

## Garden Railroading News Nov/Dec 2021

A Free Digital Magazine Produced by Volunteer Garden Railroaders

# Happy Holidays! Celebrate with Trains!

A point-to-point railroad centerpiece?

A loop around a tree?

A front yard display?

Let your imagination play!

### **GRN**EWS.org

Share your garden railroading activities via

Facebook



gardenrailroadingenews

Instagram



grnewsimages

#### Inside...

Railroad Garden at the ABQ BioPark: An Albuquerque Botanic Garden Highlight

Plastic or Wood? Yes!

A Railroad in a 150 sq. ft. Planter

**R/C for Live Steamers** 

And More...!

#### Thank you all for your support!

Please support our advertisers who make this digital magazine possible.

#### In This Issue

Regularly Scheduled	
Editor's Note	1
Seen On the Tracks: Photo Gallery	3
May We Suggest: New Products & News	5
Accucraft, LGB, PIKO, USA Trains, Split Jaw Products and Future Events	
Club Corner by Bill Derville	13
Straight from the Iron Horse's Mouth: Letters	38
Affiliated Clubs	39
Advertiser Index	40
Garden Railroading News	40
An Online Magazine Explainer • PDF Downloading, Page View, & Magnific	ation
<b>S</b> pecials	
Featured Layout: The Railroad Garden in the Botar Garden at ABQ BioPark • Albuquerque, NM by Vance Bass	nic 7
Pop Up G-Scale Railroad Displays 14, 18 A Survey of the Variety in G-Scale Short Term Layouts Built by Garden Rail Clubs around the United States	, 36
On Demand Railroading Part Four by Mick Spilsbury	34

Mixed Consist Club Interchange	•
Plant of the Month: Hedgehog Norway Spruce by Richard Murray Article from: Bay Area Garden Railway Society <i>Trellis &amp; Trestle</i> May 2019	15
Fox Hollow Railroad: A Raised Bed Railroad by Becky Herzog Article from: Redwood Empire Garden Railway Society The Redwood Tie July 2021	14
More Adventures in 3-D Printing by Vance Bass Article from: New Mexico Garden Railroaders Dispatch October 2021	19
Plastic Wood by Don Rose Article from: Puget Sound Garden Railway Society Garden Railroading June. 2021	20
Experiences with a Battery Conversion & More: Part Two Bachmann Railtruck Conversion by Pete Hendel Article from: Denver Garden Railway Society Newsletter June 2021	24
An Introduction to Live Steam Locomotives Pt. 2 by Pete Thornton Article from: Florida Garden Railway Society Newsletter July 2021	29
Featured Member Layout: Bonita Valley Short Line Article from: San Diego Garden Railway Society Newsletter December 2021	35

All articles herein are copyright by their respective authors or club newsletters and may not be republished without permission.



Send suggestions and questions regarding Garden Railroading News to:
Mick Spilsbury, Bay Area GRS at: marketing@GRNews.org
Carla Brand Breitner, Santa Clarita Valley GRC at: editor@GRNews.org
Bill Derville, Club Corner, Advertising, Rose City GRS at: bill@derville4.com
or www.facebook.com/groups/gardenrailroadingenews



Go to Page 40 for An Online Magazine Explainer

How to Download a PDF & Customize Page View to Your Preference.

Magnifying GR News and the "Hamburger" Icon.





Above: Denver South Park & Pacific Railroad 2-6-6T Mason Bogie "San Juan" pulls a Tiffany Reefer through a snowy landscape on the Denver Garden Railway Society Live Steam Track. The box car in the background is full scale on display at the Colorado Railroad Museum. • Golden, Colorado

Below: Galloping Geese and a rail truck outside the Durango depot on Ted Yarbrough's Chatsworth Division of the Denver & Rio Grande Western. • Chatsworth, Georgia



Photo by Ted Yarbrough



#### **PIKO America Features Freight**

By November, PIKO will have delivered 60 new items in G-Scale and introduced their first North American prototype HO models this year. There are new items to entertain your holiday guests and to honor our patriotic past.



38123 Christmas Freight R/C Starter Set w/Analog Sound
(Similar to 38122 but with R/C Remote and an upgrade to the gearbox, including traction tires)





38922 American Traditions Betsy Ross Reefer

38928 Vintage Warbirds Spitfire Hopper

PIKO has added a medium radius (6' diameter) switch to their collection of G-Scale track and accessories.



35228 Manual Switch, Left R3 (6' Diameter), 22.5° 35229 Manual Switch, Right R3 (6' Diameter), 22.5°

More information at: www.PIKO-America.com

#### Coming Soon in GR News: Dealing with Derailments

Tips from Garden Railroaders around the United States



Send your tip to: editor@GRNews.org

#### LGB America Goes Loco: We Mean Motive, Of Course

A track cleaning engine modeled on a Union Pacific tracklaying machine, a RhB Crocodile on the 100th anniversary of first delivery, and a narrow gauge 2-6-0 Mogul for the Durango

& Silverton tourist line— Märklin/LGB has your locomotive waiting to deliver the 2021 Christmas Car.



36021 2021 Christmas Car



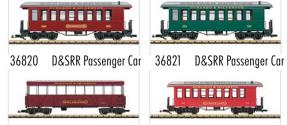
23407 Cl Ge 6/6 | Electric Locomotive



21672 UP USA Track Cleaning Locomotive



20283 Durango & Silverton Mogul Steam Locomotive
There is also a consist of passenger
cars your tourists can ride in.



30261 D&SRR "Rio Grande" Open Air Observation Car

36808 D&SRR Passenger Car

More information at: www.LGB.com

#### We want your feedback!

We've set up a short, six question reader survey to find out how we are doing. You can complete the survey by copying and pasting this link:



https://www.surveymonkey.com/r/HDVBDV7 or go to www.GRNews.org and click the link there.

#### Split Jaw Products/Railclamp.com Announces Motorized Turntables

Split Jaw Products continues to add items to their line of clamps, joiners, bridges and drawbridges every month. Both brass and aluminum clamps are now available. In early 2022, look for aluminum turntables. Battery-powered models and track-powered models in three sizes are promised.



Sign up for product announcements at: www.railclamp.com

## TrainShow.com Schedules First Quarter 2022 Shows Across the U.S.

Great Midwest Train Show stops at DuPage County Fairgrounds in Wheaton IL on Dec. 12, 2021. Greenberg's Train & Toy Show is at Dulles Expo Center in Chantilly VA Dec. 18 & 19, 2021. The Great Train Shows return to the West Coast starting in Sacramento CA Jan. 8 & 9, 2022, at Cal Expo. Check the show schedule at TrainShow.com to learn when a show will be near you.

More information at: www.TrainShow.com

## Christmas Season at USA Trains & Charles Ro Supply Company

Add a new look to your Christmas consist and your Christmas village with the many choices that can be found at www.CharlesRo.com. Here are a few examples:



R13039 2021 Christmas Car



R183012 Santa's Elves Workshop Car

#### Accucraft

Accurraft has been delivering ready to run 1:32 Southern Pacific P-8 locomotives since showing it at the National Steamup Spectacular in Lodi CA the first weekend of October. Kits are also available



Accucraft UK is introducing a 1:19 Peckett butane live steam locomotive adjustable to 32mm or 45mm gauge with two domes, the ogee original and a simpler Australian version.





Details at: www.livesteamstation.com

#### **LGB Tours Plans Trips for 2022**

Narrow Gauge Paradise • LGB Tours has arranged tempting trips for Fall 2022.

One trip visits the French Riviera and Spain from Sept. 1 to 12, 2022. Train travel ranges from the Train des Pignes (Pine Cone Train), a 1-meter gauge railway, to the Ligne de Cerdagne, often called "The Little Yellow Train" of the Pyrenees Mountains, an historic metergauge electric railway, and includes steam excursions and a rail-bike line.



fount Washington Cog Railway Thoto by Roller Coaster Philosophy Steative Commons

Later in September, enjoy Indian Summer in the Northeast. Travel from Boston MA to Washington DC between Sept. 25 and Oct. 6, 2022. You'll ride the Mt. Washington Cog Railway, the Amtrak Vermonter, the Cass Scenic Railroad and more while admiring the autumn leaves.

Tour information at: www.lgbtours.com



#### The Railroad Garden Exhibit in the Botanic Garden • ABQ BioPark

#### The Railroad Garden at the ABQ BioPark in Albuquerque, New Mexico

By Vance Bass Photos by Fred Prince unless otherwise noted

The ABQ BioPark is a gem along Albuquerque's Rio Grande, featuring a nationally acclaimed botanic garden, fishing beach, zoo and aquarium. One of the botanic garden's many notable features is a large-scale train layout, the Railroad Garden, which was installed in 1999 by the New Mexico Garden RailRoaders (NMGRR).

The railroad originally featured 400 feet of track, but has expanded over the years to 1,400 feet. With two main lines in a C-shaped dogbone arrangement and several smaller operational sections, volunteers can operate seven trains at once. The trains are always chugging through the landscape and then disappearing around the bend, passing towns and industries along the way.



Dramatic bridges span water features and dry creeks throughout the layout.



Mainlines converge; of course there's a town.



S curves add interest.



Visitors walk along paths to follow the trains around the Railroad Garden.

The terrain is fairly level along the line, but slopes slightly from back to front, down to an artificial creek. This provides visitors a good view of the tracks and the pleasant sound of running water. The creek water recirculates from a lake at the lower end and provides places where some dramatic bridges add to the visual appeal.

In addition to the main lines, the exhibit also features interactive loops. Thomas the Tank Engine and Percy sit ready on a small, double-track loop between the main tracks and the split rail fence. When a visitor pushes the big red button, Thomas and Percy make a circuit of the oval in opposite directions. This feature is so popular that the BioPark has had to replace the button many times after it wore out! Around the corner, there is a similar user-activated loop with a logging train. (Alas, both buttons had to be removed during the COVID pandemic, to be replaced by automatic timers.)

The trains are operated by ABQ BioPark employee Dustin Foster and NMGRR volunteers. There are several park-owned trains in residence, and the volunteers often



Thomas (and friends) have their own tracks and station.



Terrarium cars transport insects that visitors can see at the Bugarium exhibit.



Dinosaurs ride through the desert as Percy circles past.



A spider-web covered loco pulls the Heebie Jeebies Halloween special.





A circus train is one of many consists, historical and fanciful, sure to entertain.



Zoo animals (and well known characters) occasionally get out for train rides.





bring their own trains, so there is always a variety of trains rolling by for visitors. (And it's a great opportunity for NMGRR members to run on a more extensive line than they have in their own gardens.)

It might seem like such a large line would be a lot of trouble. Dustin says his daily routine starts simply with buffing the rails and clearing twigs and leaves from the cottonwood trees. He avoids automated track cleaners because of the extra wear they can put on the rails. Volunteers help with occasional track maintenance.

Albuquerque gets an average of 278 days of annual sun, so it's almost always good running weather. But neither rain nor snow stop the trains. They run all day, every day the park is open. (It is closed on Mondays and Tuesdays, Thanksgiving, Christmas and New Year's Day.)

Being open nearly all the time requires some security, of course. Volunteers go through a background check and training on the operation of the railroad. A lockable control cabinet keeps the electronics secure and out of the weather. After hours, equipment is stored in a large shed at the south end of the layout.



Always have your safety equipment and trained crews near by.



Giant rock work frames a stop served by this Santa Fe Warbonnet consist.



Santa appears on an adobe home roof, part of festive seasonal additions.



European and American steam locomotives come to town.



Mainlines run parallel, but at different heights, adding interest to the layout.



Trains can be set up and stored at night on tracks down the center of the storage shed. Long work counters facilitate repairs and seasonal changes.

Twice a year, NMGRR also sets up a temporary exhibit in the shady Ceremonial Garden, making a jampacked carnival with lots of trains running simultaneously in a very dense space. In an adjacent walled garden, the live steamers set up a loop on folding tables to show off their little dragons.

Every December, the BioPark presents River of Lights in the evenings. This event features huge sculptures made of steel frames covered with rope lights, often with animated movements. Visitors bundle up and stroll through the park, looking at the lights and listening to carolers. The River of Lights trains often feature seasonal themes, too: gondolas carrying toys, or flat cars bearing luminarias (perforated bags with candles inside, in metal miniatures on the train). These are always big hits with visitors.

Thanks to the foresight of BioPark directors in the '90s, garden trains have become an integral part of the Botanic Garden experience.

Web site: https://www.cabq.gov/ artsculture/biopark/garden/exhibits/ garden-model-railroad

Video: https://youtu.be/ELLebApz9YY



About the ABQ BioPark 903 10th St. SW Albuquerque NM 87102

Located along the Rio Grande River near downtown Albuquerque. the ABQ BioPark consists of: The ABQ BioPark Zoo, Botanic Garden, Aquarium and Tingley Beach.

Welcoming more than 1.5 million visitors per year, we are the top tourist destination in the state of New Mexico.



To learn more, visit: www.cabq.gov/artsculture/biopark



Multiple tracks loop across the Ceremonial Garden pavement in a semiannual display running a variety of trains all visible at one time.







Live steamers get to steam up in their own patio space for the semi-annual display.



During the Annual River of Lights, the Railroad Garden and trains light up for guests walking among 600 lighted sculptures and millions of twinkling lights.



Luminarias rolling by on flat cars delight visitors to the River of Lights.



River of Lights 2021 runs through December 30; tickets at RiverofLights.org

#### The Railroad Garden Exhibit in the Botanic Garden • ABQ BioPark



A coal loading facility illustrates the historical Albuquerque & Cerrilos Coal Company Madrid mines.



Chessie freight trains pass by on two levels.



A snowy town sparkles with Christmas wreaths and trees.







Dioramas which educate and entertain abound all around this layout.



## THE WORLD'S LARGEST OFFICIAL ON-LINE STORE FOR LIVE STEAM MODELS FROM THE BEST BRANDS.

#### WWW.LIVESTEAMSTATION.COM

#### Brands

- Accucraft Trains
- Aster Hobby
- AMS (American Model Supply)
- Accucraft UK
- Accucraft Germany
- AML (American Mainline)
- Maxi-Trak
- Argyle Loco Works
- J&M Models
- Albrae Models
- Accucraft Ride-On
- ALCO West

#### Featuring

- Live Steam & Electric
- HO, O, G-1, F and Ride-On
- Standard, Narrow Gauge & Road Engines
- Passenger Cars and Rolling Stock
- Track
- Parts and accessories
- New: Marketplace for used and consignment sales!



ASTER HOBBY - LNER THOMPSON CLASS B1 1:32 Scale, Alcohol Fired, 4 Liveries, Kits and Ready To Run



AML - GP60 & GP60M 1:29 Scale, Electric, Track or Battery Powered



ACCUCRAFT - SOUTHERN PACIFIC P-8 4-6-0 1:32 Scale, Butane /Alcohol Fired Live Steam, Electric, Kits & Ready to Run



ACCUCRAFT - D&RGW C-18 2-8-0 1:20.3 Scale, Butane Fired, Electric, Kits & Ready to Run



ACCUCRAFT UK - PECKETT 0-4-0ST 1:19 Scale, Live Steam Butane Fired, Various Liveries



RIDE ON - 7.5" GAUGE LOCOS & PASSENGER CARS 1.6" & 2.5" Scale, 1" Steel Rail, Acessories, ALCO West Locomotive



J&M MODELS - L&SWR COACHES
Brass Coaches in Gauge One: CIWL, L&SWR, & More



TRACK AND ACCESSORIES Code 332 & 250, Switches, Rail Clamps and more



















## CLUB CORNER

Curated by Bill Derville, Past President Rose City Garden Railway Society • Portland, Oregon



Clubs are often contacted by both club members and the public who want to sell their G-Scale railroad and equipment and do not want the hassle of advertising one piece at a time and shipping on eBay. In the September/October issue (downloadable at GRNews.org), I discussed clubs buying track from estates or dismantled layouts and reselling it to club members to start new layouts or to expand.

If the entire railroad is to be sold, estates and individuals often turn to companies that regularly buy entire railroads, which they then advertise and sell. One of our advertisers, TRAINZ.com, is one of those companies. They make it easy.

Some who wish to sell it themselves will buy a table at a local railroad swap meet. For smaller lists, clubs may allow members to list items for sale in their newsletter, with a note to contact the seller directly.

Our Rose City club holds an annual club auction (live and silent) that helps people sell equipment while members can acquire items at good prices. We usually hold the silent auction during our club annual meeting where officers are elected and club business is discussed. We





	Item for Sale Auction# 54
	Item Description UP Box CAR 100-227
	Bid \$1.00 (small item) Bid for Large Item \$2.00 (check one)  Minimum Price the item will be sold: \$ 5
	Bid \$ 16 Bidder Number 34
2	Bid \$ 20 Bidder Number /2
0	Bid \$ 22 Bidder Number 16
	Bid \$ 24 Bidder Number 12
	Bid S 21_ Bidder Number 34
	Bid \$ Bidder Number
9	Successful Bidder 34 Pay RCGRS: \$ 2.60
	Owner Gets \$ 23,40 RCGRS Gets: 2.60

rent a building with two large rooms, one for our potluck lunch and business meeting and the other for the auction. We set up folding tables to display the equipment for sale. Auction items may be brought in by sellers, or sometimes collected and stored until the annual meeting. There are usually over 100 items in our silent auctions.

We email the "Item for Sale" form to all members prior to the auction. Sellers fill in an item description, minimum bid, and a bid increment, either ahead of time or at the meeting. If no one bids the minimum, the owner takes the item home. The bid increment keeps bids in dollars, not pennies. More expensive items have a higher increment. Each item (or lot) gets a number; we buy a sheet of number stickers to put on items and write the number on the bid sheet.

Our treasurer creates a spreadsheet of all items in the auction (example below) on his laptop. Once the auction closes, helpers bring the bid sheets to the treasurer who records the winning bid and bidder number on the spreadsheet. Items are then grouped by successful bidder number, making checkout faster. Yes, the treasurer and helpers miss the last part of the meeting.

When they arrive at the meeting, people sign in and receive an auction bidding number. Members browse and make bids throughout the meeting. ("Item for Sale" example lower left.) Bidders can of course raise their bid when someone else outbids them.

For engines and items worth over \$100, we hold a live auction during the meeting. The winner gives his bidder number and the treasurer records the sale.

We take a 15-minute break from our business meeting to allow people to make their final bids. When the meeting adjourns, people check out with the treasurer, and helpers retrieve their purchased items. Checks are mailed to those who sold items. The club keeps 10% of the proceeds of items sold by club members, and 15% of the proceeds sold by non-club members.

This provides several hundred dollars of additional revenue for our club each year, helping us keep membership dues at only \$15 per family. At that rate, cost of membership is no longer a reason not to join.

— Rill









	A	В	C	D	E	G	Н	1
1			RCGR	S Auctio	n			
2				Date				
3								
4	item	description	Seller #	Buyer	Price	%	Commission	Due selle
5	1	Bachman D&RG boxcar	9			10%	\$0.00	\$0.0
6	2	ART 32405 ATSF Obser car	12	15	\$75.00	10%	\$7.50	\$67.5
7	3	ATSF Fred HRVEY COACH	12	26	\$65.00	10%	\$6.50	\$58.5
8	4	SF F3A	2	12	\$140.00	15%	\$21.00	\$119.0
9	Totals:		1	4	\$280.00		\$35.00	\$245.0
10	Notes:	No one bid on Item #1						
		Item #4 was sold by a non-member		1				







Share your ideas with me by email at bill@derville4.com and your experience may be in a future column.

#### A Variety of Pop Up G-Scale Railroad Displays





Clubs around the country have been setting up G-Scale train displays at model train shows, railroad and aviation museums, nurseries, car dealerships, and many more locations sharing our hobby with anyone who stops to look. We collected some examples to give you ideas for your own display.



Santa Clarita Valley GRC set up a table top display during Travel Town Depot Day in Griffith Park, Los Angeles CA.



Minnesota GRS set up at the Great Train Show at Canterbury Downs in Shakopee MN, with a great double helix to catch the eye.



Georgia GRS put their elevated track to use in a floor display at the Piedmont Trains Show in Cartersville GA.

continued on page 18

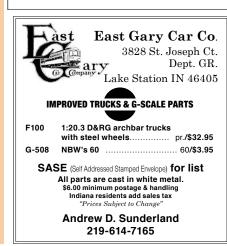


EGGHAULERS.COM CODE: GCNL2022

Expires 1/31/2022



WE HAVE GONDOLAS, FLAT CARS, BOX CARS, CABOOSES FOR EGGLINERS





-- By Richard Murray

BOTANICAL NAME: *Picea abies* 'Echiniformis' COMMON NAME: Hedgehog Norway spruce, Echiniformis white spruce

USDA HARDINESS Zone: 3 (down to -40° F)



Echiniformis' parent, the Norway spruce, grows throughout Europe from Finland in the northwest and Poland to the east. It also grows in the mountains of central Europe. The northern limit is the arctic in Norway. Its eastern limit is hard to define, due to extensive hybridization with the Siberian spruce, but it is usually given as the Ural Mountains.

Echiniformis is a very old cultivar that was originally listed in the early 1870s at a nursery in Scotland. Although some say that its origin is unknown, others say that it originated as a witch's broom. It grows as a dense bun. It is an evergreen conifer and has blue green foliage.

Echiniformis is propagated by grafting, and it does not set seed. It is a slow growing neat plant, growing about 1" per year and, therefore, is classified as a miniature. After about 10 years it is usually about 15" tall and about 18" wide. The plant in the photo is about 15 years old and seems to fit the average growth pattern.

Echiniformis' prickly needles gives the plant its common name, Hedgehog spruce. The plant's name comes from the Greek, echinus, meaning sea urchin, which looks like a hedgehog.

The plant is somewhat drought tolerant, and should not be overwatered according to some in the literature. However, I water all three of mine two to three times a week and they are all doing well. It can tolerate a wide range of soils, from poor soil to rich, well-drained soil. It likes full or part sun and does well in windy areas.

This compact plant makes a great addition to a rock garden or to a garden railroad. In fact, it should be considered for all garden railroads. It can even be kept in a container. It is a low maintenance conifer and is easily grown.

May 2019

Copyright © 2019, Bay Area Garden Railway Society





## Custom Built & Painted Large Scale Trains Custom Decals made to order



CATALOG \$ 7.00 REFUNDABLE ON ORDERS OF \$50.00 OR MORE

818-834-9455

SHAWMUT CAR SHOPS.COM

307 North Michael Street, St Marys PA 15857 email: shawmutcarshops@yahoo.com



#### FOX HOLLOW RAILROAD

By Becky Herzog

Fox Hollow Railroad was named for the female fox that I feed each night on our front porch when the babies arrive each spring. I give them a chicken thigh cut up into small pieces.

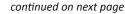
The railroad all started in early summer of 2018 when I sent Don an eviction notice for his raised vegetable garden. It read approximately "Plant your damn vegetables somewhere else. You have two garden railroad layouts and I want my own."

The raised bed was only 11 by 14 feet which was enough room for a battery-powered railroad. So, I asked Don and three members of the Redwood Empire Garden Railway Society—Ken Brody, Doug Lodge, and Terry Strom—to build it which they did in five afternoons.

> Ken drew up the plan, track was laid down and work began. Ken and Doug did the mountains and tunnel while Terry worked on the viaduct that he resurrected from one of Don's previous layouts. Don picked the rock from one of the many piles that he had purchased for his layouts and then planted the trees.

Now that my layout was basically completed, it was time for me to put on the finishing touches that I had been thinking about for a long time. I wanted a school, a playground, a dog park, and a farm. And, in the far corner, I wanted a winter scene complete with skiers, a sleigh ride and other goodies.

Don has a warehouse full of trains and accessories which I carefully perused and found multiple items for my railroad. And, I did not really mind going to the miniature shop and purchasing whatever else that I wanted just like he goes to the train store. I put out my accessories on the layout each spring and store them away in the fall, changing scenes somewhat each season. Don had one of his engines converted to battery power and with sound for me to use along with several cars. All in all, it has been a fun experience and shows how much can be built in a small space.





Opening Day in 2018



Landscaping sets off the Fox Hollow RR in 2019



#### **PHOTO GALLERY** FOX HOLLOW RAILROAD



Track in place on temporary supports



Ken and Terry work on viaduct installation



Doug and Don ballast the track



**Becky cuts ribbon at Grand Opening** 



Schoolyard on finished layout



Snow scene in the mountains

# Callway Mailway Mailwa







#### A Variety of Pop Up G-Scale Railroad Displays

A temporary club display can range from loops on the ground to multi-level, multi-train displays. Christmas displays running throughout the month of December warrant more "permanence" than a single day or weekend show.



Redwood Empire GRS built a Christmas display on a flat bed trailer for a 2018 party a member held for neighbors who lost homes in a wildfire.



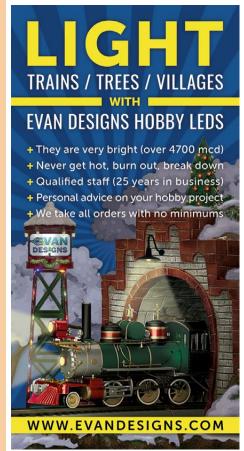




A different Main Street Holiday Train display at EnterTrainment Junction is built by Greater Cincinnati GRS & Miami Valley GRS club members each year.



continued on page 36





Support your Local Train Shops & Your Favorite On-Line Train Websites. Donate to Railroad Museums & Excursion Train Foundations. Keep Trains on the Rails in All Scales.

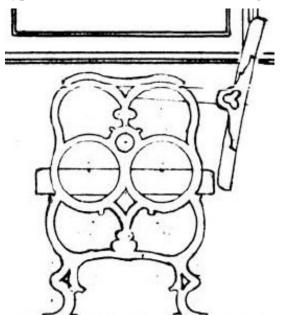


#### -**= ©**

## More Adventures in 3D Printing

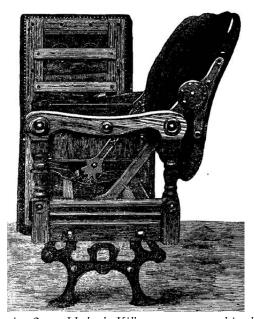
#### **Vance Bass**

There's a fellow in a <sup>7</sup>/8" scale discussion group I follow who's scratchbuilding a model of a Maine 2-foot gauge combine. He noted that making the chairs was going to be a huge pain, since none are commercially available, so I thought I'd give it a try in 3D CAD. The first one I did was based on a D&RG drawing from 1880, but it was the wrong style for his model. Try again! The second style is based on a drawing in the 1888 Car Builder's Dictionary, and is just like the ones in the prototype car. Success! But it's not a magic wand – each chair takes about 8 hours to print.





Version 1 − based on a 1880 D&RG drawing





Version 2 – a Hale & Kilburn seat, as used in the Monson Railroad combine, from the 1888 Car Builder's Dictionary





#### **Plastic Wood**

(No trees were harmed in today's presentation)



#### Photos and article by Don Rose

If you look through any collection of photos from the early steam era, most of the freight cars and passenger cars were wood construction. Even after the early diesel engines started to show up, wood cars were still around in significant numbers. The narrow gauge lines started with wooden cars and finished with wooden cars.

As a narrow gauge modeler I build mostly wooden cars—out of plastic. You might not want to build a plastic wood freight car but you probably have a spot on your railroad for a small shed or other little wooden building. So some "plastic lumber" might be just what you need.

Turning styrene into "plastic wood" is very easy. I made a little tool out of some old saber saw blades. You want a variety of scratches of different depths to give some nice "grain" to the plastic.





I use plastic from both Evergreen Styrene and Plastruct. It comes is numerous dimensions and the pieces can be easily laminated to give any size board or beam you need. A few swipes with a saw blade and the joint between the pieces disappears.



If the finish is too rough you can smooth it down a little with an old Xacto saw blade.

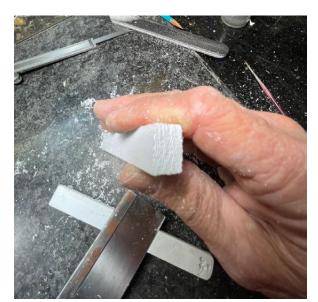
Page 💽

Continued on next page.

June 2021



#### Continued from previous page.



End grain can be added using the saw blades. Here I am forming the pilot end beam for a locomotive



It is not necessary to use individual boards. This box car sheet siding *(below)* was lightly scribed with an Xacto saw blade with some of the boards given a little extra scratching to create a difference in textures.



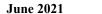


Knot holes or not holes? Small drill bits can be used to poke a few knot holes in your plastic wood. I don't carve a lot of knot holes in my "lumber." The heyday of wooden car building corresponded to the heyday of the lumber industry. Tens of thousands of board feet of lumber were cut from old growth timber. Railroad car builders used only the best wood. It was all straight grained and almost completely knot free. If a board had a warp or a knot it was thrown out and a perfect board selected. The stuff that the lumber yards sell today as prime grade lumber would have gone to the box factory or the slash burner 125 years ago.



A prototype example is this SP narrow gauge stock car weathering away at the museum in Perris, California. Over a hundred years old and still straight and tight and knot free.

Continued on next page.



Puget Sound Garden Railroading





Finally, a couple more examples of plastic wood cars.

Detail of a pickle car built up with various pieces of "plastic wood".

A "plastic wood" gondola.







Page 🔘

Puget Sound Garden Railroading

June 2021

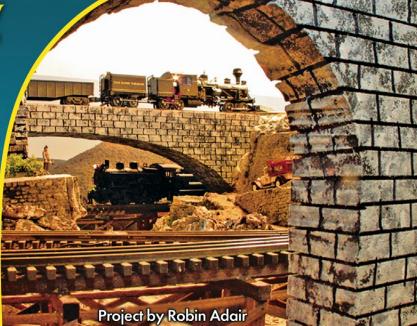




Hot Wire Foam Factory tools and products are perfect for turning foam into detailed model railroad landscapes!

Get 10% off with code **GRMHWFF10**\*Excludes CNC Machines

Hot Wire Foam Factory 1-866-735-9255 www.HWFF.com





Call or Email Stan Cedarleaf 928.778.3732 scedarleaf@aol.com

Custom Decals
Specifically Designed for
Your Railroad

cedarleafcustomdecals.com



Robert Buck

robert@gscaleinstallations.net

(717) 309-0706 (c)

G and O Scale Direct Radio Control Battery Power

> Rail Pro Phoenix USA Trains

Kadee Piko

York PA



# AIRWIRE® NEW!

- Programming and Operations Throttle
- ► Big, bright and rugged graphics display
- Single turn speed knob with speed readout
- Dedicated key for locomotive direction
- ▶ 40+ hour Li-Ion USB rechargeable battery
- ► More loco memory, more consist memory
- Compatible with all AIRWIRE products

AIRWIRE is the preferred battery-powered wireless DCC control system for garden railroads. And the new T6000 PRO-OPS throttle has several new features requested by many customers. The new sunlight-readable graphics display shows the active locomotive number, frequency, speed and direction. The built-in backlight can be turned on or off with a single key press. Store up to 16 individual locomotives. Consist Memory now stores up to 3 multi-unit locomotive consists with up to 4 locomotives in each consist. Available now at any of our authorized AIRWIRE dealers or direct from CVP. For ordering options and pricing, please see the CVP website.

**CVP PRODUCTS Richardson, TX** 

www.cvpusa.com





Owasso, OK 74055 918.361.6084 vernon@reindeerpass.com

www.reindeerpass.com

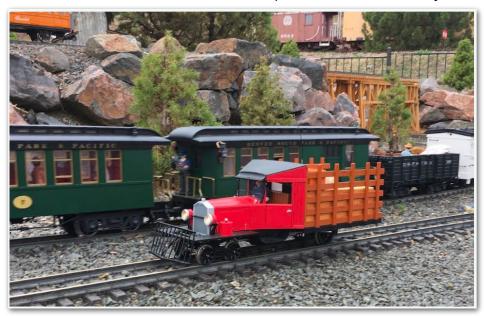


*lume 38 Number 6* June 2021

#### **Bachmann Railtruck Conversion**

Back in 2015 at the NGRC in Denver, I asked Marilou what sort of engine she would like. She picked a red Bachmann Railtruck because it looked cute.

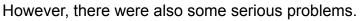
As our Lastchance and Fairplay Railroad is DCC powered and the Railtruck is just analog DC, we did not have much chance to run it, except at the DGRS club layout,



The running properties, however, were not so good. It ran fairly quietly in reverse, but made rather bothersome noises running forward. On downgrades or trailing throttle, the Railtruck has a serious surge as the slack in the drive train is repeatedly taken out and then builds up again.

However, since I don't have the ability to run analog DC on our layout (it would screw up all the DCC connected track controls), we did not run it. Only after some pressure to run it on our own layout, I started to look at the alternatives. I could convert it to DCC, add a sound

system or just have it battery powered. Since I had converted a Hartland "Doosie" rail bus to DCC and battery power, I thought I should go ahead and make the same conversion to the Railtruck. This would enable the rail truck to be run on several different types of powered layouts.



- The Railtruck had a mechanical issue with the transmission. It surges due to a sloppy drive train and gearbox.
- There is very little room to put a battery, R/C speed controller, sound system and speaker in the truck.



Volume 38 Number 6 June 2021

Doing some research on the web, turned up some interesting answers to the problems. There is a total of about 3/4 turn of the rear drive wheel before all the play is taken out of the driveline. The worm gear itself is a single lead screw which cannot be back-driven. When running on the flat, or with a load, the slop is all taken up and the Railtruck runs smoothly. However, when running downgrade, the driveline doesn't provide enough drag and the Railtruck runs away due to the pull of gravity until the driveline slop is all taken out the other way and the driveline binds up against the worm causing the Railtruck to nearly stop. As the worm gear continues to turn, it takes up the slop again and drives the Railtruck downhill until the acceleration of gravity takes over again and the Railtruck runs ahead of the driveline. There was no economical replacement for the driveline all the way back to the worm.

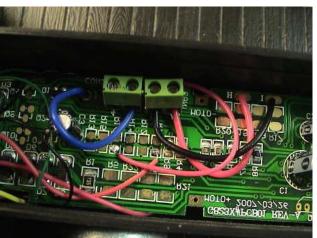
Several articles suggested fixes from replacing the entire drive train to a simple fix of adding drag to the Railtruck with a brake on the front axles. Obviously, this would be an easier and cheaper solution. This was accomplished by putting a brass strip to act as a spring bearing against the front axles.

This has helped to make the surging less noticeable, but it is still there if you watch closely.

The next step was to add battery operation. At this point I looked at several

different solutions and decided that I wanted track DCC power as well as battery power, mainly because the battery would be very small given the size of the truck.

So my plan was to use a Soundtraxx Tsunami TSU 1000 (Goose sound) as the motor controller and sound system.



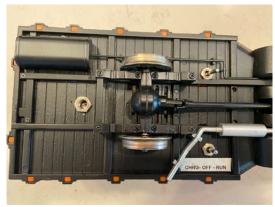
I removed the tool box, all the electronics and wiring from the truck bed. and replaced it with the Tsunami and speaker box.



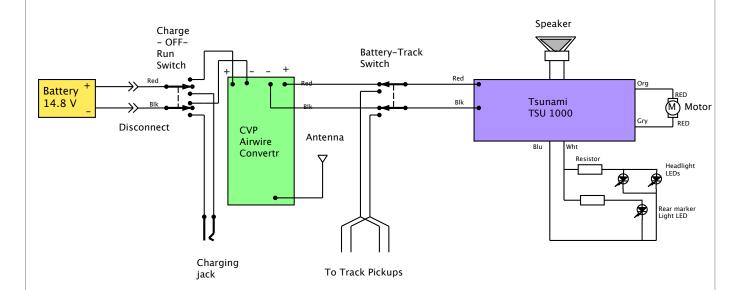
Volume 38 Number 6 June 2021

I also added a Track/Battery select switch so we could use it with track or battery power, a Charge/ OFF / Run switch and charging jack.

The next aspect was to add Radio Control and the battery power. CVP Products makes a small ultra miniature radio receiver and DCC booster, which is called an Airwire Convertr. It was a very simple approach; connect a battery, the DCC controller (The Tsunami) to the Convertr and one can control it with the Airwire throttle.



The circuit diagram showing all the major components is shown below.



At the time, the only converter available was the 2.5 amp continuous Convertr-25X. Since it was really small, it fits nicely into the cab of the rail truck.



The battery has to be small enough to fit into the back bed of the truck, yet powerful enough to run the truck for several (3) hours without stopping. Since the motor only draws less than 1/2 amp at full speed (not very realistic), the calculation of .5 amp x 3 hrs equals 1.5 amp-hrs. The closest and



Volume 38 Number 6 June 2021

smallest battery was a 14.8 v, 1350 mAh (milliamp-hour), which fits nicely in the bed of the truck.

Since the battery, Tsunami, speaker box, and the switch are packed into the bed, with sacks of grain and lumber, the addition of a charging jack means I can charge the battery without taking everything apart.



The final change was to replace the LED lights in the front headlamps with ones that looked better and were brighter.



Altogether, it was a fun project that took a bit of time as I had to do a lot of research for the issues and find solutions. Once a path was chosen, it did not take very long to get a running and dependable rail truck.

#### Pete Hendel

Copyright 2021 DGRS



**DGRS Newsletter** 





## STEAM##GARDEN

Starting in STEAM is the definitive handbook for those just starting in Small Scale Live Steam. Available in digital format, you can take this with you on your laptop or tablet. Assembled from articles in Steam in the Garden, this 148-page book not only introduces new hobbyists to

Starting STEAM.

AN INTRODUCTION TO LIVE-STEAM MODE: RAILROADING

By Scott E. McDonald, Carl Weaver and the staff of STEAM MIGGARDEN

the fun and excitement of small-scale live steam, but will also provide experienced steamers with tips and tricks from seasoned hands.

Buy your digital copy of Starting in STEAM today.

http://www.steamup.com

#### **LOCOLINC SERIES 200**

#### Wireless Control Solutions





Keithco, Inc locolinc.com (503) 635-7604

Automatic device discovery and WiFi format make the new Locolinc 200 Series the most user friendly interface on the market.

- · WiFi format at 2.4 Ghz
- · Loco and Accessory Receivers
- Track or battery voltage (12-24V dc)
- Automatic device discovery: Loco & Accessories
- Superb NEW user interface 3"x 5"x 1"
- · Easy implementation & cost effective
- · Easy conversion for existing customers
- Renown LOCOLINC quality & reliability









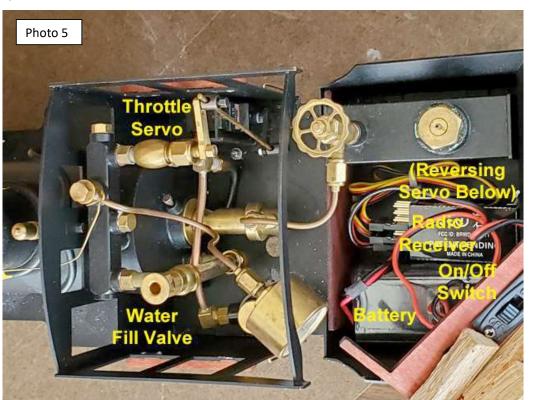


# An Introduction to Live Steam Locomotives Part 2

# Adding Radio Control (RC) to your live steamer and other Considerations By Pete Thornton

Remote control of your live steamer is a nice thing to have, just as it is for a track- or battery-powered electric locomotive. You can stop and start the train without leaving your chair! There is another feature of live steam that makes radio control very helpful, especially if your track has any hills at all. Unlike an electric, your live steamer will struggle to climb a hill if you don't open the throttle a little more, and will run away down the hill and probably crash at the bottom if you don't close the throttle. (Rather like the real thing.) And like the real thing, hills should be kept to 2-4%, but you will still need radio control. Geared locomotives, like the Shay or other models designed for beginners, do not have a problem with hills and therefore make a good choice for a regular garden.

Unfortunately, most American live steam locomotives do not come fitted with r/c gear. (Many UK suppliers offer models with r/c gear fitted.) You have to make brackets and figure out linkages, and work out where to put the batteries, receiver, and servos. Then you have to drill holes in your new locomotive to fasten it all together. You will now understand why flat steam tracks are quite common.



In photo 5 you can see my Regner Heisler cab which has radio control, supplied as an 'addon' kit by the manufacturer. The components are the same ones used in model aircraft or r/c cars, so they are easy to find. Often you have to make up your own fitting "kit" as few manufacturers supply the brackets and holes needed.

(The loco in photo 3 [GR News Sept/Oct 2021] was sold as 'r/c ready', which means it has the metal throttle arm with holes in it. That's all it has, although the tender in photo 4 [GR News Sept/Oct 2021], also 'r/c ready', has a tube through the water tank to the rear to facilitate installing the gear.)

continued on next page

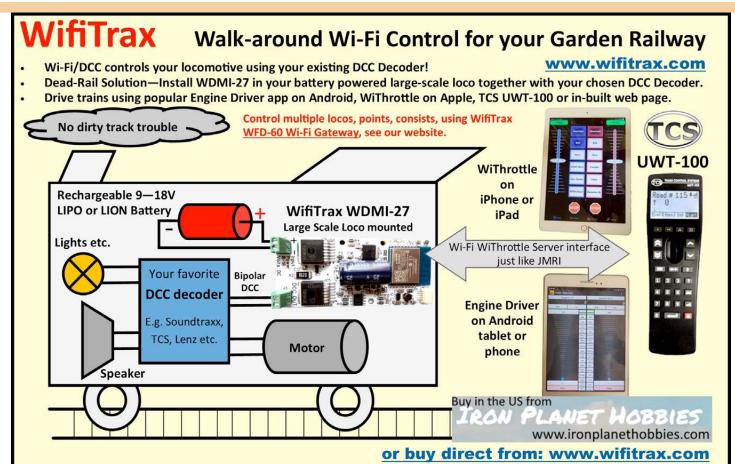






For the reasons mentioned in the previous section, many live steam tracks are level. As much of the charm is in running the locomotive and enjoying the sight, pure steam tracks tend to be short on scenery, like the track in the lead photo, shown last month. And owners tend to be older, so the tracks are set higher than ground level to make loading and running those heavy locomotives a little easier. The wider the curves,

the better – one track we visit is 200' x 100' approx., and has 20'+ radius curves (40' diameter.) If you are running a N&W J class express locomotive, then LGB R1 curves just won't work. Most live steamers are spec'd for 4' radius minimum, and the big ones need 10' radius, 20' diameter. The 1:32 scale mainline locomotives also tend to be made to finer scale tolerances so they have skinnier wheels that require better switches – another reason you won't find much LGB track in use for serious live steam. However, there is no reason that you can't enjoy the small to medium size locomotives on a typical garden railroad. My friend's layout has 5' minimum radius curves with mostly LGB track and switches, and our live steamers will run perfectly happily. Photo 6 is a 2-cylinder shay looking quite at home among his trees.





#### Steamups

After describing how big a track you need to run those big live steamers, it probably won't be a surprise to hear that this is a social hobby, and anyone with a track will often offer to host a 'steamup', just like the FGRS get-togethers, but with the addition that everyone brings a favorite live steam engine or two to run.

Several clubs have large tracks, like the Tradewinds & Atlantic RR in Coconut Grove, or the Ridge Live Steamers, where members can turn up and run trains even if there is no-one else around. Other tracks are portable, and can be set up at an event so we can all come and entertain the crowds with our trains.

There are also a couple of annual Steamups (usually,) where a large hall or hotel atrium is taken over for a few days so that everyone can run their trains and socialize. Photo 7 ( below ) shows the main hall at the National Summer Steamup in Sacramento, where a variety of tracks are available for owners to enjoy running their trains.



continued on next page





## IF YOU CAN DREAM IT WE CAN BUILD IT

#### WWW.JSWOODCRAFTS.NET

Structures, Animation, Motorization,
Accessories, Diecast, Custom Freight Cars,
Custom Work and more.

All structures and accessories are  $\frac{1}{2}$ " scale •  $\frac{1}{24}$ th, G-Scale compatible.

e-mail: jswoodcrafts@sbcglobal.net 310-539-44246 P.S.T. All Week 10 to 5 P.M.



#### Manufacturers

Live steam locomotives are expensive. They are made in small batches from stainless steel, brass and copper, and when they are gone, they are gone. Very few models ever get a rerun, so if a particular locomotive catches your eye, buy it now or never. The N&W #611 in lead photo, last month, originally sold for several thousand dollars. And while you can find locomotives for \$500 (+/-), they tend to be small, limited in capability, and not very satisfactory to own.

While there were many early manufacturers of live steamers, like Bing and Carette, you won't find them except on eBay. Here's some of the ones you will find, with a few notes.

**Mamod** (now MSS) in the UK makes very inexpensive locos and kits, but only recently has started selling decent locomotives, with butane gas tanks. The Sterno tablet fired locos are not recommended.

**Roundhouse**, also in the UK, makes bullet-proof steamers ideal for beginners, as they work without any issues or problems. Many are available in 45mm gauge, and most have r/c built in at the factory as an option. The range of US prototypes is limited.

**Regner** in Germany has been making live steam models for many years, and most are excellent. Their 'easy line' locomotives are available as kits or ready-to-run. The kits are simple and will give you a good idea of the parts, should you ever need to take it apart for maintenance.

**Aster** in Japan offered kits and ready-made models of many different locomotives, in particular large ones, like the UP Big Boy. They recently reorganized and joined forces for manufacturing with Accucraft.

Accurraft is in China and has been taking advantage of low labor costs to make complete models of many prototypes, big and small. The big ones are great if you have some experience – they even offer one set up for coal firing. For the inexperienced, their small to medium size locomotives are ideal: the shay, Forney, mogul and other similar locomotives are very satisfying to own.

**WuHu/Bowande** are also in China and are a recent entrant into this field. Their models get good reviews, although the range is limited.

There are many, many small manufacturers that produce a limited range for a few years, and then the owner retires or decides to stop. A fun place to see the variety is Marc Horowitz's Locomotive of the Month, which ran from 2000 to 2010 and has a diverse range of locos from his collection. There is also a Gallery, which is worth a look, of owner contributions since 2010. <a href="http://www.sidestreet.info/railways/gr.home.html">http://www.sidestreet.info/railways/gr.home.html</a>

As some products are inexpensive, they can sometimes require a little fiddling to make them work well. The internet forums are a great source of information if you run in to a problem. It was mentioned at the beginning of this article that these models are made in small batches. If you are curious, the bottom of the Accucraft.com website (not the new "livesteamstation.com",) has a link to "Legacy" models, where you will find lots of interesting products that they don't make any more. They do come up on the used market occasionally, so keep your eyes open. Live steam is lots of fun and different from running trains with electricity. Give it a try, and feel free to email me (<a href="mailto:pthornto@aol.com">pthornto@aol.com</a>) with any questions – I may be able to tell you where to find the answers.



## **RAILWAY CONVENTION**

DENVER GARDEN RAILWAY SOCIETY
VISIT NGRC2022.ORG

### **REGISTER NOW!**

#### REGISTER ONLINE OR PRINT FOR REGISTRATION BY MAIL

**SAVE THE DATE** 

Individual Registration	\$75 by March 31, 2022	\$100 thereafter
		1

\$125 by March 31, 2022 \$150 thereafter

**VISIT NGRC2022.ORG** 

#### **REGISTRATION INCLUDES**

- Visit 40 + Layouts Scheduled for the Convention
- Access to Vendor Hall, Welcome Reception, Clinics and Convention Store

**Family Registration** 

- Participation in the Convention Model Contest and Youth Model Contest
- Convention Bag, Program Book, and Commemorative Convention Pin

#### ADDITONAL OPTIONS

- Four Pre-Convention Bus Tours Transportation, Admission, and Lunch
- Post-Convention Bus Tour Includes Transportation and Admission
- Banquet, Ice cream Social and BBQ at the Colorado Railroad Museum
- Bus Transportation to Layout Tours and BBQ

PLUS Limited Edition Convention Car – Logo-branded Rio Grande Caboose available for \$98



#### Gene's Integrated Engine and Sound

## MostlyGscale.com

Locomotive repair
Installation-Sound and DCC Decoders
Sales of new and pre-owned items
Coming soon—50+ locomotives and
200+ cars in G scale



Piko ESU USA LGB



Gene Rahrig

Ph 937-864-7411

8074 Dayton-Springfield Rd. Fairborn OH 45324 Email bgrails@flatdon.com for specific information We can negotiate on most items.





#### ON DEMAND GARDEN RAILROADING Part Four

#### **HOSTING AN OPEN RAILROAD**

An 'On Demand Garden Railroad' simplifies hosting an open railroad.

- Subject only to visual inspection of track, checking that switches do switch and that batteries are charged, our battery-operated locos are ready to run.
- After running track cleaning engines and hand-polishing any stubborn gunk, our track-powered locos are also ready to run.
- After a once-over with a shop-vac around a layout, our railroad looks tidy.

Nonetheless, there are still many things to do before opening our railroad. The tasks vary by railroad but several garden railroaders with extensive 'Open Railroad' experience collaborated to develop the task lists below.

Two thing we recommend for all.

- □ Recruit one or more train engineers to operate consists, leaving you time to meet and greet.
- ☐ Keep operations simple!

#### TASKS DURING THE WEEKS BEFORE OPEN RAILROAD

- ☐ Recruit train engineers.
- ☐ Prune vegetation, especially close to tracks.
- □ Plan refreshments (if any).
- ☐ Plan activities for kids (if any).
- ☐ Get any signage needed.
- ☐ Consider liability insurance.
- ☐ Promote your 'Open Railroad' (if applicable).

#### TASKS THE DAY BEFORE OPEN RAILROAD

- ☐ Clean the railroad with a shop vac.
- ☐ Clean areas that cannot be reached with the vac including the inevitable spider webs.
- ☐ Reposition varmint-mauled figures.
- ☐ Ensure that tunnels are clear of anything that could impede a consist during the open railroad.
- ☐ Set out stored buildings and trackside details.
- ☐ Remove any rain/sun-protection devices.
- ☐ Check that any trackside sounds are operating.
- ☐ Check that any trackside lighting is operating.
- ☐ Ensure that spare loco batteries are charged.
- □ Put new batteries in any remote throttles.
- □ Oil axles/ensure that couplers are snug.
- ☐ Set out any required 'out of bounds' signs.

And, last but not least, run your consists with the train engineers that are helping you at the open railroad.

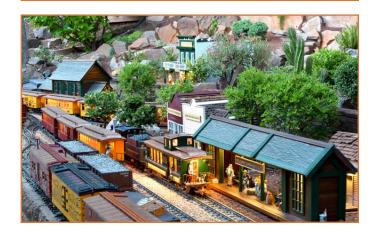


#### **DAY OF OPEN RAILROAD TASKS**

- ☐ Final visual inspection for track obstacles.
- ☐ Final check for spider webs.
- ☐ Test runs of the consists and test steam-ups.
- ☐ Set out signs to let folk know they have arrived, where to park and where to enter.
- ☐ Set out guest book (and writing instrument).
- ☐ Set out any literature about the railroad and/or any video presentation we are going to share.
- ☐ Set out refreshments and children's activities.
- ☐ Make sure that the guest bathroom is presentable (if it is to be available).
- ☐ Consider watering the railroad; gardens often look better after a recent watering.

#### THE HOUR BEFORE OPEN RAILROAD

Chill out and enjoy how wonderful your RR looks!



We welcome **YOUR** comments on our 'Open Railroad' checklist for a future GRNews.org Bonus.

Anything missing? Anything mistimed? email Mick Spilsbury at marketing@GRNews.org

On Demand Garden Railroading Garden Railroading News Page 34



### SDGRS News - December 2021

## Featured Member: Eugene "Gene" Cook



Gene has not formally given a name to his layout, but sometimes refers to it as the

Bonita Valley Short Line

Images showing the groomed foliage and detail in Gene's Layout







North American Distributor for from \$99

MyLocoSound

New Premium Sound for Battery or Track Power

Heavy Diesel - Light Diesel

Universal Steam

Electric - Goose - Street Car

Trigger via R/C, IR Remote or Track Magnets

Custom Vinyl Lettering

www.GScaleGraphics.net

# SOCIETY STOCKED

# CCC GRS DAUG





#### A Variety of Pop Up G-Scale Railroad Displays

Platforms of board on block walls or on boxes can be used to raise the level of your temporary layout and will be easier for your train crew to maintain. Plan your track and building placement ahead of time, so you can set up the hard-to-reach areas first.



San Diego GRS set up a desert and a small fairyland (with giant toadstools) on block-supported platforms for the San Diego County Fair in Del Mar CA.



Central California Coast GRS set this small display up at the Central Coast Railroad Festival.



The Puget Sound GRS included this sawmill diorama at the Lion's Train Show in Lynden WA.



South Jersey GRS set up this snowy layout at Ocean City Music Pier for a weekend. The club will also run trains on the Battleship New Jersey through Christmas.

#### A Sampling of G-Scale Railroad Displays in Public Places December 2021

#### **Norway House**

913 E Franklin Ave Minneapolis MN 55404 11-23-2021 through 1-2-2022 (closed Mondays) Gingerbread Wonderland with G-Scale Trains

#### **Battleship New Jersey Wardroom**

100 Clinton St Camden NJ Dec 11 to 26 (closed Christmas) 11am to 3PM South Jersey GRS Holiday Train Display

#### **Old Bethpage Village Restoration**

1303 Round Swamp Rd Old Bethpage NY Dec 17–21, Dec 27–29 5 to 9PM Long Island GRS Table Top Display

#### **Cradle of Aviation Museum**

Charles Lindbergh Blvd Garden City NY Dec 21 to Dec 29 (closed Christmas & Mondays) 10am to 5PM Long Island GRS Modular Display

#### Jim Marsh Chrysler Jeep

8575 W Centennial Pkwy
Las Vegas, NV
Dec 20 to Dec 31 (closed Christmas)
Las Vegas Garden Railway Society Display

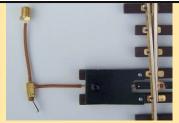


### Sunset Valley Railroad LLC

Complete line of code 250 track in brass, aluminum, nickel-silver and stainless. Connects to code 332 track. G gauge (45mm) O gauge and dual gauge available. 49 sizes and styles of switches and crossings.

Comprehensive pneumatic switch operating system, very simple and reliable to install and use!

Experienced dealer for Accucraft/Aster and Roundhouse. In business for 30 years. Nearly everything proudly made in the USA.



Pneumatic switch



G gauge track

We carry over 20,000 ft of track and 300 switches in stock for YOUR garden railroad

Call 253-862-6748 <u>www.sunsetvalleyrailroad.com</u> email pete@sunsetvalleyrailroad.com





North Texas GRC set up two! circuses and multiple, molded mountains at the Fall Plano Train Show.



Sales • Installation • Service 603-321-1347

email: donsweet@rcsofne.com

www.rcsofne.com

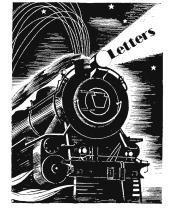
# We Are STEAM#GARDEN All About Real Steam on your Garden Railroad

For over 30 years, Steam in the Garden Magazine has covered garden scale live steam trains. We provide information that is aimed at live steamers of all skill levels, bringing together the best that we can for the hobby. Available in **Print** and **Digital**. With a digital subscription you can download and take us with you on

your laptop or tablet plus access our complete archive of magazines, over 30 years smallscale live steam of knowledge. Visit us online at www.steamup.com for more information. Until then — Happy Steaming!







## STRAIGHT FROM THE IRON HORSE'S MOUTH

Letters to the Editor should be sent as e-mails only to Carla Brand Breitner at: Editor@GRNews.org

Letters will then be addressed accordingly and/or passed on to the author for further edification. Unless marked otherwise, letters to this publication are assumed to be submitted for print. Please include your name and club affiliation. Please note that we may not be able to print all letters, though we will try to respond to them. Letters may be edited for length and clarity. We are unable to answer requests for information about specific products or systems; these are best addressed to the appropriate manufacturer.

#### **SHOWCASING YOUR RAILROAD**

Our railroads are cool. Thousands of hours are invested creating them and getting our trains to run smoothly. Plants, water features, buildings, trestles, tunnels, rock formations, figures, animals and trackside paraphernalia make amazing settings. Sounds and lights bring them to life.

We love showcasing our work and creativity and do this in 4 venues:

- ♦ In our magazine.
- ♦ On our Facebook Group
- ♦ On our Facebook page
- ♦ On Instagram

We would love to showcase YOUR railroad.

Marketing@GRNews.org or Editor@GRNews.org

# Photos Welcome for Seen on the Tracks A G Scale Realistic Scene Photo Gallery

Please send uncompressed photo (with caption information describing the scene and rolling stock, railroad name & proprietors, location, and photographer's credit) to Editor@GRNews.org; photos may also appear on the *GR News* website and social media.



BRIDGEWERKS.COM 253-225-9032





MORRISON

- \* 3 AMPS
- \* MOMENTUM
- \*DIRECTIONAL CHANGE PROTECTION FOR YOUNG ENGINEERS

**FAMILY OWNED SINCE 1995** 



5 YEAR WARRANTY

#### Affiliated Clubs by State & Country as of 12/5/2021

ΛP	Greater Hot Springs Garden Railway Society		ME	Maine Garden Railway Society
	Northwest Arkansas Garden Railway Society		MI	Lakeshore Garden Railway Club
	Ozark Garden Railroad Society			Minnesota Garden Railway Society
	Arizona Big Trains Operators		MO/KS*	MO-KAN Garden Railroaders
	Central Arizona Model RR Club			Ozark Garden Railroad Society
	Gadsden Pacific Div. Toy Train Operating Mus	eum		Coastal Carolina Garden Railroad Society
	Oracle Community Learning Garden Kid's Rail			Gibsonville Garden RailRoad Inc.
	Tucson Garden Railway Society			North Carolina Garden Railway Society
	VDO Garden Railroad Club			Piedmont Garden Railway Society
	1:32 Scale Group			Rivercity Railroaders
	Bay Area Garden Railway Society			New Hampshire Garden Railway Society
	Central California Coast Garden Railroad Soc			South Jersey Garden Railway Society
	Del Oro Pacific Large Scale Modular Railroad	ers		New Mexico Garden Railroaders
	Diablo Pacific Short Line		NV	Las Vegas Garden Railroad Society
	Fairplex Garden Railroad Volunteers			Northern Nevada Garden Railroad Society
	Gandydancers Gold Coast Garden Pailway Society			Central New York Large Scale Railway Society
	Gold Coast Garden Railway Society Mendocino Coast Model RR & Navigation Co			Finger Lakes Live Steamers Genesee G Gauge Railway Society
	Orange County Garden Railway Society	•		Long Island Garden Railway Society, Inc.
•••••	Redwood Empire Garden Railway Society			Western New York Garden Railway Society
	Sacramento Valley Garden Railway Society		OH	Buckeye State Garden Railroaders
	San Diego Garden Railway Society			Columbus Garden Railway Society
	San Joaquin Garden Railway Society			Greater Cincinnati Garden Railway Society
	San Leandro Historical Railway Society G&O	Rwy		Miami Valley Garden Railway Society
	Santa Clarita Valley Garden Railroad Club	,		Northern Ohio Garden Railway Society
	Santa Fe & Buthead Cove RR Train Group			Riverside Railroad Crew
	Shasta Garden Railway Society		OK	Central Oklahoma Garden Railroad Society
	Southern California Garden Railway Society			Ozark Garden Railroad Society
	Upland Garden Railroad Society			Tulsa Garden Railway Club
CO	Denver Garden Railway Society			Cascade Crossing Module G-Scale Group
	Grand Valley Model Railroad Club			Medford Garden Railroaders
	Mile High Garden Railway Society			Northwest "G" Railroad Club
	Northern Colorado Garden Railroaders	.L.		Rose City Garden Railway Society
C1	Central Connecticut "G" Gaugers Modular Clu Central Connecticut "G" Scalers	al		Train Mountain Railroad Museum Lehigh Valley Garden Railroaders
D C \WD\\\A*	Washington, Virginia & Maryland GRS			North Central Pennsylvania Mountains GRS
	First State Model Railroad Club			Pennsylvania Garden Rail Society
	Shore Line Garden Railroad			Pittsburgh Garden Railway Society
	Emerald Coast Garden Railway Club			Southeastern Pennsylvania Garden Railway Society
	Florida Garden Railway Society			Susquehanna Valley Garden Railway Society
	Model RR Division of Florida RR Museum			Crossville Model Railroad Club
	Tradewinds & Atlantic Railroad, Inc			Mid-South Garden Railway Society
GA	Georgia Garden Railway Society			Nashville Garden Railway Society
	Central Iowa Garden Railway Society			Houston Area G Gaugers
	Southern Idaho G-Scale Railroad Society			North Texas Garden Railroad Club
	Inland Northwest Garden Railroad Society			San Antonio Garden Railway Engineer Society
	Chicago Area Garden Railway Society			Color Country Model Railroad Club
	LGB Model Railroad Club of Chicago	1.3		Utah Garden Railway Society
	Midwest RAILS (Railroaders Active In Large Sc	ale)		Piedmont Railroaders
	Illiana Garden Railway Society			Tidewater Big Train Operators
	Indiana Large Scale Railroaders MO-KAN Garden Railroaders			Washington, Virginia & Maryland GRS Inland Northwest Garden Railroad Society
	Greater Cincinnati Garden Railway Society			Puget Sound Garden Railway Society
	Rusty Rails & Rotten Ties			Kenosha Garden Railroad Society
	Mason Dixon Large Scale Railroad Society			Wisconsin Garden Railway Society
MD/DC/VA*	Washington, Virginia & Maryland GRS			Wisconsin Garden Kanway Godiery
	,			* Club/Society includes members from multiple states
	•	National U	S	and is listed under each state.
	CANADA Big	g Train Operat	or Club	
Canada	Black Mountain Railway Club	LGB of Amer		Countries beyond North America
	BC Society of Model Engineers		AUS	Garden Railway Club of Australia Inc.
	Burlington Model Railway			Auckland Garden Railway Group
	Central Ontario GR Association			Christchurch Garden Railway Group
	Fraser Valley G-Scale Friends			Locos, Lads & Lasses
	Golden Horseshoe Live Steamers			Waikato Garden Railway Group
	Greater Vancouver GRC			
	London GRS			Wairarapa Garden Railway Group
	Northern Alberta Garden Railroaders			
	Ontario's West GRS			
	Ottawa Valley GRS			US G-Scale Friends Switzerland
	Rocky Mountain Garden Railroaders		UK	G Scale Society United Kingdom

#### **ADVERTISER INDEX**

2022 NGRC Denver	33 36 .12
Bridgemasters	28
Bridgewerks	38
Cedarleaf Custom Railroad Decals	22
Eaglewings Iron Craft31,	
East Gary Car Company	
Egghaulers.com	
Evan Designs	
GardenLines.net	
Gary Raymond Wheels	
G Scale Graphics	
	22
G-Scale Installations	
G Scale Society – UK	33
Hot Wire Foam Factory	22
J. S. Woodcrafts	
LGB America	
Live Steam Station/Accucraft	. 12

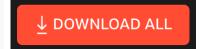
Locolinc (Keithco Inc)	28
Mini Forest by Sky	28
Model Decal Depot	18
MyLocoSound	35
Mostly GScale.com	33
Old Ďominion Railways	23
RailBoss	35
RCS of New England	37
Reindeer Pass	23
Shawmut Car Shops	15
Shawing car shops	10
Split Jaw Products/RailClamp.com	23
Split Jaw Products/RailClamp.com	
Split Jaw Products/RailClamp.com Starting in Steam	23
Split Jaw Products/RailClamp.com Starting in Steam Steam in the Garden	23 28 37
Split Jaw Products/RailClamp.com Starting in Steam Steam in the Garden Stoneworks	23 28 37
Split Jaw Products/RailClamp.com Starting in Steam Steam in the Garden	23 28 37 15
Split Jaw Products/RailClamp.com Starting in Steam Steam in the Garden Stoneworks Sunset Valley Railroad	23 28 37 15
Split Jaw Products/RailClamp.com Starting in Steam Steam in the Garden Stoneworks Sunset Valley Railroad Train Installations	23 28 37 15 37 27
Split Jaw Products/RailClamp.com Starting in Steam Steam in the Garden Stoneworks	23 28 37 15 37 27 27

#### How to Download GR News

GR News is a PDF document meant to be read in Acrobat Reader. It can be read in many browsers, but is best inside Acrobat Reader where you can control more display options and jump around throughout the magazine. All browsers have a download option, but the icons can vary. Look for an arrow pointing down and try clicking on it; then choose "Save File" and a location on your device. Some icon examples are shown here. Look for the arrow.











#### **How to Change Page Display**

When *GR News* is read in Acrobat Reader, the display can be adjusted using choices under the "VIEW" menu. *GR News* is designed for Two Page Display with Cover, so the front page is alone and the rest of the magazine appears as a two-page spread as if it was a print magazine. You control this with the "Page Display" choices under the "VIEW" menu. You can choose "Fit Page" or "Fit Height" to see pages without having to select a percentage. Size of page controls can also be found above a PDF on screen or by clicking a magnifying glass icon with a "+" inside. (Not the "search/find" empty magnifying glass icon.)

Hope these explainers helps make reading *GR News* more fun. Enjoy.

