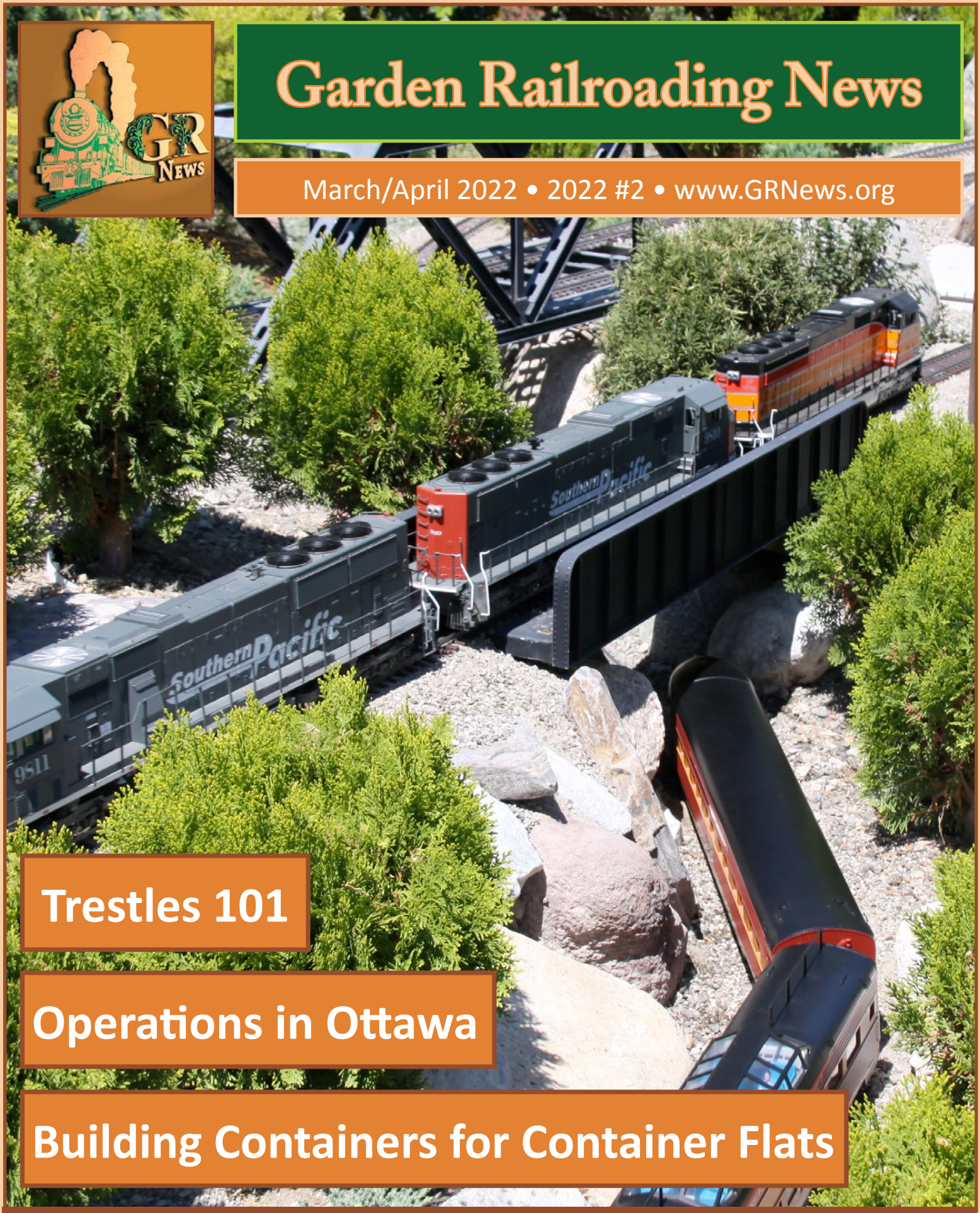
Garden Railroading News

March/April 2022 • 2022 #2 • www.GRNews.org



Trestles 101

Operations in Ottawa

Building Containers for Container Flats

A free digital magazine produced by garden railroaders for garden railroaders

Garden Railroading News

March/April 2022 • #2 2022 • GRNews.org

In This Issue

How To Build It Issue

Regularly Scheduled

Specials

Mixed Consist Club Interchange

Send suggestions and questions regarding *Garden Railroading News* to:
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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.

Seen On the Tracks

Photo by Bruce Jahn

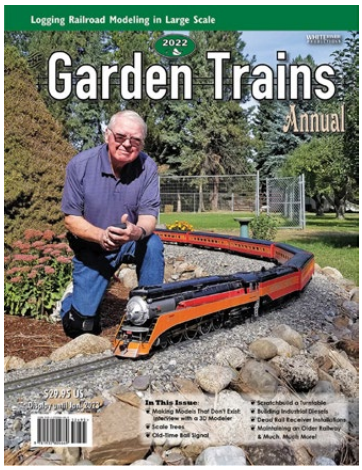
Above: *Dixieland music fills the air on Bruce Jahn's "Park" module, part of the 50'x70' display of the Diablo Pacific Short Line (shortline.org) set up at the Great American Train Show in Sacramento in January 2022. The 1:29 UP Turbine rumbling by was almost completely scratch built by Paul M. Newitt of Danville, California, and its three units measure about six feet long. (Note: all decals for this set were created by Stan Cederleaf.)* • Sacramento, California

Below: *An Accucraft live steam butane-fired C-25, weathered by Earl Martin and now owned by John Polen, crosses a steel girder bridge over a dry river bed at Lee Barrett's high desert railroad.* • San Jacinto & Santa Rosa Mountains, California

Photo by Pete Comley

Garden Trains Annual 2022

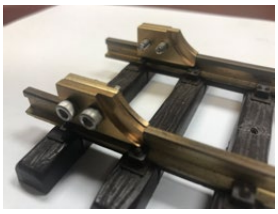
White River Productions is offering a pre-publication *sale price of $25* for this year's *Garden Trains Annual* through March 31; regular price $29.95 (plus shipping, of course). This soft cover publication is packed with building and how-to projects along with great layout tours and a Garden Gallery photo feature, filled with great shots from readers! The *GT22* is brimming with information on everything from prototype trains to flights of fancy and whimsy; whatever your large scale modeling style, you'll find the *Garden Trains Annual* is for you.



Jess Steven Hughes, a regular contributor to our GRNews facebook page, is the gentleman on the cover with his MTH 1/32nd scaled Southern Pacific GS4 4-8-4 Daylight steamer and passenger car consist. He posted that his story will be on "the origin of my layout and its early beginnings." Be sure to check it out.

shop.whiteriverproductions.com/products/gt22

Split Jaw Products/RailClamp.com Introduces Useful New Items to Support Your Trains



The new Split Jaw wheel stops for track spurs fit multiple rail sizes, code 332/250/215. Useful on your point-to-point line and switching spurs. Easy to install without removing any of your track; SplitJaw recommends using their SJ 10705 Hex Driver. Each set consists of two wheel stops, one left-handed and one right-handed, designed to securely fit to your rail. Tested on track from multiple manufacturers. Available in Brass only.

Electro-Grease,™ an antioxidant, conductive grease used during product testing at Split Jaw, is now packaged in 1 oz. jars for all garden railroaders to use. The non-toxic, non-hazardous formula helps you solve some of the most nagging challenges in outdoor large scale model railroading: Electro-Grease blocks oxidation, is electrically conductive, inhibits corrosion, and prevents seizure of screws and bolts.

After a many years absence, the 53" Rosecrans Truss Bridge is back in Single Track and Double Track versions. Sharp-eyed viewers may have spotted one in a recent feature in *GR News*. Rugged 100% aircraft grade aluminum, with over 1,000 hand embossed rivets. The prototype bridge replaced a plate girder bridge in the 1960s.

More information at: www.railclamp.com

Coming Soon in *GR News*: Tips on 3D Printing an Entire Train

by Rick Bremer
Fairplex Garden Railroad Volunteers ***Orderboard***

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.

Make Plans to Attend the 2022 National Garden Railway Convention in Denver, Colorado

Early bird rates for the 2022 National Garden Railway Convention in Denver—June 19 to 25—end on March 31st. Four days touring great garden railroads, clinics, vendor hall, barbecue at the Colorado Railroad Museum, banquet and Ice Cream Social plus pre- and post-convention 1:1 scale excursion railroad tours. Details on the Registration page at:

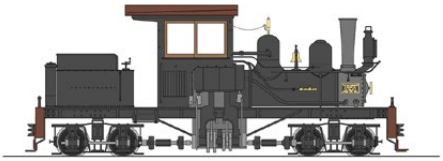
www.NGRC2022.org

Garden Railroading News will be there. Please attend our round-table discussion/clinic on the future of the hobby and conventions held in the hour before the Ice Cream Social. See you there!

Accucraft Plans a Gauge-Adjustable 1:20.3 Lima 13-2 Class A Shay

Accucraft is in the planning phase for a gauge-adjustable Class A Shay. The 13-2 Class A straight boiler Shay locomotive was one of Lima's industrial success stories, with virtually identical examples built for US and international industry and plantations lines. This 2 cylinder, 13 Ton conventional straight boiler design was built for a wide variety of gauges including 50cm, 24", 30" 36", 42" and standard gauge. Today the one known survivor of this design, as built for Queensland, Australia, is at the Nambour Museum in beautifully restored, non-operational condition.

The model will be gauge-adjustable for 32mm and 45mm and will come with two types of stack as typically supplied by Lima when built. This butane-fired live steam locomotive will be available as a kit and RTR, in green or black, when it goes into production.



13-2 Class A straight boiler Shay locomotive

Illustration by David Fletcher

More information will be available as the model nears production:
www.livesteamstation.com & accucraft.UK.com

LGB America Will Welcome a Trolley with Lights & Sound in the Fall and a Tribute to First Responders for Fourth Quarter 2022

Don't wait until the Bay Area National Garden Railway Convention in 2023 to enjoy a San Francisco streetcar ride. LGB America will offer this model of the original 1914 San Francisco Muni streetcar #130 or the "Lucky 130" in the Fall. The four-axle streetcar got its nickname because it was saved from being scrapped in 1958 to tow broken down PCC-type streetcars. This LGB streetcar includes an mfx/DCC decoder for many digitally controlled light and sound functions, the first time an LGB streetcar has had light and sound functions. The running sounds work in analog as well. All wheelsets are driven by two Bühler motors.

This model of the Norfolk Southern rescue and training train used to educate first responders will arrive in late 2022. The train consists of a diesel locomotive, a tank car and boxcar. The locomotive includes an mfx/DCC decoder for digitally controlled light and sound functions, and both trucks are driven by two powerful Bühler motors. Running sounds work in analog. The tank car can be filled with water and sprayed using the digitally controlled pump. (A new way to water your plants.)

LGB will be donating 50 € from the sale of each product to the First Responders Foundation.

More information at: www.LGB.com

20834 San Francisco Streetcar #130

29911 Norfolk Southern Railroad (NS) Rescue Train

LGB® Garden Railroading
Get on board and join the fun!

2022 New Item
20384 San Francisco Streetcar, Car No. 130

This is a model of the original 1914 San Francisco Muni streetcar the "Lucky 130." The four-axel streetcar got its nickname because it was saved from being scrapped in 1958 to tow broken down PCC type streetcars. The streetcar includes an mfx/DCC digital decoder with many light and sound functions, for the first time! Running sounds work in analog. The wheelsets are driven by two Bühler motors.

2022 New Item
29911 Norfolk Southern Railroad Rescue Train

This is a model of a NS rescue and training train used to educate and train first responders. The train consists of a diesel locomotive, a tank car and boxcar. The locomotive includes an mfx/DCC decoder for many digitally controlled light and sound functions, and both trucks are driven by two powerful Bühler motors. Running sounds work in analog. The tank car can be filled with water and sprayed using the digitally controlled pump.

A portion of the proceeds from the sale of this product will be donated to First Responders Foundation.

Visit LGB.com to see the complete line of 2022 New Items.
Purchase from your favorite LGB® dealer today!

Email customerservice@marklin.com for a free New Items catalog.

LGB.com
customerservice@marklin.com

A Railroad Designed for Train Operations & Camaraderie: Fred Mills' IPP&W and RP&M Operated by the Ottawa Valley GRS

By Mike Hamer
Photos by Pat Brennan, Bernie Goodman, Mike Hamer, Mark Shumelda, Malcolm Vant and Lawrence Watkins

For neighbours of Fred Mills the annual migration of railroaders arriving at his property in late May is a harbinger of warm spring temperatures making their appearance in Canada's capital region. Planting season can now get underway! Eager train operators are greeted by a small yet wondrous "Rust Garden," so dubbed not for the colour of its plants, rather the "rusty railroad relics" found within. Trains run through a diverse natural landscape ranging from verdant green grass to towering evergreens, from hedgerows to leaning ferns. Garden stone walls support elevated areas and bridges span wide chasms.

"Train operations" is the true reason folks make the journey here. The railroad has survived another winter hibernation and now it's time to hit the high iron and have fun on the

continued on next page

The group's beloved "Rust Garden" greets all visitors to the Ironwood, Peter's Pond & Western. The sound of the steam locomotive bell ringing announces the beginning of each Saturday's operating session.

Standard gauge diesel and narrow gauge steam operating sessions take to the G-scale rails on alternate Saturdays.

A grandfather/grandson team have brought their train into Bell in the western sector of the railroad. Nelson Yard, to the right, is located at the midpoint of the IPP&W.

The heavily forested eastern sector of the railroad offers shade on hot mornings in mid-summer. Visitors of all ages are encouraged to run a train under the guidance of a member.

"Ironwood, Peter's Pond & Western" (IPP&W). Sessions alternate between narrow and standard gauge from week to week. "Steam rules supreme" one Saturday while "diesels delight" the next. Sessions involve twenty operators with a handful of observers dropping by to watch.

The railroad covers a 100′x100′ property. Train tracks crisscross the landscape ensuring lengthy runs between towns. Classification yards are found at the two end terminals of the railroad and in the center. Along with industrial spurs, town locations have passing sidings offering runaround capability for crews to access cars from either end of their train. These long sidings allow for train meets as well.

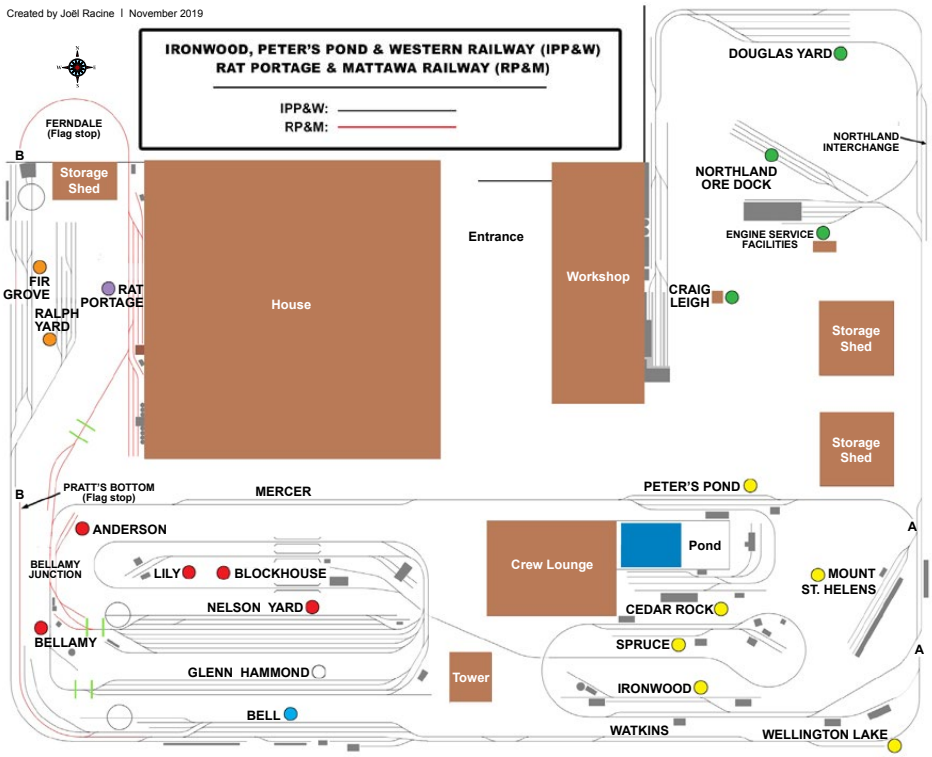
In many instances, the industries offer up both facing and trailing spurs (shorter sidings heading in both directions) which afford a variety of operational challenges for the crews. The Cedar Rock branch diverts from the main line at Peter's Pond adding to the operational fun. Of importance, all town locations are labelled on wooden plaques attached to the fascia or supported on posts for the benefit of visiting operators.

Peter's Pond is the junction of the IPP&W with the Cedar Rock Branch. Ferns and foliage create a green backdrop here.

A secondary railroad, the "Rat Portage & Mattawa" (RP&M) acts as a "bridge route." It connects two points on the IPP&W, running a northerly route with a brief sojourn into the "real world" of the front yard via two openings in the garden fence.

While a continuous loop was originally built into the railway for open house and locomotive testing purposes, it is not used during train sessions

Passenger Train #1 passes "The Rockery." In some areas rock retaining walls provide a nice backdrop for railfans and stabilize the higher portions of the line.



which simulate the real-life operations of a point-to-point railroad.

Crews, however, require a means of turning their locomotives when they reach both ends of the line. A wye is found at the eastern end of the line in Craig Leigh and a turntable exists at the western terminus of Firgrove. Turntables are also found in Nelson Yard and at the Interchange of the two railroads in Bell. The wye in Craig Leigh is useful for turning the full consist of arriving passenger trains as they must change direction to back into the terminal station at the end of the line.

Of note, the dispatcher controls four important signals guarding the junction where both railroads cross near the western throat of Nelson Yard. One other set of signals exist which are controlled by the Craig Leigh yardmaster to the east. They govern train movements along a lengthy section of track hidden behind storage sheds on the property.

continued on next page

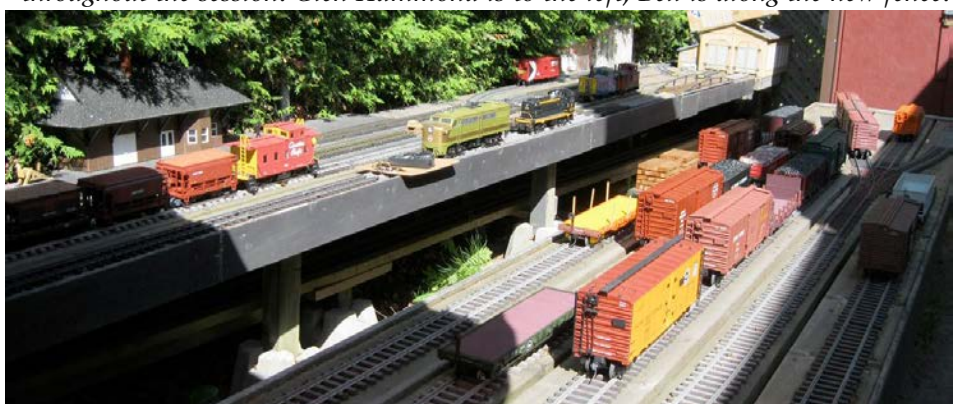
The tunnel portal located in Rat Portage offers one of two openings to the front property which is traversed by the Rat Portage & Mattawa Railway.

Ferndale, on a small curve among the ferns on the front of Fred's property, is a whistle stop where trains only stop on request.

Even the children of our group run trains under the tutelage of their parents.

Where real estate allows, a wye offers so much more than just turning an engine. Operators can turn an entire train if the trackwork beyond the three legs of the wye junction is long enough.

The main classification yard, Nelson Yard, contains nine tracks—more than enough to handle any traffic thrown the yardmaster's way. Centrally located, it acts as the heartbeat of the railroad. Trains are made up (blocked) and broken down continuously throughout the session. Glen Hammond is to the left; Bell is along the new fence.



Firgrove is the western terminus of the railroad. The station is tucked in under the hedgerow by the fence. Ralph Yard, in the foreground, is used by the yardmaster to classify cars while making up and breaking down train consists.

The passenger terminal in Craig Leigh is the most easterly point of the line. The crew backs a draft of passenger cars into the terminal area after turning on the wye.

A typical year sees us hosting twenty-two operating sessions weather permitting. We begin on the Canadian Victoria Day long weekend in late May and run until our Thanksgiving Weekend in early October. Each year, the OVGRS is thrilled to host its now famous annual “Invasion of Friends” in July. Large scale model railroaders interested in train operations come to Ottawa from all over the United States and Canada (even one individual from overseas) to put the IPP&W/RP&M through its paces! We also host “open houses” for special groups from around the region interested in seeing how we operate the railroad. Children of members love to come and run trains as well.

While there are a few spare locomotives around the property, operators are encouraged to bring out any engines they wish to run for the theme of the week. While some operators have their own personal large scale layouts at home, many don’t. They truly appreciate the fact they can run their locomotives during Fred’s sessions.

During the operating season, Wednesday mornings are typically reserved for MOW sessions where group members perform various maintenance and gardening tasks. These include, yes, “MOW”-ing the lawn,

continued on next page

Folks come from throughout North America and even Great Britain during our annual “Invasion of Friends” meet in July each summer. Lily is in the foreground.

Steam locomotive running at the same time as a later model diesel? It’s a railfan museum excursion running along IPP&W iron!

We live by the motto that “Garden Railroad Operations Are Fun” and the conductor aboard this Algoma Central unit agrees.

While Fred refers to the railroad as existing in a Spartan garden landscape, we like to think it fits perfectly in this verdant green environment comprised of ground-hugging plants, hostas, low growth shrubs, and towering pines, along with vines climbing the property line fence.

clearing brush and cleaning the track of debris. By running independent radio-controlled locomotives we have avoided the need to constantly ensure electrical connectivity in the rails. The track, however, must be kept clear of the aforementioned obstacles, both natural and man-made, to ensure smooth operations. Fred always wants the railroad to be ready for the next session.

We are proud of the fact that our group pioneered remote radio-control and battery operation in the early days of large scale train running. Detailed clinics involving the installation of remote-control battery power, sound and coupler replacement can be found at our website at: ovgrs.org.

The Ottawa Valley Garden Railway Society is still going strong more than thirty years since its beginning. All members of OVGRS are encouraged to offer input as to changes they feel could improve the railroad's physical plant or operations. Through these efforts, train operations evolve and grow.

Fred will be the first to say, "This is not "my" railroad, this is "our" railroad." He will add, "It's not magic that an out-of-doors large scale railroad in a Spartan garden environment is able to draw a loyal bunch of people together from May until October." Indeed, realistic train "operations" is the glue that holds this migratory group together for six months of the year — each year — in our northern environment.

Our author, Mike Hamer, wishes to thank his good friend, Doug Matheson, for his well-respected input with regard to train operations. He also appreciates Mark Shumelda for his fine-tooth comb perusal of the text. Thanks go out to members of the OVGRS who submitted pictures for the article.

Mike keeps an active blog each week of the group's garden railroad operations. Here you will find hundreds of photos from each session with captions as well as many videos of the trains running. It can be reached at: gardenrailroadottawa.blogspot.com

A local member of the NMRA takes Pool Train 15 from Mount St. Helens into Ironwood.

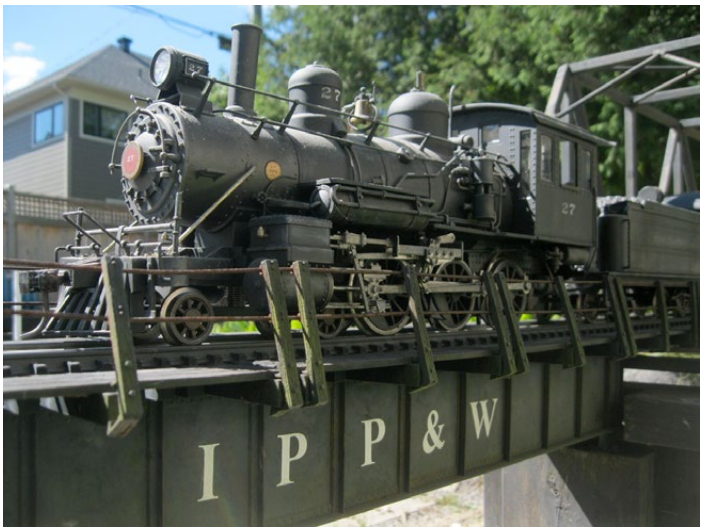
Operators often bring their prized engines in creative carrying cases.

A pair of EMD GP30 diesel locomotives greet us in Nelson Yard on a fine summer's morning.

Train 304 arrives at Bell a few summers back.

Visitors can spend the day admiring the operations or choose to run trains.

We must thank "Father Fred" for hosting us each Saturday morning to this remarkable operations layout.



The Fred Mills Trestle proudly bears the name of his beloved railroad. Fred, ever so humble, still gives the crew "that look" when we insist the bridge be named after him!

"Operations Logistics on the IPP&W" will appear in the May/June 2022 issue of Garden Railroading News.

Live Steam Station is the newest and largest online store for all your live steam needs: Accucraft, Aster Hobby, Maxitrak, and more can all be found here. *www.livesteamstation.com* will replace *www.accucraftestore.com*. Visit us online and happy steaming!

LIVE STEAM STATION

THE WORLD'S LARGEST STORE FOR MODEL STEAM TRAIN SUPPLIES

ACCUCRAFT · ASTER HOBBY · MAXITRAK · J&M MODELS · ARGYLE LOCO WORKS · AMS

Southern Pacific P8
1:32, Alcohol or Butane
Kit $3995, RTR $4495

LNER B1
1:32, Alcohol Fired
Kit $3100, RTR $3600

USRA Mikado Heavy
1:32, Alcohol Fired w/ 6 Free Cars
Kit $4400, RTR $5500

GWR 43xx 2-6-0
1:32, Butane, Green and Black
Kit $2695, RTR $2895

N&W 4-8-4 J-Class
1:32, Alcohol Fired or Electric
Alcohol $5950, Electric $5250

Adams Radial Tank
1:32, Butane Fired
Kit $1995, RTR $2160

Tiger 0-6-0 with Tender
1:32, Alcohol Fired
Kit $3250, RTR $3800

Kerr Stuart 'Victory'
1:32, Butane Fired
RTR $1100

D&RGW C-25
1:20.3, Coal or Butane
RTR $5250

D&RGW C-18
1:20.3, Butane Ceramic
$3095-$3395

Baldwin "Mabel" 0-6-0T
1:20.3, Butane Fired
Kit $1249, RTR $1499

Ruby #1 0-4-0T
1:20.3, Butane Fired
Black, Red, Blue and Brown
Kit $649, RTR $699
New 2022

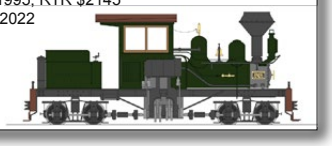
Dora 0-4-0T
1:20.3, Butane Fired
Black, Maroon, Blue & Green
RTR $499

'Cranmore' Peckett
1:19, Butane Fired
Kit $1695
RTR $1795

Lawley 4-4-0
1:19, Butane Fired
RTR $3395

"Talyllyn" Railway 0-4-2ST
1:19, Butane Fired
RTR $1700

Shay 13T
1:13.7, Butane Fired
Kit $1995, RTR $2145
New 2022



Forney SR&RL & WW&F
1:13.7, Butane or Coal
Butane $3200, Coal $4200

"Train Bleu" CIWL Sleeper
J&M Models
1:32, Brass
$950/Car, $3800/Set of 4

BR Mk1 Passenger Cars
1:32, Plastic body, Metal Trcks
$295/Car

L&SWR Coaches
J&M Models
1:32, Brass
$800/Car, $3040/Set of 4 Cars

Jackson & Sharp Coach
AMS
1:20.3, Ball Bearing Trucks, Lighting
$295/Car

Logging Disconnects
AMS
1:20.3, Plastic Body, Metal Trucks
$120/Car

Gondola
AMS
1:20.3, Plastic Body, Metal Trucks
$160/Car

GP60/GP60M
AML
1:29, DCC & Sound Option
$599 Base model, $799 Sound

3-Bay Hopper
AML
1:29, Plastic Body, Metal Trucks
$160/Car

High Cube Box Cars
AML
1:29, Plastic Body, Metal Trucks
$150/Car

Allchin
MAXITRAK
1.5" Scale, Butane Fired
RTR $3800

Austerity 0-6-0T
MAXITRAK
5" & 4 3/4" Gauge
Kit $5800 RTR $6050

RGS #6 Goose
2.5" Scale, 7.5" Gauge
$4950

2-4-0 7.5" Gauge Ride-on
2.5" Scale, Coal Fired
Kit $15000 RTR $18000

Code 332 Rail
Brass and Alum Rail System

Club Corner

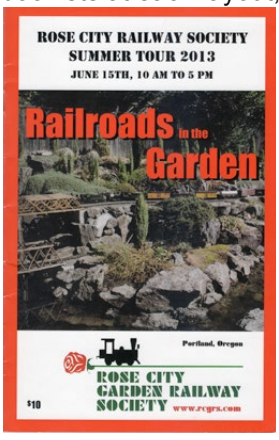
Curated by Bill Derville, Past President
Rose City Garden Railway Society • Portland, Oregon

Last issue, I introduced the subject of hosting garden railroading tours for the public as a good way to introduce the hobby to many who have not had a previous interest in trains or model railroading. Several hundred people attend our club's annual event and some become members. A number of other clubs throughout the United States also do a public layout tour, and I would love to hear from you about how you run your events.

The Rose City Garden Railway Society has run this event since 2001. I have chaired this event since its conception when our club was struggling financially. We have made money almost every year, usually netting about $1,000 over expenses.

There are several keys to our success. The biggest key is that we have some excellent layouts that people want to see. In the July/August issue I discussed club work parties where members help to build layouts. Many of our layouts started out with the help of experienced club members. We have shown around twenty-five layouts since 2001; from ten to fourteen of our best layouts are shown every year.

We always hold our event on the Saturday of Father's Day weekend. Our $10 booklet is the ticket that allows an entire family from grandparents to grandkids to visit as many layouts as they wish. We used to police this and ask that people show their booklets at each layout, but we don't do that anymore. We are just happy people come.



Every year we usually replace one or two layouts with new layouts or ones that were not on the previous tour. We feature a different layout on every cover, and change the color of the borders each year. The cover is made of a card stock rather than paper.

Our booklet is printed on 8-½ x 11" paper folded in half. Two pages per layout follow a welcome page and tour guideline "Suggestions." [Shown next page] The name of the railroad, the names of the owners, the address, a picture and description of the layout are on the left-hand page along with special notes regarding layout accessibity and such; and a map and street by street directions from the previous layout, including distance, are on the right-hand page. The booklet suggests an order of travel which changes between years. Most people today use their GPS, but sometimes a guest tells me of a mistake in the street by street directions, indicating they are used. We **bold street names** on the directions as well as "**Right**" or "**Left**" when indicating a turn. People can start at any layout, and most start with the one nearest their home.

How many booklets to print is always a guess. In 2019, we printed 700 booklets at a cost of just over $1,000. We started out just selling through hobby shops, but this quickly grew to include garden centers. Several garden centers have multiple stores, and all of them handle our booklets. We track how many books are sold by each of our 18 vendor locations, and give them a few more than they sold in previous years. We no longer accept new vendors because there is no longer room on the back to list them without reducing the size of print. We do not accept any ads in the booklet. No vendors want to sell a book that advertises their competitor.

In the May/June issue, I will complete this series on how we conduct our Summer Tour for the public.

continued on next page

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

Club Corner continued

Layout Tour Booklet pages (right) introduce garden railroading, provide visitor rules and advice, and encourage conversation with club members and layout hosts. Layout descriptions may include highlights, construction notes and the "story" of that railroad.

Welcome to the

2015 Railroads in the Garden Summer Tour

This year we have 13 garden railroads on tour for your viewing pleasure, rain or shine. Three were not on last year's tour, and two are on tour for the first time. It is almost impossible to see them all in a single day, so choose the ones you like. The ** in the driving instructions indicate places where you can start following the directions if you don't take them in order. You can also use a GPS to help you find our garden railroads. Watch for the cross buck Railroad Crossing sign in front of the homes on tours.

There is usually something of interest for everyone, be it trains, miniature buildings and people, small plants, gardens, or ground covers. You will be able to view Bonsai plants, water features, and creative vignettes that spark the imagination and create a minlature world in our backyards.

Garden railroading is the fastest growing segment of the model train hobby. The equipment you will see is G-scale, approximately ½ inch in scale (½ inch =1 foot) and specifically built for operation outdoors. The rails are usually electrified with 24V DC to provide energy to the locomotives. But many layouts now use batteries in the engine with radio controls and some run live steam engines. The rails are brass, aluminum, or stainless steel and stay outside all year round.

Please enjoy yourself and do ask questions of your hosts. They are indeed very proud to share their layout's background with interested vlsltors. There will be several club members wearlng either a R.C.G.R.S. logo shirt or a club name badge to assist you at each garden railroad.

See the back of our application in the center of this booklet for information about our club. Membership only costs $15 a year for the whole family so consider becoming a member, which you can do three ways: on our website, by filling out the application and giving it to one of our members on tour today, or mailing it in with $15.

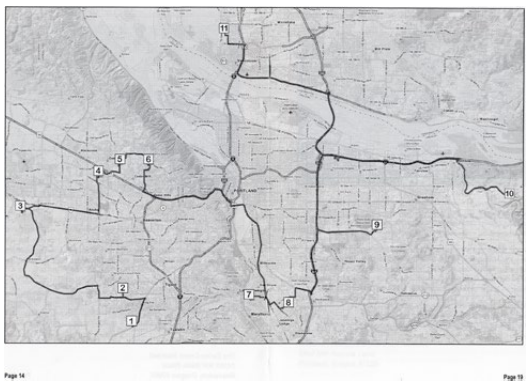
You can learn more about our club on our website rcgrs.com. Thank you again for coming. We hold this event every year on the Saturday of 'Father's Day weekend, so tell your friends, and I hope you will see more of our Garden Railways next year on June 18, 2016.

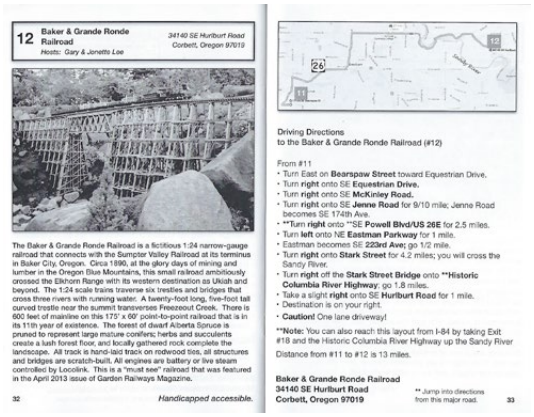
Warmly,
Bill Derville, President and Summer Tour Chairman

Suggestions for a Fun-Filled Day

1. Plan your route for most efficient travel. (You may begin at any railroad.)
2. Watch for the "Railroad Crossing" signs (cross bucks); they indicate each tour site.
3. Please do not block neighbors' driveways; we appreciate their support and don't want to lose it.
4. Please NO PETS other than handicapped assistance animals.
5. Children are welcome; however, they are your responsibility— keep them at hand at all times.
6. These are private homes; please respect the time frame of 10:00 a.m. to 5:00 p.m.
7. Telephones are not available at any of the tour sites.
8. Restrooms are only available at the Colorado & Southern Railroad (#4) and the Baker & Grand Ronde Railroad (#12).
9. Please remember to sign the guest books; we appreciate your visit.
10. If you wish to visit railway gardens out of the order listed, jump into the directions on a major street by finding the ** in the directions.
11. The maps for each site are image captures and give you a general impression in order to locate the area. Use the listed driving directions and/or your GPS system for a clear and easy-to-follow route to the site.

3





12 Baker & Grande Ronde Railroad
3414O SE Hurlburt Road
Corbett, Oregon 97019
Hosts: Gary & Jonetta Lee

The Baker & Grande Ronde Railroad is a fictitious 1:24 narrow-gauge railroad that connects with the Sumpter Valley Railroad at its terminus in Baker City, Oregon. Circa 1890, at the glory days of mining and lumber in the Oregon Blue Mountains, this small railroad ambitiously crossed the Elkhorn Range with its western destination as Ukiah and beyond. The 1:24 scale trains traverse six trestles and bridges that cross three rivers with running water. A twenty-foot long, five-foot tall curved trestle near the summit transverses Freezeout Creek. There is 600 feet of mainline on this 175' x 60' point-to-point railroad that is in its 11th year of existence. The forest of dwarf Alberta Spruce is pruned to represent large mature conifers; herbs and succulents create a lush forest floor, and locally gathered rock complete the landscape. All track is hand-laid track on redwood ties, all structures and bridges are scratch-built, All engines are battery or live steam controlled by Locolink. This is a "must see" railroad that was featured in the April 2013 issue of Garden Railways Magazine.

32 Handicapped accessible.

Driving Directions
to the Baker & Grande Ronde Railroad (#12)

From #11
- Turn East on **Bearspaw Street** toward Equestrian Drive.
- Turn **right** onto SE **Equestrian Drive.**
- Turn **right** onto SE **McKinley Road.**
- Turn **right** onto SE **Jenne Road** for 9/10 mile; Jenne Road becomes SE 174th Ave.
- **Turn **right** onto **SE Powell Blvd/US 26E** for 2.5 miles.
- Turn **left** onto NE **Eastman Parkway** for 1 mile.
- Eastman becomes SE **223rd Ave;** go 1/2 mile.
- Turn **right** onto **Stark Street** for 4.2 miles; you will cross the Sandy River.
- Turn **right** off the **Stark Street Bridge** onto **Historic Columbia River Highway**; go 1.8 miles.
- Take a slight **right** onto SE **Hurlburt Road** for 1 mile.
- Destination is on your right.
- **Caution!** One lane driveway!

**Note: You can also reach this layout from I-84 by taking Exit #18 and the Historic Columbia River Highway up the Sandy River

Distance from #11 to #12 is 13 miles.

Baker & Grande Ronde Railroad
3414O SE Hurlburt Road
Corbett, Oregon 97019

** Jump into directions from this major road.

33

37th National Garden Railway Convention
Denver CO June 21–25, 2022

Here's a preview of a few layouts that will be open during the 37th National Garden Railway Convention. Register now and support garden railroading. Early bird rates end March 31.

Go to: **www.ngrc2022.org** for more information.

Bob Dunlap

The D&RG–Foothills Branch est. 2002

The D&RG–Foothills Branch is a dog bone built on a hillside. Battery power is in use for 350 feet of track. All equipment is narrow gauge (1:20.3 scale) D&RGW and Rio Grande Southern. Structures are Silverado Mine and Chama coal tower, both scratch built. There is a 25-foot bridge and 9-foot trestle. In 2016, a 100-foot extension and a 25-foot curved trestle were added, all with great views of the front range mountains. In 2019, the Ophir Station and Yankee Girl Mine were added.

Byron & Marta Fenton

Gold Dust & Red Rocks RR est. 1998

The GD&RR is a loop folded into a C shape located on a sloping hillside, including over 200 scale trees. Total trackage is 400 feet with 250 feet of main line. The "mountain" setting features a waterfall and 50-foot long realistic mountain stream into a small pond. There is a small mountain with two tunnels and the train runs along a ledge on one side. We have a 40-foot long curved trestle, two to three feet. high. Also included is a spur line into the basement to store the trains. It features a waterfall, stream and plantings, as well as two town sites.

Chris & Rosemary Reid

The Great Southern & Western RR

Chris and Rosemary Reid's second railroad is in its third operational year. Two interconnected continuous loops at different levels travel 380 feet of track-powered main line. Spurs, operated automatically,feed to gravel and logging operations. The layout represents a rundown short line handling mainly freight traffic, with an occasional passenger train, somewhere around the 1940s.

Joel Waszak & Martha Miller

Colorado & NorthWestern Rwy est. 1998

Inspired by the Colorado & North Western Railroad, nicknamed the Switzerland Trail, the C&NW connected mining towns west of Boulder, and provided day trips and picnics for tourists. The Garden C&NW is fully integrated into the landscaping, passing flagstone paths, benches, bridge, pond with waterfall (Glacier Lake), and a gazebo. 100s of miniature plants, ground covers and buildings line the railway throughout the yard. With over 600 feet of track, the railroad has two reversing loops, two major spurs, and a main terminus (Boulder), which uses a reversing turntable. The grades are between 2% to 4%, with tunnels and much trestle work connecting the mountain towns and mines. Locomotives are live steam and battery R/C,

Bob & Erlene Finch

Colorado & Northern Pass RR est. 2011

An ore train loops around the mining town of Moss Rock on an elevated track, traveling behind the waterfall. It passes Auntie Em's country farm, the yellow brick road and the Emerald City. The mainline runs through a tunnel in Moss Rock Mountain, under the waterfall, and then behind a raised garden wall, emerging on a long trestle around the east end of the yard. The loop continues a second time around the yard through the gardens passing a 1950's era town. 500 feet of track circle the three loops of the railroad. Scenery includes many structures, cars, and people.

The Workbench, an article from Ray Dunakin III

THE
WORKBENCH
By Ray Dunakin

THE JOY OF MODELING

Our hobby has many facets. For instance, some people enjoy "operations" -- running trains in a realistic manner, switching, etc. Others like creating landscapes of miniature trees and shrubs. Some prefer trains running through gardens of colorful flowers. I love scratch-building models, whether they're buildings or trains! I also enjoy the related modeling techniques of kitbashing and weathering. Scratch-building has many things to offer:

First, scratch-building models is a very creative endeavor. I consider it an art form. Creating a realistic miniature environment is like painting in three dimensions. (Which is why I also love making scenery. Structures are just an extension of that.)

Brick and Stone: A pair of scratch-built Sintra and styrene buildings on the In-ko-pah RR

Second, it gives you complete control to make exactly what you want, the way you want it. You can also use the materials and techniques that give the best appearance and durability, rather than being limited to what is easiest for a manufacturer to mass produce.

Third, there is great satisfaction in building something that is uniquely yours. Whether it's a complex model with intricate details, or a simple cabin, you can take pride in knowing you built it, and you'll have something no one else has. The few things I haven't scratch-built, such as locos and rolling stock, are at least weathered and often modified or kitbashed, both to increase their realism and to make them my own.

Fourth, you can reproduce specific prototypes. Even when I'm freelancing a structure, it is designed to be true to a specific style, period, and degree of weathering.

Work in progress
Sintra w/brick details

Fifth, building or customizing a model is something you can do day or night, regardless of the weather. In fact, making models of structures, locos or rolling stock is something you can do even when you have no room for a complete railroad, or are no longer physically able to maintain a railroad.

Sixth, it's often cheaper than buying kits or pre-built, commercial products.

Of course, scratch-building isn't for everyone. But with so many great things going for it, I like to encourage people to give it a try! That's what this column is about, as well as sharing tips and techniques to help produce better models. You don't have to be an artist to scratch build models, all you need is the will and some practice. The more you do, the more your skills will improve and your confidence as a modeler will increase. Just don't give up if your first try isn't a masterpiece!

The Workbench, an article from Ray Dunakin III (continued)

THE WORKBENCH
By Ray Dunakin

TOOLS

Scratch-building doesn't require a fully-equipped machine shop, either. I do all my modeling with a few basic hand tools. Here is a list of the tools I consider to be essential:

* A hobby knife such as the X-Acto brand, with new #11 blades. I buy blades in the 100 pack, because I go through them quickly. I've found that the Excel brand blades seem to be the most durable.

* A metal ruler both for measuring and to use as a straight edge.

* A scale ruler can be handy at times, especially if you're working in a scale such as 1/29th or 1:20.3. I model in 1/24th scale, which is a half inch to the foot. This is pretty easy to figure out on a regular ruler, so I don't often use the scale ruler.

* A Dremel plus various bits, including a large cutting wheel.

* A pin vise. This is a simple manual drill for use with very fine bits. They're pretty cheap so I now have several of them, which reduces the amount of times I have to change bits. Some hobby pin vises include a starter set of bits.

* A razor saw. I keep two on hand: one regular and one with extra fine teeth.

* A hobbyist's miter box. This is a piece of aluminum channel with slots in it, allowing you to make cuts at 45 degrees and 90 degrees.

* Steel machinist's blocks. This can be found online, usually called "1-2-3 blocks". I prefer the kind without holes. These are great for holding parts in alignment for gluing. Small angle blocks or "step" blocks are useful, too.

* A smooth, hard work surface. I use a tempered glass tray that I picked up from a thrift store.

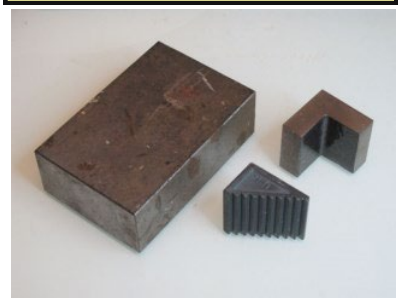
* A cutting tool such as the Chopper III from Northwest Short Line. This really earns its keep when you need to cut multiple strips of material at precisely the same length.

* Various small files, available from any hobby shop.

* Tweezers.

3 styles of pin vises, one in middle holds a set of drills inside the handle

"1-2-3" block, step block and L-shaped steel block



I also have a few custom tools for special purposes. For instance, I used a Dremel with a cutting disk to cut off a 1/4" wide section from a razor saw. This is mounted in the handle of a hobby knife, and is used to create simulated wood grain in styrene. I also made a double-bladed scribing tool out of brass, for embossing the horizontal courses of bricks.

MATERIALS

Now, there are many different materials one can use to build models for outdoor use. I've seen some great structures made from Precision Board, ~~which is available from Rainbow Ridge~~*. I've also seen many fine structures and rolling stock made from clear acrylic, aka "Plexiglas", usually laminated with styrene, wood, or other material. Some modelers have gotten good results using an epoxy clay called "Magic-Sculpt" to create simulated stone buildings. These are all great products, and I encourage their use. The materials I use most for my structures are styrene, and a PVC foam board called "Sintra", so that's mostly what I'll be discussing in my column. But I strongly believe that there is no single "right" way to do things when it comes to modeling. Use whatever materials or methods you feel comfortable with!

Although Sintra is called "foam board", it doesn't have a foamy appearance or texture. Both the surface and interior are smooth. It's stiff, yet cuts easily with an X-Acto knife. It's hard enough to withstand considerable abuse, yet soft enough to be scribed, textured or embossed. It's also designed to handle the elements, commonly being used for outdoor signs. Sintra is available online ~~from www.foamboardsource.com~~* in a variety of sizes and thicknesses.

There are two main suppliers of styrene hobby supplies: Plastruct and Evergreen Scale Models. Both sell styrene rods, strips, tubes and shapes such as angles, H-beams and I-beams. I find Evergreen's products to be better suited to scale modeling, but Plastruct does have some specialty items that aren't available from Evergreen. Plastruct also has other materials which may occasionally be useful, such as ABS and acrylic.

*[GR News Editors Note: Since original 2018 publication of this 2-part article, Rainbow Ridge and foamboardsource.com have closed. A web search will find sources for Precision Board and Sintra Board. The modeling information remains timely to all modelers.]

The Workbench, an article from Ray Dunakin III (continued)

ADHESIVES

I recommend a solvent type cement for gluing styrene to styrene. "Plasti-Weld" is available at most hobby shops and comes in a small bottle with a brush attached to the cap. It's a good start, but after it runs out I refill it with bulk solvent from the hardware store. MEK is the solvent I've been using, but I think it has been replaced with something else recently.

For gluing styrene to Sintra, or Sintra-to-Sintra, I use Sci-Grip 16 (formerly called Weld-On 16). It's a syrupy cement that comes in a large tube, and works on PVC, acrylics, and other plastics. Occasionally I use plumber's type PVC cement from the hardware store, mainly for laminating two sheets together. It's not well-suited to finer work.

Another adhesive I use from time to time is Dynaflex 230. It's a paintable silicone caulk available in a large squeeze tube from the hardware store. I also use thick CA (cyanoacrylate) aka "super glue". This can be found at most hobby shops, along with a spray "activator" or "accelerator" that is useful for setting it quickly.

Well, that about wraps it up for this month. Until next time, happy modeling!

Left: Styrene strip shop doors

Below: Mill door: Loading dock of a mill building on the In-ko-pah

DENVER welcomes you in 2022

37th National Garden Railway Convention

JUNE 20-25, 2022

'85 '86 '87 '88 '94 '04 '09 '22 '15

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Telling the Tale of the Track

Baron Spilsbury's Black Canyon Drinking & Mining Railroad Company

By Mick "Baron" Spilsbury

My railroad has a story with good deal of BS interwoven with facts about San Rafael in 1899. But, why? Researching San Rafael around 1899 was intrinsically interesting and has sparked entertaining conversations with neighbors and friends regardless of their interest in my railroad. Understanding the city's history has also helped me make more sense of San Rafael today.

The story is my road map for the development of my railroad. Buildings have been introduced to service new businesses that were being established in San Rafael at the end of the 19th century. Rolling stock has been acquired or modified to fit new businesses' needs. Rivalries of the day are reflected in the characters on the railroad. I like having the roadmap. It creates a context and framework for railroad enhancements.

Visitors enjoy hearing the story, both the silly BS and the tilts at real facts. It makes them smile and focus on the railroad's details. This makes open days more interesting. While dedicated garden railroaders can sit and watch trains for hours, mere mortals need multidimensional entertainment which the story provides. It also stirs up a more varied assortment of questions beyond the dozen that we all get asked all the time.

The story also suits my joy in writing to entertain and nourishes my active imagination. I wrote lots of advertising and PR copy in an earlier life, even a couple of plays for an amateur theater company. I have enjoyed transferring ideas to paper for years; bringing ideas to life on my railroad is even more fun.

So, what is my railroad's story?

In the 1880s, Baron Spilsbury, aka BS, judged that the gold-seeking 49ers may have rushed to the foothills of the Sierra Nevada without pausing to consider whether gold could be found closer to San Francisco. He bought a single parcel of land in Black Canyon in the hills, north of San Rafael, and started surreptitiously exploring for gold on both his own and adjacent parcels. Upon discovering a rich vein of gold, he set about buying those adjacent parcels. They were cheap because nobody could imagine building on them. BS assured them selling was OK because he was establishing a wildlife refuge.

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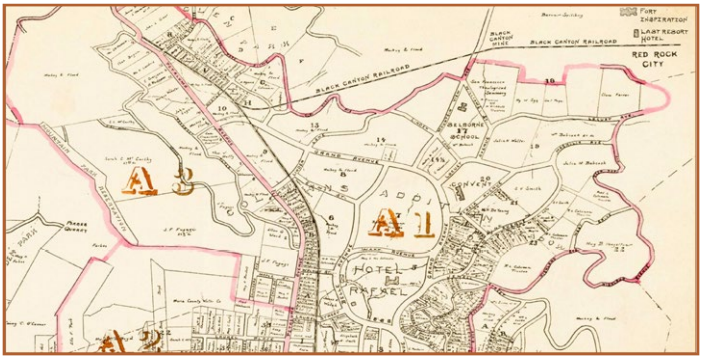


The Baron's architect daughter laid out the Black Canyon Railroad (upper right) on an 1899 map of San Rafael.

The Baron, in royal blue coat, is an outdoorsman who loves hunting & fishing in between drinking and womanizing.

The railroad to BS Ventures gold mine ships tons more ore than wagon trains hauled.

The BCD&MRR ships supplies of all kinds.

The tasting room at BS Liquors is rowdy and renowned.

BS Livestock herds roam Red Rock Canyon.

The Last Resort Hotel, built on a solid foundation of gold and whiskey, welcomes gentlemen callers.

It was soon clear that BS had struck a very rich vein of gold and banks were falling over themselves to loan money to start his mining operation. Mining equipment was brought in by wagon through the hills. Ore to be processed went on wagons in the opposite direction. Wagons broke down and got marooned after heavy rain, so a new method of transportation was required. BS negotiated a right of way with the San Francisco & North Pacific Railroad and built a 2-mile spur from the mine to their tracks. He was soon rolling in money. Unsure how long the vein would last, BS started to diversify.

A miner from Tennessee was making a very popular whiskey in a backwood still, but not making much money. BS paid him $100 for the recipe, made some test batches, and sent them to fine restaurants in San Francisco. The restaurants demanded more and BS Liquors was established. By 1899 BS Liquors was shipped up and down the West Coast.

The same hostelries asked whether BS could supply high quality meat. He said yes, then began researching cattle farming. A few smart hires moved things along and within six months, BS Livestock was shipping meat to satisfied hostelries. A holding company, BS Ventures, was formed

Tent encampments were no longer adequate for the growing population of Black Canyon, so BS built Red Rock City. Ever eager for profit, Baron Spilsbury erected the Last Resort Hotel in the city's most prominent location. Its bar operates 24/7. Black Canyon is beyond San Rafael city limits, so the Baron can and does makes his own rules. All these new visitors require his "Lads & Lassies" security force. The female members of the force distract villains, then partner with their male colleagues to kick bounders out of the canyon.

Passenger service to Red Rock City travels over Black Canyon. Visitors find the distinctive yellow & green uniforms of the BS Patrol easy to spot.

continued on next page

7 custom-painted box cars await barrels of whiskey to be shipped through Northern California and the Pacific Northwest.

BS enjoyed the profit margins in the hospitality business and decided to expand into the 'gentlemen's' entertainment business. Officially, society decried such establishments but they flourished anyway. BS decided that a fixed location was unwise. The largest caboose he could find was expensively converted into the traveling Baronial Club. Some clients were members of the Bohemian Club (founded 1872). They sponsored BS into the club so they could travel to their 2 weeks of hijinks near Monte Rio on the Russian River in the Baronial Club car. They also join BS for hunting at his Black Canyon hunting camp.

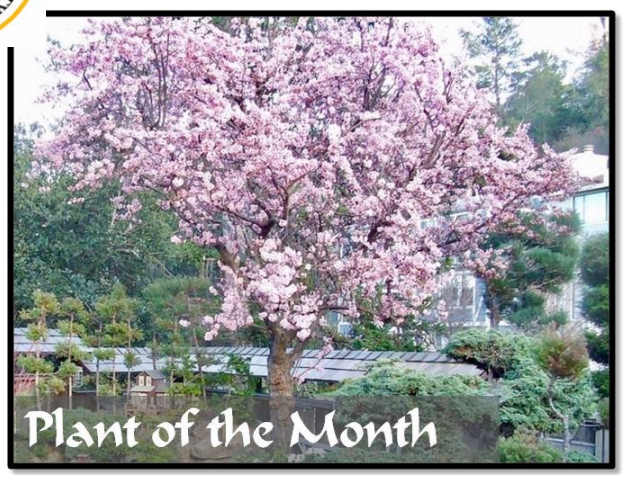
The mine continues to fill BS's coffers, the distillery ships barrels of whiskey, and Baroness Spilsbury keeps a careful eye on the finances of BS Ventures while largely ignoring BS's adventures. Life in Black Canyon is good.

The BCD&MRR support staff.

BS Ventures Business Car.

GR News would like you to share the story of *your* railroad.
Send your *Tale of the Track* to editor@grnews.org with illustrating images — and your railroad may be the next *Tale* told.

Red Rock City glows in the evening as the party gets rolling in the BS Baronial Club caboose.



-- **By Richard Murray**

BOTANICAL NAME: *Chamaecyparis thyoides* 'Ericoides'

COMMON NAME: Atlantic white cedar

USDA Hardiness Zone: 4 (down to -30° F)

The parent plant of 'Ericoides' is *Chamaecyparis thyoides*, an evergreen coniferous tree, usually growing to 60–90 feet. It is native to the Atlantic coast of North America from Maine south to Georgia, with a widely separated population on the Gulf of Mexico coast from Florida to Mississippi. *Chamaecyparis thyoides* lives almost exclusively in freshwater wetlands at an altitude from sea level to 150 feet. It prefers habitats where the soil is saturated with water for at least the majority of the growing season. The soils in these regions have a thick organic layer. Atlantic white cedar wetlands are acidic and there is little oxygen stored in the soil because water has displaced the air. Plants that live in these environments must be especially adapted to such conditions.

continued

The mature bark is reddish brown. Its wood has excellent resistance to decaying and has been used for a number of purposes including boat construction, shingles, and posts. Altered fire regimes, logging, and draining of wetlands outside the few protected areas have all contributed to the general decrease in the size and occurrence of Atlantic white cedar stands. The tree is listed as rare in Georgia and New York, of special concern in Maine, and is extinct in Pennsylvania. The remaining populations are now found in mostly remote locations that would be difficult to harvest, so its popularity as a source of lumber has decreased. Although the tree is not listed as threatened, Atlantic white cedar wetlands are considered a globally threatened ecosystem.

The variety 'Ericoides', as pictured above, is a conical shrub form of Atlantic white cedar with dark, blue-green, persistent juvenile foliage that turns rust colored in winter in colder climates. To the uninitiated, sometimes the plant looks dead because of its winter color. Because of the mild temperature in my yard, the winter color is about 1/2 rust and 1/2 green. After 10 years of growth the listed growth is 5 feet tall and 3 feet wide. Its average annual growth rate is listed at 4 to 6 inches. Mine get pruned every year so they are a bit smaller than the listed sizes. The above 'Ericoides' plants were originally planted in Jack Verducci's yard in the early 1990s. Of the 19 that were transplanted to my yard 15 years ago, only 3 have been lost.

'Ericoides' does best in full sun with moist, sandy, and slightly acidic soil. When branches get bare close to the trunk, it is best to cut the branch all the way back to the trunk to encourage new branch growth. Except for pruning, this is a relatively low maintenance shrub. There is no serious insect or disease problems. There is some susceptibility to juniper blight.

Its origin has sometimes been given as the Begéot Nursery in Le Mans, France, about 1840. However, in 1989 researchers said the French origin is incorrect because the nursery identified, instead, a closely related plant. They also point out that the variety 'Ericoides' has had a convoluted taxonomic history for over a century, having been assigned to at least eight different genera. These authors used macroscopic and microscopic wood anatomical features to establish that 'Ericoides' is in fact a form of *Chamaecyparis thyoides* and probably arose from a branch sport. A few years later other researchers confirmed the naming with DNA tests.

The common name "Atlantic White Cedar" has been rejected by the American Joint Committee on Horticultural Nomenclature, as it is a cypress, not a cedar. However, it is still the most widely used name for the species. The recommended name is Atlantic white cypress.

Making Containers

Article and photos by Chuck Carlson

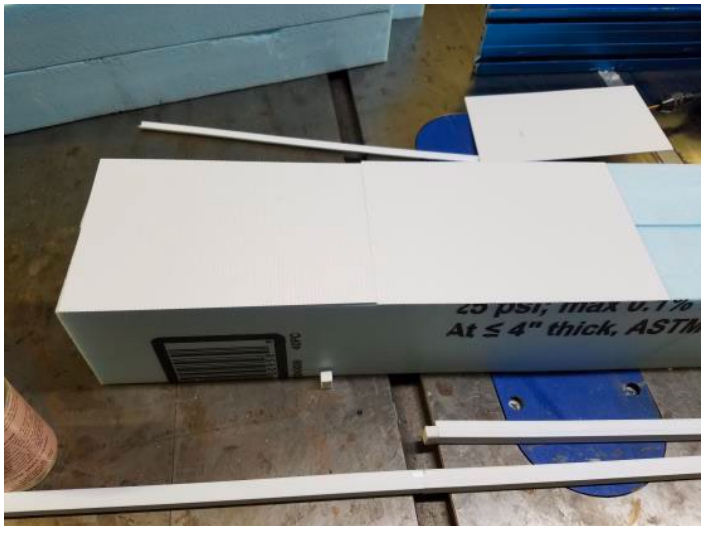
This year at the Lynden Train Show I purchased two Southern Pacific intermodal cars. Neither came with a container and as you can see in the photo above, these cars are for 48' containers, thus my search of the internet for containers.

The only things I was able to find were some small containers (20') made by Piko and the price started at $85.00. Looking at the cars I noticed markings for 40' container and thought a smaller container might be easier to scratch build. These are USA train cars so the scale would be 1:29; doing the math would make the containers 16.5" long by 3" wide and 3.75" high.

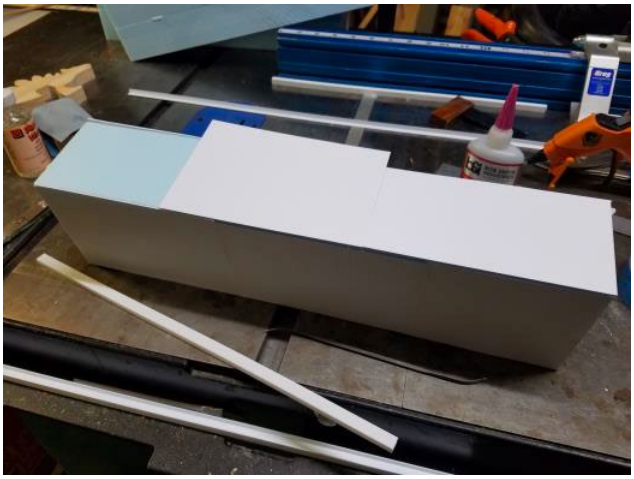
I started going through my inventory of Styrene material, which wasn't all that bad. I had a bag of Plastruct 3/8" "H" pieces, ¼" square tubes, ¼" angle, 0.250 x 0.312 solid rods and several sheets of plain 0.080 and 0.040 sheets. I still needed corrugated sheets, rectangle tube 0.250" x 0.375" and 1/8" round rods. Hobby Lobby carried Evergreen but mostly in HO and N gauge material and no corrugated; I did get the 1/8" round though. Other hobby shops were about the same. So on to Amazon and EBay. I first bought 4 Evergreen corrugated sheets from Amazon. They came one sheet to a pack 150mm x 300mm (about 6" x 12") and later I found out I need three sheets for one container. I purchased 3 packs corrugated from JTT Scenery Products 7.5" x 12" (2 sheets to a pack.) These being wider, I only needed 2 ½ sheets per container.

To make the container block, use 2" foam board, rip 3" wide strips, and then cut the boards to the 16.5" length. Using a hot glue gun, glue two of the pieces together to form the container-size block; then rip the block to 3.75 tall.

The next step is to cut 5 of the corrugated sheets across the ridges 3.75" high and hot glue these to the sides of the foam block.



Next cut 3 corrugated pieces 3" wide and hot glue these to the top of container block. Now there are three sides of the block covered with the corrugated ribs going up and over.



Next make the locking blocks. You need 8 of these for each container, top and bottom corners Start by cutting the ¼" square tube ¼" in length for each block. Then cut a strip about 5/16" wide from a 0.080 sheet of styrene, and CA glue each block to the strip. When dry, cut the block out and turn it over and re-glue to the strip. Cut the block out again, and sand the edges smooth on all four sides. This makes a square block.

Next, drill a 1/8" hole on one bottom of 4 blocks, and a 11/32" hole on two adjacent sides of all the blocks.

From the solid 0.250 x 0.375 rod, cut two pieces 2.75" long. Glue the blocks on each end of the rod making sure the holes on the blocks are facing out on each end.

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The base piece is made from the "H" Plastruct; glue two pieces end to end for each side. After the glue dries, cut each to 16.5".

Next glue the end pieces from above on each end of the "H" strips making sure the holes on the blocks face out. Now glue the container block onto the base making sure the same amount of base is showing on each side of the block, and even with the "H" ends.

Next, take the ¼" angle and place it on the top side of the block and measure the length from end to end. Cut and glue with CA glue to the container long edge. Repeat on the other side. Now using the 0.080 sheet of smooth styrene, cut a piece the height of one end; then cut to the width and finally cut that in half (this makes the doors on one end). Glue the two halves on with the hot glue gun making sure you touch the base. Measure and cut a piece for the other end out of the corrugated material.

(*See photo top of the next column*)

Now take the other four ¼" locking blocks (without the hole in the bottom) and CA glue them to the top corners on the same line with the bottom blocks and slightly higher than the top of container; make sure the holes face out. Now measure a ¼" angle piece for the corner side edge; you will have to make some small cuts to get it to fit around the upper and lower blocks, glue with CA glue. With the 0.250 x 0.375 rectangle tube, measure to fit between the two upper locking blocks and cut to length. Measure in on the 0.375" side about 0.125" and draw a line the length parallel to the edge; on the 0.250 side do the same. Cut on these two lines with a razor knife to take away a corner of the tube. With CA glue on the edges attach at the top between the two locking blocks. Do the same on the other end.

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With the 0.040 smooth styrene sheet, cut four 1"x1" squares and CA glue them on to the doors.

(You can see them in the photo in the adjacent column.)

Cut four locking rods from the 1/8" round to fit on the door end. DO NOT GLUE THEM AS YET; and finally from the 1/8" round, cut four small pins to glue on top of the locking blocks.

Note: Like any project, you may need to use putty in places.

You now must decide on your container's line/color. I did find "G" scale decals for MAERSK and Ocean Network Express (ONE) lines. I painted two containers gray for Maersk and one container white and one pink for the ONE line After you've painted the containers and decaled them, glue the 1/8" round pieces on the door end.

The containers ran on the Puget Sound GRS modules at the Puyallup, Washington, Great Train Show in January.

Trestles 101

By Paul D. Race
written for FamilyGardenTrains.com

Photo by Peter Wine

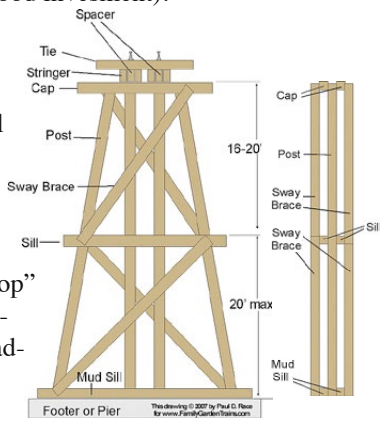
One of the most common characteristics of garden railroads is the timber trestle, a sight common in hilly terrain a century ago and still visible today in some out-of-the-way places. The complex lattice-work inevitably draws attention, no matter how big the trestle is. But it is neither as difficult nor as time-consuming to build a trestle as you might think. In fact, if you are going to have a raised railroad anyway, a trestle is one of the fastest and least expensive ways to fill the gap between the track and the terrain.

A trestle is made up of relatively simple components that are repeated over and over again. To build a trestle, you create a "jig," that is a carefully measured framework that helps you assemble the most important components quickly.

You will need:

- Lumber for the trestle material, usually cedar or something else weather and insect resistant
- A table saw that can cut ("rip") 1/2" strips out of cedar fencing or similar boards. (If you don't already have the saw, a friend with a table saw is almost as good, since most of the work you need the table saw for can be done in one day away from the railroad.)
- A broad board or a piece of plywood you can use for the jig. A minimum would probably be 14" wide and 24" long. I found 18"x32" about right, although 18"x36" would be better for working with longer pieces.
- Waterproof wood glue
- A brad gun and brads that are just slightly too short to penetrate two "posts." (Post widths are discussed below, but a 3/4" or 7/8" brad that is the highest gauge your gun will handle is probably a good invesment).

What is a Bent?



The key component of any trestle is called a "bent." It is the vertical component you would see if you could look at the "cross-section" of a trestle. Generally a "bent" consists of 4-6 long vertical posts that spread out as they go from "top" to "bottom" and two or more horizontal "sills." Most garden railroaders build the trestle bents in their workshop, then assemble them in their garden once the rest of the track and roadbed has been laid.

Note on Staining Trestles: A reader asked how to stain the trestle, and I got input from several people, whose responses are in the [online] appendix of this article. Some folks stain the wood before they build anything, some folks stain the bents after they're assembled, and some folks stain the whole thing at a time after it's assembled. And the chemicals folks use are "all over the map." But if you read that section before you start building bents in earnest, you may find a method that appeals to you. I put this note here in case you decide to stain your wood before you assemble your bents, so you can plan ahead.

Back to Building Trestle Bents — Trestle bent construction has been described in *Garden Railways* a few times, and there is a brief description in Jack Verducci's book *How to Design and Build* a Garden Railway. But I thought it might be worth spelling out a detailed step-by-step procedure that could be used even by people with relatively little skill and no tool more complicated than a table saw. (In a way this is a throwback to the earliest days of my site, when my central theme was "If even I can do this, anybody can.")

The most prominent parts of a trestle bent are the:

- **Posts** - the long vertical pieces,
- **Sills** - the horizontal crossbars,
- **Cap** - the highest horizontal crossbar, and the
- **Sway Braces** - the diagonal pieces that give the bent horizontal integrity.

Plan How You Will Use the Bents

Most garden railroaders use their trestles in a largely cosmetic fashion. That is to say, the track is already being supported by *something*, not by the trestle itself. When the trestle is installed it may camouflage or partially replace the "real" support, but trestle bents by themselves will not support track unless you engineer a solution.

As an example, many railroads today are being built with Bill Logan's HDPE ladder-style roadbed. The result is a clean, open framework that both supports the track and looks good on top of a trestle or other bridge construction. You could "toenail" (angle) screws or nails through that roadbed right into the caps of your bents, if you wished, and many people have. But Bill's preferred solution is to add a strip of 3/4" x 3/4" HDPE lumber to the outside lower edge of the HDPE roadbed. Then he can shoot nails either down into the cap or up through the cap easily. When Bill is satisfied that the trestle will hold the track, he removes the temporary vertical supports. In the photo at the left, the vertical support is still there, but it was removed a few minutes after this photo was taken.

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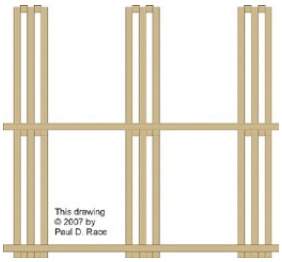
Some folks do build trestles that fully and independently support their track. To do that properly is outside the scope of this article, but you should know that it requires addition of "stringers" that run parallel to the rails and support the ties underneath. If you try this, you may want to add diagonal bracing between the bents to provide a more rigid overall structure. Folks who follow this approach typically build and assemble the whole trestle in the "shop" before the track is even installed; then they install the trestle in one piece and install the track on top of it. Many beautiful garden railroad trestles have been built this way.

In addition, you should think about what happens where the bottom of your trestle reaches the ground. The best case is not to have it touch soil at all; more than one garden railroader has had to replace part of a trestle that started rotting out from the ground up. My friend Wil Davis uses concrete bricks as "footers" for the bottom edge of his trestle. If you want to use a poured concrete base or those 8"x16" concrete blocks, disguised with gravel, that would work, too. Find out what folks in your area are doing successfully if you can.

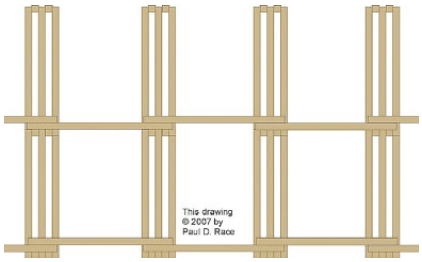
However you decide to attach your trestle to your roadbed or to deal with the bottom edges, it's better to think this through now than later.

Plan How You Will Connect Your Bents

You'll also need to think about how you will provide cross-connections between bents once the bents are in place between your roadbed and your footer. In the title photo, they've obviously used long strips of wood that are thinner than the members that make up the trestles. A more diligent modeler may wish to follow prototype practices, having many cross-connectors that are only long enough to reach from one trestle bent to the next. While you're experimenting with the first few bents you've put together, get some scrap pieces and visualize how you will fasten the trestle bents together once they are installed.



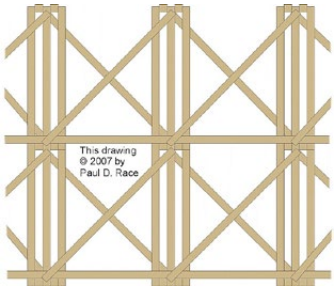
Using a single piece of wood for the crossbars simplifies construction.



Separate, staggered crossbars provide visual interest.

Many options for connecting bents have been tried by the "real" railroads.

Most garden railroaders don't add diagonal ("sway") bracing on the outside of the trestle. But it adds even more interest if you have time to do it. To the right is an example of a garden railroad trestle that uses a single strip of wood for the crossbars and adds sway bracing on top of the pieces. It is built by Dayton-area garden railroader Denny LaMusga.



Denny's outside sway braces mechanically make the trestle more stable. It also camouflages the fact that the crossbars are all one piece. A diagram showing how the pieces interact is shown at right.

Choosing Your Dimensions

On most Denver and Rio Grand trestles, which are often used as models, the posts and most of the sills were 12"x12" timbers. Most garden railroaders use posts that are half-inch square. This is about "right" for LGB trains and Bachmann starter sets, although if you are running other scales, you may choose another size. For sake of space, I've specified the different possible sizes depending on what kinds of train you plan to run most often:

Kind of train you run most often:	Recommended Post Width:
Bachmann Shay or other 1:20.3 trains	Consider 0.6" square. (19/32")
LGB trains, Bachmann starter sets, or other 1:22.5 trains	Consider 0.53" square (17/32").
AristoCraft, USA Trains, or other 1:29 trains	Consider 0.4" square (13/32")
MTH trains or other 1:32 trains	Consider 0.375" square (3/8")

It's not hard to tell from looking at the table above why most garden railroaders choose 1/2". Still I *would* encourage anyone using 1:29 or 1:32 trains to consider 3/8" as long as it is mechanically feasible with the materials and tools at hand. Oversize timbers give a false impression of the relative size of Standard Gauge trains, making them look as much as 25% smaller than they should in relationship to their surroundings.

On D&RGW trestles, the sills (horizontal members) also tended to be 12" square, so the same cut pieces will do for those as for the posts. The top sill, also called a "cap," was usually 12" wide by 14" deep, but most modelers use the same dimensions as they use for the posts and other sills.

On the other hand, you sometimes have to work the the materials that are easily available to you. For my yet-unfinished project, I tried using some "Western" cedar fence boards, the kind you use if you're making a "dog-ear" fence from scratch, because I liked the color and the grain. When I started using them, I realized that they varied between 9/16" and 5/8" in depth. So if I do use these in "production mode" I will have to run each piece through the saw twice — once to cut it to width, and once to even out the depth. Then I realized why so many folks doing this just start with 2"x4" boards anyway.

Conversely, you may have come across a bunch of "tomato stakes" or something that are a little smaller than they "should be" to meet with D&RGW standards. Don't feel bad. D&RGW is a "best case" for narrow gauge railroad construction. Many narrow gauge railroads' trestles used smaller dimensions, and some of them used much smaller dimensions for the sills and sway braces. (2"x12" sway braces were common on some lines.)

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The same applies to any odd widths left over when you cut your posts. If you realize that you'll have enough of a particular width to use for all of your sway braces or for all of the crosspieces that hold the bents together, that's fine as long as you're consistent.

What If I Don't Have a Mill or Even a Table Saw?

Of course, many of you can mill wood in your shop; you're ahead of me already. On the other hand, some of you are, frankly, in no danger of ever owning or learning to operate a table saw. There's no real reason you can't buy the lumber, ask a friend who's handy with this sort of thing to slice up a bunch of boards for you to the necessary dimension and do the rest of the project yourself.

Setting Your Cap

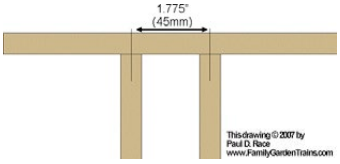
Once you decide what width of lumber you will be using, you're in a position to start planning your jig. When you begin planning, all the most critical decisions are made in the top six or so inches of the trestle bent. This starts with the "cap," the highest horizontal member of each trestle bent. Your cap will probably be somewhere between 6" and 8", depending largely on what kind of trains you plan to run. A typical D&RGW trestle cap was 14' long (although I've seen some diagrams in which the caps seem to measure about 11'8"). Again, the measurement of your model cap depends on the kinds of trains you're running:

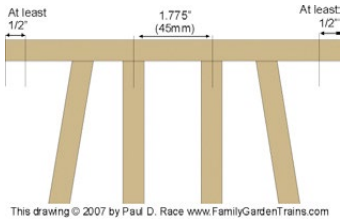
Kind of train you run most often:	Recommended Cap Length:
Bachmann Shay or other 1:20.3 trains	Between 7" and 8.25"
LGB mogul, Bachmann starter set, or other 1:22.5 trains	Between 6.5" and 7.5"
AristoCraft, USA, or MTH trains	6", especially if you're using 3/8" posts. Once your caps get below 5.5", it gets harder to assemble the trestle together in the "field."

Once I thought I knew what dimensions I wanted for my cap and posts, I started assembling the materials for my jig. In my too-cluttered garage, I found a piece of 3/8" plywood that was left over from a previous project, cut nice and square to about 18"x32". I also brought out several long strips of wood from my fence-board slicing experiment, so I could lay them out on my "jig-in-progress" and get an idea of how they would work. Every time I thought I had the measurements right on my jig, I laid some pieces of wood on the plywood to see if what I was designing was mechanically feasible and/or attractive. All of this "hands-on" fiddling would be unnecessary for someone with greater confidence at this sort of thing, but it helped me visualize things and tweak my final measurements.

Spacing Your Posts on the Cap

On a D&RGW-style bent, the distance between the inside two posts is easy to figure — each inside post should be centered under a rail, 45mm apart (1.775"). On this example, the angle of the center posts is also easy to figure — they're vertical. So you can easily use a square to draw their path on your jig.





Now you need to figure out where your outside posts start, and how much they slope. You want the cap to poke out beyond each post at least one post's width. So if you are using 1/2" posts, you need to leave 1/2" clearance or more at each end of the cap. The illustration of the cap and posts above is based on a 7.5" cap. You can tell that this gives you plenty of room to work with. If you haven't already sliced up some wood to try things out with, download the full-sized [online] picture, set it to print at 7.5" wide on your printer, then cut out four long 1/2" wide strips of paper to work with as you try to visualize your future setup.

As I worked with the D&RGW drawing, I realized that certain things were a little "off," including the slope of the outside legs, which is slightly exaggerated. For an 18" trestle, this wouldn't be so bad. But if you built a 3' trestle that used this slope, the base could easily get wide enough to be unmanageable.

In my experimentation with my posts, I found that I was most satisfied when my outside posts angled away from the center posts between 3/4"–1" per foot. Whatever slope you settle on, you have to stick with that throughout any single trestle on your railroad — you can't change slopes within a trestle.

By now you should have all the information you need to start outlining things on your "jig." Once you have a good outline, screwing little blocks of wood on to keep those pieces aligned while you zap them with your brad gun is the next step.

Spacing Your Sills

On a real trestle, the bottom ("mud") still comes first. On a garden railroad, though, we work from the top down. The D&RGW plan says that the sill closest to the cap should be between 16' and 20' below it, and other sills should be 20' apart. That said, most folks go on the closer side, not the maximum, because more sills makes for more apparent detail on the trestle. Before you decide exactly where these things should be, you should dummy up a bent or two and experiment to see what looks right to you. Here are the D&RGW guidelines, transferred to various scales and rounded off to the nearest 1/4".

Kind of train you run most often:	Distance From Cap to First Sill:	Other Sill Distance Maximum:
Bachmann Shay or other 1:20.3 trains	9.5" to 12"	12"
LGB trains, Bachmann starter sets, or other 1:22.5 trains	8.5" to 10.5"	10.5"
AristoCraft, USA Trains, or other 1:29 trains	6.5" to 8.25"	8.25"
MTH trains or other 1:32 trains	6" to 7.5"	7.5"

How many sills you use depends on how long your trestle will be. Most garden railroaders don't put bottom sills on most bents, since they are most interested in the bents aligning at the top

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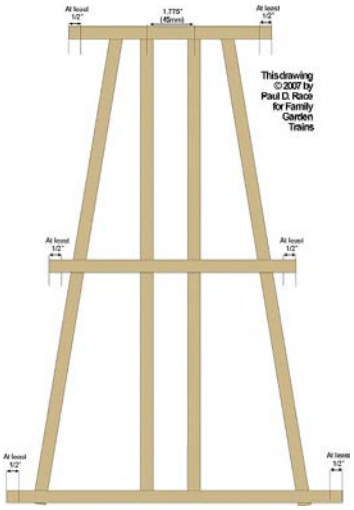
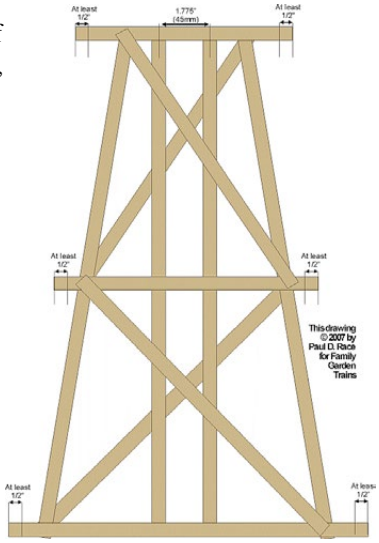
(where they meet the roadbed), and the way things align down below is secondary.



You don't need to plan the length of your sills — that will be dictated by their location on the bent. However, you *will* want to extend the ends of each sill at least one post width (I'd recommend 2) beyond the vertical post, so you have room for the cross-pieces that tie the trestle bents together once they are in place.

Also, you won't need to plan the length of the diagonal "sway braces" — that will be dictated by everything else, and will vary depending on what part of the trestle bent you're working on. The only other thing you need to know about the braces right now is that many trestle plans show them extending too far. When you actually add them, don't let them extend much, if at all beyond the posts. Again, you need to leave room on the sill for the cross-pieces to go on. On the title photograph, the builders have gone one step farther — they have attached the diagonals only to the posts, which saves a little bit of wood and makes the bents easier to handle for moving and setup (a big issue when you're installing hundreds, as they did at that site). I think it creates a nice appearance but some purists would probably cringe.



How Many Bents Will You Need?

Most people plan for the bents to be between 3/4 and 1.5 times as far apart as their sills. If the sills are a little closer than they "need to be" to be good models, that's okay, having the bents a little closer than they "need" to be doesn't hurt anything really and provides more room for apparent detail. Some folks who are modeling lumber railroads or the like that operated on a shoestring like to space their sills and their bents far apart, to make the trestle look as sparce as the budget for new projects on that railroad would have been.

Building the Jig

Once you create an outline for what the bents will look like, then you create your "jig." Transfer your measurements onto a wide board or a piece of plywood. Some folks just draw the bent on the board, then tap in a bunch of finishing nails so the components have to go the right places. This is good for an experiment or trial run, but the pressure from the brad gun will loosen things up before long. For long-term use, most folks screw blocks onto the board for a more "foolproof" guide.

The photo to the right shows a jig that started out as a 4-post-jig (see the line drawings) but was converted to a three-post jig for the trestle on a children's railroad. The oversized sills are just there to help me locate the blocks properly before I refasten them.

Generally you won't need to show your sway braces on your jig - it's pretty obvious where they go once you have the posts and sills installed. But if you *do* want to show them for some reason, be sure to show only half of them - the ones you install from "this side." That way you have less chance of having some bents where the sway braces go one way and some where they go the other.

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Fine-Tune Your Installation Plans

Make a few bents and line them up (detailed steps are below). Make certain they're symmetrical so it doesn't matter which way you have them turned when you line them up. Take them out into your garden railroad and make certain they will fit where you want to use them and that they will support your track or fasten to your roadbed the way you think they will.

Cut Your Wood

When you think you're ready to go, it's time to start "ripping" cedar in earnest. While you're at it, cut a bunch of "posts" to a length that is a couple inches longer than you think you will need them to be. This will give you extra "room to work with" if things have shifted around since you started this project. Garden railroaders who are doing a really big project where the final measurements are unknown often leave 6"-12" extra. It's a lot easier to cut off extra material once you are on the "job site" than it is to add.

Try to cut the shorter pieces, such as caps and sills, from any scraps, although you may need to sacrifice a long piece to get started.

Also, depending on how you decided to represent the cross pieces that hold the bents together once they're installed, you may need to cut some other lengths of wood.

Assembly Line

Although you've done your ripping by now, you'll still want some sort of power saw ready to cut the sills and braces as needed. You'll also want to find your waterproof wood glue, your brad gun, and a pencil for marking the braces.

1. Line up the "top" of the posts so that the end comes just below where the cap will be.
2. Put a drop of glue on each post where the cap will come into contact with it. Try not to put so much that it runs — excess glue will "seal" the wood wherever it drips and keep that bit from either accepting stain or weathering at the same rate as the rest of the lumber.
3. Align the cap and use your brad gun to fasten it to the posts. Actually, the brads are mostly to hold the things together while the glue sets, but it does make a nice "belt-and-suspenders" approach to building solid bents.
4. Attach each sill the same way. Do not attach sills "below" the point where you are likely to need them.
5. Lay a piece of wood where the first sway brace needs to go. Mark the length you think it needs to be and cut the brace. Lay the cut brace where it will go. If you're satisfied, put a drop of glue everywhere the brace will contact other wood and use your brad gun to fasten it down.
6. After you've finished adding cap, sill, and braces from this side, turn the bent over and add them on the other side.

When you have more bents than you can possibly use on the first bit of trestle you plan to build, stop.

Ordinarily you will build your final trestle on site, but there may be times when it makes sense to build it all at once, such as the trestle for the "demo" railroad shown to the right. This one used the unprototypical three-posted version of the jig shown above. We screwed the caps to a 5/4"x6" piece of wood to make the whole thing stable enough to haul over a thousand miles and set up multiple times.

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Building On Site

When you take your trestle bents outside, you'll probably want to take:

- A saw for fine-tuning on site
- A brad gun and or power screwdriver for fastening the crosspieces to the bents and fastening the bents to the roadbed
- A small plumb line (If you don't have a little "plumb bob" you can tie a rock to one end of the string and tie a small stick or thumbtack to other end.)
- A level
- A tape measure
- A shovel
- The concrete bricks or whatever else you decided to use for "footings." (If you don't isolate your trestle from ground contact the day you install it, try to do so before winter (or the rainy season, if you live someplace more tropical).

Put on long pants or figure out some other way to protect your knees. Take your bents, other pieces, and tools to wherever you're going to install your trestle. Some folks like to start in the middle and work their way in both directions. Wherever you start:

1. Use your level to make certain that your track is level now, or at least that it is at the grade you want it to have. Also the track shouldn't tilt from left to right, unless you're allowing it to bank a little on curves.
2. Place your footing underneath where your first bent will go. I would be inclined to set it in loose gravel to reduce the effect of frost heave. On the other hand if your roadbed is designed so that the whole thing rises and falls with the frost, there's no reason the trestle can't rise and fall with it also.
3. Hang your plumb line from the track or roadbed and measure the distance from the bottom of the roadbed to the top of the footing.
4. Cut a bent to fit and try out the fit.
5. If the bent fits, make certain it is vertical (the center posts should align with the plumb line in both directions).
6. Fasten the bent to your roadbed, step back and admire your handiwork. Use your level to make certain you haven't changed the grade or the left-right tilt of the track.
7. Hang the plumb line where you think the next bent on either side of the first bent should go. Measure and cut the second and third bent.
8. Prop the second and third bents where you think they should go and decide if the bents seem too close or too far apart. Again, most folks like to put them about the same distance apart as the average distance between sills on a bent.
9. Lay some of the pieces you will be using for crossbars on the sills of the bents and decide how you like the look.
10. When you think you have the right spacing, measure it so you can be consistent. Then, using the plumb line to be sure you are staying aligned, attach the next two bents. Check the level again in both directions and make any adjustments as necessary.
11. If you are using separate, staggered crossbars, you should probably wait until you have six or seven bents installed before you start attaching your crossbars. And then start from the middle, never attaching anything to the last two crossbars in any direction — it's too easy to make wrong assumptions about where the staggered crossbars should go when you don't have all the bents up. On the other hand, if you're using long pieces of wood to represent crossbars, you should try temporarily laying the pieces where they will need to go every so often, even though you can't really attach them until you've got a lot of the trestle run. This gives you another way to check the vertical alignment of your trestles — if the sills seem to be going up and down underneath your crossbar, you may have a problem.
12. When you're all done, check your levels again and choose your least expensive locomotive for your first test run. When you're certain everything is working right, take a digital photograph and e-mail it to us, along with any "lessons learned" you want to pass on to our other readers. If you haven't taken steps to protect the base of your trestle from moisture and frost heave, please make a note to do so between now and bad weather.

I wanted to get the basic instructions out there now for folks who are wondering what it takes to produce a nice big trestle for their garden railroad. The answer is, it takes a few simple steps and pieces, repeated over and over and over again.

(Editor's Note: Paul D. Race's FamilyGardenTrains.com has information for modelers of all levels.)

SDGRS News - February 2022

Tips & Tricks
Greg Elmassian

Track Leveling

It's not always clear why your trains do not run well. One thing that is often hard to see, but makes a big difference is the "cross level" of your track. Grades up and down are easy to see, but in terms of “side to side” quite often it is way off level but it does really jump out at you visually.

Our trains don't have the "compliance" that real trains do, even if you have a suspension, it won't follow irregularities like a real, heavy loco and other rolling stock. So, every so often you should check the cross-level of your track, especially at switches/turnouts.

One way to do this easily is a small digital level with a hold function. I found this one at http://mpja.com and it was only $15. Model 35908 TE. Very few digital levels are small enough to put crossways on the track, and also very few read in percentage. Clearly you can also use this to measure your grades, as the rule of thumb is to keep them under 2%

In the first picture, on the left, the track does not look too bad, BUT! the second picture shows it's off level by over 2%.

Checking your track every so often and correcting cross level will go a long way to decreasing derailments and/or allow longer trains to run.

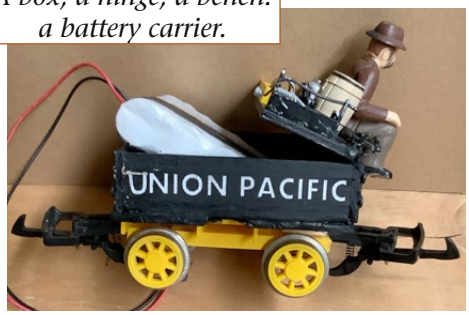
(Editor's Note: More of Greg's Tips on Large Scale Trains can be found at www.elmassian.com)

A Hartford Passenger Coach with Detailed Interior

Submitted by Bob Dunlap
D&RG–Foothills Branch

When describing his layout for the Denver convention previews, Bob sent the photo left and wrote, "I did the interior on the passenger cars. All the seat backs flip over just like the real one. It takes about one month to build a Hartford car. They are all wood just like the real ones (no plastic or brass)."

A box, a hinge, a bench: a battery carrier.



Kitbash Projects: a Battery-Bearing MOW Car and a Memory-Carrying Rail Car

Submitted by James Kasik

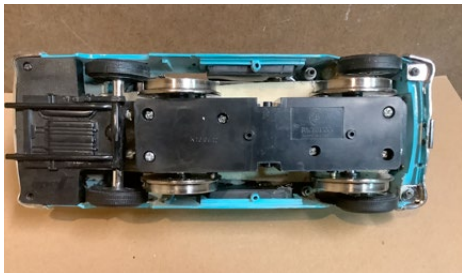
Jim Kasik has had a busy 2021 in his shop. In July 2021, Jim sent your editor his Maintenance of Way car with battery enclosure. In November 2021, Jim submitted his Mid-Century MOW Rail Car, complete with backstory. Jim built these projects to run on his Jim's Folly RR in Virginia, a 75' x 15' garden loop with a 12' curved trestle. Both of Jim's projects may give you an idea for your own kitbash.

Regarding the battery-hauling car shown above, Jim writes, "Using the trailing car chassis of the Bachmann MOW 2 car set, I built a battery enclosure trailing car. A wooden frame, measuring 3"x3"x1" inches, was used to contain a Li-ion battery. The bench that the workman sits on is hinged to allow placement of the battery. Various tools were added to the bench to allow the workman to do his job." Jim even supplied a water cooler for the crew.

Jim's rail car project is a trip down memory lane. He wrote, "My first car was a 1955 Chevy Bel Aire. The identical car was on E Bay—style and color combination, compatible with G scale,1:25. I purchased it and proceeded to kitbash the car into an MOW rail car.

"First I needed to make space available for the motor block and wheels of a Bachmann trolley which I had. Using my Dremel, the interior of the car was gutted and the motor block and wheels were installed using superglue. Tires were also attached with superglue.

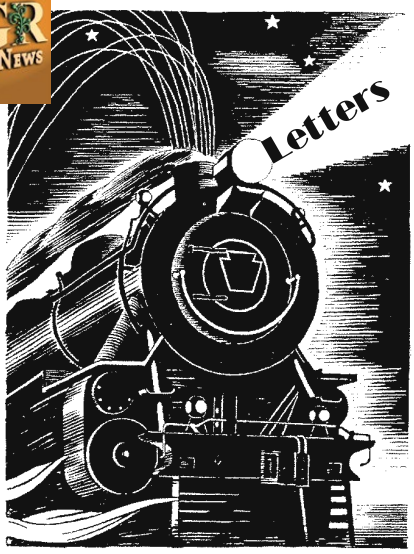
"In my parts cabinet, I found two MOW workers. Unfortunately for them, I had to cut off their bodies—at the waist. The figures were superglued in the front seat with one worker waving to onlookers."



Above: *Bachmann trolley motor block & wheels just fit the Chevy undercarriage.*
Below: *The rail car speeds by on track power.*

Circa 1955 photo of the car with Jim and his mother.

The completed rail car with two workers travels on train wheels, but appears to roll on top of the track.



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.

Ken Brunt: G-Scale Enthusiast

My name is Mike Hamer and I live up in Ottawa, Ontario, Canada. This e-mail concerns the sudden passing of our dear friend, Ken Brunt, on December 20, 2021. He left a lasting impression on all who met him and he will be deeply missed. Wherever he went there was laughter and joy!

Ken traveled far and wide to attend operating sessions and garden railroad conventions where he met so many in the hobby who were quick to consider him a friend.

In his annual visits up to Ottawa, Canada for our "Invasion of Friends Weekend" we shared much laughter along with deep conversations. Our event, and so many others, will never be the same without him. Wherever Ken journeyed he brought joy to the group and left a positive and lasting impression. A true ambassador to the hobby, Ken found tremendous satisfaction in sharing his [Pennsylvania] home railroad with others from near and far. He loved his country for which he served. Ken will be remembered as a generous, cheerful soul. Our condolences go out to his family and friends.

Mike Hamer
Ottawa Valley Garden Railroad Society

Affiliated Clubs by State & Country as of 3/15/2022

AR ..... Greater Hot Springs Garden Railway Society
..... Northwest Arkansas Garden Railway Society
AR/OK/MO*... Ozark Garden Railroad Society
AZ ..... Arizona Big Trains Operators
..... Central Arizona Model RR Club
..... Gadsden Pacific Div. Toy Train Operating Museum
..... Oracle Community Learning Garden Kid's Railroad
..... Tucson Garden Railway Society
..... VDO Garden Railroad Club
CA ..... 1:32 Scale Group
..... Bay Area Garden Railway Society
..... Central California Coast Garden Railroad Society
..... Del Oro Pacific Large Scale Modular Railroaders
..... Diablo Pacific Short Line
..... Fairplex Garden Railroad Volunteers
..... Gandydancers
..... Gold Coast Garden Railway Society
..... Mendocino Coast Model RR & Navigation Co.
..... Orange County Garden Railway Society
..... Redwood Empire Garden Railway Society
..... Sacramento Valley Garden Railway Society
..... San Diego Garden Railway Society
..... San Joaquin Garden Railway Society
..... San Leandro Historical Railway Society G&O Rwy
..... Santa Clarita Valley Garden Railroad Club
..... Santa Fe & Buthead Cove RR Train Group
..... Shasta Garden Railway Society
..... Southern California Garden Railway Society
..... Upland Garden Railroad Society
CO..... Denver Garden Railway Society
..... Grand Valley Model Railroad Club
..... Mile High Garden Railway Society
..... Northern Colorado Garden Railroaders
..... Rocky Mountain Live Steamers
CT ..... Central Connecticut "G" Gaugers Modular Club
..... Central Connecticut "G" Scalers
D.C./MD/VA* Washington, Virginia & Maryland GRS
DE ..... First State Model Railroad Club
..... Shore Line Garden Railroad
FL ..... Emerald Coast Garden Railway Club
..... Florida Garden Railway Society
..... Gulf Coast & Central Florida RR Museum, Bushnell Stn
..... Model RR Division of Florida RR Museum
..... Tradewinds & Atlantic Railroad, Inc
..... West Florida Railroad Museum
GA..... Georgia Garden Railway Society
IA ..... Central Iowa Garden Railway Society
ID ..... Southern Idaho G-Scale Railroad Society
ID/WA*..... Inland Northwest Garden Railroad Society
IL..... Chicago Area Garden Railway Society
..... LGB Model Railroad Club of Chicago
..... Midwest RAILS (Railroaders Active In Large Scale)
IN ..... Illiana Garden Railway Society
..... Indiana Large Scale Railroaders
KS/MO* ..... MO-KAN Garden Railroaders
KY/OH* ..... Greater Cincinnati Garden Railway Society
LA ..... Greater Baton Rouge Model Railroaders
MA..... Rusty Rails & Rotten Ties
MD..... Mason Dixon Large Scale Railroad Society
MD/DC/VA* Washington, Virginia & Maryland GRS
ME ..... Maine Garden Railway Society
MI ..... Lakeshore Garden Railway Club
MN ..... Minnesota Garden Railway Society
MO/KS* ..... MO-KAN Garden Railroaders
MO/AR/OK*... Ozark Garden Railroad Society
NC..... Coastal Carolina Garden Railroad Society
..... Gibson Valley Garden RailRoad
..... North Carolina Garden Railway Society
..... Piedmont Garden Railway Society
NE ..... Rivercity Railroaders
NH..... New Hampshire Garden Railway Society
NJ ..... South Jersey Garden Railway Society
NM ..... New Mexico Garden Railroaders
NV ..... Las Vegas Garden Railroad Society
..... Northern Nevada Garden Railroad Society
NY ..... Central New York Large Scale Railway Society
..... Finger Lakes Live Steamers
..... Genesee G Gauge Railway Society
..... Long Island Garden Railway Society, Inc.
..... Western New York Garden Railway Society
OH..... Buckeye State Garden Railroaders
..... Columbus Garden Railway Society
OH/KY*..... Greater Cincinnati Garden Railway Society
..... Miami Valley Garden Railway Society
..... Northern Ohio Garden Railway Society
..... Riverside Railroad Crew
OK..... Central Oklahoma Garden Railroad Society
OK/AR/MO*... Ozark Garden Railroad Society
..... Tulsa Garden Railway Club
OR ..... Cascade Crossing Module G-Scale Group
..... Medford Garden Railroaders
..... Northwest "G" Railroad Club
..... Rose City Garden Railway Society
..... Train Mountain Railroad Museum
PA ..... Lehigh Valley Garden Railroaders
..... North Central Pennsylvania Mountains GRS
..... Pennsylvania Garden Rail Society
..... Pittsburgh Garden Railway Society
..... Southeastern Pennsylvania Garden Railway Society
..... Susquehanna Valley Garden Railway Society
TN ..... Crossville Model Railroad Club
..... Mid-South Garden Railway Society
..... Nashville Garden Railway Society
TX ..... Houston Area G Gaugers
..... North Texas Garden Railroad Club
..... San Antonio Garden Railway Engineer Society
UT ..... Color Country Model Railroad Club
..... Utah Garden Railway Society
VA ..... Piedmont Railroaders
..... Tidewater Big Train Operators
VA/DC/MD* Washington, Virginia & Maryland GRS
WA/ID* ..... Inland Northwest Garden Railroad Society
WA..... Puget Sound Garden Railway Society
WI ..... Kenosha Garden Railroad Society
..... Wisconsin Garden Railway Society

National US

Big Train Operator Club
LGB of America

Canada

Canada ... Black Mountain Railway Club
..... BC Society of Model Engineers
..... Burlington Model Railway
..... Central Ontario GR Association
..... Fraser Valley G-Scale Friends
..... Golden Horseshoe Live Steamers
..... Greater Vancouver GRC
..... London GRS
..... Northern Alberta Garden Railroaders
..... Ontario's West GRS
..... Ottawa Valley GRS
..... Rocky Mountain Garden Railroaders
..... Vancouver Island GR Club

* Club/Society includes members from multiple states and is listed under each state.

Countries beyond North America

AUS ..... Garden Railway Club of Australia Inc.
..... Australian Model Rwyy Assoc Queensland
NZ ..... Auckland Garden Railway Group
..... Christchurch Garden Railway Group
..... Locos, Lads & Lasses
..... Waikato Garden Railway Group
..... Wairarapa Garden Railway Group
..... Wellington Garden Railway Group
SWE ..... NTJ, Näsets Trädgårds Järväg (Varmland)
..... Sveriges Tradgardsjarngar (Stockholm)
CH ..... US G-Scale Friends Switzerland
UK ..... G Scale Society United Kingdom
..... Kent Group: G Scale Society

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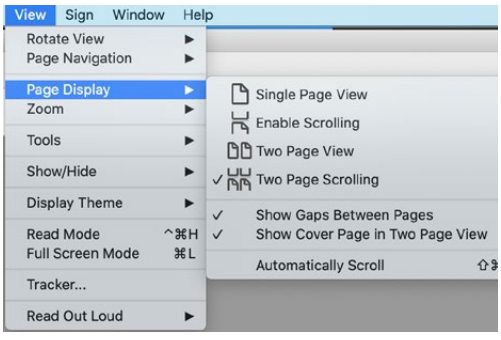
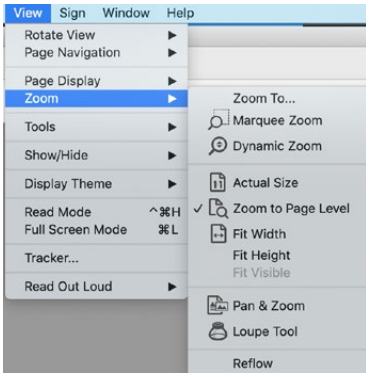
Hope these explainers helps make reading *GR News* more fun. Enjoy.





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