

# The Tuolumne County

*This 1:20.3-scale railroad is a break from traditional, indoor modeling*

1. A Bachmann 4-4-0 rumbles past the ore bin with a pulpwood car and South Pacific Coast way car in tow on the Tuolumne County Narrow Gauge Garden Railroad. Baby tears spreads over the yard. MARC HOROVITZ



# Narrow Gauge

## Garden Railroad

by Bob Brown | Los Altos, California | Photos by the author except as noted





2. An overall view of the Tuolumne County Narrow Gauge Garden Railroad. This is the third incarnation of the author's garden railway. A variety of conifers landscape the town and a blend of groundcover greens the banking to the walk.

I have always wanted a garden railroad, but it took a long time for me to build one. In 1944, when I was 12, I found a copy of *The Model Railroader* on a magazine stand. This publication “hooked” me on the hobby and I have been an active model railroader ever since. By the late 1950s I became interested in finescale, three-foot-gauge models in quarter-inch scale (0n3) and, in 1964, I started a small magazine devoted to finescale narrow-gauge modeling called *Finelines*. Some 11 years later, in 1975, I merged *Finelines* with the *Slim Gauge News* and created *The Narrow Gauge and Short Line Gazette*, which is a magazine that my wife Irene and I publish to this day.

All during this period I was fascinated whenever I read about a garden railway. In 1971, Irene and I attended the NMRA Convention in London. While in England, I saw my first garden railways. My

## Plants on the Tuolumne County Narrow Gauge

Los Altos, California  
USDA Hardiness Zone 9

### CONIFERS

Plume false cypress  
*Chamaecyparis pisifera*  
'Plumosa Compressa'

Japanese false cypress  
*Chamaecyparis pisifera*  
'Squarrosa Intermedia'

Andelyensis Conica white cedar  
*Chamaecyparis thyoides*  
'Andelyensis Conica'

Little Jamie white cedar  
*Chamaecyparis thyoides*  
'Little Jamie'

Dwarf Alberta spruce  
*Picea glauca conica*

### TREES

Japanese maple  
*Acer palmatum*

Dwarf pomegranate  
*Punica granatum* 'Nana'

Double White snowrose  
*Serissa foetida* 'Flore Pleno'

### GROUNDCOVER

Rupturewort, Green Carpet  
*Herniaria glabra* 'Green Carpet'

Green Mound juniper  
*Juniperus procumbens*  
'Green Mound'

Baby tears  
*Soleirolia solierolii*

Elfin thyme  
*Thymus praecox* 'Elfin'



3. This ore tippie is served by a two-foot gauge, battery-powered diesel, running on 32mm-gauge (O gauge) track. The ore tippie is made of styrene and redwood and has weathered well.



4. A freight train leaves the covered bridge and is about to cross the pond. Behind is the train-storage shed. The railroad's sign on the shed was made by BAGRS member Russ Miller. The back side by the fence is built up with volcanic moss rock on hidden cement blocks to allow a mountainous look with soft groundcover between the stones.

interest continued and, in 1980, I built an elevated track in my backyard. My friend and *Gazette* author Reg Shaffer added battery-powered radio control to my LGB Mogul to run on this line. However, the elevated wood structure eventually deteriorated and I tore it out.

Around 1993 I tried again, laying some track on the ground. This line literally never went anywhere and I soon tore it up. It was laid under a Deodora cedar, so was it always covered with sap and needles.

By 2001 I had met, and become friends with, *Garden Railways* author Jack Verducci. Jack builds garden railroads professionally, so I asked him to help me build mine. Jack came over and suggested I have the Deodora cedar removed. The

tree was showing signs of aging, so we followed Jack's advice. Gone were the sap and needles.

Later, Jack came to survey the railroad. As we were talking, a 16-wheel flatbed truck pulled up and the driver off-loaded six tons of rocks and 2,000 pounds of cement in 100-pound bags—all onto our front driveway. Next, a dump truck rolled up and dumped a big pile of topsoil. Then Jack told me he was off to the Garden Railway Convention in Seattle and it would be nice if all the rocks and cement were in the backyard when he returned a week later. He also suggested it would be nice if I dug the hole for the pond. So, I moved all the rocks and cement and dug out the pond—all during a hot July, and I

lost some 25 pounds.

When Jack returned from the convention he slyly mentioned that he had signed me up to be open during the Bay Area Garden Railway Society's (BAGRS) regional meet the next July. That gave us one year to get a line running. Fortunately, Jack also brought along his friend Chuck Sanfilippo, who helped us move all the rocks and dirt onto the railroad while Jack arranged them and planted the groundcover and trees. Chuck and I also mixed the cement so Jack could make the pond and water feature.

Then I began laying track. Jack came by and helped several times. I also built a plywood platform as a steaming bay for my live-steam locomotives. My friend



5. A Catatank live-steam Heisler emerges from the covered bridge and starts down the long curved trestle.



6. A live steam, Accucraft Michigan California N° 5 Shay with a single boxcar in tow emerges from the tunnel into the cutting. Elfyn thyme, baby tears, and rapturewort spread to form a meadow.

MARC HOROVITZ



When not on display on open days, most of the exterior details, including the cars, are stored inside this structure. Cast-resin buildings hold up well outdoors. Green Carpet shows off its color to the right of the building but defines the parking lot's "outskirts" to the left rear as it tries to grow on cement.

Tom Vertel not only added outdoor, 110V wiring but also covered the plywood platform with tar and added gravel. We made the deadline and the railroad was open for the BAGRS regional meet in 2002.

### Concept

Most of the live-steam tracks I had seen were on flat tables, so I decided to build a track with scenery and grades for running small scale, live-steam locomotives. I planned to have a point-to-point line so that I could follow the trains and switch

them around but all my BAGRS friends were horrified at the idea because they felt I needed to be able to run trains continuously at an open house. I then decided on an out-and-back railroad: again, horrified looks. So, I added reverse loops at each end of the mainline for continuous railroad operation.

I initially decided to build a railroad based on the three-foot-gauge Nevada County Narrow Gauge Railroad and I called my line the Tuolumne County Narrow Gauge Railroad after my indoor 0n3

Tuolumne Forks Lumber Company railroad. I fear my interests have strayed and I now run a very mixed roster of live-steam locomotives. After all, I have plenty of California logging railroading upstairs on my 0n3 railroad.

### Reality

I used LGB's flex track, with a few sections of LGB #1600 sectional track. Turnouts are by Sunset Valley and Hillman's Railclamps are used between the code-250 turnouts and LGB's code-332 rails.



7. A Shay takes its train up the trestle at the far end of the railroad. Groundcover has made a lush meadow of the landscape.



MARC HOROVITZ

A California Western Mack railbus, built by Al Graves, eases across a trestle above the Accucraft 2-6-0. While the prototype California Western was standard gauge, Al chose to build a narrow-gauge railbus. Snowrose appears to hold up a trestle bent as the train passes a mixed conifer forest.

The two reverse-loop turnouts are thrown by air, since one is hard to reach. The rest of the turnouts are hand thrown. I did have an automatic air system, where the trains actuated the air motors, but it broke down. I now have a two-switch control panel for throwing the two air-powered turnouts. I find this annoying and have plans to change the railroad, removing the reverse loops but still keeping continuous running.

Track is laid on a bed of decomposed gray granite fines, wetted down. There was some subsidence but nothing major. I built a descending, curved trestle about 30 feet long that needs periodic leveling.

I also added a shed to house my models. This contains a small yard and several storage shelves and is connected to the mainline by a trestle. However, I have yet to run trains in and out of the shed because I need some way to remotely control the turnout.

### Equipment

As mentioned above, I have an eclectic collection of equipment. I run several live-steam locomotives, including a radio-controlled Roundhouse Forney with some scratchbuilt Maine two-foot cars, and a radio-controlled Roundhouse Darjeeling Himalayan Class B 0-4-0ST with train. My most dependable locomotive is a radio controlled, Accucraft open-cab Shay that hauls a train of LGB disconnects, with a scratchbuilt caboose mounted on one of the disconnects. I recently added an Accucraft British-outline *Edrig* and Lynton & Barnstaple *Lyn*, a Regner *Willi*, and an Accucraft three-cylinder Shay—all live steam. A British outline, battery-powered diesel and a battery-powered Bachmann Shay with an AirWire radio-control system allow me to run trains without steaming something up. I also have several railcars built by railroad historian Al Graves, as well as a Bachmann 4-4-0 and 2-8-0

### Narrow Gauge and Short Line Gazette



Bob Brown is the editor and publisher of the *Narrow Gauge and Short Line Gazette*. While the *Gazette* is not a garden-railway magazine, it does contain many articles and reviews on large-scale models and an occasional article about a garden railway. Each issue features “look what I did articles” as well as articles on modeling techniques. There are always plans that can be used for building models in any scale. Contact the *Gazette* at PO Box 26, Los Altos CA 94023. Web site: [www.ngslgazette.com](http://www.ngslgazette.com)



9. One end of the railway, with the steamup-bay platform in the background. A radio-controlled Roundhouse Forney takes a train of scratchbuilt cars across the trestle. The pomegranate tree on the right sheds flowers and leaves all over everything. Mirroring the full-size canopy is a dwarf pomegranate to the left, behind two cone-shaped dwarf Alberta spruces. Behind the engine house, procumbent juniper models its cousins, the bush junipers. Irene's saucers collect water for full-scale wildlife, but little train workers may use them to clean train parts.

## About the author



Bob and Irene Brown, in addition to long careers as educators, have published a model railroad magazine every two months for 43 years, as well as five books (on railroads, of course). Bob spent 35 years teaching elementary school and has been an avid model railroader since he was 12. Irene is a biologist and is now in her 40th year of research on the Chalcedon Checkerspot Butterfly at Stanford University's Jasper Ridge Biological Preserve. Both enjoy their garden railroad—Bob the trains; Irene the plants, birds, and insects.

awaiting batteries and radio control. There is also a two-foot-gauge mining railroad running between an ore tibble and a yet-to-be-built mine. A little battery-powered diesel will eventually run back and forth on this line.

Rolling stock includes modified and weathered Bachmann and Accucraft freight cars, several scratchbuilt cars, a number of Hartford Products cars built from kits, and a three-car Carter Brothers passenger train.

### Buildings

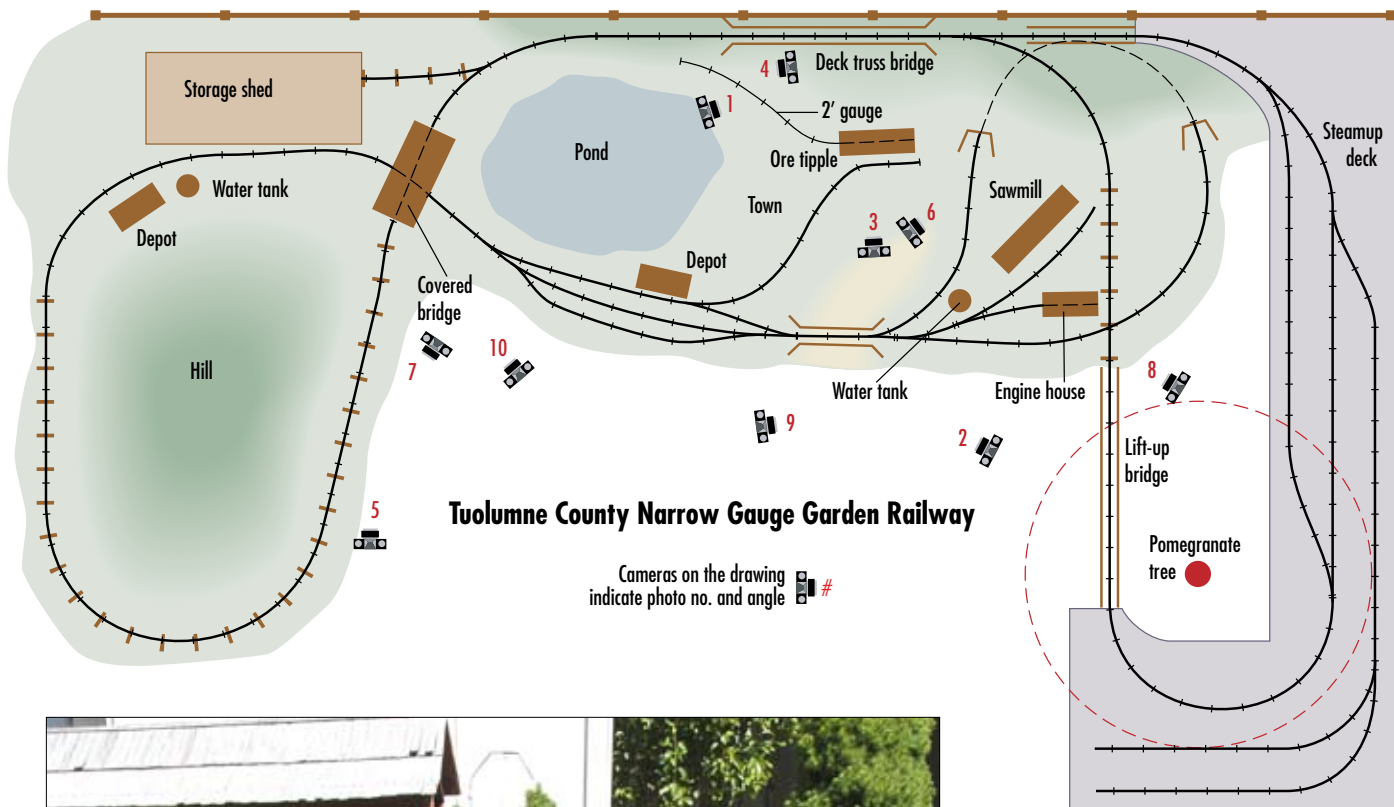
I have had trouble constructing garden-railway buildings that satisfy me. I enjoy building highly detailed models but models for a garden line have to be robust to hold up to the weather. So far I have assembled several Railroad Avenue kits and find they hold up well. There are also two Pola water towers on the line and a Pola freight station. I have scratchbuilt a

sawmill, engine shed, and covered bridge from redwood, and they, too, have weathered well. I have recently been experimenting with styrene and have built several buildings that seem to be holding up.

I hate moving my buildings in and out for operating sessions, so I tend to leave them out. I store automobiles and other details inside one of my buildings and take them out when needed. One building I do take in is a beautiful blacksmith shop with a detailed interior, assembled from a Western Scale Models kit. I also have a cast-resin British depot that, while seemingly out of place, adds a lot of charm to the railway.

### Plants

The initial planting of green carpet, elfin thyme, and baby tears groundcover has done well and nicely covers the rocks. However, we have had trouble with a flowering pomegranate that continually



10. The Accucraft open-cab Shay with a short train and caboose. Two white cedars nod to the Shay as it passes an embankment of yellow-green rupturewort and blue-green Elfin thyme.

drops leaves and buds on the platform. The buds can derail a locomotive, so I am always cleaning them off.

We planted dwarf Alberta spruce, obtained at sale prices after Christmas. They have done well—we've not lost one.

### Conclusion

I am not a gardener and several of my non-garden railroad, model-railroad friends wonder why, because of the

weeding, I have a garden line. Actually, I have always had to weed our backyard every year, but now it's more fun because I am weeding the garden railroad. I find the maintenance, weeding, and watering pleasant and part of the charm of having a garden line.

I am pleased that I built my garden railway. I have made many friends in BAGRS, have enjoyed seeing other garden lines, and enjoy looking out our windows

### Railway at a glance

**Name:** Tuolumne County Narrow Gauge

**Size of railroad:** 30' x 60'

**Scale:** 1:20.3

**Gauge:** 45 mm

**Era:** 1920-1930

**Theme:** A pleasant place to run trains in the garden

**Age:** Six years

**Motive power:** Small, live steam, geared and rod locomotives plus several battery-powered rail cars

**Length of mainline:** 200 feet

**Type of track:** LGB flex and sectional with Sunset Valley Turnouts

**Minimum radius:** Four feet

**Structures:** Scratchbuilt and kit

**Control system:** Radio-controlled live steam and Air Wire R/C battery

or through our French doors to see the railway in the backyard. It has been fun and, with the help of my wife Irene's healthy cooking and trips to the gym, I have kept off the 25 pounds I lost building it. 🚂