

The





# Eagle Mountain Railroad

*An action-packed line that reflects Arizona's history*

by Dick Izen | Oro Valley, Arizona | Photos by Doris and Doug Evans







2. Martin's Machine Shop is typical of the industrial buildings on the Eagle Mountain Railroad. Meticulous attention to detail gives the scene veracity. The giant saguaro base makes the prickly pear border seem farther away.

Gary and Peggy Martin's interest in garden railroading began in 1989 when they moved into their new home in Tucson, Arizona, two weeks before Christmas. It had been a tradition to put an HO train around their tree. That year Gary bought a large-scale train, reasoning that the bigger train would be easier to set up. The next year the train went around not only the tree but the television. The year after that, the loop had grown to encircle the tree, the television, and the couch. With that much track, they decided to add a small village. Then they discovered *Garden Railways* and decided to build a permanent railroad outdoors.

Over the years the Eagle Mountain Railroad (and its subsidiaries, Emerald

**Previous page: 1.** This overview of the Eagle Mountain Railroad proves that garden railroading is possible even in a desert environment. The dry-land plant material enhances the line in a unique way. Silvery sage and dark green shrubs typify the landscape.

Mining and Eagle Mountain Lumber Co.) has grown to five interconnecting loops with over 1,400 feet of track that are detailed to represent various areas in their home state of Arizona. The line is fully landscaped with both miniature and full-size plants.

As you start the tour, you first see a 250-foot elevated section that was installed to permit easy loading of guest trains during the railroad's frequent operating sessions. The scenery along this section, which is still under construction, represents scenes along Route 66, the principal east-west highway between Chicago and the west coast prior to the interstate-highway system. As with much of the Eagle Mountain, this part of the railroad is a single track with several long passing sidings.

Plants along this section are primarily native cacti, which demand a healthy respect. In fact, the entire railroad contains a considerable amount of cacti, so it is best to stay on the well-marked trails that encircle the entire line.

Gary has built platforms along the long passing tracks on both sides of this portion of the railroad. These support the scenery, which includes a large passenger station and businesses that might have been encountered by Route 66 travelers in the '30s and '40s. Future plans include adding a turntable and engine facilities at the lower end of the loop.

Further up, where the elevated extension joins the original loop, is Eagle Mountain, the principal town on the railroad. Another passenger station, with a busy crowded platform, is located at this junction. The station is served by a street-car line that runs from the station around the industrial area (with its mine shaft), continuing around the hill to the rear of the commercial part of town. A small, two-stall enginehouse and related engine-service facilities are located near the station.

Highly detailed scratchbuilt and kit-bashed structures make up the commercial center of this 1920s-era town. The hilly setting has put real estate at a premium





3. The adobe town of Old Nogales resides on the backside of the Eagle Mountains. A cattle drive is taking place up the main street. Sage-colored brittlebushes will be aflame with golden "daisies" in the spring.

and many buildings are supported by pilings or timber cribbing. The architecture is eclectic, most buildings being of wood, with a few of brick. A busy blacksmith's shop, complete with flickering fire, is located on one side of the town.

Almost all of the buildings have been heavily modified and, even when Gary uses a kit without structural modification, the building is painted and usually re-signed. Details abound, including streetlights, walkways, vehicles, and pedestrians. As with the buildings, Gary has modified and repainted many commercial figures. He has also made a number of custom figures to get just the right pose or activity for the scene he wants to portray. For example, a close observer will not only see children at recess outside the school, but they will also notice the janitor cautiously attempting to net a skunk before the school children are sprayed.

On the far side of the streetcar line the terrain is more level. It is in this area that the mansion of the mine owner, as well as other upscale housing, is located. There is



4. The Yuma industrial area features a variety of businesses served by railroad spurs. A 2-6-6-2 cab forward takes its train past the brewery and the grain company. The base of a saguaro cactus towers over the grain depot.





5. The five-stall enginehouse at the Eagle Mountain Railroad's primary engine facility. On the far right is the coal trolley.

## Plants on the Eagle Mountain Railroad

**Tucson, Arizona**  
**USDA Hardiness Zone 10**

### TREES

Dwarf cedar  
*Cedrus* sp.  
 Palo verde  
*Cercidium floridum*  
 Dwarf Alberta spruce  
*Picea glauca conica*  
 Aleppo pine  
*Pinus halepensis*  
 Dwarf white pine  
*Pinus strobus* 'Nana'  
 Mesquite  
*Prosopis chilensis*

### SHRUBS

White bursage  
*Ambrosia dumosa*  
 Desert broom  
*Baccharis sarothroides*  
 Mexican heather  
*Cuphea hyssopifolia*

Brittlebush  
*Encelia farinosa*  
 Ocotillo  
*Fouquieria splendens*  
 Blue juniper  
*Juniperus chinensis* var.  
 Creosote bush  
*Larrea tridentata*  
 Penstemon  
*Penstemon* sp.  
 Desert phlox  
*Phlox tenuifolia*  
 Rosemary  
*Rosmarinus officinalis*  
 Autumn sage  
*Salvia greggii*  
 Bird of paradise  
*Strelitzia reginae*

### CACTI & SUCCULENTS

Agave  
*Agave tequilana*  
 Saguaro  
*Carnegiea gigantea*

Buckhorn cholla  
*Cylindropuntia acanthocarpa*  
 Silver dollar or sea urchin cactus  
*Echinocactus asterias*  
 Crown of thorns  
*Euphorbia splendens*  
 Fishhook barrel cactus  
*Ferocactus wislizenii*  
 Teddy bear  
*Opuntia bigelovii*  
 Tree cholla  
*Opuntia imbricata*  
 Bunny ears  
*Opuntia microdasys*  
 Prickly pear  
*Opuntia* sp.

### GROUNDCOVER

Lantana (yellow blooms)  
*Lantana camara*  
 Myoporum  
*Myoporum* sp.  
 Showy primrose  
*Oenothera speciosa*



a gazebo for band concerts; visitors who press a button along the walkway are rewarded with the sound of the band playing. Just down from this residential area is a graveyard with a funeral in progress.

As you continue along the first loop, the railroad curves around the town and, as the terrain climbs, the line passes over a wood trestle and a curved bridge carved from construction foam. At the far end of the bridge is a scratchbuilt lumber mill and bark burner, complete with log pond. This part of the line represents Apache country and the White Mountains area, where lumbering continues to this day in Arizona. Contained within the upper end of the first loop are the logging operations and lumber railroad of the Eagle Mountain Lumber Company. The logging railroad crosses waterfalls and streams on a number of short bridges. These streams feed the mill's log pond. The tight curves form an under and over, folded figure eight with some of the steepest grades and tightest curves on the entire line.

This second loop is served by a decrepit, lumber-road Shay that began life as a Bachmann Shay but has been modified, repainted, and detailed until it is pretty much unrecognizable. The track winds around the back to the detailed lumber camp, complete with steam skid engines and high rigging to move and load the logs. The observer will find Native American camps and wild animals, including bear and elk. If you look closely, you may even spot eagles in some of the miniature trees that densely populate this area. Gary has limited plant growth by keeping trees in pots but this heavily forested area still requires frequent pruning. Again, you will get a better look at the details in this area as you complete the circuit around the railroad.

Branching from the first loop is a line through a tunnel, past a sand quarry, and on up to the third loop. At this point you are behind the Martins' house and the ground has leveled out. It doesn't appear level, however, because Gary has built a six-foot-tall range of mountains that reflect both the reddish color and stark shapes of Spider Rock in Canyon de Chelly, the mesas of Monument Valley, and the rugged Superstition Mountains. The Eagle Mountain's third loop circles this mountain range but the massive size of the artificial mountains ensures that the



6. This elevated section of line facilitates the loading and unloading of visiting trains. All of the structures and vignettes on this section depict scenes along old Route 66. A canopy of mesquite, palo verde and Aleppo pine provide shade.

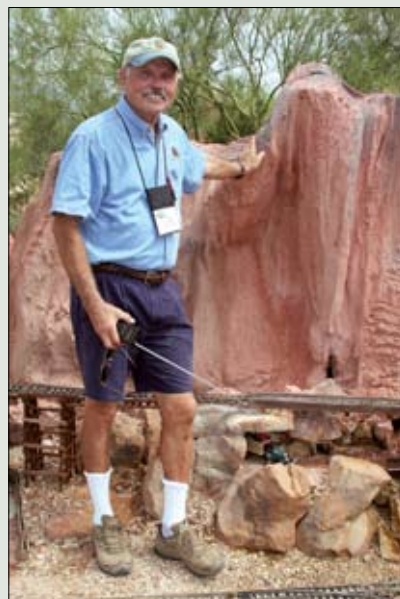


One of the railroad's articulated locomotives crosses a short trestle. Sunny flowers emerge from a fishhook barrel cactus.

## About the owner

Gary Martin was born and raised in the Los Angeles area. His interest in trains began with a Lionel set that his Dad gave him for Christmas when he was five. In 1989, when he moved to Tucson, he purchased a large-scale train for use around the Christmas tree. By 1993, he and his wife Peggy had discovered garden gaiting and began construction of what would grow into the Eagle Mountain Railroad.

He enjoys the combination of railroading and gardening, though he readily credits Peggy with being the chief horticulturalist. Gary's other pursuits include skiing and off-road motorcycling. He trained as an industrial engineer and his work took him to many foreign countries. He retired in 1997.







7. The Emerald Mining Company's open-pit copper mine is one of the more spectacular features of this railroad. The Shay descends four feet into the ground to collect its single car of ore.



8. The sawmill and bark burner with their attendant log pond. Two shrubby groundcovers soften this industry: lantana, with yellow blooms, and autumn sage, with dark pink flowers.

visitor can only see a small portion of this loop at any given point.

Branching from one of the yard tracks, the fourth loop forms an under-and-over figure eight, snaking around the mining district located in these mountains. Within these loops are models of vertical- and horizontal-shaft mines, as well as a large, scratchbuilt stamp mill.

The vertical-shaft mine is served by a short spur to its tippie and lift house, while the horizontal shaft has a separate, dedicated mining railroad that runs back and forth between the stamp mill and the opening to the mine on the backside of the mountain range. A large waterfall

adds beauty to the relatively bare mountain area and a long, curved tunnel under the mountains adds interest to the ore trains hauled by articulated locomotives on this loop.

Returning to the third loop, trains coming past the sand quarry arrive at the Yuma yards and industrial area, where a large machine shop, a grain mill, Hoof & Mouth Meat Packing plant, a brewery, and a furniture factory—all housed in both scratchbuilt and kitbashed buildings—are the principal industries. Of course, with meat and beer being shipped, the area also is home to an ice plant to cool the refrigerated cars.

This area has a three-track yard and the largest engine facility on the line. Water, coal, fuel oil, and sand are provided, while a turntable leads to a beautiful, scratchbuilt, five-stall wooden roundhouse. While the roundhouse has been carefully constructed, the backside reveals some men repairing the corrugated-steel roof. Workers with a flickering welding torch behind the roundhouse are repairing the truck of a freight car.

Continuing around the backside of the mountain range, in addition to the entry to the horizontal mine, we can see a prospector leading his pack mules along a mesa, and adventurers climbing the steep cliff faces. When asked how the miner got his mules up the vertical face of the mesa, Gary responds that there's a hidden elevator inside the mountain. Also on this side we see an ancient cliff-dwelling pueblo built high into the side of the mountain.

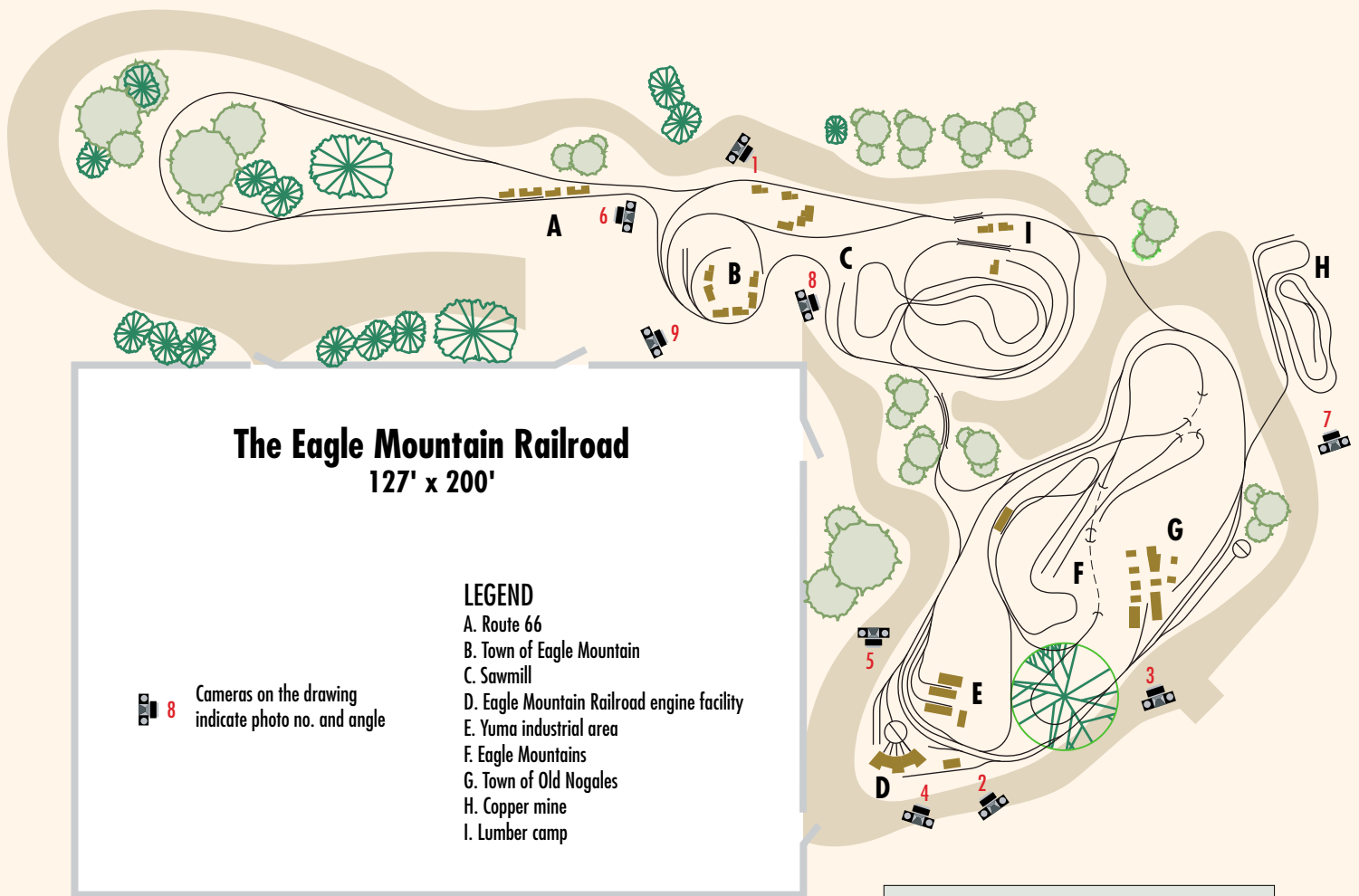
As we walk further along, there is some track construction and a complete work camp with tents for housing and feeding the gandy dancers. Laborers are largely



9. The town of Eagle Mountain is well populated and bustling. Structures are a combination of kit-built, kitbashed, and scratchbuilt. Plausible and thoughtful placement makes this scene come alive.

### Visit this railroad

Located in northern Tucson, the Eagle Mountain Railroad will be open Monday, April 28, before the 2008 National Garden Railway Convention, and Thursday, May 1, when it will be open both to self-drive and bus tours. This is one railroad that shouldn't be missed.



### The railroad at a glance

- Name:** Eagle Mountain Railroad
- Minimum radius:** 18" on logging loop, but generally 4'
- Size:** 100' x 150'
- Scales:** 1:29, 1:24, 1:22.5, and 1:20.3
- Structures:** Modified Piko, Pola, and Railroad Avenue kits, and many scratchbuilt
- Era:** Late 19th century to 1950s
- Gauge:** 45 mm
- Theme:** 3' narrow gauge in Arizona
- Power:** Primarily track power with Bridgewater, MRC, Aristocraft, LGB, and Hogger power supplies
- Age:** 14 years
- Length of track:** 1,400'
- Type of track:** Code 332 LGB and Aristocraft
- Maximum grade:** 6% on logging section, but generally 4%
- Control:** Aristocraft/Crest Train Engineer and AirWire 900 remote control

Chinese, as were the construction crews that built the Southern Pacific railroad through Tucson. Construction gangs have always been on the rough side and this group is no different, as you might surmise from the honky-tonk music coming from one of the canvas saloon structures.

Past the trackwork, we come to a highly detailed, mostly scratchbuilt adobe village that shows typical southwest and Mexican influences. There are cattle drives, cantinas, food stores, gun shops, and churches, as well as residences. Food shops are filled with brightly colored, made-from-scratch fruits and vegetables. Of course, the station and freight house are southwestern in flavor. In the background is a typical church and, to one side, is the sheriff's office, with a gallows nearby. In addition to the passing siding, a second siding serves a freight platform and leads to a smaller turntable and a single-stall enginehouse. Most trains pause here for water. Just past the village are loading pens for cattle as well as farm buildings.

Branching off from the loop near the

village is a spur to a tipple, where ore is transferred from Emerald Mining's open-pit copper mine to the mainline railroad, reflecting Arizona's great copper-mining history. This particular mine is four feet deep, though it appears deeper, and is served by a weatherbeaten Shay that clings to the terraced sides of the pit as it makes its way down to recover a single loaded car from the steam shovel and bulldozer on the mine floor. It then drags itself and the car through the tight curves and steep grades to the loading tipple for the main railroad. As with other locations around the railroad, Gary has installed sounds that can be operated by a visitor pushing a button. In this case we hear "Fire in the hole!" followed by the sound of an explosion as the miners break up a boulder.

From this point the path leads back down toward the exit. On the way back you will get a close view of Eagle Mountain Lumber's logging camp, the residential portion of the Town of Eagle Mountain, the graveyard and funeral scene, and the passenger station serving the elevated Route 66 section. **II**