed to the side walls. These "second class" cars all had radial deck roofs (probably covered in painted canvas) and featured solid T&G board siding. End platforms and steps made for easy loading and unloading, and passenger-type trucks gave a smooth ride. It's unclear, however, where the extra trucks for these came from.

While none too elegant, these biggest picnic cars best served the purpose demanded of them best of all even though they surely cost more to make. That economic fact points to why the Sausalito Shops' next efforts were more rudimentary and smaller, those bridging the gap between the rudimentary toast racks and the giants cars 42 – 45.

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In Northwestern Pacific car 844 (above) we see one of the final eleven 38-seat cars built by NPC in 1895. This particular example was North Pacific Coast Railroad No. 59, bearing the same number under North Shore ownership. Observe how it (and its identical siblings) were built as glorified flat cars but with especially pleasing T&G siding, the arched “window” openings and a rather substantial roof structure, but steps assemblies that were a design throwback to the 1870s-1880s. In this shot taken at Sausalito yards, the car was likely nearing the end of its active lifetime and with added safety appliances (knuckle couplers and extra grab irons) applied after c. 1913. Incidentally, the 1895 construction date represents the year they were completed and placed upon the railroad’s taxable properties rolls as “revenue” rolling stock, just as a ‘scrap’ date records their official removal from said revenue service and tax rolls.



North Shore Railroad’s largest and heaviest engine No. 18 (bought new by the NPCRR in 1899) seems to overpower the compact picnic-excursion train trailing its tender, the train seen resting at San Anselmo. White flags on the engine mark this an an unscheduled “extra.” Standing on the locomotive are ranking senior engineer Bill Ritchie and fireman Bob Rutherford. The date of this scene is c. 1904-1907.

Fred Stindt collection.

A Note on Colors

Throughout the entire time span of picnic train service, we know next to nothing about how many of these special-service cars were painted. Thanks to the CDNC, however, we have two recently discovered tiny glimpses:

Sausalito News 5 February 1899, page 3:

THE PICNIC SEASON.

The Observation Cars of the N. P. C. R. R. to be Repainted.

“President J. B. Stetson of the North Pacific Coast road was here Monday and after visiting Mill Valley returned to the railroad’s shops where he made a short stay. The observation cars are to be repainted in Pullman colors and fitted up ready for the picnic season. A number of passenger coaches are being repainted and an air of improvement prevails at the shops.”

The next and only other hint about paint hues that we have comes from the time shortly after North Shore Railroad took over the North Pacific Coast Railroad:

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Sausalito News 25 April 1903, page 3:

SOUND OF HAMMER AND SAW NEVER CEASES.

“...There is that feeling prevading [sic] the establishment that the work on hand must be rushed through with the greatest possible dispatch... old cars are being overhauled and put into condition to handle the enormous crowds expected this summer, and which have already put in an appearance as exemplified by the travel on the ferries the last few Sundays... Expert painters are engaged in coating the cars with the brilliant red adopted by the North Shore...”

Once the Northwestern Pacific Railroad took over in 1907, fully repainting and relettering the much expanded and merged fleet (which included all the standard gauge cars used on lines north of Tiburon), it took at least two years to complete. That means freight cars received a uniform color, and passenger-type cars another uniform color—again an olive hue. The picnic cars were also treated as passenger cars and retained the olive color up to the end of their revenue duty. For now, that is all we know on that topic.

The Final Years

In between late 1904 and December 1906, the West Coast and bay region newspapers were filled with stories of the sparring between E. H. Harriman and the Santa Fe over who would have supremacy in the redwood coast region. The North Shore was but one small component in that “battle” which—and if we look at it all askance—the perceived war may have been partly for show and distraction while the sparring bodies worked out their differences in very discrete settings. With Harriman mostly prevailing and prodding matters from 1905 onward, the formation of the Northwestern Pacific Railroad became internally tantamount to all else, although its incorporation was not publicly disclosed until December 1906.

However, the tragic Great Earthquake of April 18, 1906 and resultant inferno in San Francisco threw much of that planning temporarily aside, and the grand expansion plan for electric trains to Tomales Bay was thrown out altogether. The North Shore’s narrow gauge was badly damaged, and half the summer of 1906 passed while the railroad was rebuilt, and at heavy expense. With Harriman’s unexpected and sudden death in 1909, the SP and Santa Fe interests shifted away from earlier growth plans and the push was on to finish their co-owned standard gauge line between Willits and Eureka. As early as 1904 newfangled automobiles began showing up on the ferries and in the countryside, and by 1915-1920 these drove down popular interest in mass-excursions as old roads were improved and new paved roads were built. The narrow gauge was basically left to strangle into the 1920s.



The onetime NPC/NS picnic-excursion car No. 43 (and a like sister car, far left) was photographed somewhere on the standard gauge Northwestern Pacific in lowly maintenance of way or “MW” duty, sometime after 1908 but possibly c. 1925 or later. The placement of standard gauge arch bar trucks underneath have hiked both cars far above their original passenger service height and an overall state of “droop” and neglect clings to the 1063. With its broad observation “windows” sealed up with miscellaneous lumber and shingles, it seems to have been in use as a crew bunk car. Its ultimate fate remains unknown, but being burned for salvage scrap metal before the 1940s seems likeliest. Photo courtesy NWPRRH Archive collection.

Swansongs and Retirements

The picnic trains craze seemingly vanished by about 1910 or a little later. By 1908-10, the Mt. Tamalpais Scenic Railway was very well established, and with the addition of its Muir Woods branch, the “crookedest

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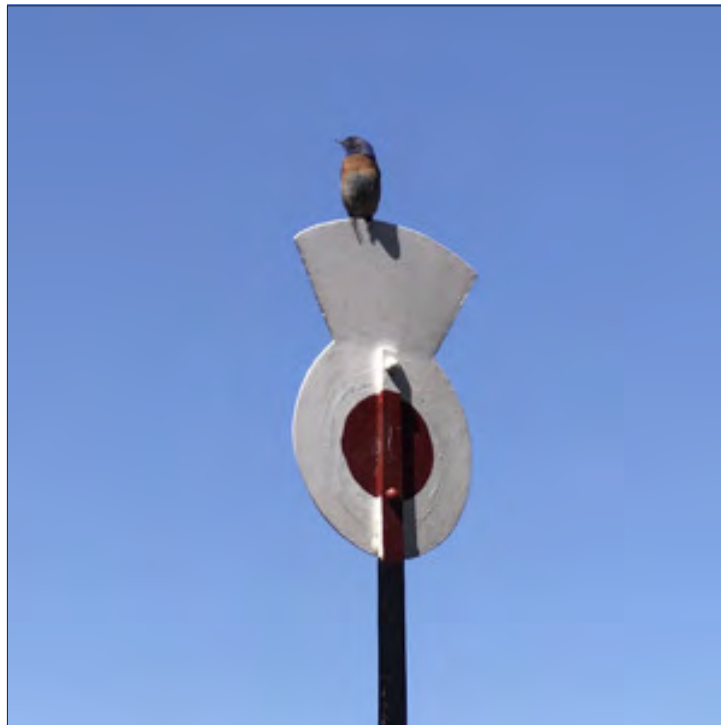
railroad in the world” gave metropolitan folks throughout the Bay Area as satisfying an excursion experience as they could ask for without having to travel as far as before. Also, the resident and peripatetic summer population was more strongly established over the entire length of the Northwestern Pacific narrow gauge, but especially between Sausalito and Point Reyes and around Monte Rio. If folks wanted to picnic, they could do it any time on their own rustic vacation property or they could drive just about anywhere—wonders like Yosemite included.

As that picnic service demand fell off, the Northwestern Pacific Railroad was swift to rationalize and balance its accumulated fleet of rolling stock and inherited services. Its Willits and Eureka link was finished in 1914 but proved grossly expensive. Worsening matters were the periodic landslides and floods over that same extension that would dog the NWP right into the 1980s and beyond.

The first retirements of the then-oldest picnic cars, NWP 851–853 (originally NPC 2–5), began all at once in October 1908 with all three converted to maintenance-of-way service cars. These were at the same time accompanied by one of the long 25,000 pound picnic cars, NWP 826, which was turned into NWPMW 1063. The remaining balance of the picnic fleet built in 1895 lasted only up to the very early 20th century years. More were pulled from public use and put into maintenance-of-way duty from 1908 to 1914. Of that lot, five of the more basic cars (the former NPC cars with arched “window” openings) were retired outright as “scrap” in 1912. Three of the biggest cars were reconfigured as “lunch cars” in 1914 with built-in center tables replacing the centerline benches. The final two of those were fitted with standard gauge arch bar trucks in 1914, and joined the “MW” work fleet that worked all over the Northwestern Pacific in roadway maintenance and repairs. At least one of those with standard gauge trucks was photographed circa 1920–1930 in a very run-down state. While its ultimate fate is not clear, we can safely bet it was reduced to minimal scrap metal and forgotten thereafter.

In 1929 NWP threw in the towel and applied for abandonment of the narrow gauge, and in 1930 that was realized by state and federal approval. The older segment between San Anselmo (Manor) and Point Reyes Station had been standard gauged but also failed to generate revenue and was abandoned and torn out after the narrow gauge engines stored at Point Reyes Station were loaded on flat cars and towed to Tiburon to await their fate. What little of the narrow gauge car fleet remained was sold off through a dealer, but none of the picnic fleet remained by that time.

And that closes out this saga. It is my hope that this extended article has been illuminating and gives *Hotbox* readers and our Museum’s railroad crews and history interpreters a stronger sense of the very colorful seasonal passenger railroading that ran northwest of the Golden Gate. 📷



Beautiful Western Bluebird resting on one of the switch stands.
Photo: Bob Pratt

Thank You Kevin!

Bruce MacGregor

We owe Kevin Bunker a large thank-you for three years of service as the group's Curator, a position he leaves this month. With a resume that included service at the California State Railroad Museum, not only did Kevin bring a wealth of experience as a museum professional, he brought expertise in a special car in our collection: Northwestern Pacific caboose 6101.

It was almost like fate: the caboose literally followed Kevin from CSRM. The car had checkered background, first restored by a non-profit group in the 1970s and donated to CSRM as an important artifact of coastal California narrow gauge railroad history. But while other donated cars became focal points for CSRM restoration work and eventual exhibition, caboose 6101 remained in storage when CSRM opened to the public in 1981. Mistakes made in its first restoration (for example plywood used to recreate siding) covered up mysteries in the original car structure; the lack of focus inhibited deeper research, evaluation and planning for the eventual display of the car. Kevin was busy with his own projects at CSRM, but he wondered—sometimes out loud—how 6101 could be rescued from this limbo.

Kevin himself helped answer that question when he accepted the position of Curator at SPCRR in 2015. By that time, CSRM had donated 6101 to SPCRR. Our museum raised money that allowed us to move the caboose higher up on our priority list, and begin a new restoration effort. Kevin dove in with both feet. He advocated the removal the plywood siding. He then began a detailed investigation of the original car structure. Kevin found never-before-seen photographs of the car in service, and read hundreds of pages of old newspapers looking for clues about the car's origins and use. He worked with a draftsman, Daryl DiBitonto, to create comprehensive documentation as siding was removed, and early wall structures were revealed.

And as a lasting gift to our museum, Kevin wrote (and is still working on) one of the most comprehensive restoration reports ever done for our museum. At almost 100 pages, the volume brings together new findings, historical documentation, and a roadmap to the caboose's ongoing restoration. The report truly sets a high standard for future restoration reports about cars in our collection.

We wish Kevin all the best on the many historical projects he's committed to finish, including a three volume mega-project on the history of the California Western Railroad. Thank you, Kevin, for the contributions you've made to SPCRR! 🚂



Kevin painting clear posts. Photo: Bruce MacGregor

The Mystery of the Upside-Down Comma

Bruce MacGregor

Several years before Paul Harr's death this past March, he shared news of a cast iron plate he had purchased from an antique dealer in Southern California. Paul knew his railroad antiques and, in particular, narrow gauge antiques. He recognized the name "Carter" cast into the plate and got in touch with our museum.

Paul was a well-known figure in the narrow gauge community. A long time member of the Orange Empire Railway Museum, he and friends, like Bill Barbour, championed the growth of the Grizzly Flats narrow gauge division of the museum. Paul facilitated the donation of Ward Kimball's famous locomotive "Emma Nevada." Orange Empire's impressive collection eventually included a Carter Brother's coach, and Paul struck up numerous conversations with our museum about its history, appearance and strategies for restoration.

In turn, Paul befriended our group, volunteered at Rail Fair more than once, and stayed in touch. One year ago, just before Rail Fair 2017, Paul wrote to tell us he had decided to donate the cast iron plate to our museum. He passed away shortly before he could actually send it. But this month—thanks to the efforts of Dave Garcia, Susie LePrince and Tom Gazsi—Paul's estate agreed to complete Paul's wishes and sent us the plate by Federal Express.

Along with this wonderful donation comes mysteries. The information Paul had received from the antique's dealer was sketchy at best. The casting was rumored to have come from Hawaii. It's shape ruled out its use as a car door transom (stepping plate), but perhaps a Carter customer had used the plate on a turntable. There was no further identification except the date cast on the plate itself: 1882.

A close look at the plate revealed further mysteries. The individual who made the pattern seemed to have trouble with punctuation. The apostrophe in "Carter Bro's" was improvised from an upside-down comma, and a comma is mistakenly used instead of a period in the abbreviation of the name "San Francisco." These errors are minor but, unlike other examples of cast iron Carter name plates, seem to suggest this plate is unusual. If anyone has any information about where this plate might have come from, we'd welcome clues, hints and hunches.

We close this news with our appreciation to Paul Harr, and to Paul's estate, for this extremely generous, thoughtful gift. 🌟



Summary of Board Actions - March 2018

Gene Arrillaga, Secretary

The Board approved that within the next 6 months we purchase a refurbished, insulated and ventilated container (with insect screens on all openings) with end door; and place it in the corp yard on drain rock. (est. cost \$6000). The Board agreed to use a 3 person crew on a 3 car train from now on. The park is to be reminded that school groups are to be limited to 60 persons or less including teachers, vchaperons and parents. Safety Manager Brook Rother and committee are developing new safety procedures. The Board learned that the location of any loading facility at Deer Park cannot be determined until the replacement passing track is completed and the exact location of the park's new 440v electrical line is defined.

SPCRR's Digital Rescue Project: Rounding up the usual suspects (and a few new ones)

Bruce MacGregor and John Hall

One year ago, the *Hotbox* announced the beginning of a digital rescue project aimed at capturing as much of North Pacific Coast coach 34 as possible before termites, rot, disintegration and time joined forces to destroy what remained of the car's original parts.

The 1893 coach in question, built by Carter Brothers for the North Pacific Coast, is the most difficult historic artifact our group has ever tried to preserve. Even the word "preserve" is an understatement of the difficulty involved since the car was literally salvaged in the form of fragmentary parts and assemblies, the largest of which was about 40% of an end wall. When our group was given access to the parts in 1990, little of the original car body was intact. NPC 34 didn't even look like a railroad car—more like a giant debris pile. The nearby Russian River had flooded the car twice in the 10 years previous to our arrival which led to extensive rot, particularly in the lower parts of the car. In storage at Ardenwood for the following 30 years, time only magnified the problems encountered when these parts were recovered.

Given a handful of alternatives—none of them easy—the group opted to use 3D CAD to capture as much of the car as possible before the value of these parts was compromised beyond retrieval. For some of the parts the point of no return had probably been reached. Beginning in 2017, John Hall led the effort to document NPC 34 in 3D CAD. John quickly discovered conflicting measurements as he attempted to reconstruct the intact car from the sum of thousands of loose, deteriorating parts. When John carefully measured the position of siding, wall studs, header beam, and



Figure 1. A circa 1990 interior view of roughly half an end wall, showing flood damage most dramatically visible close to the camera—on the parts of the wall closest to the end beam and car floor. This photo lines up with the right hand portion of John's 3D CAD reconstruction in Figure 2. Photo: Bruce MacGregor

John commented, "I am finding the end wall a very challenging part of NPC 34"

of the end wall, siding and frame. A leaky roof contributed to the rot of the upper portion of the wall. Rot and wood degradation are clearly visible in the photograph, damage that completely destroyed the end beam that once supported this wall—the solid foundation that wall posts and other parts depended on to stay in alignment.

John's working drawings (Figures 2 and 3) show these major parts assembled in the end wall, positioned above the missing end beam that once supported them. John measured the large wall parts and their positions, carefully. It seemed logical at first to blame conflicting measurements on this massive loss of material from the end beam, a part that no longer existed.

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The inconsistencies in measurement seemed widespread through the reconstructed end wall. Given the extensive flood damage throughout the car frame and lower parts of the wall, similar inconsistencies could be expected anywhere that John attempted to reconstruct the original walls in 3D CAD. Did the inconsistencies mean that the parts were too far deteriorated to accurately recreate the original car?

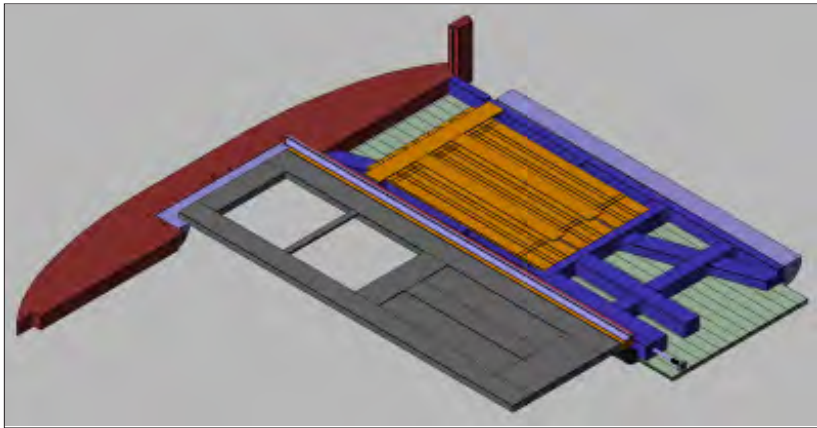



Figure 2. John Hall's 3D CAD reconstruction of the interior end wall in NPC 34. Colors indicate outside wall siding (green), wall header (red), interior oak paneling (orange), internal wall framing (dark blue) and quarter rounds (lavender). Illustration by John Hall.

original drawing assumed the parts interlocked without the need of thick shims. However, careful inspection of a 1990 photograph revealed the rotted remains of $3/8$ " shims clearly intended to fill a noticeable gap between supposedly interlocking parts. Without including the shims as part of the drawing, the dimensions of the wall parts alone failed to give accurate displacements—in other words, accurate locations where each part was originally positioned in the wall.

Once the shims were added to the drawing, the end wall measurements reconciled, and the accuracy of the 3D CAD drawing was back on track. In spite of the extreme flood damage, parts and assemblies could be accurately combined in 3D CAD into larger and larger parts of the car. A basic question about the project's accuracy had been answered.

But John allowed himself to ask a different kind of question: why were the shims added in the first place? We can only speculate. On the Carter Brother's shop floor, the craftsmen who assembled these cars used shims and grooves as adjustments to the structures they put together, obviously a way to make the structure tighter and more rigid. Was this accepted industry practice or just Carter practice? Or perhaps some kind of temporary workaround? Or—like the urban myth of a Monday on an automobile assembly line—just a bad day? We simply don't know.

But the remains of NPC 34, under John's close scrutiny, have at least shed light on a new question. John's work on NPC 34 continues (along with future updates in the *Hotbox*). 

The apparent impasse lasted several days. Then, while re-examining the parts carefully, John found something unexpected. When the NPC 34 was constructed, Carter had used small wooden shims and shallow grooves to bring the wall parts into proper alignment. John began to focus on the role these shims played.

Most of these shims were thin, just $1/16$ " to $1/8$ " thick, probably used to compensate for the fluctuation in finished lumber sizes. But then John found $3/8$ " wide lath used to close the gap between two larger structural members, custom-cut to interlock. John's

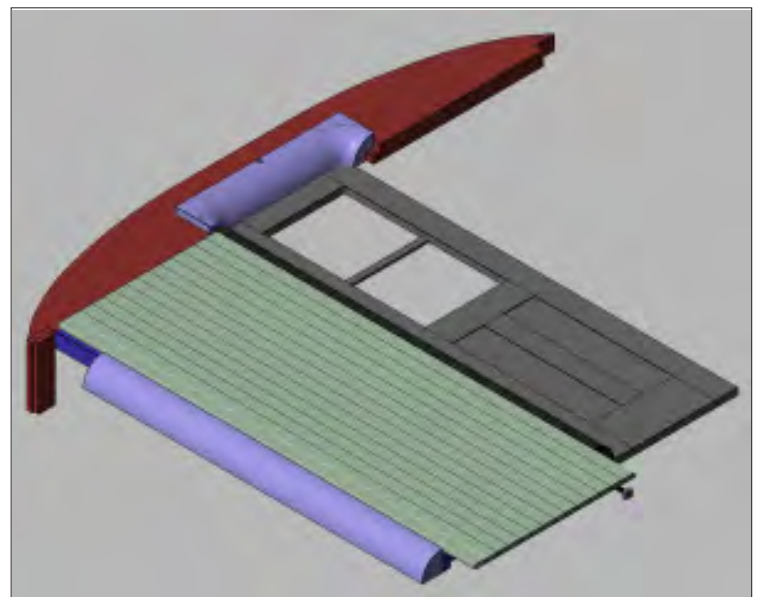


Figure 3. The same wall shown in Figure 2, seen from the outside of the car. Illustration by John Hall

GETTING THE RUN-AROUND

Fund Goal: \$10,000

Duration of Fund Drive: January-December 2018

Great News!

Donations to the RUN AROUND TRACK FUND of \$5,600 from **The Thagard Foundation, Kathleen and Paul Gardner, and Jack and Jacque Burgess** have put us very close to reaching our goal of \$10,000. We now have \$8,313.08 in the fund and only need \$1,686.92 more to complete it. Once this passing track is finished at the Eastern Terminal, we will be able to safely transport visitors to the Car Barn for onboard interpretive tours of our historic car collection.

Thanks to the following people who donated in April and May to the RUN-AROUND TRACK FUND:

Donations under \$1,000

Kathleen and Paul Gardner

Jack and Jacque Burgess- in memory of Trudy Frank

Donations of \$1,000 and above:

The Thagard Foundation

OTHER DONATIONS:

Donations under \$1,000:

Loretta Bassman - in memory of Trudy Frank (Car Barn Maintenance)

Bruce Sorel (Air Brakes for Katie)

Donations of Equipment:

Kim Jones - DeWalt 790 12" Radial Arm Saw

To make a tax-deductible donation by PayPal on our website:

You do not need a PayPal account to use a credit card. Go to our website at www.spcrr.org. Click on "DONATE" at the top right side of the page. A donation acknowledgment letter will be sent to you for tax purposes.

To make a tax-deductible donation by check: Please make your check payable "SPCRR" and mail it to: SPCRR, PO Box 783, Newark, CA 94560. A donation acknowledgment letter will be sent to you for tax purposes.

If you would like to donate in someone else's honor or memory, please include that information when you donate.



President's Report

John Stutz, President

Update since the last Hotbox... On the locomotive front, Katie's gas engine has been replaced with the new diesel engine (thanks to **Rod Smith's** generous donation), and train air brake supply and controls have been added. Both projects were a major undertaking and very complicated, but **Brook Rother, David Waterman** and **Jay Hernandez** have carried the projects through to the point that only minor ancillary details remain. Katie has now passed her operational inspection and we have received a permit from the State of California Department of Amusement Park Rides, as have the West Side excursion cars and existing track. We will have resumed operations before you receive this issue. See Jack Burgess's article for more details.

The two ex-WSL excursion cars have been thoroughly refurbished, the drooping end platforms and steps made good, hand brakes added, and the air brakes restored to operation. The latter was essential as we are now required to have air brakes on cars used in regular passenger operations. Car air brakes are also a game changer for operations, as their judicious use greatly helps normal train control, and emergency stopping is much better assured. The cars have been repainted inside and out, thanks to the hard work of volunteers lead by **Ron Quicili**. The Pullman Green color chosen has greatly improved their appearance.

On track improvement, the Deer Park siding was removed and is now being rebuilt thanks to the hard work of **John Goldie, David Waterman** and other volunteers. Large scale track work is going much easier and faster with the aid of the new tractor (thanks to **Gary Smith's** generous donation). Small scale track work remains a labor intensive activity, but the several bad ties spotted during the preliminary track inspection have been replaced, as well as missing track bolts. 🛠️

FOR THOSE WHO PURCHASE SPCRR ITEMS AND REQUEST REIMBURSEMENT: Please do not purchase candy, drinks, or other personal items on the same receipt as items for SPCRR. Having food items on the same receipt as SPCRR items could cause a problem during an audit of our books, even though you do not ask for reimbursement for drinks or snacks on the same receipt. In the future, please ask the clerk to charge your personal items separately.

Other Railroad News

The Disneyland Railroad has re-opened after an 18 month closure for rerouting the Rivers of America for the new 14-acre "Star Wars: Galaxy's Edge" land. The railroad now has 3 new trestles including one long trestle over the river, new waterfalls, and a new tunnel. They have brought back a few features from the original 1950s mine train (such as the "Teetering Rock"). For the first time the track now makes a left curve. There are many videos such as this one on YouTube: https://www.youtube.com/watch?v=vXsiY_e3Exc.

The first official run was historic—for the first time ever, two outside steam engines ran on Disneyland's railroad. Both engines were once owned by two of Walt Disney's legendary "nine old men" of animation: Ollie Johnston and Ward Kimball. John Lasseter was engineer in his locomotive the "Marie E" (originally owned by Johnston), which towed the "Chloe" and a car which originally ran on Kimball's Grizzly Flats Railroad, both now owned by the Orange Empire Railway Museum (<https://www.youtube.com/watch?v=sZrmKTZNvi8>). Johnston and Kimball were largely responsible for Walt Disney's interest in steam-powered railroads as a hobby, that eventually led Walt to build the "Carolwood Pacific" railroad at his home in Holmby Hills, CA. 🛠️



Photo credit: Photo by Jeff Gritchen, Orange County Register/SCNG

Helpful Road Travel Apps

Tony Peters

The following apps are helpful for when you are out rail fanning or on vacation:

iExit: A must-download for interstate driving. This app will tell you what you'll find at each upcoming exit—restaurants, gas stations, hotels—so you can plan your pit stops (and end up at yet another Applebee's). Free

Flush Toilet Finder: Useful on a road trip as well as when you reach your destination. This app pinpoints any public bathroom in your vicinity and has more than 190,000 restrooms around the world in its database. Free

Glympse: This app allows you to share your location with fellow travelers, which can be handy if you're driving caravan-style or have family or friends eager for your arrival. You can select contacts and give them permission to view your location for a set amount of time. Free

GasBuddy: Use this not only to locate the closest gas stations (with customer reviews), but to find out the gas prices at each. It's billed as "the world's largest community-based fuel app" with 60 million downloads worldwide. Free


HotelTonight: Use this hugely popular app to search for last-minute hotel deals while you're on the road or still at home (you can search as early as a week ahead). Hotels want heads in beds, so they're willing to slash rates rather than leave a room empty. Free

Roadtrippers: This handy route-planning app enables you to mark your beginning and end points, then figure out how you want to noodle around in between. You can search for all the places to eat and stay, as well as top-rated attractions along the way, and note them on your personalized map. Free

Waze: This app is super useful for both commuters and vacationers, allowing drivers to steer clear of traffic tie-ups. It aggregates user-generated traffic and road condition information to identify the fastest route, and it sends alerts about accidents or other snags down the road. Free

RepairPal: Use this app at home as well as on the road if car trouble hits. You plug in the make of your car and the problem (or your best guess) and the app provides you with area mechanics and an estimate for repair. Free

Podcast Addict (Android) and **Podcasts** (Apple): The hours can fly by when you're listening to a wonderful story, and there are plenty these days in the form of podcasts—sports, politics, true crime, even old-school-style dramas (see their slideshow of recommendations). These apps connect you to thousands of options, as well as to your favorite radio shows. Free

Tollsmart (helpful if you go on a trip to the eastern part of the US): Calculates toll costs across all tunnels, bridges and toll roads on your route anywhere in the United States and Canada; for motorcycles, RVs and cars. \$2.99 per month (cancel after your trip). 



Rod Smith donated the funds to purchase and install Katie's new diesel engine in honor of his late wife, Katie. Here he takes a look at the completed project. Photo: Bruce MacGregor

Weekly Workdays

Track, Restoration & General Maintenance

Ken Underhill

Date(s): Thursdays and some Saturdays

Time: Email or Call (see below)

Meet At: Car Barn - See "Directions" on the last page

Special Abilities or Work Equipment: N/A

What to Bring: Long pants, work gloves, and steel-toe boots (if you have them). Water is provided. If we are working on an outdoor project bring a hat, long-sleeve shirt, and sunscreen. We generally go off-site for lunch, but you are welcome to bring your own lunch or eat at the Farmyard Café when it is open if you prefer.

PROGRESS SINCE LAST NEWSLETTER:

LOCOMOTIVES:

4/26/18: B. Lependorf, D. Waterman (2 hrs). Installed brake shoes on Katie.

4/28-5/4/18: B. Rother, D. Waterman (60 hrs); J. Martinez (24 hrs), R. Neelson (9 hrs). Installed air brake system on "Katie" and excursion cars 318 and 5. Also installed hand brakes on excursion cars.

Sat 5/26/18: G. Arrillaga, R. Neelson, B. Rother (1 hr). Look at alternator on Katie. Will take to repair shop to have it tested and replaced if needed.

RESTORATION:

Flat Car 1725:

Sat, 4/14/18: G. Arrillaga (7 hrs), A. Cary (3 hrs). Gene worked on replacing the end beam on WSL 1725; while Andy started work on refurbishing the seats on 1725.

Thurs, 4/19/18: G. Arrillaga, R. Quicili (6 hrs). Continued work on 1725.

Excursion Car Refurbishment - R. Quilici (18 hrs).

Sat, 4/7/18; Mon, 4/9/18; Fri, 4/13/18: R. Quilici (18 hrs). Powerwashed benches and touch up painting on cars. Painted and installed benches. Painted stripes on excursion car steps to ease off-loading.

Thur, 5/10/18: G. Arrillaga, G. Bobik, A. Cary, T. Peters (6 hrs). Tony worked on end beam mortises and Andy worked on benches for WSL 1725. Both Genes fastened seats to the decks on excursion cars 5 and 318; and removed damaged planks from WSL 1725.

Thur, 5/17/18: G. Arrillaga, G. Bobik, A. Cary, (7 hrs). Andy worked on mitigation of sill damage on WSL 1725. Gene B. finished fastening seats to deck of excursion car 5. Gene A. worked on WSL 1725 end beam mortises.

Sun, 5/20/18: A. Cary, B. Dike, R. Quilici (6 hrs). Deck holes covered on excursion car 5, and first coat of floor paint applied.

TRACK PROJECTS

Week of 4/9-13/18: B. Pratt (6 hrs). Bob tightened track bolts between Ardenwood station & Deer Park.



WSL excursion cars in their new paint scheme.

continued on page 18

Workdays - continued from page 17

Sat 4/14/18: B. Dike, J. Goldie, B. Pratt (7 hrs). Replaced ties at Shirley's siding and on the straightaway between the 2 curves per the track maintenance report, as well as general cleanup at Deer Park.

Sun 4/22/18: J. Goldie, D. Waterman (8 hrs). Replaced 3 ties and gauge was corrected. Installed bolts for Katie's hood.

Sat 4/28/18: G. Arrillaga (4 hrs); B. Dike (6 hrs); A. Cary, J. Goldie, B. Pratt, J. Stutz (9 hrs). Replaced 5 ties,, re-spiked 4 ties, and gauged the track west of Farmer's Crossing. Rock was replaced and tamped.

Sat 5/5/18: J. Stutz (2 hrs). Worked on ties per state report.
Sun 5/6 & Weds 5/9/18: J. Goldie (8 hrs). All bolts between the Corp Yard crossing and butterfly plank were tightened.

Mon/Tues 5/7-8/18: B. Pratt, D. Waterman (12 hrs). 3 ties were replaced per state report.

Sun 5/13/18: J. Goldie (8 hrs). Tightened bolts between west Deer Park and the start of CB curve; plugged about 20 of the siding ties; and changed out some washers.

Sun 5/13/18: D. Waterman (8 hrs). Placed ties for 75% of Deer park siding.

Sat 5/19/18: J. Stutz (2 hrs). Tamped and filled the 5 new ties previously installed to meet state inspector's report, at the Ardenwood end of Jack's Curve.

Sun 5/20/18: J. Goldie (8 hrs). Bolt tightening, joints inspected, washers replaced, switch frogs and flange gaps cleaned, ballast profiling. recent tie replacement spots tamped, 50 more ties plugged, and profiled ballast on mainline.

Sun 5/20/18: J. Goldie (8 hrs). Track maintenance including bolt tightening, joints inspected, washers replaced, switch frogs and flange gaps cleaned, ballast profiling. recent tie replacement spots tamped, 50 more ties plugged, profile ballast on mainline
At Deer Park Siding

Mon 5/28/18: J. Goldie (4 hrs). Siding ties have all been plugged, and Deer Park cleaned up to ready for laying out rail and spiking siding. Worked the track bolts from the Corp Yard Crossing towards the Car Barn - 45 rail joints worked over. Inventoried joints for future maintenance.



John Goldie moves track tools after working on track. Photo: Bob Pratt



Clean right-of-way! Photo: Barry Lependorf

MOW-WEED CONTROL:

4/5, 12, 19, 21: B. Lependorf (16 hrs). Cleared track of debris and weeds.

Sat, 4/14/18: A. Cary (4 hrs) and J. Stutz. (7 hrs). Weed-whacked and mowed the grove side of the car barn to clear the fire hydrant and the parking area, and the gore between sidings 3 & 4.

MISCELLANEOUS PROJECTS:

Sat, 4/21/18: G. Arrillaga, J. Burgess, R. Quilici, J. Stutz, K. Underhill (6 hrs). Installed all of the new planks for the Ardenwood station platform.

April 2018: B. Lopendorf (5 hrs). Created event flyers and brochure.

Sat, 4/22/18: G. Arrillaga (3 hrs). Finished top step Ardenwood platform west stairs.

April: B. Lependorf (5 hrs). Created event flyers and brochure.

Mon, 5/14/18: G. Arrillaga (1 hr). Replaced 10 lb sledge hammer handle.

5/22-23/18: E. Ballard (16 hrs). Made custom saw horses to hold low children's activities tables for special events based on Gene Arrillaga's design.

Wed 5/23/18: J. Burgess, B. MacGregor (5 hrs). Prepped kids activities for Katie Train Activities Day.

Thurs 5/24/18: B. MacGregor, J. Shellen (7 hrs). Worked on archive collection and database.

Sat 5/26/18: A. Cary (8 hrs). Set up rope fence at Deer Park for event days; repaired gasket leak on new diesel fuel transfer pump; painted and labeled fuel cans yellow for diesel; worked on on side sill of NS 1725; worked on right-of-way signage.



Saw horses as works of art, built by Woody Ballard for the Katie Train Activities Day.
Photo: Bruce MacGregor

WORK PLANNED FOR NEXT MONTH

Join our **Yahoo SPCRR_members** group for the latest information (details how to join are shown in the blue box on the last page of the *Hotbox*). **Workdays can be spread all over the park... for directions**, or get more information about volunteering, email info@spcrr.org, or call 510-797-9557.

- **Thursdays and some Saturdays - Miscellaneous Projects.** For more information, contact Ken Underhill at 925-373-6884 or email kcunderhill@yahoo.com.
- **Thursdays and some Saturdays - Historic Flat Cars and Caboose 6101 - Project Manager: Gene Arrillaga.** For more information contact Gene at 510-657-8733 (home) or email arrillaga@sbcglobal.net.
- **Various Days - track work/MoW Projects - Project Managers: David Waterman.** Schedule a day to join David at the Park to work on various projects. Our current project is working on the Deer Park siding. For more information contact David at 415-602-7377(cell) or email steamfreak22@gmail.com.
- **Various Days - Locomotives - Project Manager: David Waterman.** Work on our diesel locomotive. See above notice for contact info.
- **Usually the 2nd Saturday of Every Month - Monthly Restoration Saturday - Project Manager: Brook Rother.** Work on current projects, including wooden car restoration and/or locomotives. To find out this month's projects, contact Brook at 530-559-4249 (cell).

All dates and changes will be announced on the Yahoo SPCRR_members group. See blue box below for instructions on how to join. If you have any problem, call Ken at the number/email below.

Contact: Ken Underhill

Email: kcunderhill@yahoo.com

Phone: 925-373-6884

Notes:

- Everyone over the age of 18 is welcome.
- Thursdays focus on restoration work.
- 2nd Saturday of the month focuses on locomotives, restoration & misc. work.
- Please contact me in advance so I know how many to expect (prefer email). That way I can have jobs ready for you when you arrive. Please include your name, cell number, and email so I can contact you if I have to cancel the date or change the time.

How to sign up for the YAHOO SPCRR_Members group to receive announcements and updates!

We post up-to-date announcements and workday updates on the SPCRR_Members group on Yahoo Groups. It is free to join... you just need a free Yahoo email account. To join the SPCRR_Members group, send an email to "spcrr_members-subscribe@yahoogroups.com" and include your name and your Yahoo email address. If you have any problem, call Ken Underhill at 925-373-6884 or email kcunderhill@yahoo.com.



The goats are back making short work of the weeds near the Car Barn. Photo: Barry Lependorf

CALENDAR 2018

CALENDAR OVERVIEW: NOTE: If you are a new volunteer, call or email your project manager **BEFORE** the workday to get instructions for entering the Siward gate (emails and phone numbers are shown below as well as in the *Hotbox* articles). **Any changes in dates or times are posted on the Yahoo SPCRR_Members group.** See instructions for how to join the group on the previous page.

If you would like to volunteer at any of these events, contact the Phone Committee by calling 503-309-4701 (9am-9pm) or email macgregork@aol.com to secure the volunteer position of your choice. Employee train crews operate the train at all Park-sponsored special events.

Restoration Workdays are held on Thursdays (and some Saturdays). Contact project manager Gene Arrillaga to verify dates and times: mail arrillaga@sbcglobal.net or call 510-657-8733.

- June 2** **SPCRR Special Event - KATIE TRAIN ACTIVITIES DAY.** Employee train crew. Need volunteer station agents and volunteers for activities
- June 10,17,24 **Park Event - Historic Hay Harvest.** Employee train crew. Need volunteer station agents
- July 4 **Park Event - Old Fashioned Independence Day.** Employee train crew. Need volunteer station agents
- July 22, 29 **Park Event - Historic Wheat Harvest.** Employee train crew. Need volunteer station agents
- Sep 1,2,3** **SPCRR Special Event - RAIL FAIR 2018.** Need volunteer train crew and volunteers for all activities
- Oct 8** **SPCRR Railroad Adventure Day.** Saturday train rides. Need volunteer train crew and station agents
- Oct 13,14 **Park Event - 33rd Annual Harvest Festival.** Paid Employees. Need volunteer station agents
- Oct 19,20,21 & Oct 26,27,28** **SPCRR Special Event - HAUNTED RAILROAD.** Need volunteer train crew, station agents, and cowboys to hold up the train
- Nov 18 **Last day of train operation for season**

Directions For Most Workdays

Volunteers cannot drive beyond the regular entrance parking lot when the Park is open to the public (between the hours of 10 am-5 pm, every day except Monday). When the Park is open, we must use the gate at the end of Siward Dr. at Ridgewood Dr. (near the Car Barn). **IMPORTANT: the gate is kept locked, so you must contact the project manager BEFORE the workday so he can arrange to let you in. See the contact information shown in each workday notice.** If you cannot reach a manager, call 510-508-8826.

From I-880:

Take I-880 to the Dumbarton Freeway/Route 84 West toward the Dumbarton Bridge. Exit at Newark Blvd/Ardenwood Blvd and turn right onto Ardenwood Blvd. Continue 1 mile (past the Ardenwood entrance) and turn right onto Paseo Padre Pkwy at the traffic signal. Continue 1 mile on Paseo Padre Pkwy and turn right at the traffic signal onto Siward Dr (just before the I-880 overpass). The gate into the Park is at the end of Siward Dr at Ridgewood Dr. Once you enter the gate, proceed on the gravel road toward the left and park your vehicle at the Car Barn.

From Highway 101 on the Peninsula:

Take Highway 101 to Route 84 East over the Dumbarton Bridge. Exit at Newark Boulevard/Ardenwood Blvd and turn left onto Ardenwood Blvd. Continue 1 mile (past the Ardenwood entrance) and turn right onto Paseo Padre Pkwy at the traffic signal. Continue 1 mile on Paseo Padre Pkwy and turn right at the traffic signal onto Siward Dr (just before the I-880 overpass). The gate into the Park is at the end of Siward Dr. at Ridgewood Dr. Once you enter the gate, proceed on the gravel road toward the left and park your vehicle at the Car Barn.