



California narrow gauge *in the* 1940s



1. (Left) The Limited train crosses the long bridge below Martis Landing, approaching the station. Moss and more moss loves the redwood canopy.

2. (Right) The Limited train runs down the center of Donner's Main Street on a sunny Labor Day weekend.

3. (Below) Truckee is a popular destination on the last weekend of summer. Two boxwood species and baby tears fill out the town.



The Lake Tahoe & Truckee Railroad by Don Watters | Los Altos, California | PHOTOS BY COLIN CAMARILLO

THE LAKE TAHOE & TRUCKEE (LT&T) IS A BACKWOODS, narrow-gauge garden railroad modeled after the Lake Tahoe Railway & Navigation Company. The prototype ran along the Truckee River, connecting Truckee and Tahoe City in California. Until the rails were torn up

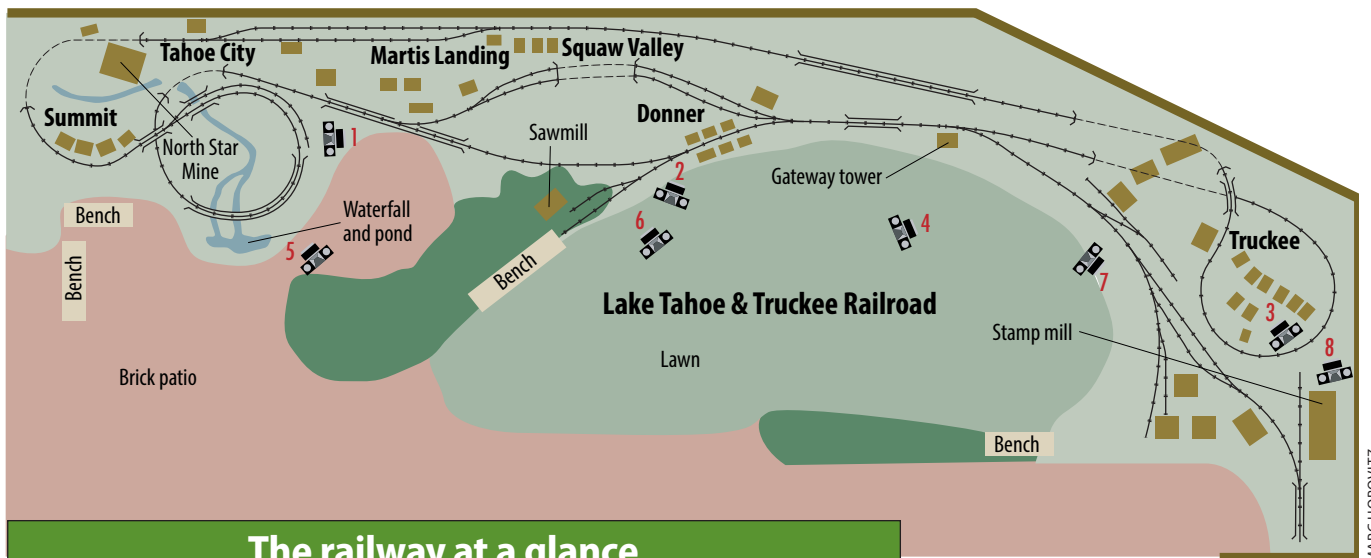
and salvaged for the war effort during the early 1940s, the line served as a link between the Transcontinental Railroad and Lake Tahoe.

The railroad hauled natural resources extracted from, and converted in, the Tahoe Basin, out to the Southern Pacific

railhead at Truckee. It also brought in a mainly Truckee-based workforce as well as imported necessities for lakeside residents. As the gold and timber supplies played out, the railroad continued to operate, serving newly built tourist hotels on Lake Tahoe.

The garden railway

Our LT&T depicts what the Lake Tahoe Railway & Navigation Company might have been like had it survived into the late 1940s. Truckee is at one end of the railroad. A mountain, with Brockway Summit on the near side and Lake Tahoe on the other, is at the opposite end. In between is a V-shaped outcrop that includes upper- and lower-level towns. The upper track represents the actual line between Truckee and Tahoe City, including stations at Truckee, Squaw Valley, and Tahoe City. The lower



The railway at a glance

Name: Lake Tahoe & Truckee

Size: 120' x 15'

Scale: 1:22.5

Gauge: N° 1 (45mm)

Era: 1940s

Theme: Sierra Nevada narrow gauge

Age: 21 years

Motive power: LGB Moguls, cab-forward articulated, Forney

Length of mainline: 300+ feet

Maximum gradient: 2.5%

Type of track: LGB flex and Sunset Valley switches

Minimum radius: 5'

Structures: Railroad Avenue, Verducci resin, Pola plastic

Control system: AirWire

track represents a planned-but-never-completed route from Truckee through the Martis Valley, up over Brockway Summit, down to Kings Beach, and around the lake to Tahoe City. It includes stations at Donner, Martis Landing, and Brockway Summit.

10'-long curved trestle, and six tunnels for the cheapest and easiest route. We then laid LGB flex track.

After nearly two decades, the rapidly growing 1:1 redwoods had upended much of the concrete-block retaining wall and dislocated most of the track. In the worst

case, one grade had increased from under 3% to nearly 15%.

With the help of GR's Nancy Norris, we recently realigned most of the roadbed, adding a dramatic 10' bridge scratchbuilt by Lake Phillips, to eliminate problematic lumps and bumps. The net result was a much-improved maximum grade of 2.5%.

Using her trademark cantilevered vertical rocks, Nancy was able to achieve several objectives. These included broadening the radii of the curves at each end of the line by a foot or so, building retaining walls in strategic locations to provide space for several additional small towns and three industrial spurs, and "daylighting" a tunnel that had collapsed below the town of Truckee.

Natural setting

Standing in our backyard, among half a dozen huge redwoods, it's easy to forget which of the hundred-plus trees are 1:1 redwoods and which are 1:22.5-scale lemon-cypress miniatures that brightly illuminate the otherwise-heavy shade.

The initial design concept for our backyard, a "clearing in the woods," predates the railroad by over a decade. Twenty years ago, Jack Verducci worked with us to construct the LT&T, which remains pretty much as built then. We removed shrubbery along the back and side fences to provide the railroad's footprint. A concrete-block wall went in next, to secure the rocks and dirt representing the Sierra Nevada Mountains. Then we cut and filled the roadbed through the mountains to produce the 3% grades, four bridges, a



4. (Above) The TGIF train slowly winds its way out of Truckee's lower yard. Twenty years ago, this view was mostly boulders and miniature false-cypress trees. Finding the right plants has kept this scene green.

5. (Right) An ancient Mogul hauls the TGIF train up the 2½% grade on the shaky curved trestle, which is close to the end of its useful life. Campanula is confined to the lower slopes, but we see it's getting away on the upper left.

Operations on the LT&T

Ours is a single-track mainline with three strategically located, double-ended sidings that allow opposing trains to safely meet and pass each other. We have only three industrial spurs, which offer few opportunities for online switching. We spot five previously blocked trains in the four-track Truckee Yard. Two other blocked trains are stored on industrial spurs.

The Official Timetable reflects the busiest and most complex time of the year, just before and after Labor Day. It lists seven distinct trains, which operate two (occasionally three) at a time in opposite directions on the single-track mainline.

Three daily trains:

- The Worker train transports miners, lumberjacks, and others who work in the Tahoe Basin
- The Limited train carries lake-bound tourists to the steamer *Tahoe* for cruises around the lake
- The Gold-and-Lumber train hauls Tahoe's natural-resource bounty to Truckee for further processing and transshipment

Three weekly trains

- The Local train provides whistle-stop

service for residents along the Truckee River

- The Petrol train transports the meager, barely economic production from oil drilling in the basin
- The TGIF train brings mid-week entertainment and recreational supplies to local residents, returning any Truckee-based labor and management personnel who remain in the field during the work week

One seasonal train

The Cattle train brings livestock to their

summer grazing grounds, then returns them to their home ranches via Truckee in the fall.

The Limited, Worker, and TGIF passenger trains are always superior to the other four trains. When any of the first three meet, or when any of the other four trains meet, the "up" direction of travel (southbound) is always takes precedence over the "down" direction (northbound). Running the full schedule provides plenty of challenges and many hours of enjoyment for two to four operators.



Four complete trains are spotted at the four-track Truckee Yard. Seven distinct trains are run on the railway, usually two or three at a time.

Intriguing details

Visitors often comment favorably on the realistic structures, life-like vignettes, and decrepit equipment on the LT&T. We have nearly 40 twenty-year-old, cast-resin buildings scattered across the site, in the largest town of Truckee, and in five smaller settlements. Most are from (discontin-

ued) Railroad Avenue kits, several are (old) Verducci custom-built structures, and a few are kitbashed Pola products.

After 15 years outdoors and way too many coats of (brushed on) paint, all of the structures were soda blasted and we now store them indoors during the winter. They are on their second (spray)

repaint (though some roofs have to be repainted every season). We have recently added aluminum-angle bracing inside the structures to strengthen them. Timber tunnel portals have been replaced with stone ones.

Hundreds of people, animals, and vehicles, arranged in realistic groupings,





Plants on the LT&T

Los Altos, California, USDA Hardiness Zone 9-10

DWARF CONIFERS

Lemon cypress (90 alive out of 100 planted)

Cupressus macrocarpa
'Wilma Goldcrest'

Little Jamie false cypress (2 alive out of 200 planted)

Chamaecyparis thyoides
'Little Jamie'

Dwarf Alberta spruce (4 alive out of 20 planted)
Picea glauca 'Conica'

TREES AND SHRUBS

Japanese maple (4 alive out of 5 planted)

Acer palmatum var.

Boxwood (35 alive out of 35 planted)

Buxus sp.

Miscellaneous shrubs (20 alive out of 50 planted)

GROUNDCOVER

Bellflower (predates the railway)

Campanula sp.

Baby tears (planted everywhere—90% alive)

Soleirolia soleirolii

Ivy

Hedera helix (trained around a stake or sprawling on rocks)

bring each scene to life. Probably the most interesting arrangement of these is the town of Donner, where the LT&T runs down the middle of Main Street, inspired by a classic O. Winston Link photograph.

Motive power and rolling stock

Five ancient, weatherbeaten steam locomotives, including three diminutive LGB Moguls, an ancient Forney, and a husky LGB articulated cab forward, share

prime-mover duties.

Most of the 40 pieces of rolling stock are also old, weatherbeaten, and barely serviceable, as repair parts, lubricants, and paint were rationed for non-critical uses during WWII. The only "presentable" equipment is a fleet of passenger cars used mainly on the Limited, which are being restored to their bright-yellow glory by LT&T's shop force.

Unique operations

Conveniently, the approach we take to operations is generally consistent with real life, where trains were made up or broken down at either end of the line in Truckee or Tahoe City. Modeling this allows us to focus primarily on over-the-road trains that link these towns (see sidebar). AirWire radio-control throttles keep the battery-powered locomotives moving, while recently upsized, air-powered Sunset Valley switches keep them on the right track.



6. (Above) The Limited train passes the Alberni Sawmill en route to Martis Landing among the redwoods. Lemon cypress and baby tears predominate in the landscape, along with moss that sticks to everything.

7. (Left) Mogul crews relax in Truckee's lower yard, awaiting clearance to take the main. The Worker train, above, nears Truckee station. Regular spraying with white vinegar keeps the track and ballast free of weeds.

8. (Right) The cab forward, with the Gold and Lumber train, climbs the over/under loop, approaching its final destination in Truckee. A single Japanese maple tries to shade the parking lot.



Next steps

The LT&T is mostly in good shape at this point. Several next steps are on the agenda, though: repairs, replacements, and new projects.

After 20 years of heavy use, our locomotives and rolling stock are in need of cosmetic repairs. Missing brake wheels, handrails, and other details will be repaired or replaced. Weathering also needs to be reapplied. We will have to find a replacement for (discontinued) Floquil spray paint but we still have plenty of Bragdon Weathering Powder to finish the job.

At some point, the 20-year-old curved trestle will have to be replaced. We may extend the trestle two to three feet out over the pond.

The one new project under consideration is bridging the gap between the railroad and the shed next to the garage. We will build adjustable shelving in the shed for housing the trains, which are currently stored on rolling food-storage carts. 🚂

About the author

Don, a retired management consultant, and Sue Watters lived and worked for many years in Australia, Japan, the UK, and the Netherlands, in addition to North America. They now work and play together on the LT&T, which is truly a joint venture. Sue has had an important hand in design and placement of key railway features. Her primary focus now is on placing and caring for the plants, buildings, people, animals, and vehicles. Don's emphasis is on configuring, maintaining, and operating the trains. Both have been active Bay Area Garden Railway Society (BAGRS) members for over 20 years.

For the past seven years Don and Sue have been joined by friend and fellow BAGRS member Bill Rutledge, who has been an important part of the train crew. He helps new train-crew members and visiting youngsters learn our operating scheme and he teaches them how to use our AirWire controllers.



Don (right), Sue, and Bill participate in hosting BAGRS open houses, visits from family and friends, and occasional National Garden Railway Conventions.