



2002 - 2003



TGRS SPECIAL NEWS UPDATE

Meeting January 12th at the Sleepers

Where: Lou and Jan Sleeper

6636 East Villa Dorado

Tucson 85715

Time: 1:00 PM

Phone Number: (520) 751-9628

**Directions: Take Speedway going east or west to
Dorado Country Club (between Kolb and Wilmont),
turn into Dorado Country Club on Camino del Dorado.
At first left turn onto Dorado Blvd. Second right onto
Villa Dorado.**

Workshop at Nick Bucholtz

Saturday, January 19th

Time: 10:00 AM

**Workshop will be on installing battery power in
locomotives. Call Nick for directions to his home.**

Address: 3401 West Blacksill Drive

Tucson 85741

Phone: (520) 744-4932

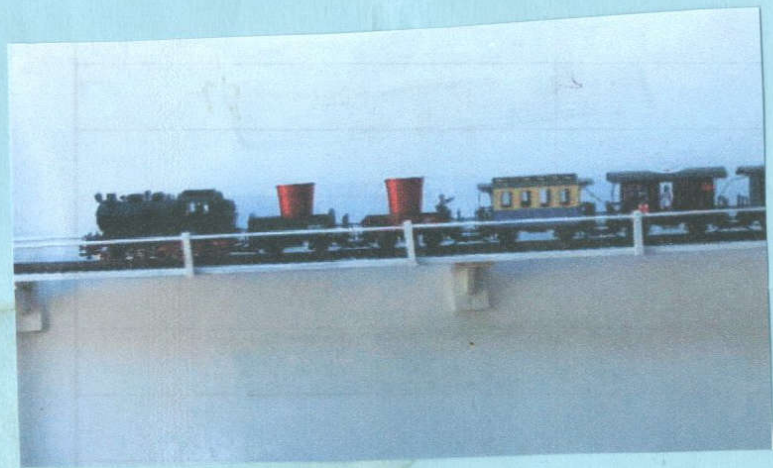
Welcome New Members: Lucas and Barbara Marcotte

5250 So. Campbell #50

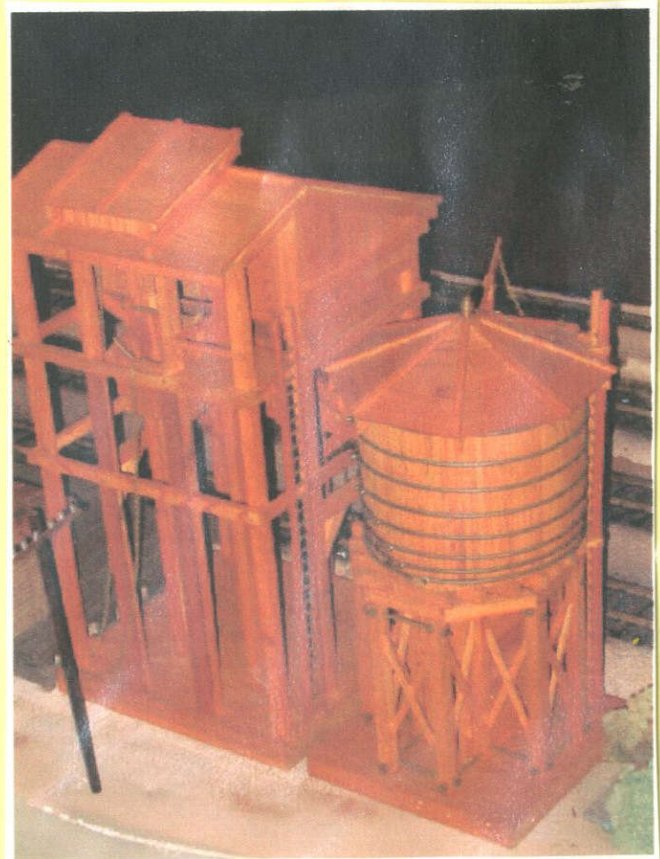
Tucson, 85706 Phone: 294-7373

New e-mail address for Willis and Dottie Fagg

KM6MV@worldnet.ATT.net



ARIZONA STATE HOME SHOW TUCSON CONVENTION CENTER JANUARY 4,5,6, 2002





29TH BIENNIAL

TOY TRAIN SHOW

SPONSORED BY THE GADSDEN-PACIFIC DIVISION
TOY TRAIN OPERATING MUSEUM, LTD.

MUSEUM'S WEBSITE: <http://hometown.aol.com/ienglish/index.htm>



ALL GAUGES
*
RAILROADIANA
*
SNACK BAR
*
OPERATING LAYOUTS

BUY
*
SELL
*
TRADE
*
DOOR PRIZES

SATURDAY JANUARY 19, 2002

9:00AM TO 3:00PM

(Seller Table Setup: 7:00 AM – 9:00AM)

ADMISSION \$2.00

FREE FOR CHILDREN UNDER AGE 13 ACCOMPANIED BY ADULT

RODEWAY INN EVENT CENTER

W. GRANT RD. & I-10 (EXIT 256) * TUCSON, AZ

SPECIAL ROOM RATES (\$38+ TAX) AVAILABLE-CONTACT THE RODEWAY INN (520-622-7791)

SPECIAL SELLERS ONLY RAFFLE

SELLERS STILL SETUP AT 3 PM WILL PARTICIPATE IN A FREE DRAWING FOR THE FOLLOWING PRIZES

1st PRIZE: \$30 CASH 2nd PRIZE: LIONEL GPD-TTOM ORE CAR 3rd PRIZE: COFFEE MUG

8 FOOT TABLES

PRE-PAID TABLE RESERVATIONS ARE REQUIRED

TABLE: \$15.00

**FOR TABLE RESERVATIONS CALL BOB GRASSI AT (520) 797-1184
OR E-MAIL BOB AT trains1937@home.com**

**SEND TABLE RESERVATIONS CHECKS PAYABLE TO GPD-TTOM TO
GADSDEN-PACIFIC DIVISION TOY TRAIN OPERATING MUSEUM, LTD.**

P.O. Box 85425, TUCSON, AZ 85754-5425

ATTN: TOY TRAIN SHOW COMMITTEE

FORMERLY IDENTIFIED AS THE COYOTE MEET

GADSDEN - PACIFIC DIVISION

ATING MUSEUM, LTD.
TUCSON, ARIZONA 85705-2275
X 85425 TUCSON, AZ 85754-5425
ometown.aol.com/ienglish/index.htm



CALENDAR

FEBRUARY

SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
						
17	18	19	20	21	22	23
						
24	25	26	27	28		

APRIL

SUN	MON	TUE	WED	THU	FRI	SAT
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20

17	18	19	20	21
24	25	26	27	28
31				

MAY

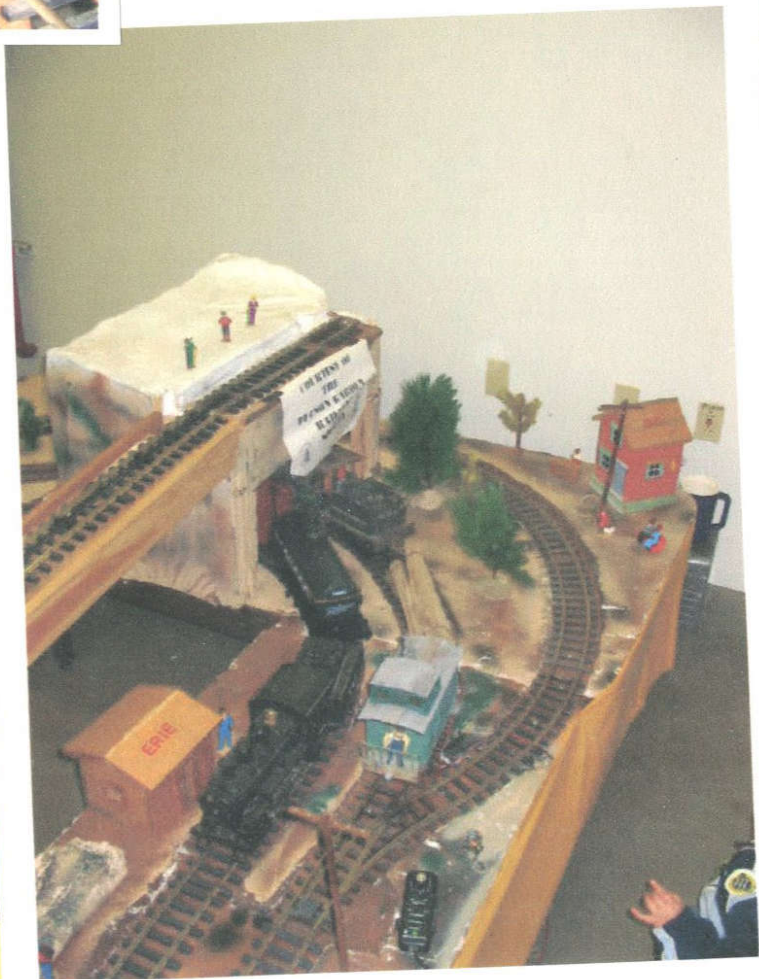
SUN	MON	TUE	WED	THU
			1	2
5	6	7	8	9
12	13	14	15	16
				
19	20	21	22	23
26	27	28	29	30



INDICATES MUSEUM IS OPEN. SATURD

FOUNDED 1980

A NON



27


SAT
1
8
15

22

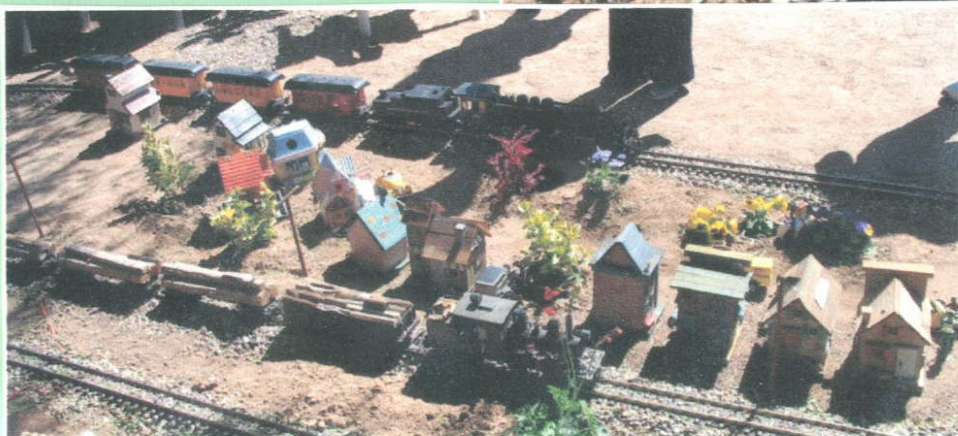
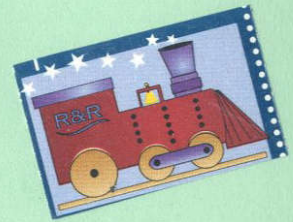
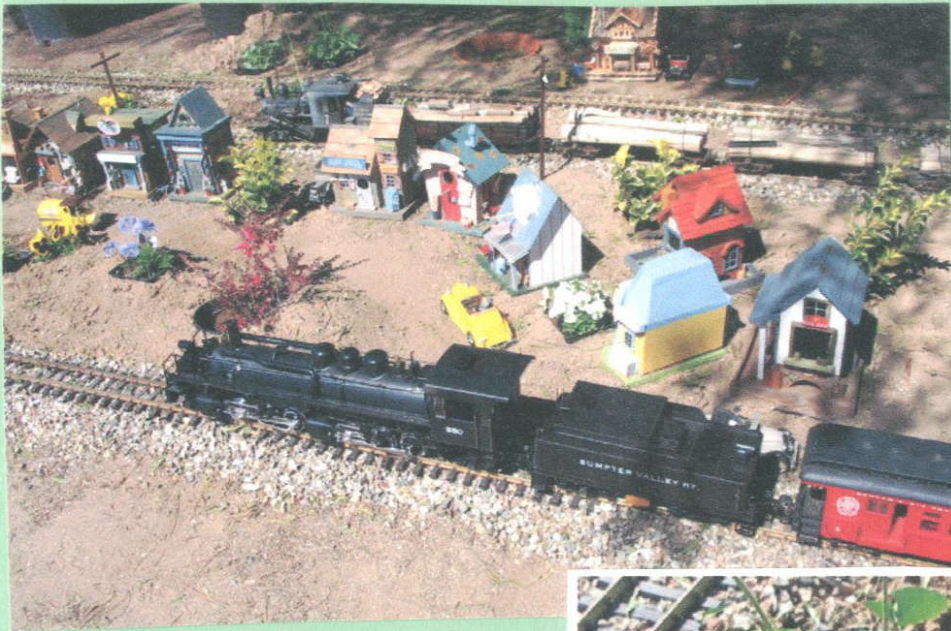
29

PM

991

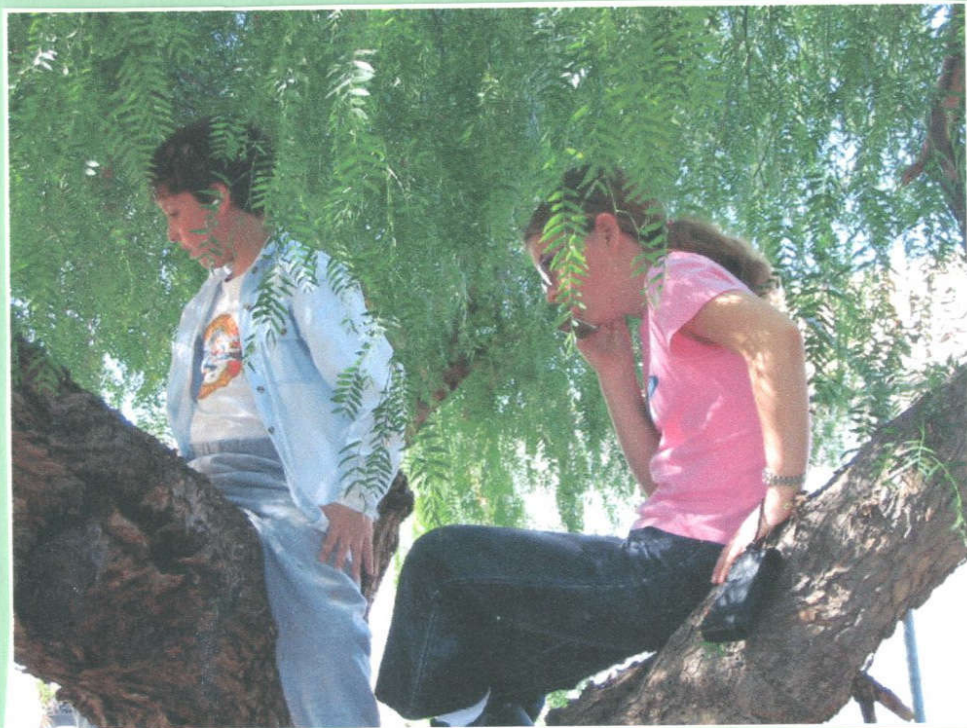
Magic Garden Nursery Weekend

March 8, 9 & 10, 2002



Magic Garden Nursery Weekend

March 8, 9 & 10, 2002





APRIL 18 - 28, 2002

**PIMA
COUNTY**

DEMO DERBY
Fri. April 19th



PIMA COUNTY FAIR WORK SIGN-UP SHEET

IF YOU HAVE NOT SIGNED UP AND INTEND TO PARTICIPATE, PLEASE
GARY MARTIN AT 299-7428 OR MIKE DORGAN AT 529-2430

PARKING AND ENTRY PASSES WILL BE PROVIDED

YOUR HELP IS NEEDED

CURRENT LIST OF THOSE SIGNED TO WORK

SET UP WED. 4/17 10:AM -----

DUDA, DIRKSEN, SLEEPER, NORDIN, WRAY, BUCHHOLZ, ULMER,
STOESSER, DORGAN, SKINNER, MARTIN

SET UP THURS. 4/18 10:AM TO 6:PM

FITZNER, DIRKSEN, SLEEPER, WILLETS, OELSCHLAGER, FAGG,
SKINNER, MARTIN

RUN TRAINS THURS. 4/18 6:PM TO 10:PM

STOESSER, DUDA, DIRKSEN, SKINNER, MARTIN

FRI. 4/19 DAY LEADER - LEW SLEEPER 751-9628

11:AM TO 5:PM - SLEEPER, DIRKSEN, DORGAN, FAGG, MECHIGIAN, M.

5:PM TO 11:PM - ULMER, MILLER, DIRKSEN, MARTIN

SAT. 4/20 DAY LEADER - FRED WRAY 648-5649

11:AM TO 5:PM - MILLER, KELLY, GAST, SPRINGSTEAD

5:PM TO 11:PM - GAST, DIRKSEN, SKINNER

SUN. 4/21 DAY LEADER - JOE STOESSER 577-1210

11:AM TO 5:PM - WRAY, KELLY, DIRKSEN, DORGANS, FAGG, MARTIN

5:PM TO 10:PM - STOSSER, DIRKSEN, SKINNER, MARTIN

MON. 4/22 DAY LEADER - NICK BUCHHOLZ 744-4932

11:AM TO 5:PM - DIRKSEN, DORGAN, MARTIN, SPRINGSTEAD

5:PM TO 10:PM - FAGG, MARTIN

TUES. 4/23 DAY LEADER - STOESSER 577-1210

11:AM TO 5:PM - STOESSER, DUDA, DIRKSEN

5:PM TO 10:PM - DIRKSEN, SKINNER, MARTIN

WED. 4/24 DAY LEADER - HERB HOFFMAN 824-4444

11:AM TO 5:PM - HOFFMAN, MERHAB, DORGAN

5:PM TO 10:PM - DIRKSEN, MARTIN

THURS. 4/25 DAY LEADER - JOE STOSSER 577-1210

11:AM TO 5:PM - WILLETS, OELSCHLAGER, FAGG

5:PM TO 10:PM - STOESSER, DIRKSEN, SKINNER

FRI. 4/26 DAY LEADER - MIKE DORGAN 529-2430

11:AM TO 5:PM - WRAY, KELLY, DORGANS, FAGG

5:PM TO 11:PM - MILLERS, DIRKSEN, DORGANS

SAT. 4/27 DAY LEADER - GARY MARTIN 299-7428

11:AM TO 5:PM - MILLERS, DIRKSEN, MARTIN

5:PM TO 11:PM - WILLETS, OELSCHLAGER, FAGG

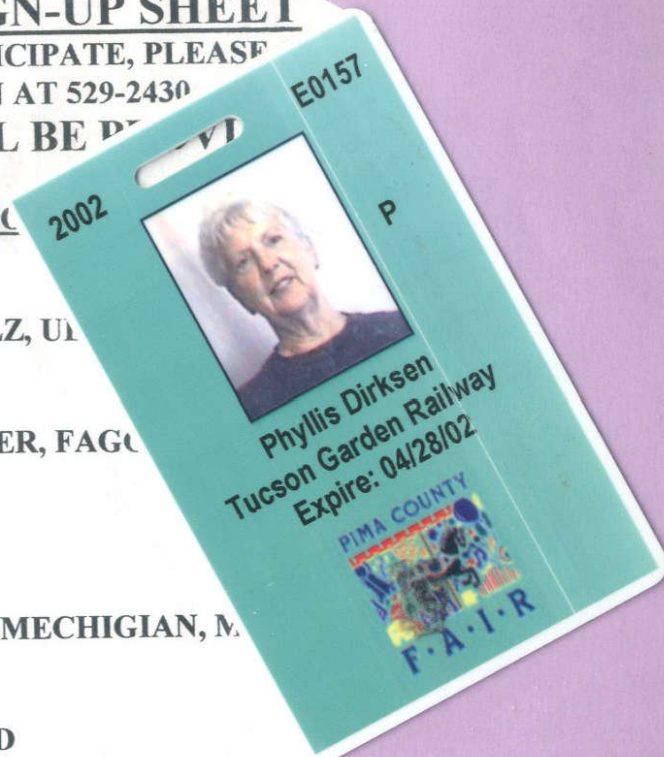
SUN. 4/28 DAY LEADER - JOE STOESSER 577-1210

11:AM TO 5:PM - STOESSERS, DIRKSEN

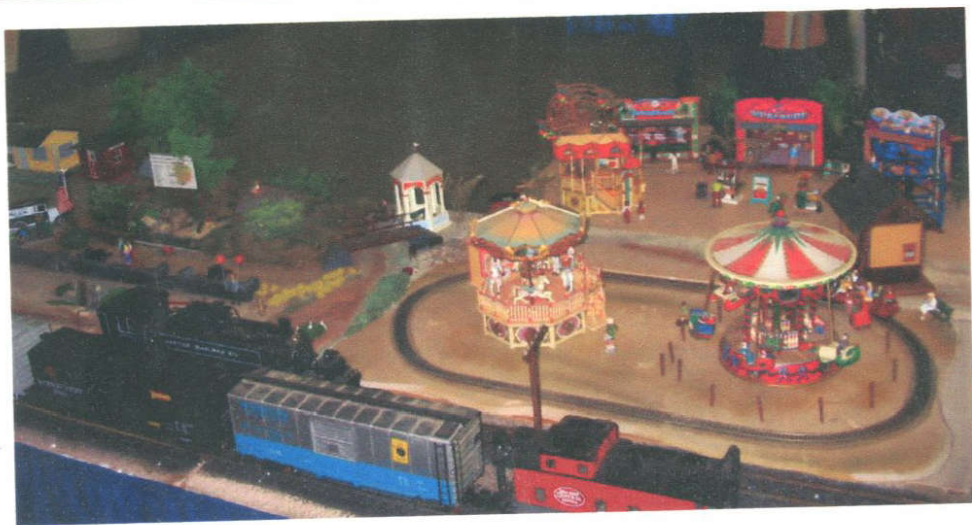
5:PM TO 9:PM - DORGANS, SKINNER, MARTIN

MON. 4/29 TEAR DOWN

10:AM - DORGANS, DIRKSEN, FITZNER, MARTIN



Name RANKIN
Address 320-0207
Phone No. _____
PRINTED IN U.S.A.



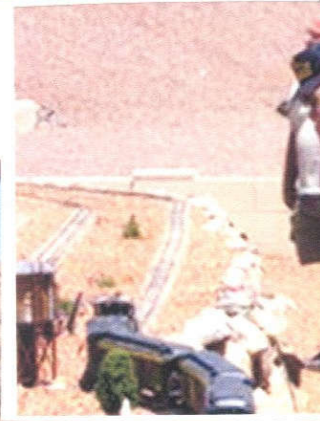


The
Tucson Garden Railway Society
Welcomes
The Arizona Big Train Operators
to our
Spring Round-About

May 11, 2002

**Gary Martin, President
Mike Dorgan, Vice President
Jane Dorgan, Secretary
Fred Wray, Treasurer
Nick C. Buchholz, Editor**





To Our Guests:

People seem to be fascinated by trains. The “up close and personal” feeling of the power of a train as it goes by seems to draw young and old alike. In an earlier time, the railroad was the symbol of a nation that was growing and uniting at the same time. On a more intimate level, it was a symbol of personal freedom--that great wide world out there. For us garden railroaders, this fascination with railroading has been transformed into a hobby that has become an integral part of our lives.

The five garden railroads you will visit today show five different approaches. Each approach stands on its own merits.

1. Catalina and Southern Railroad

The C&S depicts one year of operation of a “captive” railroad, that is, one that is part of a larger corporate entity. Although a common carrier, that role is secondary to serving the interests of the parent corporation. In a period of economic adversity, a “make do” attitude dominates the scene.

2. The Gnome Valley Central Railroad

Its name says it all. A blend of reality and fanciful imagination, It is a railroad the piques the imagination and delights the senses.

3. The Boojum and Mesquite Railroad

The B&MRR portrays the age of steam in railroading. Its character will continue to develop as Bill and Barbara progress further into the hobby.

4. The Cactus Corners Railroad

The Cactus Corners Railroad pictures a town that is changing because its reason for existence is declining in importance. A town that was once a center of intense economic activity is slowly fading into the background. Although the the railroad is important to the town, the town is becoming less important to the railroad.

5. Sleepy Hollow Railroad

The Sleepy Hollow Railroad is a railroad that serves a variety of economic activities, which are mirrored in its traffic. Set in the period of dieselization of railroading, it shows the changes that are taking place during the era it represents.

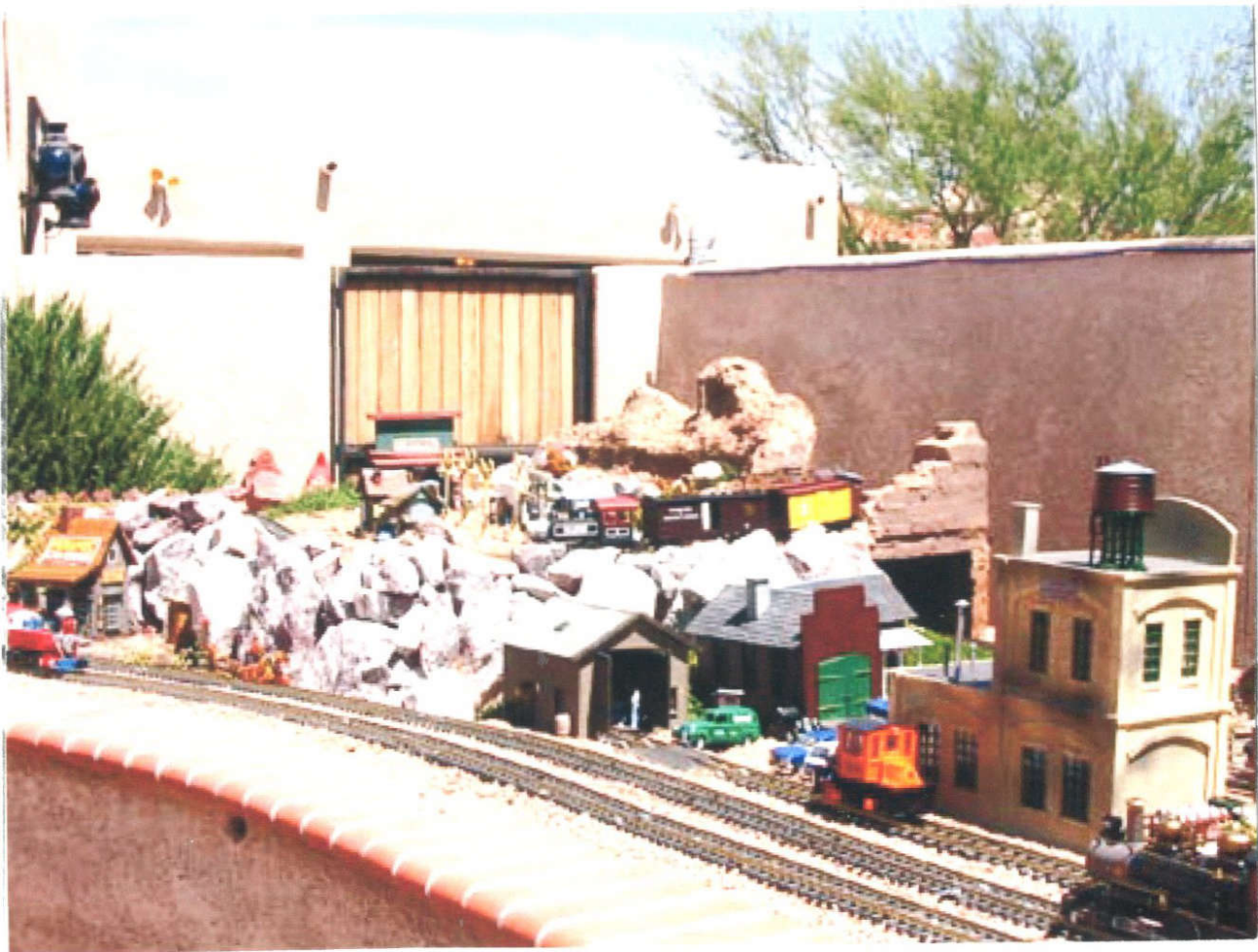


CATALINA AND SOUTHERN RAILROAD

Robert and Phyllis Dirksen

The year is 1932, and the C&S, a wholly owned narrow gauge subsidiary of Schweiz-Rubin, A.G., is struggling. Developed to serve the mines at Helvetia and Ruby, the line was later extended to Nogales, where it meets the standard gauge Ferrocarril de Sonora, and to Tucson, where it meets the standard gauge El Paso and Southwestern and the narrow gauge Tucson, Globe and Northern. The C&S provides weekday passenger (The Helvetia and Ruby Express) and freight service between Tucson and Nogales and operates a weekend excursion to the elegant Hotel Don Quixote on beautiful Lake Basura. This excursion is operated along with the TG&N and begins at Catalina and operates from November through March. The C&S also operates the Matlock, Grande Point and Western, in Manitoba, Canada.

(Phyllis suggested the C&S in 1996 to save a closet from being destroyed for an N gauge layout.) At present, the C&S has two battery powered LGB moguls, one BBT Bachmann 10 wheeler, two trolleys, an Aristo 0-4-0 powered by an LGB tender, Li'l Critter, and a Bachmann 0-4-0T field railroad loco, along with various leftover parts of projects, both successful and unsuccessful. The rolling stock is largely Bachmann with Kadee Couplers. We have four novelty units: A BBT Bachmann Christmas Train, an Eggliner, an LGB bubble car, and Thomas the Tank Engine. The sound systems are both Phoenix and Soundtraxx. The controllers are Aristocraft.



THE GNOME VALLEY CENTRAL

Dr. Roy and Mary Ann Eberbach

The Gnome Valley Central Railroad is a garden style fantasy railroad. In 1998 a small community of gnomes came from Germany and took over the space we had set aside for our garden railway. For their entertainment, they built a garden railway which they share with us.

The Gnome Valley Central operates as a narrow-gauge railroad. It is track powered and is controlled largely with Aristocraft Train Engineer transmitters and receivers. Light for night time viewing is low voltage A.C., which is provided by simple transformers. The garden has a drip irrigation system. For security reasons, all rolling stock is stored inside on a six track holding yard. Phase 1 of the railway is almost complete. Phase 2 has working track and the landscaping is under way. Phase 3 will get under way later this summer.

Since Roy is disabled and requires an electric scooter for mobility, the railway is built 24" above the ground and has wide aisles. These allow him to move about the garden. The brick cap on top of the walls give him a place to sit while he works on the railway.

We share the building tasks. Roy, a member of the N.M.R.A and the Circus Model Builders, is responsible for the trains and most of the buildings and detail work. Mary Ann works with the plants and does some scratch building of structures.

Please come back again and see our railroad grow.



BOOJUM AND MESQUITE RAILROAD

Bill and Barbara Dillon

The Boojum and Mesquite Railroad, just three months old, is the outcome of our becoming interested in garden railroading in the early 1990's. We did a lot of reading on the subject and purchased some inexpensive Bachmann sets to experiment with. Just recently we have moved to a new home and have decided to build our railroad.

The Boojum and Mesquite replicates railroading in the early to mid 1900's, using battery power, Locolinc, LGB track with a minimum radius of 4.5 feet, Phoenix Sound, and kit structures. We decided to put the railroad at waist level for easy construction and maintenance.

At present the Boojum and Mesquite has a single loop over 600 feet long, with two towns, two sidings and a change of direction feature. There is a long straight run and two trestles built from scratch. The most striking feature is the waterfall, which the railroad crosses over on two bridges purchased from Eagle Wings Iron Craft. Motive power is provided by a Bachmann 10-wheeler and a Bachmann 2-6-0 Mogul. We have installed a drip system for the plants that we intend to install in the future. Also in the future will be buildings lit by solar power.

We welcome visitors and encourage garden railroaders to bring trains to run. We are working on a solution for those of you who have track-powered equipment. Our phone number is 520-818-2635. Call and arrange a visit.



CACTUS CORNERS RAILROAD

Bob and Jean Hoffman

The railroad at Cactus Corners is a small mining railroad. The town was once bustling with commerce, with a main street boasting several stores, a hotel, barbershop and a gas station. At the peak of its prosperity a trolley line was put in to run workers from town to the mines and the roundhouse. As the ore began to run out, the mines closed until there is only one remaining in operation.

The railroad itself is an elongated figure eight with about 350 feet of track that starts at the foot of a four-foot high mountain. As it winds around and down, it passes through the mountain by way of a tunnel that leads into Cactus Corners. If it happens to be the monthly diesel from the main line, it stops briefly at the station to pick up passengers. Going out of town, the tracks wind up and around and over a ten-foot trestle that brings it back to the upper level.



SLEEPY HOLLOW RAILROAD

Dick Izen, General Manager, Engineer and Gandy Dancer

The Sleepy Hollow is a battery operated railroad, controlled with Locoline and has about 350 feet of track. It is roughly in the shape of a bent figure eight running across the rear of the yard and down either side. The railroad features four sidings so that trains can pass and meet, a feature of remote control battery operation that I enjoy.

All engines are equipped with sound. Sleepy Hollow steam engines carry their batteries in a trail car. My Aristo Craft FA diesels have their batteries inside their car body. The steam engines and freight cars use body mounted Kadee couplers. The FA diesels and standard heavyweight passenger cars have modified Aristo Craft couplers. An adapter car allows the diesel engines to pull freight trains.

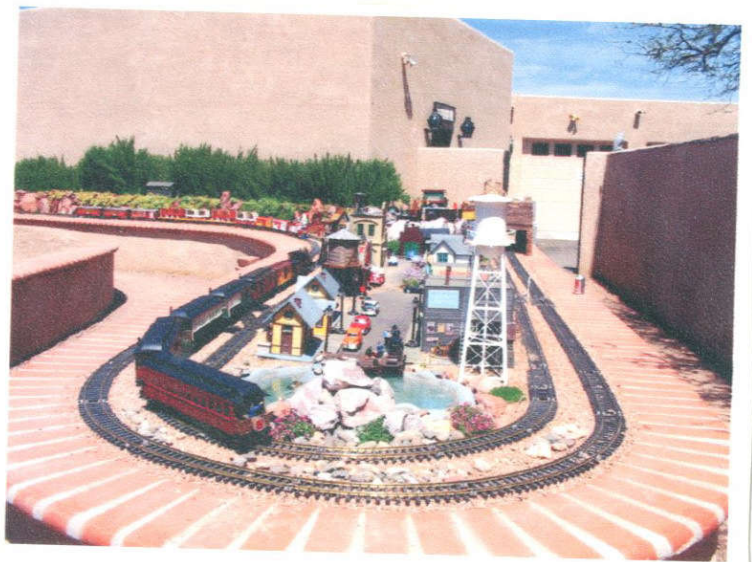
Engines and rolling stock are an eclectic mix of narrow gauge and standard gauge equipment that could have existed in the 40's and 50's. All my steam engines use common paint and lettering and are converted to oil. Tenders have tool boxes and back up lights, etc.. The rolling stock and various engines seem to mix well together, except when I am running short narrow gauge passenger trains next to the long heavyweight passenger cars.

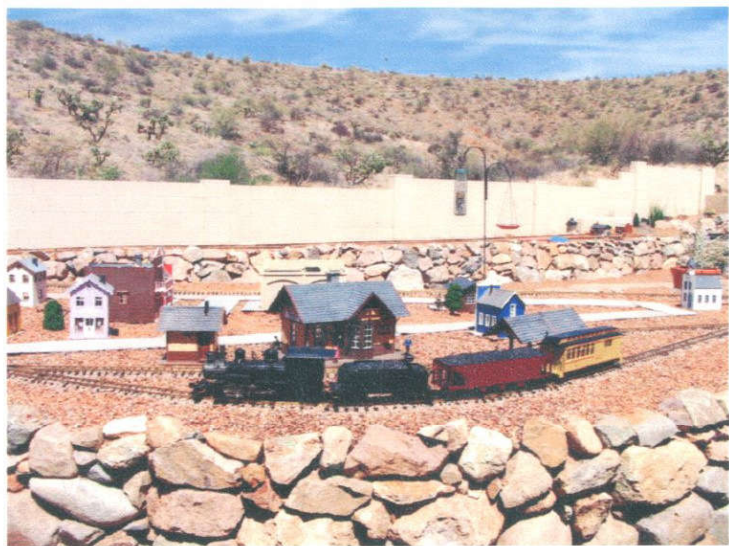
The scenery is pretty much natural with full size plants, some rock work and a number of buildings. Mixing scratch built and kit buildings gives more variety. In addition scratch building and kit bashing has allowed me to get some unique industries.

Dirksen



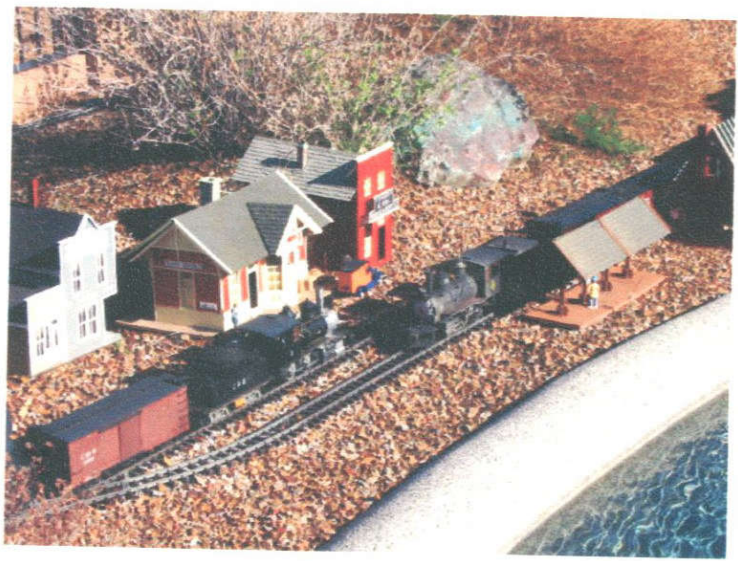
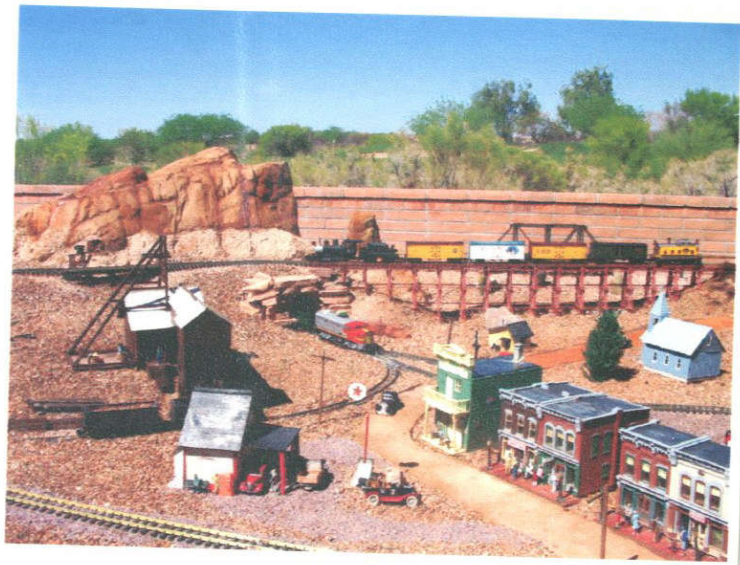
Eberbach





Dillon

Hoffman

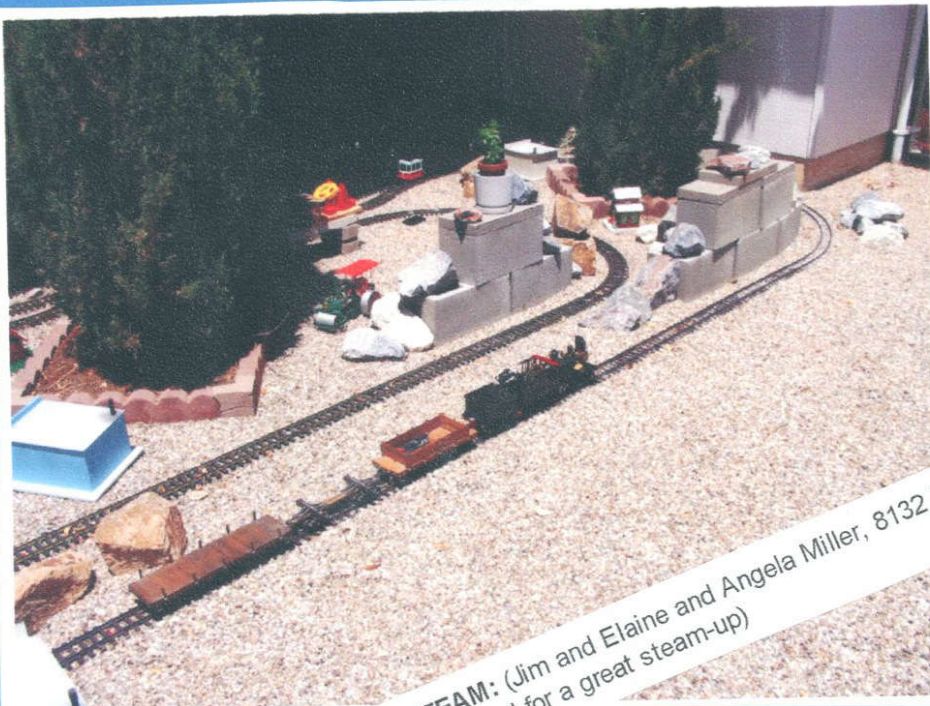


Izen

ROUND ABOUT

MAY 2002

DOUBLE K RAILROAD: (Ken and Mary Karrels, 3930 N Smokey Topaz) In among the towering trees a wonderful variety of towns, trains, scenes. This railroad is in the backyard of the Double K Ranch Bed & Breakfast. A real caboose sits in the back of the lot with it's own track for visiting railfans.



MILLER LIVE STEAM: (Jim and Elaine and Angela Miller, 8132 E Baker) The Society's only live steam layout. It is impressive. Be prepared for a great steam-up)

ROCK BOTTOM RAILWAY: (Barry & Gina Blackwell, 4042 E Cooper St.) Work began on the Rock Bottom Railway approximately 2 and a half years ago. (Rock Bottom pertains to both the terrain and the financial condition of the railway.) At present there are 250 feet of main line, 80 feet of trolley line, and about 40 feet of upper loop (One Track Mine). The upper loop has been running for 6 months. The main line was traversed for the first time on 04/19/02. The trolley line is still under construction. A waterfall (thanks to "tor"mentor, Gary Martin) and a stream are in operation. Scenic and most structures are but a dream at this point.



HART TO HART RAILROAD: (Loyal and Marty Hart, 7921 E Scarlett) A German theme layout at one end goes through a switching section to the Denver Rio Grande Western Railroad at the other end of the U-shape. Approximately 400 feet of track in five loops (including a raised town) traverse from the Alps to the Rockies. Included are castles, birdhouses in an apple orchard (painted on the wall), farm, mine and Indian settlement. This is an AWWNUTS railroad (Always Whimsical, Not Usually To Scale).



ROUND ABOUT

MAY 2002



TNT RAILROAD: Rick, Sue, Tim, Ted and Krista Gast, 7751 E Fairmount) A beautiful layout at one end of the pool. Trestles to die for, trains move up and down nestled in the palms near the pool.



THE J & P CACTUS CANYON RAILWAY: (Jerry & Pat Springstead, 5542 E. Kelso St.) Plans for our railraod started in December, 1998. It spans more than 325 feet of track which consists of an outer oval loop with a figure eight inner track.. It is a 1930's western layout. There is a desert community at the base of a mountain , a large waterfall and a canyon with a bridge, a trestle and an alpine lodge in pine trees. Cactus plants are used in the flatlands. The railroaad uses track power and a remote control by Aristocraft train engineer.

ROUND ABOUT

MAY 2002

BILMAR RAILROAD: (Bill and MaryAnn Fabbri, 8901 E McClellan) Excellent use of small area. This railroad runs next to the pool along the wall. It contains a single loop with a mountain waterfall, switchyard and great engine house.

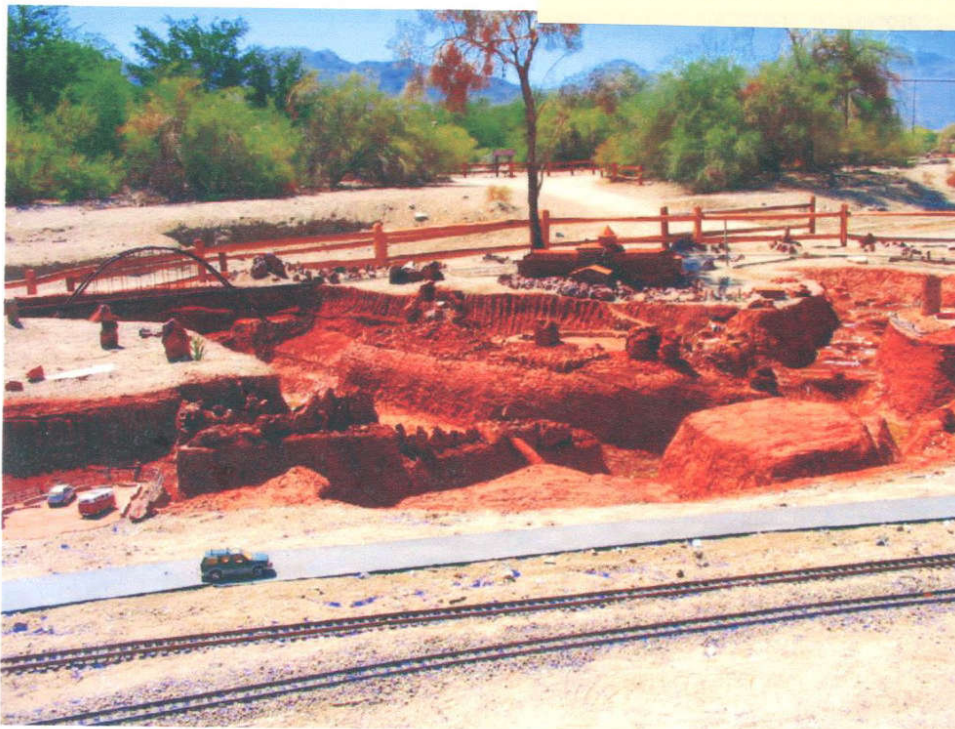


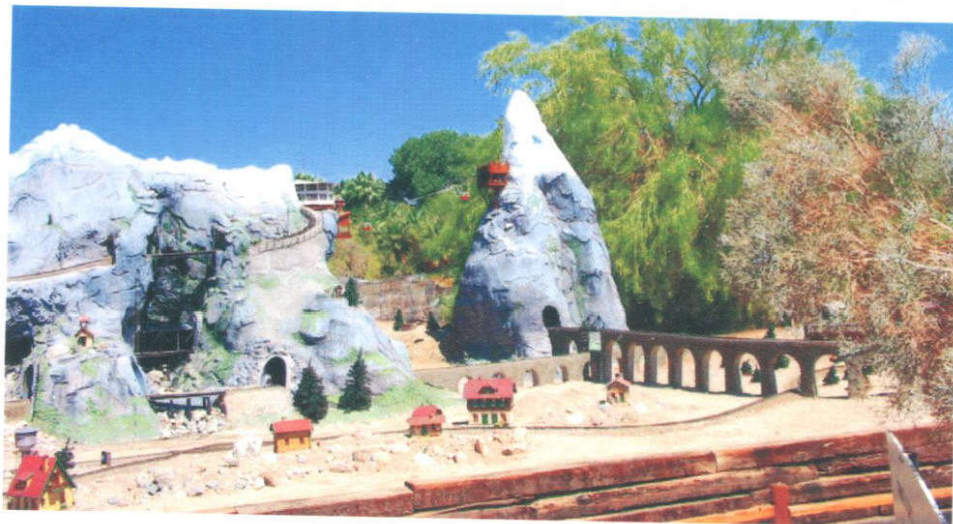
JUNE 2002

TGRS ABOARD THE QUEEN MARY



LIVING DESERT DISPLAY





LIVING DESERT DISPLAYS



Take home 1000's of bright ideas for your home & patio!



Pima County

Home & Patio Expo

VALET
PARKING
AVAILABLE!

June 21 - 23

at the Air-Conditioned

Tucson Convention Center

Fri 10-8 • Saturday 10-8 • Sunday 10-5



See what's new in home improvement,
decorating & design plus . . .

"Trash or Treasure" with Dr. Tony Hyman. See over a million dollars worth of collectibles purchased for pennies! **FREE** evaluations. Bring a personal item and learn its value.

It's Barbecue Madness! presented by Chef Barry Infuso along with an impressive line-up of Tucson's premier chefs.

Enter to Win a Home Theater Entertainment package from The Specialists worth \$12,000!

State-of-the-Art Innovation Tour from Maytag™. Interact with tomorrow's technology. PLUS enter the sweepstakes to win free Maytag™ appliances!

Estate Auction featuring art, home furnishings and fine collectibles from all over the world.

Free 3-days, 2-nights stay* at the Edgewater Hotel & Casino Laughlin Nevada to the first 700 people each day (over a \$200 value). (*must be 21 or older, 1 per family. First 700 attendees per day)

Take a trip down memory lane as you stroll thru the rows of American & British Classic Cars on display at the show on Saturday and Sunday.

FREE ADMISSION for all members of the military, fire and police departments and their spouses (with ID)!

Adults: \$7 (includes 75¢ TCC user fee) Children 16 & under free



**TGRS Town during assembly.
Notice Gary moving building.
We occasionally run a diesel.**



Fitzner/Dirksen Amusement Park



GREAT AMERICAN TRAIN SHOW

Certificate of Appreciation

We wish to thank



**TUCSON GARDEN
RAILROAD SOCIETY**

*For participating in the
Great American Train Show*

TUCSON, ARIZONA
SEPTEMBER 7 & 8, 2002

Thank You

On behalf of the Great American Train Show staff we would like to thank you for participating this weekend. We hope the show was enjoyable for you and we look forward to seeing you again at a future show.

The GATS Staff,

Tom Edwards

Max *Greg*

Natty *Bill Brown, Sr.*
Heeghegan

John *John*

Frank
Hicks

Get on track with rail hobbyists

Show at fairgrounds is 'best in the West'

By Elena Acoba

SPECIAL TO THE ARIZONA DAILY STAR

While Amtrak's Sunset Limited faces permanent derailment, around a dozen other railroad lines will roll into Tucson this weekend. Destination: 'The world of toy trains and model railroads.'

Local model railroading clubs and private hobbyists will bring their layouts to the Great American Train Show, which is making a stop at the Pima County Fairgrounds.

They will complement around 50 dealers selling toy trains, model railroading equipment, layout supplies and railroad collectibles.

"It's the best train show in the West," said Thomas Franko, a Tucson antique-train collector and seller.

Franko, 59, said he likes the twice-yearly show because it attracts a large crowd that ranges from toddlers barely able to say "choo-choo" to elders who reminisce about playing with some of the old trains like those he sets out at the event.

While Franko's railroading interest is in collecting, Richard Dick just likes to play with trains. Dick is a member of the Southern Arizona Society of Model Engineers, which will use HO scale cars to re-create a logging scene for its layout.



RON MEVSEGER / STAFF

Thomas Franko, with his Texas Special (Lionel, 1950s) and Burlington Zephyr models (American Flyer, '30s).

QUICK TAKE Great American Train Show

When: 11 a.m. to 5 p.m.

Saturday and Sunday

Where: Pima County Fairgrounds, 113000 S. Houghton Road

Tickets: \$7 buys admission for both days. The show is free for children age 11 or younger.

Information: Online, visit www.greatamericantrainshow.com.

Et cetera: Vote for your favorite train layout at the show. The winning club gets bragging rights for as long as people will listen.

Dick, who's 58 and has been a model railroader for around 30 years, said the show exposes the hobby to a general audience.

"We get to meet the public and talk with them," he said. "We can explain things about our group and explain model railroading in general."

Other groups who plan to bring layouts include the Tucson Garden Railroad Society, Grand Canyon State Model Railroad and Tucson N-Trak. It makes for a friendly social gathering.

ering of model railroad enthusiasts, Dick said. "It's always a lot of fun to see people from around town."

Activities at the show are geared to attract all ages and interest levels, said Tom Edmonds, who books show participants from the organizers' Lombard, Ill., office.

In the kids area, tykes can get rough with plastic toy trains and try operating a Thomas the Tank Engine train set on tracks. Older kids can work some of the

bigger layouts or play the video program that simulates operating a train from the engineer's point of view.

Hobbyists can attend workshops on aspects of building layouts. Topics will include making a saguaro cactus, building a mountain and animating a layout.

Collectors of railroad travel history might find such memorabilia as old time tables and dining-car china and table-

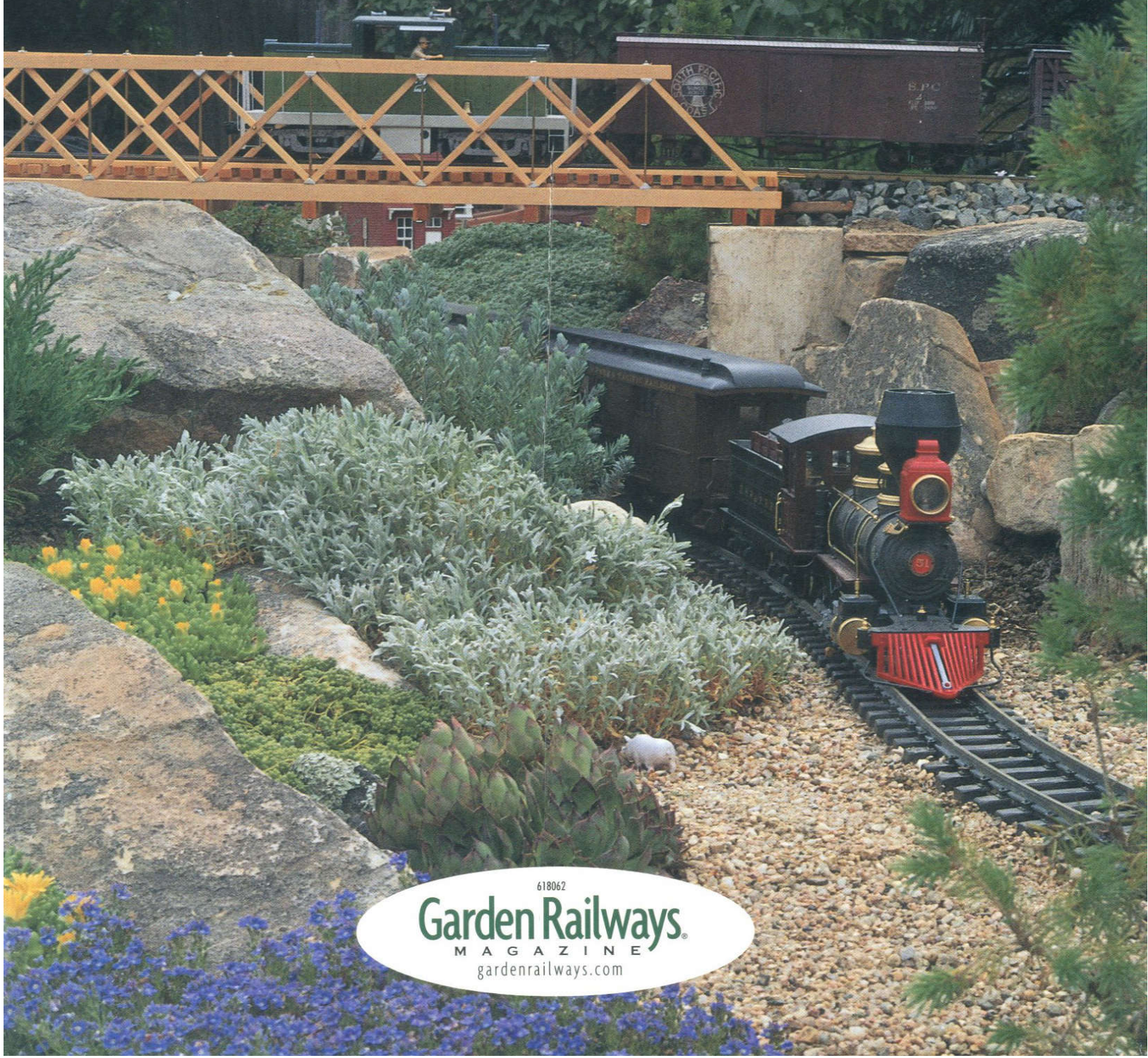
cloths, Edmonds said.

Even train mechanics get attention. Franko has a display of miniature steam engines that run various tools. "You put water in (the engines)," he explained. "They have a heater in them and then you run them. It really fascinates the kids. They want to know where the (nonexistent) remote control is."

Free-lance writer Elena Acoba is a former Arizona Daily Star reporter.

Beginning Garden Railroading

A Supplement to Garden Railways Magazine



618062

Garden Railways
MAGAZINE
gardenrailways.com

St. Aubin Station

Your Source for ALL your Large Scale Needs

1-888-STAUBIN
(782-8246)

ORDERS
888-STAUBIN
(888-782-8246)
INFO
815-334-9100

Central Standard Time
HOURS
MON-FRI 9-6
SAT 9-4 SUN 9-1
*CLOSED SUNDAYS
JUNE - SEPT*



ARISTO-CRAFT

We Carry the FULL Line of Products!

Starter Sets

Complete With
Track & Transformer **SALE!!**



28000 0-4-0 Freight Set- Penn, SF, X-mas 119.89



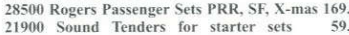
28100 0-4-0 Passenger Set- Penn, SF, X-mas, 149.89



28300 Lil'Critter Freight Set- Penn, SantaFe, UP, Southern Railway, Great Northern 119.89



28314 Lil'Critter Freight Set- Hershey 129.89



28400 Rogers Freight Set w/Sound- Penn, SantaFe, Great Northern, X-mas 169.89



28500 Rogers Passenger Sets PRR, SF, X-mas 169.89



21900 Sound Tenders for starter sets 59.89

Track & Acc.

Euro	USA <-	Track Tie Style		
11000	30030	12" Straight	Box of 12	28.89
11003	30033	Track Ties	Box of 12	7.89
11005	8'	Straight rails	Tube of 12	113.89
11060	30060	24" Straight	Box of 12	56.89
11070	30090	36" Straight	Box of 12	86.89
11099	30195	60" Straight	Box of 12	145.89
11100	30100	4" Dia Curve	Box of 12	28.89
11500	30110	5" Dia Curve	Box of 12	43.89
11550	30112	6 1/2" Dia Curve	Box of 12	52.89
11600	30115	8" Dia Curve	Box of 12	58.89
11700	30116	9" Dia Curve	Box of 12	71.89
11800	30120	10" Dia Curve	Box of 12	75.89
11801	30121	11 1/2" Dia Curve	Box of 16	99.89
11802	30122	12 1/2" Dia Curve	Box of 16	118.89
11803	30123	14" Dia Curve	Box of 16	127.89
11804	30124	15" Dia Curve	Box of 16	133.89
11805	30126	16 1/2" Dia Curve	Box of 16	137.89
11820	30125	20" Dia Curve	Box of 16	149.89
11200	30300	Switch - Manual	Right	19.89
11205	30310	Switch - Remote	Right	30.89
11210	30350	Switch - Manual	Left	19.89
11215	30360	Switch - Remote	Left	30.89
11225	30370	Switch - Man. Right	X-Wide	39.89
11235	30380	Switch- Man. Left	X-Wide	39.89
	30390	Switch Remote Super Wide #6 RH		89.89
	30395	Switch Remote Super Wide #6 LH		89.89
11299		Remote Switch Machine		12.89
11300		30 Degree Crossing		18.89
30400		19.5 Degree Crossing		24.89
30410		90 Degree Crossing		15.89
11350		Retailer 12" straight		9.89
11031		Bumper W/O Track, Lighted		7.89
11090		Reversing System W/Bumper		61.89
11900		Rail Joiners, Brass	12 for 3.98	
11901		Rail Joiners, Plastic	4 for 3.98	
11910		Socket Head Track Screws		4.98
11920		Flex Track Rail Bender		\$99.89
12091		30500 Ext. Track Set, w/ 1 Man. Switch		35.89
12092		30550 Ext. Track Set, w/ 2 Man. Switches		65.89
12093		30560 Ext. Track Set, w/ 2 Elect. Switches		87.89

All Prices subject to change without notice
Prices good for Phone, Mail, Fax & Internet/email orders only
IL Residents add 6.5% Sales Tax
15% Restocking fee on approved returns
UPS Shipping & Insurance minimum \$6.95 per order
Shipping Charges are Non-Refundable

Locomotives

NEW Radio Control Ready
14 lbs! **\$269.89**



22400 SD45 Diesel 12 Wheel Dr. Smoke & Lts 269.89
22400-S w/ Sierra Digital Sound 519.89
Southern Pacific, Conrail, SantaFe, Pennsylvania
Denver & Rio Grande, Union Pacific, Erie Lackawanna,
Norfolk & Southern Thorough Bred, CSX, CP Rail
BN, C&NW, Great Northern, Undecorated



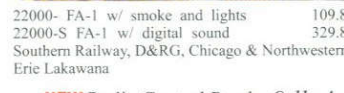
21200 Doodle Bug w/ Dual Motors & Lights 179.89
21200-S w/ Sierra Digital Sound 429.89
Undecorated, Pennsylvania, B&O, Milwaukee Road,
SantaFe, Chicago & NorthWestern, Southern RR,
Atlantic Coast Line, NYC, UnionPacific, D&RGW



SPECIAL PRICE
\$109.89 EA
2 FOR \$199.89
NEW Radio Control Ready
New Ball Bearing Motors



22000- FA-1 w/ smoke and lights 109.89
22000-S FA-1 w/ digital sound 329.89
Southern Railway, D&RG, Chicago & Northwestern,
Erie Lackawanna



NEW Radio Control Ready 9 lbs!
Ball Bearing Motors



22200- RS-3 Diesel w/ smoke & lights 189.89
22200-S RS-3 Diesel w/ Digital Sound 409.89
Rock I, UP, SF, D&RGW, BN, CP, SR, B&O, Reading,
Newhaven, C&NW, NYC, ACL, GN, B&M, Amtrak



22600- Center Cab Diesel w/ lights 139.89
PN, B&O, UP, SP, ATSF, D&RGW, Southern, NYC, CN



21400- Pacific 4-6-2 w/ sound smoke & lights 329.89
Penn, B&O, So Crescent, UP, ATSF, GN, Chessie, CN

\$159.89



83100- Classic Reo Railbus 157.89
83100-S- w/ Digital Sound 369.89
Denver & Rio Grande Western, Colorado & Southern,
Milwaukee Road, Southern Railroad, Pennsylvania,
Southern Pacific, Santa Fe, B&O, Chicago & North
Western, Canadian Pacific, Union Pacific, Christmas



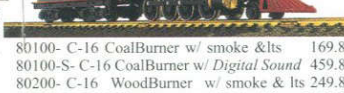
21300- Switcher 0-4-0 w/ sound smoke & lights 139.89
Penn, UP, Southern RR, SF, B&O D&RGW



21000- Rogers 2-4-2 w/ sound smoke & lights 139.89
Penn, D&RG, B&O, GreatNorthern, SantaFe, UP



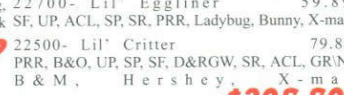
80100- C-16 CoalBurner w/ smoke & lights 169.89
80200- C-16 CoalBurner w/ Digital Sound 459.89
80200- C-16 WoodBurner w/ smoke & lights 249.89
80200-S- C-16 Woodburner w/ Digital Sound 459.89
C&S, D&RGW, D&RGW Bumble bee, Napa Valley,
Penn, SantaFe, B&O, UnionPacific, Southern



80100-S- C-16 CoalBurner w/ Digital Sound 459.89
80200- C-16 WoodBurner w/ smoke & lights 249.89
80200-S- C-16 Woodburner w/ Digital Sound 459.89
C&S, D&RGW, D&RGW Bumble bee, Napa Valley,
Penn, SantaFe, B&O, UnionPacific, Southern



22700- Lil' Eggliner 59.89
SF, UP, ACL, SP, SR, PRR, Ladybug, Bunny, X-mas



22500- Lil' Critter 79.89
PRR, B&O, UP, SP, SF, D&RGW, SR, ACL, GR/N,
B & M, Hershey, X-mas



21500- 2-8-2 Mikado w/ Smoke & Lights 399.89
21500-S 2-8-2 Mikado w/ Digital Sound 609.89



With Long Tender
Penn, SantaFe, Southern Railroad, D&RG Round
Herald, D&RG Flying Letters
With Vanderbuilt Tender
Undecorated, B&O, UP, SP, CN, GN
Power Packs
55400 1.8 Amp Power Pack 34.89
55401 Controllor 10 Amp 49.89
55450 3.5 Amp Power Pack Includes 5401 99.89
55460 10 Amp Power Pack 89.89
55461 10 Amp Transformer 29.89
55466 15amp. Controllor 49.89
55465 15amp 22v Power Pack 129.89

Rolling Stock

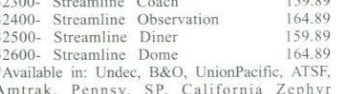
Heavy Weights



\$149.89
Coach, Observation, Diner, RPO Mail Car,
Combine, & Pullman
Undec, PRR, B&O, Southern Crescent,
UnionPacific, RioGrande, ATSF, Napa Valley &
Canadian National & NYC (New Run)



\$164.89
32200- Streamline Baggage 164.89
32300- Streamline Coach 159.89
32400- Streamline Observation 164.89
32500- Streamline Diner 159.89
32600- Streamline Dome 164.89



\$169.89
33300- Smooth Side Coach 169.89
33400- Smooth Side Observation 174.89
33500- Smooth Side Diner *Available in 2002
33600- Smooth Side Dome- 174.89
33200- Smooth Side Baggage- *Available in 2002



46200- 40ft Steel Reefer 47.89
Assorted Road Names



46000- 40ft Steel Box Car 47.89
Assorted Road Names



\$24.89
42200- Bobber Caboose 24.89
Undec, PRR, SR, UP, B&O, D&RGW, SF, Napa



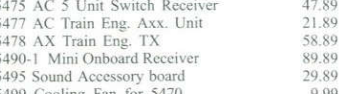
\$53.89
55470 Train Engineer 10amp Walkaround 109.89
55480 Train Engineer 2amp Single Train 54.89
55471 Receiver for 2nd Train 77.89
55472 Remote Accessory Panel 32.89
55473 Transmitter 69.89
55474 DC R/C Wireless Receiver 42.89
55475 AC 5 Unit Switch Receiver 47.89
55477 AC Train Eng. Axx. Unit 21.89
55478 AX Train Eng. TX 58.89
55490-1 Mini Onboard Receiver 89.89
55495 Sound Accessory board 29.89
55499 Cooling Fan for 5470 9.99
90001 Train Engineer "How To" book 19.95



46950- Working Track cleaning car 53.89
Pennsy, B&O, UnionPacific, SantaFe, Southern,
Remote Control



55470 Train Engineer 10amp Walkaround 109.89
55480 Train Engineer 2amp Single Train 54.89
55471 Receiver for 2nd Train 77.89
55472 Remote Accessory Panel 32.89
55473 Transmitter 69.89
55474 DC R/C Wireless Receiver 42.89
55475 AC 5 Unit Switch Receiver 47.89
55477 AC Train Eng. Axx. Unit 21.89
55478 AX Train Eng. TX 58.89
55490-1 Mini Onboard Receiver 89.89
55495 Sound Accessory board 29.89
55499 Cooling Fan for 5470 9.99
90001 Train Engineer "How To" book 19.95



55470 Train Engineer 10amp Walkaround 109.89
55480 Train Engineer 2amp Single Train 54.89
55471 Receiver for 2nd Train 77.89
55472 Remote Accessory Panel 32.89
55473 Transmitter 69.89
55474 DC R/C Wireless Receiver 42.89
55475 AC 5 Unit Switch Receiver 47.89
55477 AC Train Eng. Axx. Unit 21.89
55478 AX Train Eng. TX 58.89
55490-1 Mini Onboard Receiver 89.89
55495 Sound Accessory board 29.89
55499 Cooling Fan for 5470 9.99
90001 Train Engineer "How To" book 19.95

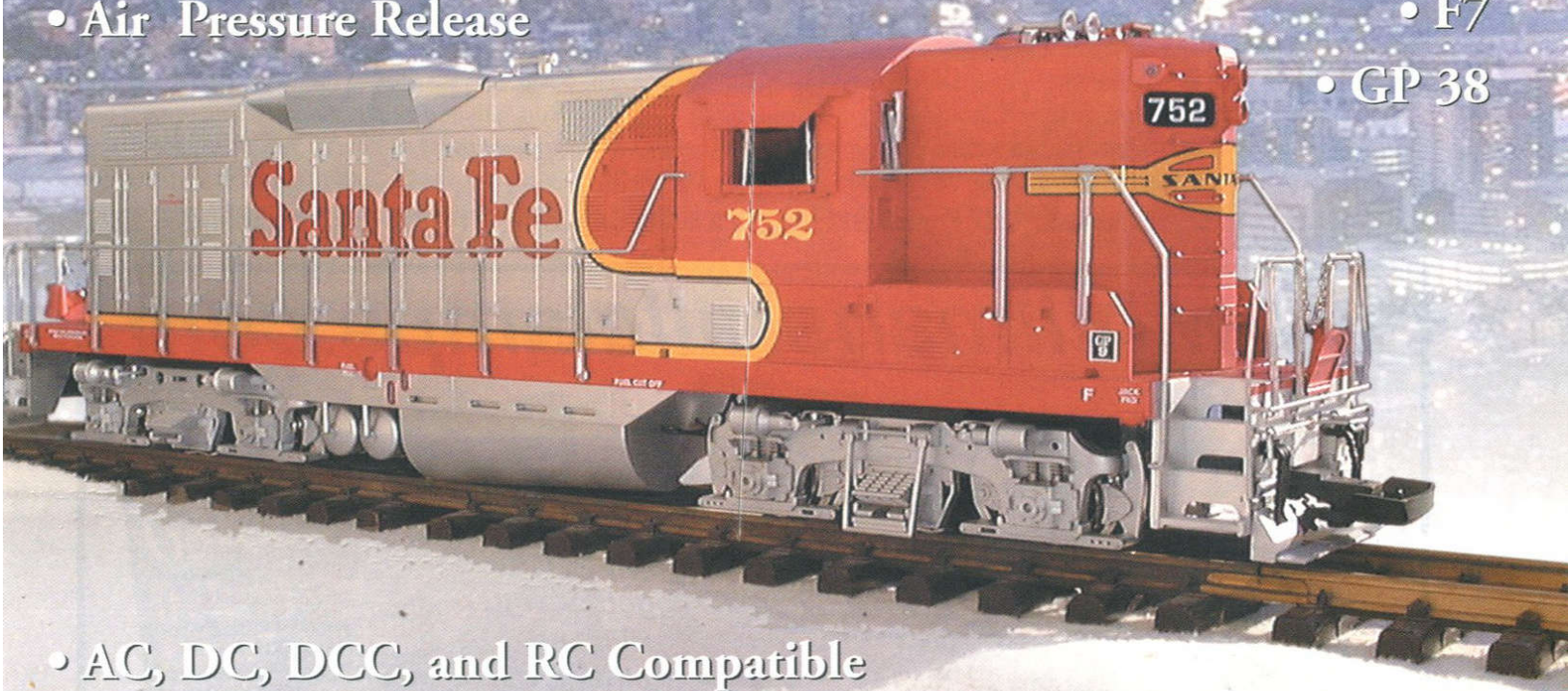
PHOENIX SOUND SYSTEMS

Only Reality Can Beat IT!

- Engine Start Up and Shut Down
- Normally Aspirated or Turbo Charged
- Wheel and Brake Squeal
- Bell, Single and Multi Chime Horns
- Brake Release
- Air Pressure Release

Sounds for:

- ALCO
- EMD
- SD40-2
- GP 7/9
- F7
- GP 38



- AC, DC, DCC, and RC Compatible
- Preprogrammed and Real Time Sounds
- Bell / Horn ON-OFF Feature
- Auto or Triggered Sounds



*Come visit us
on the **WEB!***

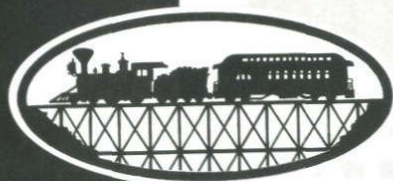
- Demo Sounds
- Product News
- Technical Support
- Dealers



Phoenix Sound Systems
3502 West Liberty Rd.
Ann Arbor, Michigan 48103-9013

Phone 1.800.651.2444
Fax 1.734.662.0809

WWW.PHOENIXSOUND.COM

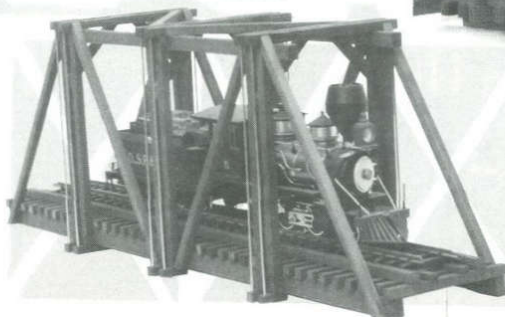


Bridgemasters' Modular (curved or straight) Trestle Sets with decks are designed to accept LGB section track patterns.

Proud contributor to the World's Largest Garden Railway, Fairplex, Pomona, CA and Children's Cancer Research of Los Angeles.

**Serving
You For
Over 10
Years
With
Over 50
Products.**

38"
Thru Warren w/Brass Rod
\$89.00 + Shipping
48" & custom
lengths available



24"
Santa Ana
Canyon River Bridge
\$49.00 + Shipping



Additional Products:

Culvert Bridge • Sub-Supported Bridge • Telephone Poles • A-Frame Bridge • Right of Way Signs Retaining Walls • Brass Structure Lights • Warren Thru Bridges • Portals/Abutments • Modular Deck Trestles (straight & curved) • Windmill • Bumpers • Coal Bin Tank Stand • Loads • Sheds • Platform Dock Set Fencing

All products are pre-assembled with nails and are dark semi-transparent stained.
Send us a large SASE for complete product line and pricing.

Bridgemasters, 1077 Promenade Ave., Placentia, CA 92870 (714) 985-9007 fax (714) 985-1976

www.hillmansrailclamps.com



For over 10 years Hillman's RailClamps (pat. D326296) has been making Large Scale railroads run better. Our satisfied run their trains from the hot desert of Arizona to the cold and snowy northeast of Maine. We also ship worldwide.



Our products help improve your day-to-day operations.

- Improves electrical continuity -NO voltage drop in 100+feet.
- Fits between ties and under rails.
- 100% brass construction with stainless steel screws.
- EASY to use and RE-USE.
- Holds rails in perfect alignment.



**Start off right!
Keep your track
together with
Hillman's
RailClamps.
They work while
you play!**

What are people saying about RailClamps?

I have used Hillman's RailClamps on my garden railway for several years. Their quality and variety of products is superior to any other product on the market. I also use them on our club's modulares. It makes set-up a breeze. I love them, other than the fact that people keep borrowing them permanently!
Paul - Rancho Cordova, CA

I tried the competition. The Hillman RailClamps are only the best. Best quality. Best performer. The grip for power.
John - High Bridge, NJ

FAST SERVICE!



Hillman's RailClamps • P.O. Box 1253 • Lodi, CA 95241 • (209) 369-1868

Welcome!

Welcome to the wonderful world of garden railroading! Though this fascinating hobby is over a century old, it has never been more popular than it is today, and nothing can match its appeal. It's a hobby that can involve the entire family. In the outdoor environment the railroad is changing with the seasons of the year, the weather, and even the time of day. You are faced with many of the same challenges as a full-size railroad, which is all part of the fun. A railroad built outdoors takes on a realism that nothing else can match.

Every issue of *Garden Railways* Magazine brings you the best of garden railroading from around the globe. You'll find diverse articles about scratchbuilding and kitbashing trains and structures, in-scale gardening and miniature landscaping, garden railway construction in different parts of the country, reviews of new products, and much more. Beautiful color photos abound!

This hobby is so varied that you'll probably never find answers to all your questions in any one place.

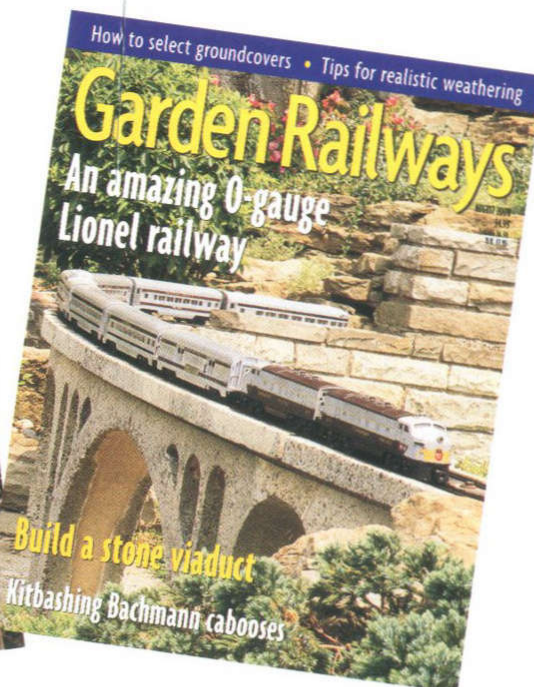
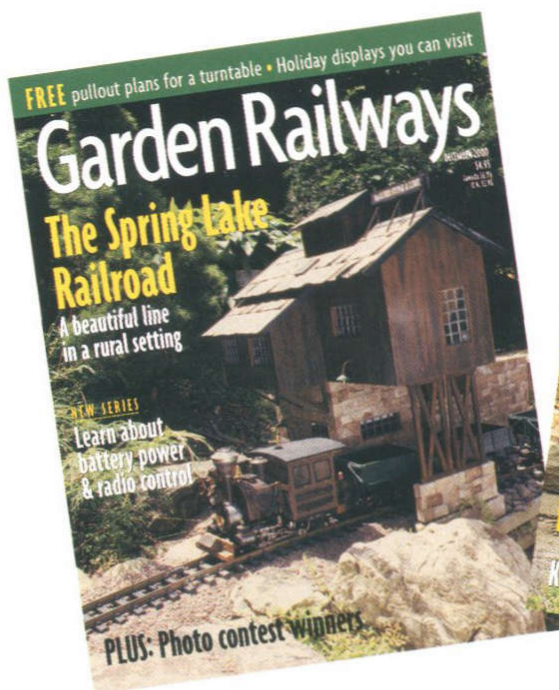
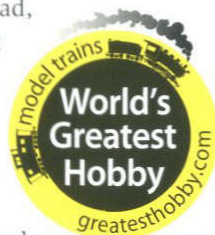
With *Beginning Garden Railroading* and your first issue of *Garden Railways*, you'll get a head start on running your own railroad outdoors. This booklet covers the basics, like selecting equipment, roadbed preparation, wiring, and basic landscaping. *Garden Railways* Magazine keeps you in touch with the latest developments in the hobby, provides the latest product information, and inspires you by showcasing great garden railroads from around the world.

For another great source of help and information for beginners, I recommend the greatesthobby.com Web site. The site is sponsored by Model Trains, the World's Greatest Hobby, a promotional program to get new people involved in all aspects of the model railroad hobby. The program is supported by the Model Railroad Industry Association and the Web site includes a directory of hobby shops, clubs and garden railroad societies who are ready to help beginners get started. If you don't have online access, call 877-426-5082.

I hope that the information in this booklet gets you started on this enjoyable, lifelong hobby.

— Marc Horovitz, Editor, *Garden Railways* Magazine

COVER: Natural-looking rock placement and plant material bring Dick Schafer's Galena Railway and Navigation Company to life. Photo by Barbara Horovitz.



Beginning Garden Railroading © 2001 Kalmbach Publishing Co.
Excerpted from *Beginner's Guide to Large Scale Model Railroading*, by Marc Horovitz and Russ Larson (Kalmbach)
Garden Railways Magazine is published bimonthly by Kalmbach Publishing Co., 21027 Crossroads Circle, P.O. Box 1612, Waukesha, WI 53187-1612. Phone: 262-796-8776. Fax: 262-796-1142. Web site: gardenrailways.com

Getting started

Before you start planning your railway, there are several things to consider. Examine the area your line will occupy to see if it's suitable. Here are some of the questions you should ask yourself.

Is your area more or less level? Levelness is not a mandatory factor in building an outdoor railroad, but the topography of your land can seriously affect the configuration of the railroad that is built in it. The steepness of the grade a train can negotiate is



STEVE SEIDENSTICKER

Aristo-Craft locomotives and rolling stock wind their way through Steve and Jan Seidensticker's Gopher Canyon Line. The track is hand-laid, and locomotives have been converted to battery power and radio control.

limited, and if your yard is quite hilly it may need to be smoothed out some. This can be done through the use of additional earth made into embankments, retaining walls to prevent soil from washing away, or bridgework and trestlework to span larger or deeper gaps.

Is there an existing garden, or will the garden be designed along with the railway? The garden should be considered as part of the railroad. If one exists already, you must consider how best to integrate the railroad into the garden so as to show each to its best advantage, while creating the kind of environment and atmosphere for your trains that you desire.

If a new garden is to be made, it should be designed along with the railway. You should have a pretty clear picture in your mind as to what you want your line to be. If you are weak in the planting area, do some homework—it will pay off later. Visit local nurseries, read books, and talk to people. Your local chapter of the American Rock Garden Society may be a good place to start your research.

Are there things in the way—like clotheslines, houses, or swimming pools—that must be removed or worked around? If so, these things can influence the route of the track. A sidewalk can be crossed at ground level by cutting away the concrete, laying in the track, and replacing the concrete with new cement, being careful to allow for flangeways. A walkway can also be crossed above ground level with a lift-out or moveable bridge. However, this will be an obstruction to the path when you are operating.

Swimming pools can be built around, but they tend to be a visual distraction to the railroad. If the line is close to the pool, it may be difficult to photograph without getting the pool in the shot, too.

Structures can be built around, or through. Many garden railways begin indoors and then go outdoors through a hole in the wall. Some are routed through garden sheds or garages, where the trains are stored and serviced.

How elaborate will the line be? As a general rule in building a garden railroad, less is more. A traditional indoor railway may have many loops of track, dozens of engines, and hundreds of pieces of rolling stock. Outdoors, where we are dealing with the elements, a single-track mainline usually suffices, with sidings at stations, industries, and points of interest, and perhaps a branch line to an outlying terminal. A garden line will have a much different look than an indoor line. To get started, a single locomotive and three or four pieces of rolling stock—freight or passenger—are all you really need.

Is your area secure? Vandalism can be a problem in some areas, and it is generally felt that what is out of sight is out of mind. A high, opaque fence may be a good idea. On the other hand, if the neighborhood you live in is itself secure, fences may not be necessary. Several garden railways have been built in front yards, in full sight of the neighbors and all passersby, never with any problems. And, in fact, there have been instances of vandalism to garden lines that lived behind high fences.

Trains, and sometimes buildings and other structures, should be either brought indoors or be made secure in permanent garden structures (like very solid engine houses or train sheds) of their own. These will prevent them from being damaged by weather, or from wandering off when you aren't home. Security is not something to be paranoid about, but it should be considered. **II**

Choosing equipment

In choosing your first train, decide what your railroad is to be. Is it a line that will haul only freight? A line of this nature might start out with one or two small engines and maybe a half dozen freight cars of specific purpose. Or perhaps you prefer a passenger line that connects small towns. Again, a single engine (and maybe another for backup) and three or four coaches would be enough to get a railroad like this off the ground.

Is your line an old fashioned, narrow-gauge steam railway, or a modern, standard gauge, diesel-powered line? The space you have available may help to answer these questions. A small industrial line, with little engines, short cars, and tight curves, will fit better and look more at home in a limited space. A modern mainline road with A-B-A diesel lashups and trains of 20 or more cars will require broader curves and longer straight stretches to look right. Do your homework—read books and magazines on the subject before jumping in.

Track

There is a wide range of commercially available track today, and this is probably the best approach for the novice. When you have gained some experience, you might want to consider building your own track.

Commercial track is available in short pieces of set

lengths and curvatures, called sectional track, or in longer sections that you can bend and shorten to suit your own needs, called flex track. Sectional track is good for some applications, but it can be very limiting.

Sectional track is an excellent choice if your railway is not to be permanent, as it can be easily picked up and put down at will in the same configuration. The configuration can also be changed at a moment's notice. Several different radii of curved track are available, the tightest curve being 2' radius and the widest being 10'.

Straight sectional track comes in different lengths, nominally 1', 2', and 3' sections. These can be easily cut to length with a hacksaw if they are the wrong size.

For a permanent railway, though, you should consider using flex track. This can be bent to any desired curvature, and with it you can make your railway go where it should go, not where it may have to go with sectional track.

The term flex track is a little misleading. The rail used in flex track must be prebent to the proper configuration before it is slid into the plastic tie strips. With aluminum rail, this can often be accomplished by careful hand bending of the rail (wear leather gloves). The best curves can be attained by using a machine designed for the purpose, a rail bender. It is surprising how attainable smooth and accurate curves can be with a machine like this. **II**

A Climax locomotive with a heavy log train passes through the river valley on Jim Overland's Eidskogen Timber Company. Jim likes to create realistic scenes on this logging railway, including a log pond, logging camp, and engine yard.



JIM OVERLAND

Planning the line

What is the best minimum radius to use on your railroad? There is no best, really. The rule of thumb, when planning your line, is to use the widest minimum that will conveniently and aesthetically fit in your available space. Personally, I like a minimum of 6' (making a 12' circle), but there have been fine railroads built with sharper curves. On the other hand, long, standard-gauge passenger trains running at speed just don't look right twisting around very tight curves, even though they may be capable of doing so. A minimum radius of 10' may be what's called for in this instance, and a really grand curve could be as wide as 15' or 20'.

However, very tight-radius track was sometimes used on prototype railroads, especially in the narrow gauges. Industrial railroads that ran small equipment and had to thread their lines between buildings or along ledges used extremely tight curves. Several manufacturers of industrial-railway equipment even offered full-size sectional track so that temporary railroads—like those used in the construction of dams, for instance—could be easily put down, moved at will, and taken up when the job was complete and installed at the next job site. These railroads are interesting prototypes to model. Space is always a problem, so do what you must, but your railroad will be much more plausible if you tailor your rolling stock to your curves.



An Aster live-steam Climax crosses a scratchbuilt trestle on Joe and Annie Mellen's Mellen Patch railway. The locomotive crossing the trestle in the distance is an LGB Mogul.

BARBARA HOROVITZ



C.J. HOUGHTALING

When planning grades, try not to make them steeper than about three percent (3" rise over 100" horizontal travel). Steep grades are unrealistic, and they will severely limit your train length. In prototype practice it is considered that train length is cut in half for every percentage of grade that must be negotiated. So, if your locomotive can pull an eight-car train on level track, it will only be able to manage four cars on a 1% grade, two cars on a 2% grade, one car on a 3% grade, and, on a 4% grade, another locomotive must be added to get that single car up.

On our model railroads, these same laws don't necessarily apply, and the powerful electric engines will pull unrealistically long trains up unrealistically steep inclines. For plausibility in operation, though, the above rule of thumb applies.

There are other factors that will affect your engine's ability to tote a train up a hill. It will be far easier if the entire grade is on straight track. Flange bind will considerably slow a train on curves, particularly tight ones. The condition of the bearings on your rolling stock is another factor to consider. Also, wheels of different materials and profiles have different rolling characteristics.

Roadbed

There are probably as many different methods of building roadbed in the garden as there are garden railroaders. There is no right or wrong way to do it, though some ways may be better than others, depending on where you live.

Perhaps the best general-purpose method for most applications is to build your railway in a prototypical manner. On a full-size railroad, the track actually floats in the ballast. By floating the track in the ballast, you

are allowing it to move, which it will do. The heat of the summer will cause the rails to expand and the cold of winter will make them contract. The freeze/thaw cycles may bring frost heave. Floating track will move as it needs to, but will be easy to realign when necessary (probably just once or twice a year, if that). The more established the railway becomes, the less it will change.

Dig a shallow trench—say 2" to 3" deep, and a little wider than your track—and fill it with ballast up to just below grade level, as shown in the drawing on the following page. There is no need to line the trench with plastic or anti-weed fabric. On the contrary, good drainage is important and an underlayment may impede it. Place your track on the ballast and level it up, making sure it's exactly where you want it. Backfill with more ballast to the tops of the ties, which should be at grade. Tamp the ballast into place for a better fit, using a piece of wood to push the ballast down between each tie. Then fill in again where necessary.

A word about ballast: Pea gravel is often used, but it is definitely not the best choice. Pea gravel is a type of river rock, and the stones are round, which means they want to roll. A heavy rain will take it right away, as will the lawn sprinkler.

What you need is a stone with sharp points and edges. These teeth will lock the ballast (and the track) into place. Many people use a product called "crusher fines," available from local rock yards. It is chipped granite, and it contains a fair amount of rock dust, which is an added advantage. After the track has been firmly set in the ballast, the roadbed can be sprinkled with water. The rock dust sets up like cement, but it is still easy to break apart for relocating or releveling

Lush foliage and color characterize Dan Gruzlewski's DT&Y. The switch tower is scratch-built. Bachmann motive power and rolling stock are used throughout the railway.

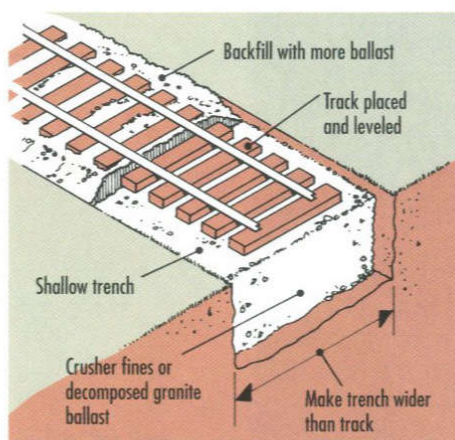
Planning the line

the track. A good alternative to crusher fines is chicken grit, available in several different sizes at grain and feed stores.

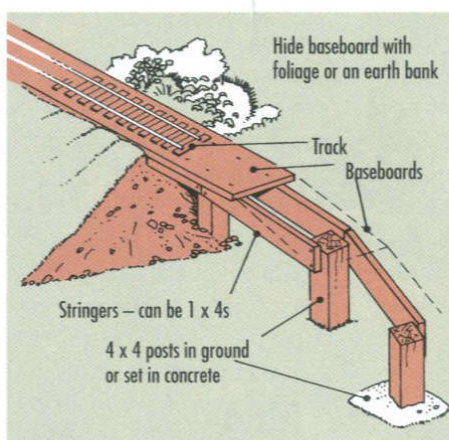
There are other methods of roadbed construction (see the drawing below). One is to elevate the track on a wooden baseboard. This can be attached to wooden posts sunk in the ground, but only in temperate climates. Frost heave in the colder climes will force the stakes out of the ground during the spring thaw, making your railroad look like a roller coaster. If you live in a cold place and want to try this idea, set the posts securely in concrete, or make sure they penetrate to below the frost line. Use a rot-resistant wood like redwood or cedar, or pressure-treated wood intended for use in decks and patios.

If you are planning never to move (or change your track plan) the railway can be set on a concrete foundation. The roadbed should be made in much the same way as the foundation of a house, with steel reinforcing rods to prevent it from cracking. It is essential that your form work be of the highest quality. Smooth curves and consistent grades are very important. The track can be screwed to wooden tie-downs embedded in the surface of the concrete. The surface of the concrete roadbed can be at grade and disguised with ballast, or it can be elevated slightly. If it is elevated, it will act as a dam, so be sure that you have cast-in culverts at the low points to allow for proper drainage.

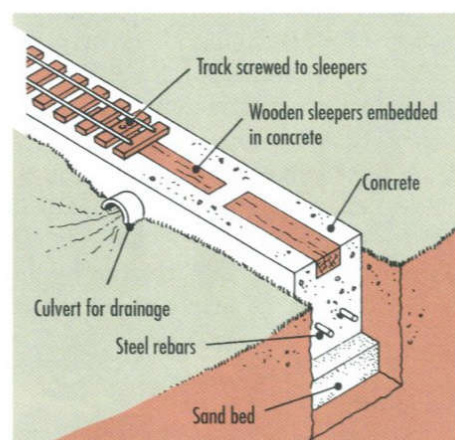
Below are roadbed construction methods for garden railroads.



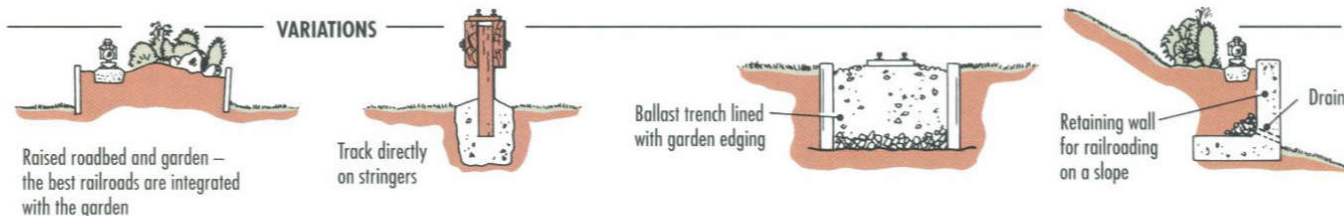
FLOAT THE TRACK IN BALLAST



WOODEN BASEBOARDS ON POSTS



CONCRETE ROADBED



It is inexpensive and simple to install, and it can be a lifesaver. Talk to the folks at your local hardware store about them.

Perhaps the biggest problem in running electricity through the rails is maintaining continuity across the joints as the rails expand and contract. One of the most effective ways of doing this is to solder jumper wires across the joints. Use a relatively heavy multi-strand wire and make a small loop between the soldered ends. This allows the rails to move around a little as they expand and contract without putting stress on the soldered jumper.

A big soldering iron—one that really puts out a lot of heat—should be used. The idea is to heat up the rail, which is a considerable chunk of metal, quickly, get the joint soldered, and get out before you melt your plastic ties too badly. (One way of protecting the ties is to pack them with wet paper toweling or sand while soldering.) I know of a railroad that was about 350' long that had all rail joints soldered. A single lead powered the entire line with negligible voltage loss.

There are clamp-on rail joiners that aid in continuity, too. These either replace the supplied rail joiners or clamp over them, compressing them into the rail. These make the track more rigid, though, and if you have long straight sections of, say, aluminum rail, you could find your track buckling in the hot summer sun. A compromise of some jumped joints and some clamp-type joiners may be the answer here.

Electrically conductive grease (available at electronics-supply stores) can also be used in the joints. This will not only aid conductivity, but will help prevent water from entering the space between the joiner and the rail. This is ordinarily not a problem in warmer climates, but in colder places the water will get in there and freeze, expanding the rail joiner. I've seen heavy brass rail joiners fracture after only a single Colorado winter.

Trains run on the same voltage that garden lighting uses. The two systems can be successfully integrated, creating wonderful nightscapes. Garden lights should have their own power supplies, again kept well out of the weather.

Alternatives

If you find running electricity through the rails to be a big hassle, there are better ways to go. Battery powered, radio-controlled (R/C) trains are becoming very popular, and several companies offer systems that can



LARRY WEBB

be fitted to existing track-powered locomotives.

Some locomotives are big enough to carry all of the battery and R/C gear onboard the engine or in the tender. If the engine is not large enough to carry all of its own gear, then a special battery car might be the best way to go.

Another popular alternative is live steam—real steam locomotives to pull your trains. These burn either alcohol or butane gas, and are quite safe to operate in the garden. Operating a steam locomotive is an entirely different experience than running an electrically powered train. If you approach it expecting the same sort of performance and instantaneous availability that you get with an electric engine, you may be disappointed. Every steam locomotive, even ones of the same type made by the same maker, is different. It must be learned to get the best performance from it. Its characteristics and idiosyncrasies must be sorted out, just as with a full-size steam locomotive, to know what it is capable of and what sort of train it will take over what sort of terrain. **II**

Above, a tunnel is under construction on Larry and Pam Webb's Little Vista Railway. The interior of the tunnel is constructed of concrete block. After the interior was finished, it was covered with dirt so only the portals remained visible, as shown in the lower photo.

Landscaping and scenery

It is the goal of the garden railroader to achieve a railroad-like atmosphere through the integration of the railroad and the garden. "Garden does not mean just plantings (though these are of paramount importance), but all the additional landscaping that must be done to attain the desired goal. Much of what should be done is determined by your existing topography, how accessible you want your railroad to be (i.e., will it lie at grade or will it be elevated for convenience or to smooth out the hills?), and how much you intend to modify the area in which you are working.

Placing rock and dirt

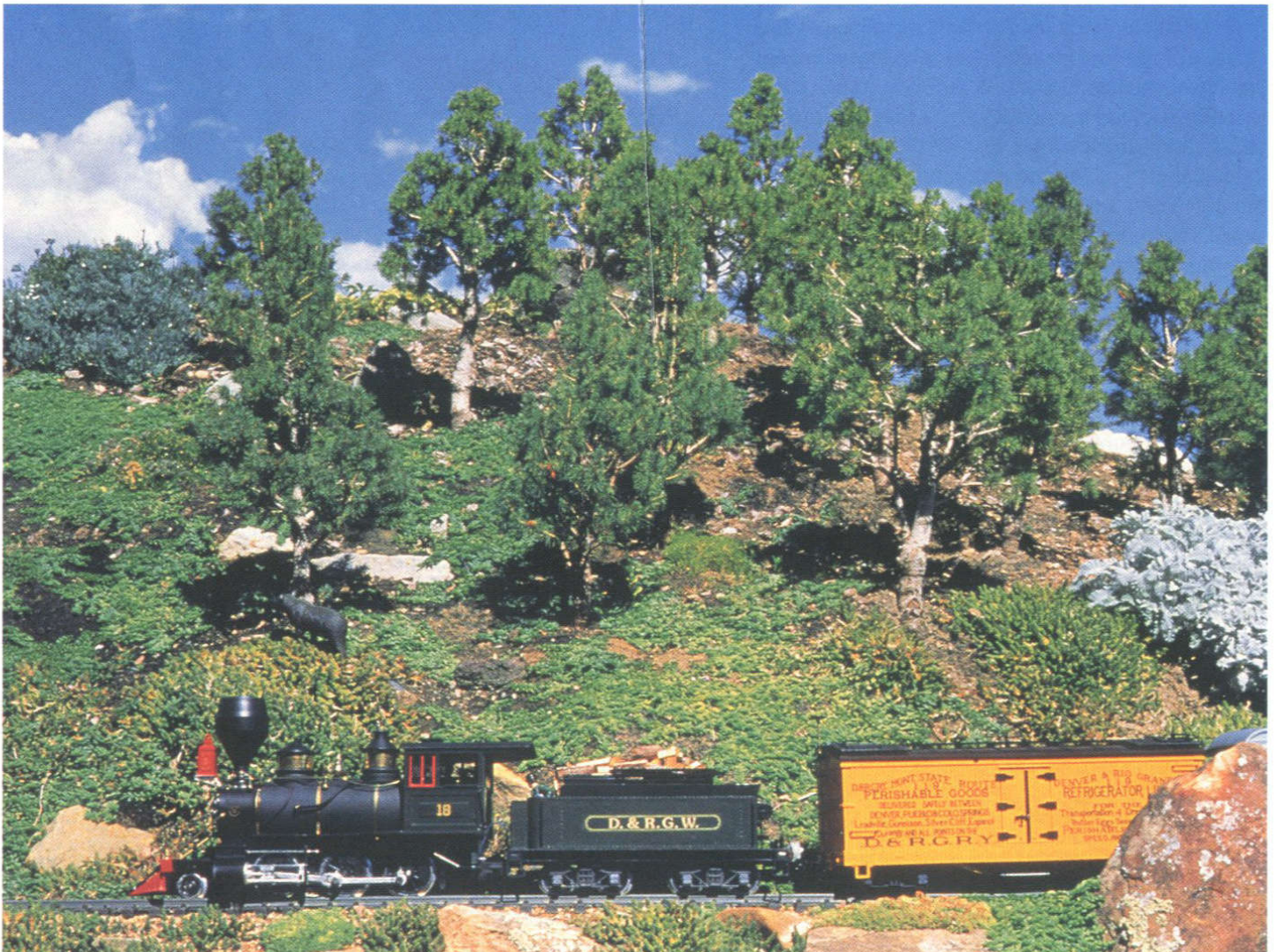
Moving landscaping materials is hard work, but it usually only needs to be done once. Even if your line expands later, the major work will have been done at the beginning. If you intend to include a rock garden,

or even a few stone outcroppings to suggest a mountainous region, these areas should be initially planned into the line and not added later as afterthoughts.

Rocks can be purchased from rock yards by the pound. The price will vary depending on how attractive or scarce the stone is. Choose your rocks carefully, and don't mix types. Generally, a natural outcropping will consist of only one type of stone. Select rocks of different sizes, too. Stones all the same size will be boring to work with if you are trying to create an interesting setting. A variety of sizes will add interest and challenge your design skills. Read some books on rock gardening that discuss rock placement. It isn't as easy as you might think.

Sometimes you can get dirt free for the hauling. The alternative, of course, is to buy it from a garden center. Dirt is sold by the “yard.” A yard of dirt is actually a cubic yard, or 27 cubic feet. If you are filling a

On Annie and Joe Mellen's railway in Colorado, a forest of selectively pruned dwarf Alberta spruce sits atop a carpet of ground-covers. The locomotive is LGB and operates on track power.



MARC HOROVITZ

space between two retaining walls, it may be fairly easy to calculate how much dirt you need. On the other hand, if you are building hills and valleys, it might be quite difficult. The cost of the dirt will vary based on what's in it. High-grade potting soil or topsoil will probably be the most expensive, and dirt that is mostly sand or clay will be the cheapest. It is usually well worth the nominal charge to have the dirt delivered to your house by a dump truck.

Once your yard is filled with mountains of dirt and piles of rocks, then what? That's when the hard work begins. You must now start shifting the dirt and placing the rocks so that your grand plan is realized. Rock placement is perhaps the most difficult task, both physically and aesthetically. I've known people to reposition rocks weighing over a ton three, four, or more times, usually with the assistance of a crane, to make sure it is just right. After all, it may rest where you put it for centuries. Do it right the first time.

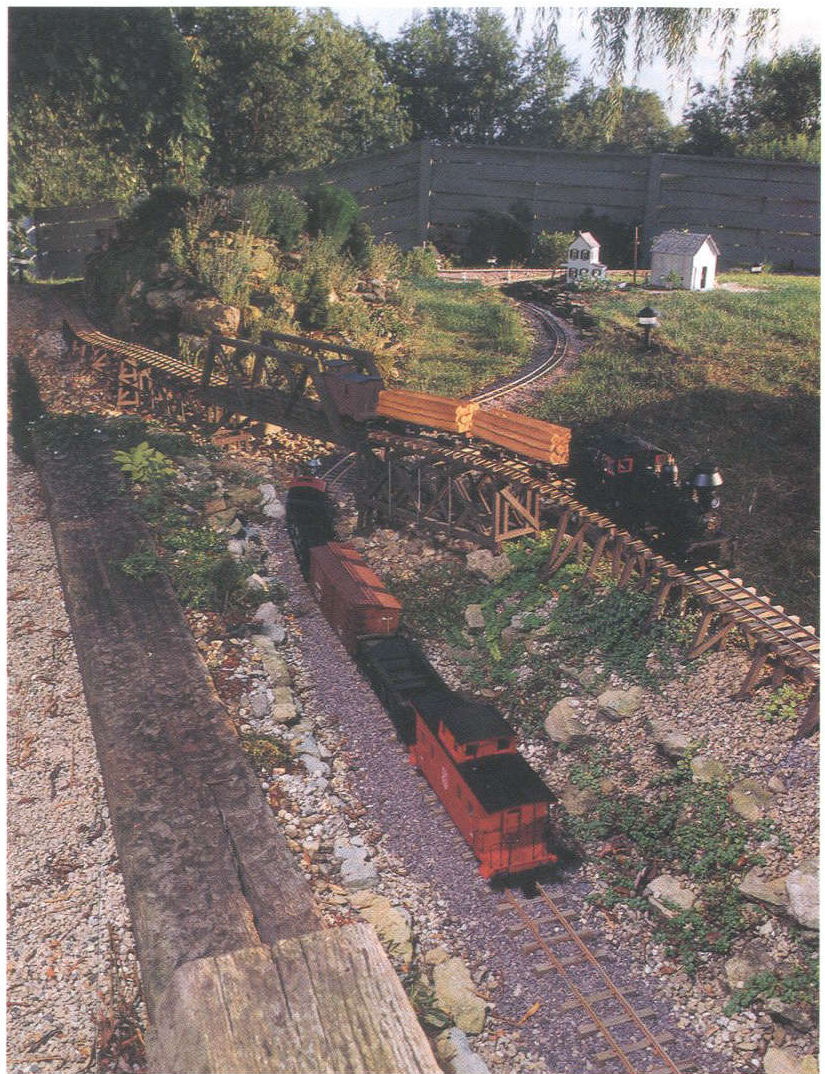
Dirt can be built up until it looks right or fulfills its function. Compared to rocks, it is easy to move around, so don't hesitate to change your mind. You can change it later, too, if you must. It has been suggested by experienced garden railroaders that you should get the dirt where you want it, then come back in a year and build the railway. During this year the dirt will have settled and compacted about as much as it's going to, and you'll have a steady and stable surface upon which to build your roadbed.

Of course, if you don't want to wait a year, there are things you can do to speed the process. Tamping it is a must, and your hardware store will have a special tool for this. It is nothing more than a heavy chunk of metal at the end of a pole. I suggest thoroughly tamping the route of the track and then give it a good watering. Do this about three times in as many days, and you should have a relatively stable track bed. There will always be some shifting, but this can usually be compensated for with the roadbed.

Mulch

Leaving great areas of exposed dirt lying around is just asking for trouble. If you are building an extensive line, I suggest that you do it in small steps, finishing off one area before going on to the next. If you build an entire set of foothills in your yard and then neglect them, the first thing you know they'll be covered with weeds. And they'll also be subject to erosion the first time it rains, leaving you with unplanned gullies and mud flats. The dirt needs to be covered.

Grass in the form of sod is a reasonable expedient,



JIM FORBES

even if you don't ultimately plan to have grass there. Another good plan is the use of mulch. This can be bark chips, small stones, wood chippings, or other things. The mulch will prevent light from reaching the ground, thus inhibiting the growth of weeds. Water will gently seep through and not erode the exposed earth.

The garden

Many beautiful and effective garden railways have been created by people who claim not to be gardeners. Gardening is a fascinating and important aspect of the hobby and railway gardening has become a sub-hobby in its own right. It is the garden that often ties the separate elements of the railroad together, and it draws entire families into garden railroading.

It is impossible in a booklet of this nature to educate you about the myriad aspects of the pastime of gardening, or even to give you a comprehensive list of plants that grow well in your area. Rock-garden plants go especially well with garden railways. Look into your local rock-garden society. Go to garden centers, read gardening magazines and books, and visit public and private gardens in your area.

When choosing plants for the railway, carefully

A Bachmann Shay takes a short train of logs over a scratchbuilt trestle on Terry and Carole Seese's Twin Lakes Lumber and Mining Railroad.

Landscaping and scenery

consider the function the plant must serve, and choose accordingly. Do you want something that imitates a lawn for the yards around the houses? Or how about a plant that can be planted in multiples in a line as an informal miniature hedge (or cut into a formal one)? Miniature trees can be used *en mass* to suggest a forest, or a single, fine specimen can be used to delineate an important point on the line. Set in rows by the track, miniature cypress can provide a formal gallery as an entry to the station area.

Plants in great diversity can be used to soften the rock garden and fill in the areas between the stones. If you choose your plants carefully, something will be in bloom during most of the growing season. If you have an area that needs filling quickly, you might consider a more “invasive” plant. More slow-growing plants can be added later, and the invasive ones removed.

The scale of the plants is something that should be seriously considered. How big will it grow if left on its own? You don’t want to spend all of your free time trimming plants that have grown too large for

their settings. Do your homework and choose your plants carefully.

As a general rule, there are three zones of planting in the garden railway. Plants near the track, or near the more developed parts of your line, should be closely in scale with the trains, people, and buildings. As you get farther from the model setting, or in places where the trains pass through more rural areas, the plants can be larger, though you might want to continue using plants with smaller-scale components (leaves, branch structure, etc.). Farther back from this area, the plants can be as big as you like and, often times, the bigger the better, as these very large plants will provide a pleasant green backdrop to the garden railroad.

What we’ve covered in this booklet is a bare-bones introduction to the fascinating pastime of garden railroading. This form of model railroading is exceedingly gratifying and it can be pursued in more individual and creative ways than probably any other. Go outside and enjoy! **II**

Chuck & Anabeth Dollins’ C&A Railway was designed for watching. Plants have been carefully chosen for their slow growth, small characteristics, color, and adaptability.



MARC HOROVITZ

Garden railroad plants

Choosing plants for your garden railway should be just like choosing plants for your own garden. When planning any garden, you need to first consider your local soil conditions and climatic conditions in order to select the best-suited varieties for your particular setting. In railway gardening you should also consider one additional thing: scale. By using plants with small leaves, twigs, and blossoms you add to the realism of the garden as a whole.

Perennial groundcovers, creepers, and other low-growing plants

These are hardy plants that appear year after year and most offer a blooming period ranging from two weeks to several months.

Creeping veronicas (*Veronica liwanensis*, *pectinata*, and *rosea*) Tight, low-growing groundcovers with petite (usually blue), colorful flowers.

Thymes (*Thymus* spp.) Many selections available, from groundcovers to tiny shrublets. Most have fragrant leaves.

Sedums or stonecrops (*Sedum* spp.) Succulent groundcovers for hot, dry places. Many have colorful blossoms.

Irish, Scotch moss (*Sagina subulata*, S.s. 'Aurea') These moisture-loving plants are often used to simulate lawns and meadow grass. These need some shade.

Corsican mint (*Mentha requienii*) Tiny, round, green leaves on a dense mat. It has a minty fragrance when crushed.

Snow-in-summer (*Cerastium tomentosum*) Vigorous grey-leaved groundcover with white blossoms.

Miniature shrubs and trees

With just a little extra care, many of these tiny shrublets can be used to resemble miniature trees in a railway garden.

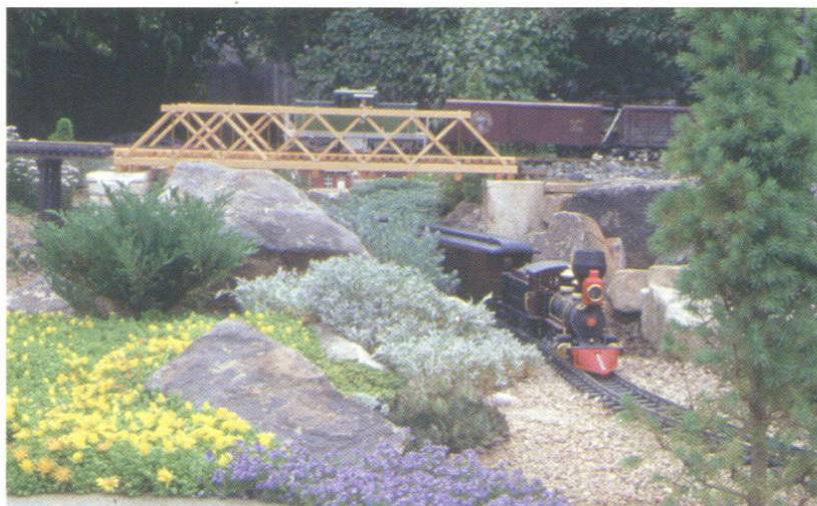
Miniature roses Numerous hybrids available. Select those with the tiniest leaves and flowers.

Miniature rhododendron (*Rhododendron impeditum*) Brilliant lavender flowers and tiny, evergreen leaves.

Compact lavender cotton (*Santolina chamaecyparissus* 'Nana') Finely textured silver-grey foliage with a shrub-like habit.

Miniature boxwood (*Buxus microphylla* 'Kingsville Dwarf' or 'Morris Midget') Evergreen and extremely slow-growing.

Miniature elm (*Ulmus parvifolia* 'Hokkaido' or 'Seiju') Tiny leaves and branches help create a scale tree.



BARBARA HOROVITZ

Dwarf and slow-growing conifers

Evergreens add much-needed color and texture to a garden railroad, especially during the winter months.

Dwarf Alberta spruce (*Picea glauca* 'Conica') Bright green conical shape, often used in groves to represent a miniature forest.

Dwarf Japanese garden juniper (*Juniperus procumbens* 'Nana') Tight, ground-hugging evergreen mat.

Dwarf Irish juniper (*Juniperus communis* 'Compressa') Very narrow column of grey-green foliage.

Miniature birdsnest spruce (*Picea abies* 'Little Gem') Dark green miniature version of a birdsnest spruce.

Blue star juniper (*Juniperus squamata* 'Blue Star') Silvery blue needles on a compact grower.

Dwarf Hinoki cypress (*Chamaecyparis obtusa* 'Nana', 'Golden Sprite' and others) Extremely slow growing, bunlike plants.

Hardy groundcovers add living color to the garden railway.



MARC HOROVITZ

This tiny Chinese elm grows to 18 inches.



PAT HAYWARD

Small-scale annuals

Annuals can't be beat for non-stop color. Choose those with fine-scale leaves and blossoms for best effect. Many may even re-seed!

Sweet alyssum (*Lobularia maritima*) Tiny, shining-white blossoms create solid color for months. Fresh, sweet fragrance.

Trailing lobelia (*Lobelia erinus*) Often used in hanging baskets, lobelia comes in an array of deep colors from blue to red to white.

Moss rose (*Portulaca*) A carnival of colorful flowers. Succulent foliage makes moss rose perfect for hot, sunny places.

Dwarf marigolds (*Tagetes*) Many cultivars with yellow to orange flowers. Those with small flowers and delicate leaves are the best suited to the railway. **II**

Annuals, such as the sweet alyssum, provide summer-long color and fragrance.

Scale and gauge¹

The tables printed here will answer what is perhaps the most-often asked question *Garden Railways* hears: What are the differences between the scales and gauges? Over the years, all these scales and gauges have evolved, and some (which we have not listed) have died out. Granted, it is confusing, but we have attempted to print the correct information here in the most understandable form possible.

It may take some study to learn it all. If you don't feel like taking the time, just use the information below as a reference. **11**

Proportions of a model to its prototype

Scale name	Proportion	Written scale
1½" scale ²	1:8	1½" = 1'-0"
¾" scale	1:13.7	¾" = 1'-0"
16mm scale	1:19 (approx)	16mm = 1'-0"
15mm scale	1:20.3	15mm = 1'-0" ¹¹
LGB (G scale)	1:22.5	.533" = 1'-0"
½" scale	1:24	½" = 1'-0"
—	1:29	.414" = 1'-0"
1 scale	1:32	⅜" or 10mm = 1'-0" ⁹
0 scale (USA)	1:48	¼" or 7mm = 1'-0" ⁹

Track gauges commonly used in the garden

Gauge 3	2½" or 64mm ⁹
Gauge 1 ⁴	1¾" or 45mm ³
(No name)	1½" ¹⁰
Gauge 0	1¼" or 32mm ⁹

Planning dimensions for G-scale (and related) trains on gauge-1 track

Minimum track radius: 2'-0" ⁸

Minimum track spacing, measured from track centerlines: 6.5" (allow more on curves)

Clearance from center of track to structures:
Straight track 2¾"
Curved track 3½"

Minimum height for tunnels: 8½"

Track gauges as they relate to the different scales

Scale	Actual gauge	Represented gauge	Scaled gauge
1:8	Ga. 1	15" narrow	14"
1:13.7	Ga. 1	2' narrow	2'-0"
1:19 ⁵	Ga. 0	2' narrow	2'-0"
1:20.3	Ga. 3	Standard ⁶	4'-2¾"
	Ga. 1 ⁷	3' narrow	3'-0"
	Ga. 0	2' narrow	2'-1"
1:22.5	Ga. 3	Standard	4'-8½"
	Ga. 1	3' narrow	3'-3½"
	Ga. 0	2' narrow	2'-4½"
1:24	Ga. 3	Standard	5'-0"
	Ga. 1	3' narrow	3'-6"
	Ga. 0	2' narrow	2'-6"
1:29	Ga. 1	Standard	4'-3½"
1:32	Ga. 1	Standard	4'-8"
	Ga. 0	3' narrow	3'-4"

Footnotes

1. Scale is simply the proportion of the model to the full-size item, and gauge is nothing more than the distance between the rails. The terms are sometimes incorrectly used interchangeably.

2. 1½" scale is commonly used for larger, ride-on trains. However, there are some modelers who are using this scale on gauge-1 track to represent 15"-gauge railways, such as those designed by Sir Arthur Heywood in Britain. We've not listed the larger gauges in this scale because they fall outside the scope of *Garden Railways Magazine*.

3. There is a slight discrepancy between the metric measurements and the imperial. Today, gauge 1 is considered to be 45mm.

4. Gauge 1 is commonly—and incorrectly—called "G gauge" by some manufacturers and dealers. This is an unfortunate misnomer that merely adds to the confusion. G-scale trains run on gauge-1 track.

5. 1:19, or 16mm, scale evolved from gauge-0 (32mm) track. The idea was to choose an existing gauge and design models of 2' gauge trains around it, which is why this scale works out quite well. However, modeling to other gauges in this scale is almost nonexistent, so only gauge 0 has been included here.

6. Standard gauge on full-size railroads is 4'-8½". Anything less is considered narrow gauge. Anything more is considered wide or broad gauge.

7. There was a gauge 2 (2"), which was quite popular in the early part of the century, but has long since died.

8. While 2' radius is commonly used, trains tend to look much better going around wider curves. A rule of thumb is to use the widest radius your space will allow. Six to ten feet is not unusual.

9. There is a slight discrepancy between the metric measurements and the imperial.

10. The correct gauge for accurate modeling of 3'-gauge trains in ½" scale. Little is commercially available in this gauge.

11. The correct scale for accurate modeling of 3'-gauge trains on gauge-1 track.

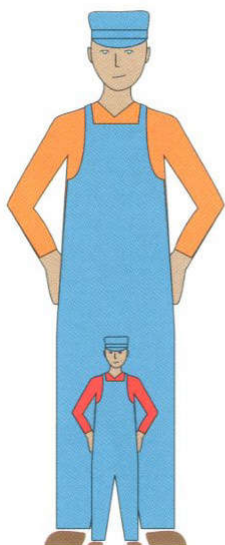


Photo gallery



STEVE HART

Garden railroading is many things to many people. It cannot be stereotyped or categorized and, of course, there's no one right way of doing it. It is a diverse and abiding pastime of great depth. There are so many different aspects to it that you'll never lack for new areas of pursuit and there are no hard and fast rules to constrain you.

The difference between traditional indoor model railroading and garden railroading is the difference between realism and reality. Indoors, the goal is the imitation of reality. But when you are working outdoors, you face the same realities that full-size railroads face, including all types of weather, changing seasons, different climates, and a variety of materials with which to do your work.

The photo gallery on the following pages will give you a brief glimpse of what just a few people have achieved in the garden. We hope that these images will inspire you to try your own hand at this wonderfully diverse and satisfying pursuit. II



CHARLEY LIX

ABOVE: The train, departing Summit Station on Charles & Elizabeth Garrett's Matadero Valley Railroad, is dwarfed by the lush, green hillside. Scale houses overlook the track on this California railroad.

LEFT: *Arthur* pulls onto the big bridge running towards the strawberry fields at Belleville on Charley Lix's Excelsior Ditch Company Railway in Nevada. This railway is $\frac{7}{8}$ " scale running on gauge-0 track.

The best way to get started



**Sign-up for
our FREE
e-mail alert!**



Come and join us today!

There is no faster way to share information than on the Internet. For over six years Large Scale Online has kept new and experienced garden railroaders up-to-date.

How do we do it?

- Our WorkShop discussion forums help get your specific questions answered.
- Thousands of pictures give you "real-life" garden railroad examples.
- We can direct you to a local club. Find like minded people that have done it before.
- Discounts at **www.gardenrailwaygear.com**
Find the products you need to get started with your garden railroad - *fast & for less!*
- Special reports directly from local shows and National Garden Railway Conventions. Exclusive pictures, videos and more...

What do people think?

With me it's just part of my everyday routine...get up, get a cup of coffee, open up Large Scale Online!

Thanks for this site. For over six years it has been a great starting place for everyone of all skill levels.

Thanks for the discounts that you offer on the products I was looking for. My dollar goes farther at your web site.
I need that.

I just joined. What a resource!

WWW.LARGESCALEONLINE.COM

Photo gallery



LEONARD WORTLEY

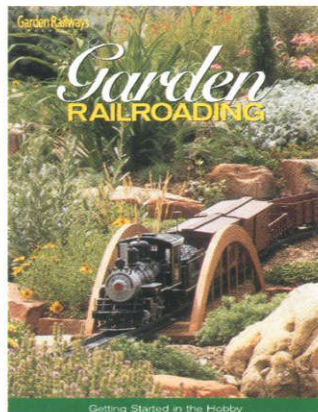
This locomotive, running on Leonard Wortley's unnamed, raised rail-road in England, was scratchbuilt. It runs on battery power and is radio controlled. The signal box behind the locomotive was also scratchbuilt.



JOHN COUGHLIN

A Chicago & North Western GP-9 pulls a short train under the waterfall while a switch engine waits at the dead end (lower right) on the Coot Lake Railway in Wisconsin, owned by John Coughlin.

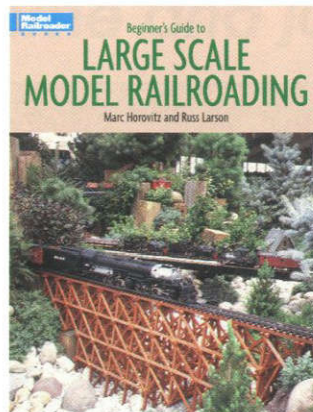
Make Your Backyard Come Alive!



Garden Railroading: Getting Started in the Hobby

Model railroaders, gardeners, miniaturists, and even those looking for home improvement ideas will appreciate this guide. Compiled from the pages of *Garden Railways* magazine, this comprehensive guide addresses the subjects most often raised by beginners and seasoned hobbyists. 8 1/4 x 10 3/4; 144 pages; 230 color photos; 60 illustrations; softcover.

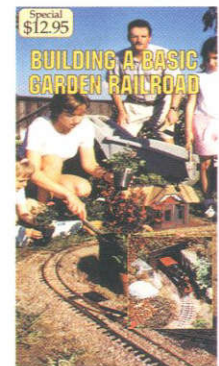
12217 • \$21.95



Beginner's Guide to Large Scale Model Railroading

Introduces the exciting world of trains that can operate indoors or outside. Photos, tips, techniques, and diagrams show how to plan, build, and operate large scale garden railroads. 8 1/4 x 10 3/4; 96 pgs.; 70 b&w and 80 color photos; 6 diagrams; softcover.

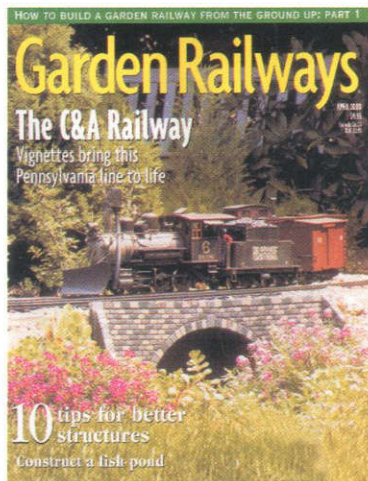
10-7940 • \$21.95



Building a Basic Garden Railroad

Learn how to construct a garden railroad as a weekend project, from laying track to picking the right plants. Clear, step-by-step presentation assures your success and lots of family fun! 19 minutes; VHS; color.

10001 • \$12.95



Garden Railways Magazine

Celebrate the fun-filled hobby of indoor and outdoor model railroading! Every issue is packed with inspiring projects, landscaping and planting tips, product reviews, and more!

**Subscribe Now and save
15% off newsstand price!**

6 Issues — Just \$24.95

(\$31.00 Canadian/Foreign)

You'll discover how to:

- Improve the Landscape Around Your Railway!
- Operate Your Train!
- Discover the Best New Trains, Products, and Accessories!
- Plus Plans, Reviews, Industry News, Convention Reports, and Much More!

Garden Railways

Call 1-800-533-6644

Call Mon-Fri, 8:30am-5:00pm Central Time.
Outside the U.S. and Canada, call 262-796-8776.
Please have your credit card ready.



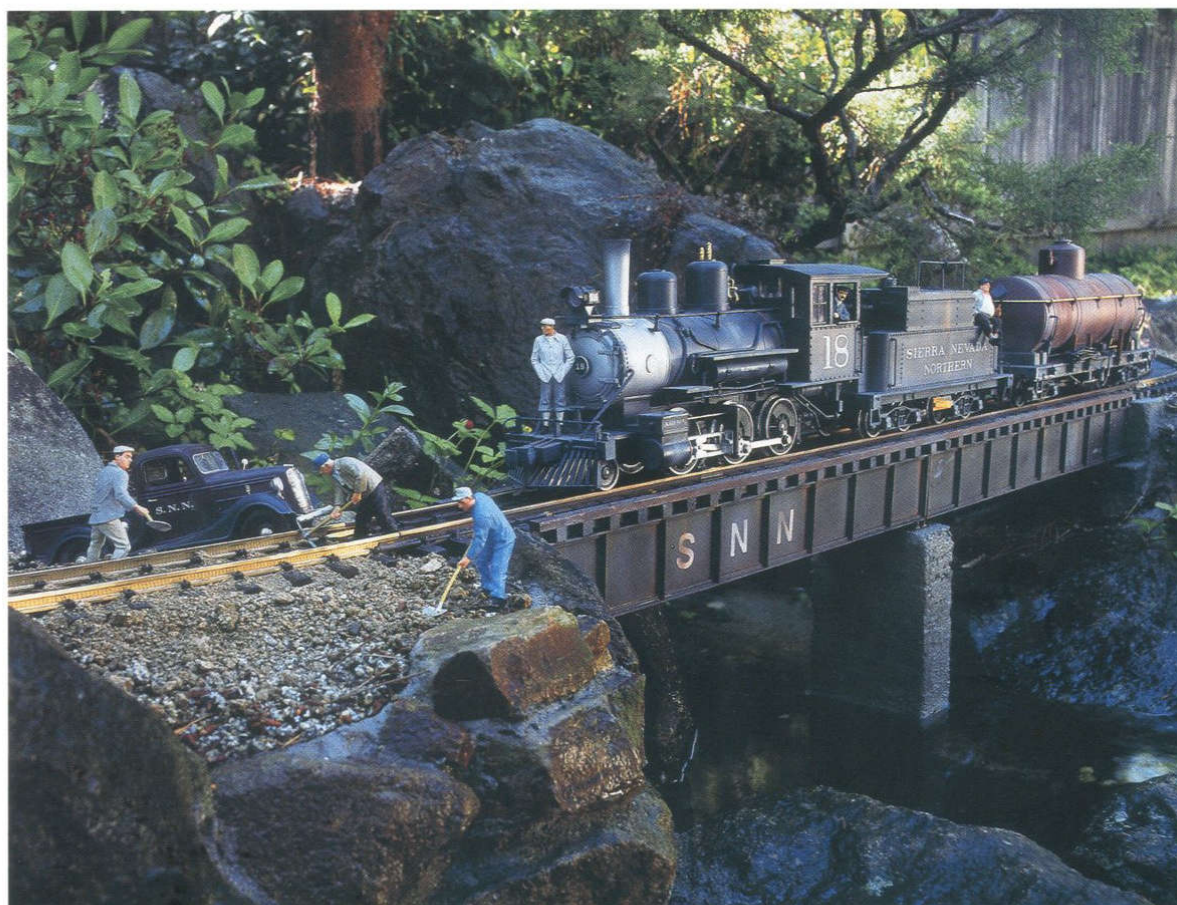
Order online at www.gardenrailways.com

Photo gallery



TOM SPEER

Tom Speer scratchbuilt the coaling tower on his Hard Rock & Dynamite Railroad in Colorado after a prototype on the Rio Grand Southern. The 2-6-6-2 locomotive was kit-bashed and is modeled after a Feather River logging locomotive.



ANDREW DE LUCIA

On Andrew De Lucia's Sierra Nevada Northern Railroad in California, engine N° 18 waits on the bridge at sunset while track workers finish their job. The engine and water car are from LGB.

Got questions about trains?

Get up to date information about garden railroading at the Internet's largest railroading portal: Trains.com. Backed by *Garden Railways* Magazine, Trains.com is your source for information about building a garden empire. From product news and reviews to forums and web cams, we've got it all!



trains.com

Find it all in the Train Shops!



trainshops.com

Shop online with confidence in our secure mall, TrainShops.com. Shop with hobby shops from around the country with the backing of the most trusted names in hobby publishing: *Garden Railways* and Kalmbach Publishing Company. Find all the products you need to build the garden railroad of your dreams!

St. Aubin Station

Your Source for **ALL** your Large Scale Needs

1-888-STAUBIN
(782-8246)

Bachmann

Starter Sets



90030 Clementine Mining Set 79.89



90020 The Ringmaster \$129.89

TWO NEW 10WHEELER SETS!
SALE \$99.89

90038 Chattanooga Choo-Choo Set \$99.89

90039 Casey Jones Set \$99.89



90016 Royal Blue B&O \$139.89



90031 Great Northern \$139.89



90032 Bumble Bee \$124.89



90033 Tweetsie Railroad \$139.89



90034 Rocky Mountain Exp. D&RG \$124.89



90035 Prospector \$139.89

Bridgewaters Transformers

Pure Filtered DC
Power Packs and Transformers

Mag 15 15Amp Power Supply	177.89
Mag 5S 5Amp 24volt 1 track control	179.89
Mag 10S 10Amp 24volt 1 track control	219.89
Mag 15S 15Amp 24volt 1 track control	259.89
Mag 200 15 Amp, 2 Track Control	479.89
Mag 400-30 30Amp, 4 Track Control	699.89
Mag 1000 15 Amp, Radio Control	479.89
Mag-Mate 100 1 Track Controller	159.89
Mag-Mate 200 2 Track Controller	279.89
URC 15 add on remote control 24 V	189.95
10 AGW 10 ga. 105 strand copper outdoor wire pair .79ft	

All Prices subject to change without notice
Prices good for Phone, Mail, Fax & Internet/email orders only
IL Residents add 6.5% Sales Tax
15% Restocking fee on approved returns
UPS Shipping & Insurance minimum \$6.95 per order
Shipping Charges are Non-Refundable

Hartland

Inner Urban Street Car



09230 Painted Unlettered Red \$229.89

09231 Pacific Electric Red \$229.89

09232 C&NW Yel/Gr Limited Edition \$229.89

Digital Sound Installed Add \$189.89

Rail Motor Car



09220 Painted Unlettered Gr/Black \$229.89

09221 New York Central Green/Black \$229.89

09222 D&RG Yellow/Black \$229.89

09225 C&NW Yel/Black Limited Edition \$229.89

Digital Sound Installed Add \$249.89



Railbus: Doozie

09200 Rio Grande Southern Silver \$169.89

09201 Painted Unlettered Green \$169.89

09250 Rail Bus & Trailer Set RGS Silver \$259.89

09251 Railbus & Trailer Set Unlett Green \$259.89

09252 Bus & Trailer Rio Grande Yel/Black \$259.89

09253 Bus & Trailer C&NW Limited Edition \$259.89

Digital Sound Installed
Add \$249



American 4-4-0

09550 D&RG Black	\$318.89
09552 Pennsy Green	\$318.89
09554 Undec Black	\$318.89
09556 D&RG Maroon	\$318.89
09558 Undec Maroon	\$318.89
09560 Virginia & Truckee Maroo	\$318.89
09562 Jupiter Red	\$318.89
09564 Santa Fe Black	\$318.89
09565 UP Black	\$318.89
09566 ATSF Black/Silver	\$318.89
09572 C&NW Limited Edition	\$318.89

Lehmann



SALE!
Amtrak Sets
\$79.89
2 FOR \$139.89

ORDERS
888-STAUBIN
(888-782-8246)
INFO
815-334-9100

Shop Online
www.LGBPOLA.com

USA



R-22300 SD40-2 \$249.89

SF, D&RGW, UP, *SP, CSX, Conrail, *BNSF, Amtrak, Chessie, Burlington, *Burlington Northern



R-22200 GP-38-2 209.89

Undec., Burlington, Leighhigh Valley, CSX, BNSF, D&RG, UP, SF, Conrail, SP, PRR, *Amtrak



R-22100 GP-7, GP-9 199.89

Undec, Burlington (3 var.), NYC, ACL, C&NW, *Chessie, UP, SF Passenger, *Conrail, GN, PRR, *SP, Newhaven, SF freight, Boston & Maine, SP (widow), CP, D&RG, Alaska, Rock Island, Western Pacific, *Burlington Route



20 tonner
\$59.89
Chessie & Conrail
20 ton
Undec., Burlington, NYC, AC, C&NW, UP SF, SP, PRR, X-mas \$79.89

Lehmann Toy Train

Lehmann Toy Train®

92090 LG&B Diesel Loco	79.89
92770 Freight Starter Set w/ Dinosaur	SALE 109.89
92788 Circus Starter Set	149.89
93775 Passenger Starter Set	SALE 99.99
96172 Steam Sound Tender	39.99
94008 Exploding dynamite car	43.99
94042 LG&B Crane Car	39.99
94059 LG&B VW Beetle Car	39.99
94061 Stake bed car w/ cattle	34.99
94065 Red Caboose w/ coupla	34.99
94069 Flat car w/ end loader	32.99
94092 Aquarium Car	43.89
94160 LG&B log car	34.99
94169 LG&B flatcar w/ truck	32.99
94469 Helicopter car w/ launcher	24.99
94569 LG&B Case Tractor car	34.99
94605 Bubble Blowing Car	SALE 49.99
94507 Box Car Red	19.99
94905 Grow-a-Pet Car	39.89
94969 Animal Flashlight car	39.89
90953 LCE Intermediate Car	35.89
91950 Amtrak Express Train Set	79.89
91953 Amtrak Intermediate Car	35.89
91954 Amtrak Dining Car	35.89
94068 Pop up Dinosaur Car	43.89

Central Standard Time
HOURS

MON-FRI 9-6
SAT 9-4 SUN 9-1

*CLOSED SUNDAYS
JUNE - SEPT*



LGB

\$699.89



Digital Sound By Sierra

23191 Mogul Steam Loco 699.89
Available in: SF, UP, PRR, C&S, SRR, D&RGW

Starter Sets

20705 Zillertal Set w/ Sound	939.89
70246 Zugspitz Rack Train Set	499.89
70457 Baltimore & Ohio F7 ABA	999.95
70634 Ice Cream Super Set	449.89
72302 European Pass. Starter Set Sound	215.89
72323 Penn. Western Passenger Starter Set	253.89
72402 Work Train Starter Set, Sound	215.89
72423 Santa Fe Freight Western Starter Set	253.89
72560 Santa Claus Starter Set	SALE 239.89
73314 LG&B Pass. Starter Set Red/Yellow	215.89
73414 LG&B Freight Starter Set, Red/Yellow	215.89
70642 RHB Luxury Train Set, Ltd.	1299.95
70657 NYC 20th Century Set	1739.89
89591 Rigi Cable Car Set w/ Transformer	143.89
Wilson Brothers Circus Set, New	1599.89

Track & Acc.

10000 12" Straight	Box of 12 for 34.89
10003 RR Ties	Box of 50pc 71.89
10005 5ft Brass Rails	Tube of 20pc 107.89
10600 24" Straight	Box of 12 for 68.89
10610 48" Straight	Box of 6 for 68.89
11000 4" Diameter Curve	Box of 12 for 34.89
15000 5" Diameter Curve	Box of 12 for 68.89
16000 8" Diameter Curve	Box of 12 for 71.89
18000 Curved Track, 15.5 ft Dia.	Box of 12 81.89
18020 Curved Track, 1/2 section	Box of 12 46.89
10001 Metal Rail Joiners	3.99
10020 Rerailer	12.89
10151 Reverse Loop Kit	29.95
10152 Double Insulating Track	19.95
10153 Single Insulating Track	19.95
17050 Track Magnet	3.99
17100 Track Contact	10.89
10260 Insulated Rail Joiner	3.89
10310 Bumper, Lighted	10.95
10320 Bumper, American Style	11.95
10560 Uncoupler, Electric	33.95
11500 Track Clips (28 Pieces)	3.89
12000 Manual Switch, Right	25.89
12100 Manual Switch, Left	25.89
12010 Electric Switch, Turnout Motor	17.89
12050 Electric Switch, Right	35.89
12150 Electric Switch, Left	35.89
12260 Electric Switch, 4 way	118.89
12360 Electric Switch, 3 way	118.89
13000 30 Degree Crossing	28.89
13100 90 Degree Crossing	28.89
13200 Crossing, R3 22.5 Degree	24.89
16050 Wide Electric Right	43.89
16150 Wide Electric Left	43.89
65000 Series Smoke Units	18.89
67319 Metal Wheels, Spoked	12.89
67403 Metal Wheels, Ball Bearing w/ Elec	23.89
67419 Metal Wheels, Large	12.89
68333 Interior Light Set	5.89
50101 10 Amp Jumbo Power Pack	449.89
50105 Wired Remote, Jumbo	69.89
50111 5 Amp Digital Power Pack 18 V AC	136.89
51750 EPL Switch Control Box, Momentary	49.95
55105 Digital Central Station	349.89
10340 Automatic Reversing w/ momentum	109.89

Accucraft Live Steam

Runs on Butane!



AC77-010 Ruby #1 \$299.89 **LIVE STEAM** AC77-012 Ruby 2 \$449.89

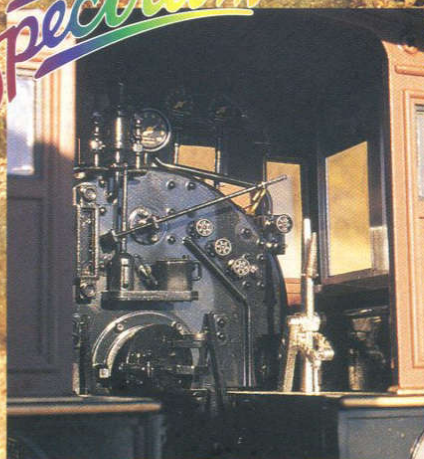
a Centennial *for the* Millennium

Marking the 100th Anniversary of our Nation's birth, the 1876 Centennial Exhibition was a showcase of American industry and culture. Among the locomotives providing transportation throughout the Exhibition grounds was a beautiful narrow gauge Baldwin 4-4-0, "the Centennial."

As we enter the new millennium, Bachmann's brand new *Spectrum*[®] 1:20.3 Large Scale Centennial recaptures the spirit of a growing nation. With fully operating Stephenson valve gear and three point suspension, this 4-4-0 is an outstanding performer. We invite you to celebrate the Millennium with a Centennial!



Spectrum[®]



ITEM

81397
81398
81399

DESCRIPTION

South Pacific Coast
Denver & Rio Grande
Painted, Unlettered

MSRP: \$799.95
SHIPPING NOW

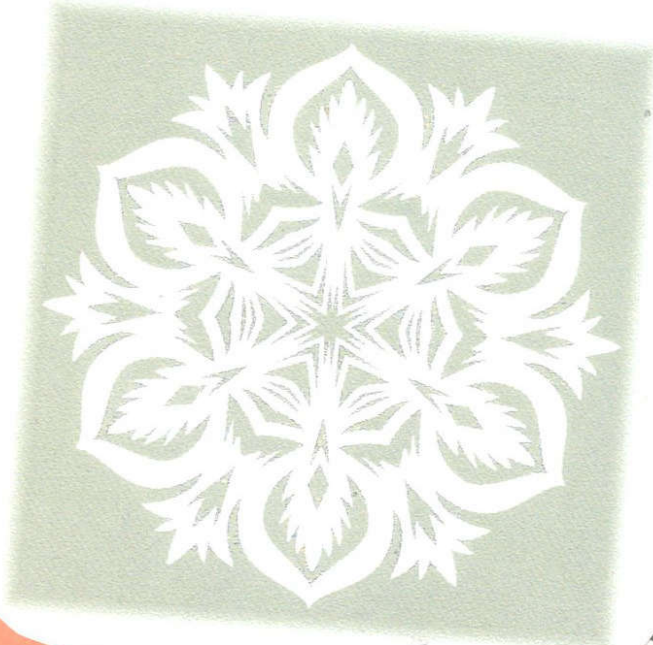


Real Passion

Tucson Botanical Gardens

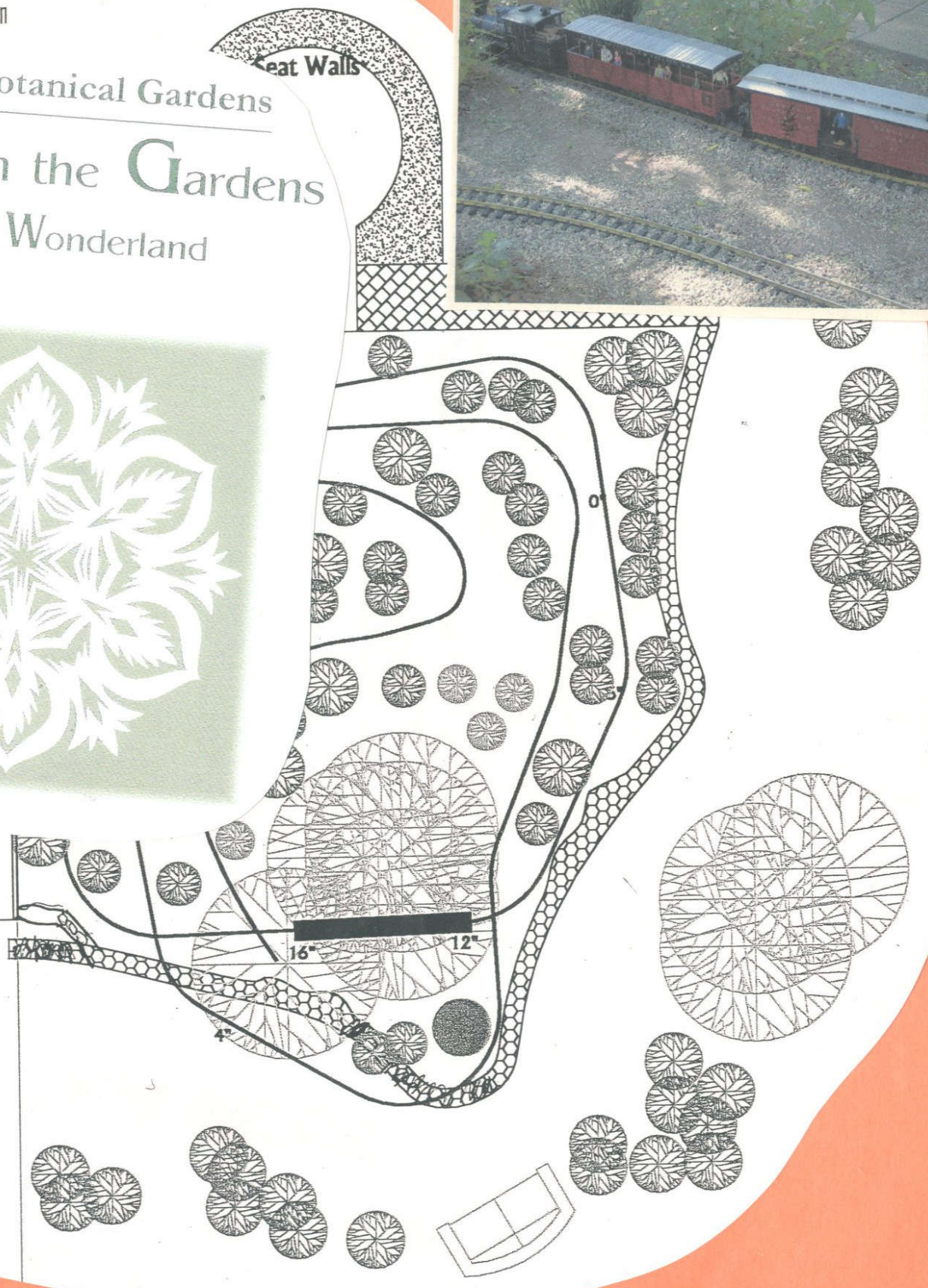
Holiday in the Gardens

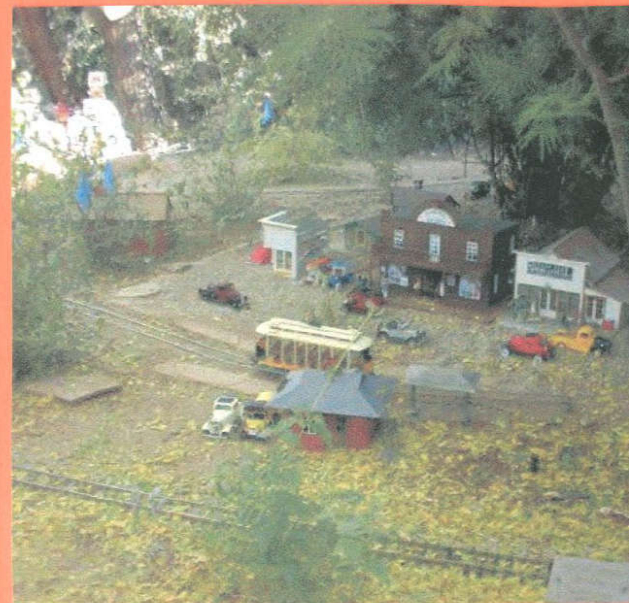
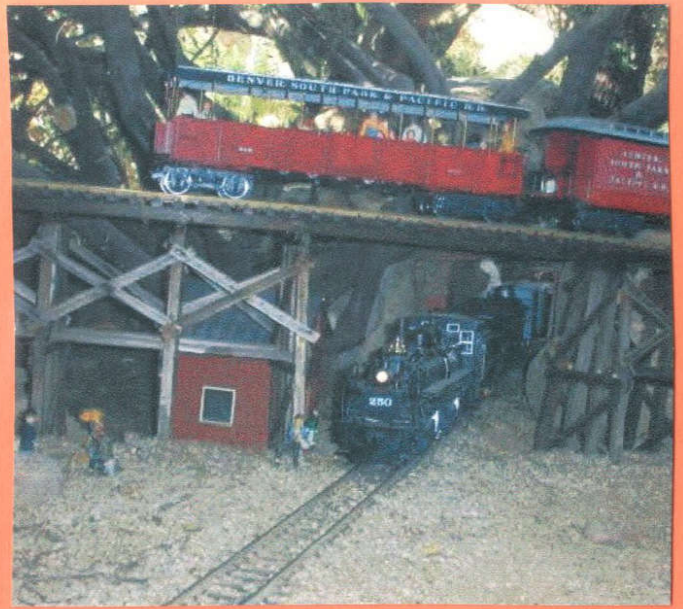
Winter Wonderland



Seat Walls

Covered Porch





A railroad at Gardens? They think they can

The sound of a locomotive coming through a tunnel in a large jojoba bush is somewhat unusual at the Gardens. The annual reading of the Gardens for Luminaria Nights has included the chuffing of engines, whistles, and assorted sounds from a miniature town developing under the shrubbery. About 25 volunteers from the Tucson Garden Railway Society have been hauling materials, sculpting the track-bed, building trestles, and laying track for "Holiday on Rails" a miniature railway in the heart of Tucson Botanical Gardens.

The scale used for the garden railroad is called G-Gauge. It is roughly one-half-inch to a foot – an engine might fit in a shoebox. Garden railroads stand up to outdoor conditions and only the size of the property limits the space allowed for their design. A transformer, plugged into an ordinary outlet, supplies low-voltage power to the track – safe enough to touch.

With 300 feet of donated track, club members have built the railway like the real thing, utilizing rocks, dirt, and gravel available; and "blasting" through obstacles as needed. Tightly assembled rocks were



At the Gardens

By CECILY GILL

used to build the waterfall, and reinforce steeper grades and approaches to tunnels and trestles. The track-bed was smoothed and sculpted before a layer of fine gravel was spread over it. Handmade redwood trestles were installed to carry trains over ravines. A finish layer of gravel was sealed with a glue/water mixture before the track was laid down. Now the railway is weatherproof – track components are made of rust-free materials.

The Society installed the railway within an established garden at TBG. Gary M., current president, says going to do it at home, in an open space and installing after the railway is in. He suggests using plants that need a lot of pruning, do attract animals, and are





VAL CAÑEZ/Tucson Citizen

Little choo-choos will make a big impact at "Holiday on Rails" at Tucson Botanical Gardens.

growing. Some members are meticulous about scale and choose plants accordingly. Gary says he prunes small plants up into tree shapes, and severely prunes bigger plants, like pines, to keep them under two feet tall. Some members prefer desert or cactus gardens and some enjoy whimsy and don't worry about scale at all.

Garden railways are maintained just as real railways are. They suffer from washouts, animal damage, subsidence, and heat expansion. Aside from natural disasters, tracks and towns need careful maintenance.

Engines need regular oiling, too. At the Gardens each morning volunteers will clean the track, hook in the electronics, get the trains on the track, and take charge of switching.

"Holiday on Rails" a Garden Railway will be running daily through Dec. 31, from 9 a.m. to 4:30 p.m. and can be viewed at your leisure with regular garden admission.

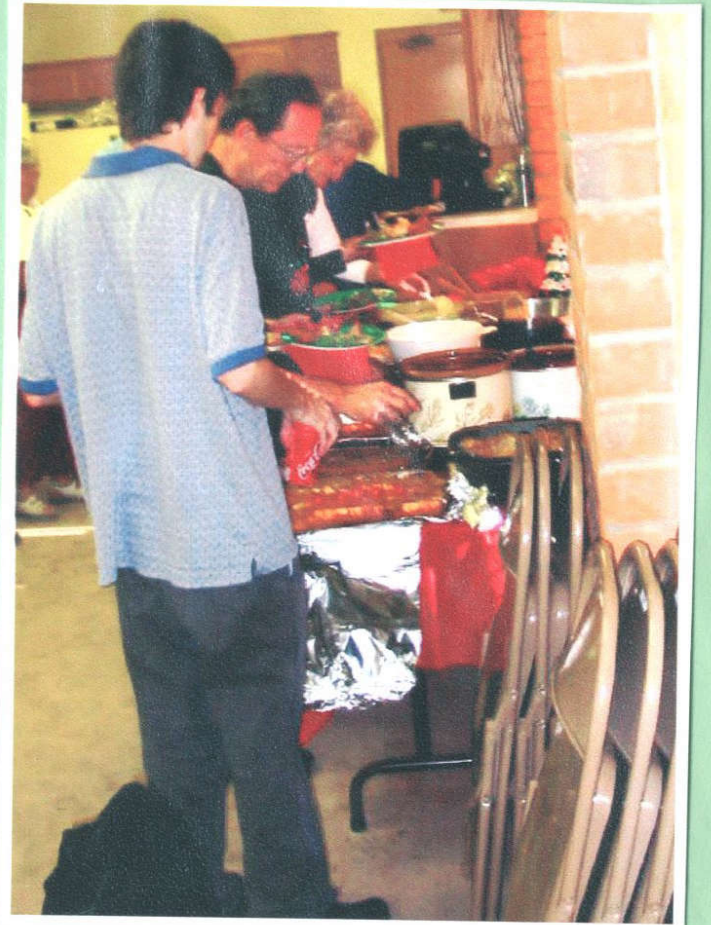
Tucson Botanical Gardens' Luminaria Nights, three evenings of candle-lit pathways, holiday musical groups, Santa, and the lighted Garden Railway will be Dec. 6, 7, 8 from 5:30 to 8

p.m. Admission to Luminaria Nights is \$5 Adults, \$3 TBG members, \$2 Children 3-11, free for children under 3 years.

The Tucson Garden Railway Society is a non-profit organization that educates about trains and garden railroads. It has 140 members (about 70 families). You can get information about the club by calling Gary Martin at 299-7428.

Cecily Gill is curator of the horticulture at Tucson Botanical Gardens, 2150 N. Alvernon Way. She has gardened there since 1986.

CHRISTMAS 2002



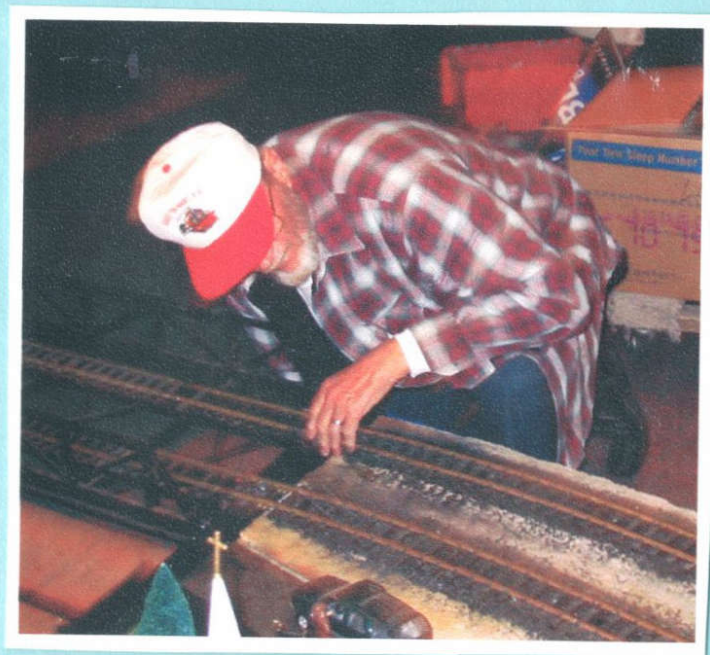
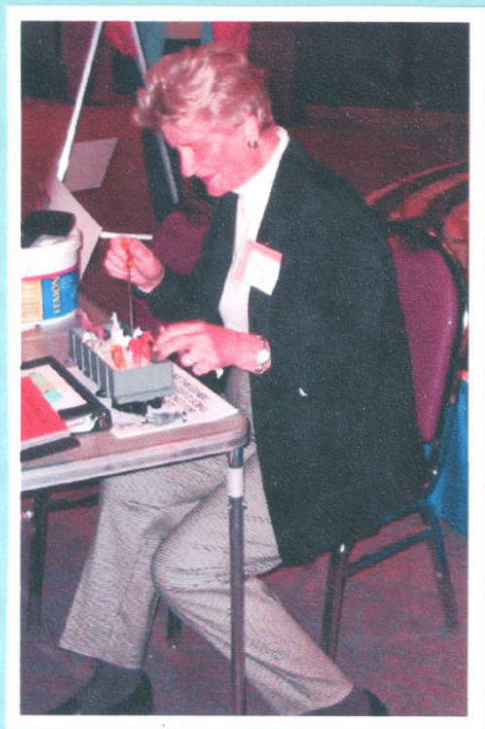


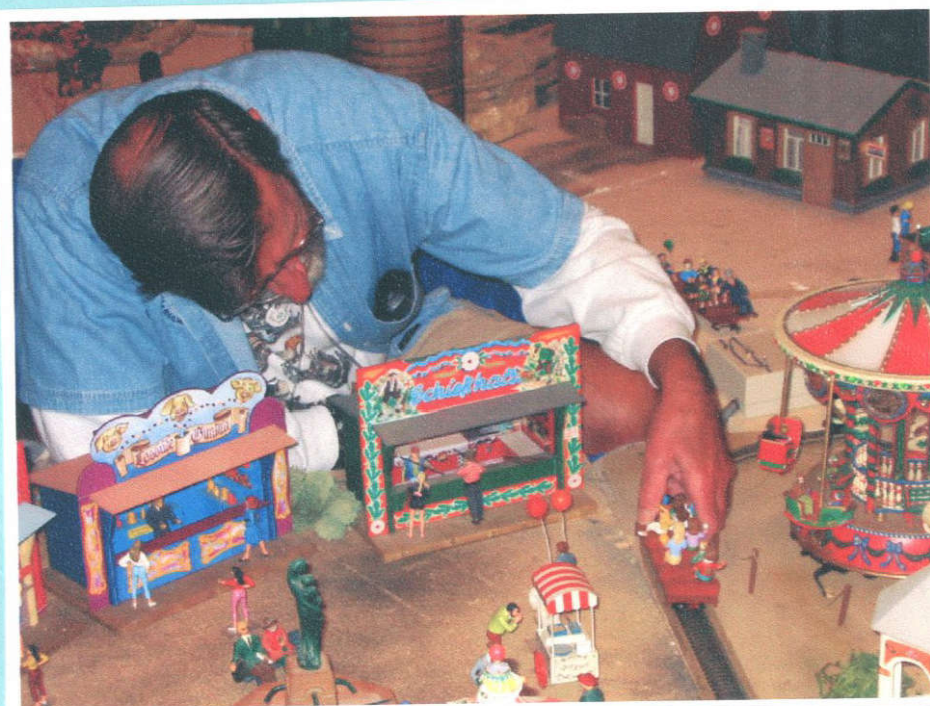
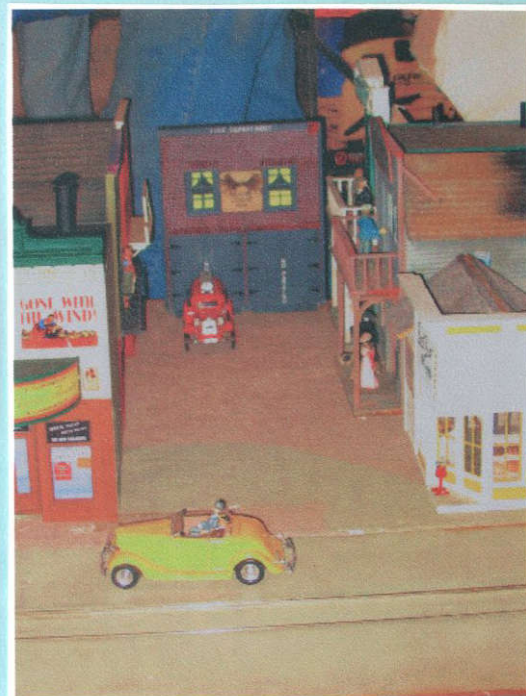
*T.G.R.S. at
St. Mark's Early Childhood Center
December 16 & 17, 2002*



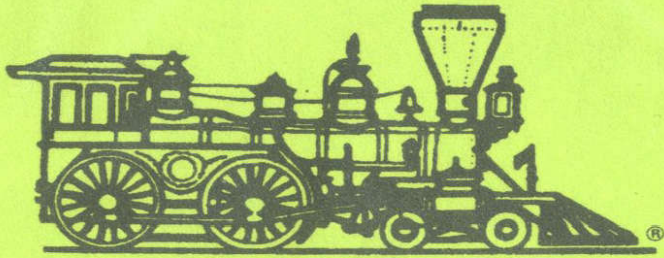


The
Arizona State
**Home
Show**
January 3 - 5
Tucson Conv. Center





Kids Are FREE!



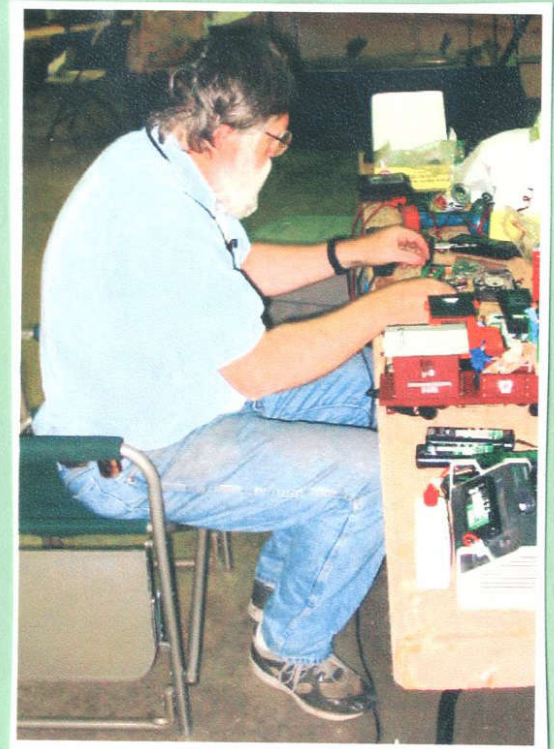
GREAT AMERICAN TRAIN SHOW

- * Hundreds of tables of national train dealers from across America!
- * A Fantasy play area where all kids can be Engineers!
- * 8 operating model train layouts!
- * 18 Free modeling workshops over the weekend!
- * Admission only \$7, good for BOTH days! Kids under 12 are FREE!

Saturday & Sunday, January 25 & 26, 2003
11:00am to 5:00pm, both days

Pima County Fairgrounds
11300 So Houghton Rd Tucson, AZ

Get a \$1 Off Coupon at www.gats.com!!



Toy trains on track this weekend

By Kevin P. Thé

ARIZONA DAILY STAR

Only once a year can you see more than 30,000 square feet of space filled with 10,000-plus toy trains in Tucson.

This weekend is that time.

The Great American Train Show — which makes about 85 stops per year all over the United States — will be in the Old Pueblo from 11 a.m.-5 p.m. Saturday and Sunday at the Pima County Fairgrounds, 11300 S. Houghton Road (Interstate 10, Exit 275).

The show will feature a vast array of model trains for sale and display, with plenty of expansive, intricately decorated track layouts.

Billed as "America's Largest Traveling Train Show," the two-day event promises to be a delight for all ages and levels of knowledge. Whether you're a die-hard en-

thusiast or simply have a casual interest, the show will have something for you, said media liaison Kurt Jablonski.

"It's kind of a way of bringing model trains to everyone," he said. "There's stuff for beginners and the hard-core collectors."

Jablonski said a visitor to the show is just as likely to find a Lionel train more than 50 years old as a brand-new model of Harry Potter's Hogwarts Express. Depending on the age, quality and rarity of a model, you might pay from \$5 to \$10 for a simple boxcar to more than \$400 for a vintage engine.

Kids with a little less dough in their wallets can still have a lot of fun checking out the working tracks and scenic displays, and they can even take turns operating a train set up specifically for them.

Adults, meanwhile, can enjoy one of several informational workshops — geared to both the beginner and advanced collector — sign up for a door prize or get their own train appraised.

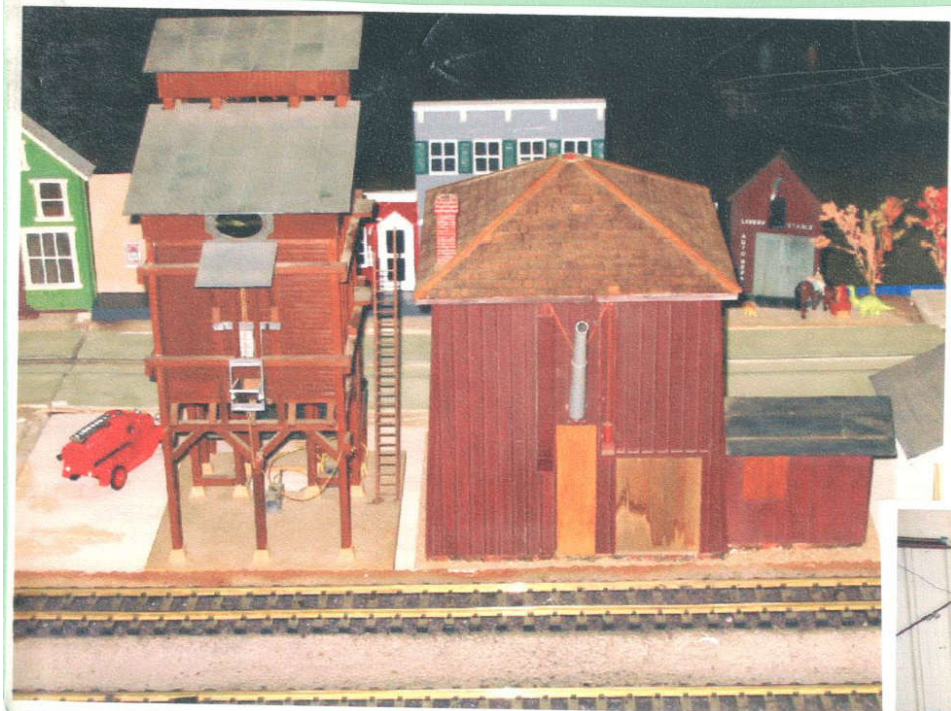
There also will be representatives of local clubs giving out information, and perhaps looking to recruit new members.

"A lot of people don't know, but there might be a (model train) club within 10 miles of their house," Jablonski said.

Cost to attend the show is \$7, and admission is good for both days. Children under 12 are admitted free with an adult.

For more information, call (702) 252-0334 or go online at www.gats.com, where you can also get a coupon good for \$1 off admission to the show. ☺

January
25 + 26
2003



Checking out choo-choos

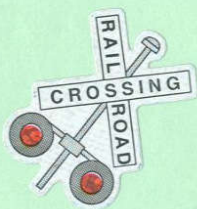


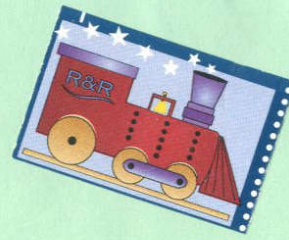
ABOVE: Logan Miller, 7, checks out a model steam engine at the Great American Train Show yesterday at the Pima County Fairgrounds. The two-day show, which ended yesterday, offered a chance for train enthusiasts to see, buy and sell the objects of their passion.



RIGHT: Collector Lee Willetts gets a good look at an N-scale model engine.

Photos by XAVIER GALLEGOS/Tucson Citizen





31ST BIENNIAL

TOY TRAIN SHOW

SPONSORED BY THE GADSDEN-PACIFIC DIVISION

JANUARY 2003





ALL ABOARD. Whether you're interested in toy trains or already have a passion for the hobby, check out this swap meet for trains, trains, trains.

The meet is a great way to get acquainted with the hobby. Collectors and operators can look for that special find.

The Gadsden Pacific Division Toy Train Operating Museum is holding the biannual event at the Roadway Inn event center, West Grant Road and I-10. The event is 9 a.m. to 3 p.m. Saturday. Tickets are \$2 for adults; children under 13 are free. For more information, call 721-1085.

6636 N. Amahl Drive
Tucson, AZ 85704
March 8, 2003 ,

Mr. Nick Bucholz
President
Tucson Garden Railway Society
4625 E. Cerro De Aguila
Tucson, AZ 85718

Dear Nick:

Please accept my belated thanks for setting up and running the Kiddie Module at the Gadsden Pacific Division Train Meet on January 18th. Family illness has placed my personal life in turmoil over the past two months and I have been derelict in expressing my appreciation for your continued support of our organization. Your layout continues to be the highlight of the exhibits we have at our train meets. We continue to be impressed and most appreciative of the dedication of your society's members in taking the time to assemble and man this very impressive module.

Thank you again for your participation in our meet. We would be most happy if your society would be able to honor us with a display at our meet in June of 2003.

Sincerely yours,

A handwritten signature in cursive script that reads "Bob Grassi".

Bob Grassi
Chairperson
GPD Train Meet Committee



GREAT AMERICAN TRAIN SHOW

Certificate of Appreciation
We wish to thank



**TUCSON GARDEN RAILROAD
SOCIETY**

***For participating in the
Great American Train Show***

TUCSON, ARIZONA
JANUARY 25 & 26, 2003

Thank You

On behalf of the Great American Train Show staff we would like to thank you for participating this weekend. We hope the show was enjoyable for you and we look forward to seeing you again at a future show.

The GATS Staff,

Tom Edmund

Moe *Geo*

Kathy *Bill Grane, Sr.*
Heeghegan

John *Joe*

Frank
Hicks

A BLOOMING RAILWAY

ARIZONA DAILY STAR / Sunday, March 30, 2003



Gary Martin, holding a model locomotive and tender, looks at a section of what he says is Tucson's largest garden railroad. It's behind his and his wife Peggy's home.

Ron Medvescek / Staff

Garden tour to include yard's model trains

By Joan F. Barrett

SPECIAL TO THE ARIZONA DAILY STAR

Dazzling flowers, spectacular cacti, cooling water features and intriguing landscape designs appear on next weekend's annual Tucson Botanical Gardens Home Garden Tour.

But one of the circuit's five stops displays a more whimsical treat: Behind Gary and Peggy Martin's North Side home, ticket holders will see model (G-gauge) trains traveling past a miniature Western town, mining area and logging camp.

About a quarter-mile of track contributes to the couple's 4,000-square-foot oasis, which Gary says is Tucson's largest garden railroad. He and Peggy embraced the concept in 1994 after Gary wearied of the seasonal labor required to install and to dismantle railway displays by an indoor Christmas tree.

"I decided if I was going to work that hard, I wanted to leave it up," said Gary, who laid the track around a palo verde tree at the bottom of the sloped yard. He kept making additions, using a 1/2-inch to 1-foot scale.

Garden greenery includes white, yellow and purple lantana, juniper, white pine, native cacti and Mexican poppies. "If the animals eat it, then we don't plant it," Peggy noted about nearby wildlife, such as rabbits and javelina.

The Martins have taken up what they call the fastest-growing railroad hobby in the country and belong, with at least 80 other families, to the Tucson Garden Railway Society. "The membership grows continuously," said Gary, a for-

mer president of the club.

During construction of his Eagle Mountain Railroad line, the 62-year-old retained the yard's naturally hilly terrain and narrow wash. Exquisitely detailed scenes appear about every five feet. Based on Gary's extensive research, the tableaux reflect slices of Arizona life between 1890 and the mid-1930s.

For example, the garden's lowest level depicts Jerome in its heyday as a mining town. Figures at the train station include a man in a top hat with a trained bear.

To the west, a hobo village holds four residents. The schoolyard has a swing and slides, as well as a man trying to capture a skunk.

On the east, a boy with a balloon trudges up a hill, pulling a wagon that holds a girl. The children head toward the town's center, where buildings include a Chinese laundry and a bakery that advertises "best buns anywhere."

To add to the authentic atmosphere, a voice within the Red House Saloon says, "Get the sheriff." An audio specialist in California supplied the battery-operated, custom-made sounds used throughout the garden.

Rosemary, trimmed to look like trees, appears on a higher level. Flatcars with stacked lumber look ready to be pulled away from an adjacent sawmill.

Dwarf Alberta spruce also contributes to this section, which has been designed to resemble the White Mountains. Behind the mill, a small lake features a female moose standing on a rock.

Four cabins, an outhouse and a main

If you go

- **What:** Tucson Botanical Gardens 17th annual Home Garden Tour; self-guided; five Tucson-area home gardens and admission to TBG.
- **Where:** Tickets include a map and provide one admission to each garden during the weekend.
- **When:** 10 a.m.-4 p.m. April 5 and April 6
- **Cost:** \$12 for TBG members (up to four tickets); \$14 for others, advance purchase; \$16 tour day.
- **Tickets:** TBG, 2150 N. Alvernon Way; Harlow Gardens, 5620 E. Pima St.; Mesquite Valley Growers, 8005 E. Speedway; B&B Cactus Farm, 11550 E. Speedway; Civano Nursery, 5301 S. Houghton Road; Rascon's Landscaping, 7974 N. Oracle Road; Rillito Nursery, 6303 N. La Cholla Blvd.
- **Information:** 626-5161



Many of the figures that appear in the tableaux were sculpted by Gary Martin

H2 • ARIZONA DAILY STAR / Sunday, March 30, 2003



Ron Medvescek / Star

A miniature welder works as a blue light glows to simulate sparks.

RAILWAY

Tour to include garden with model trains

Continued from Page H1

lodge with a dining room make up the logging camp's residential section. Nearby, two men cut down a big tree.

Two fountains provide realistic waterfalls by the Emerald Mine. Radio control can quickly send a train with a load of gold ore whizzing through a tunnel.

Tracks end near the top of the garden, where cars with ballast and rails signify the work still ahead for earlier-era Chinese and Irish workers. Upbeat music spills from Big Bob's Saloon and Dance Hall.

The northeast corner features a train-maintenance area. Elements here include a repair shop, a fueling tower for oil-burning engines, a windmill, a water tank and an engine house.

This uppermost section requires the lowest maintenance because landscaping consists of rocks, native cacti and succu-

At least \$20,000 has gone into the garden. For example, a kit to build the mine cost \$400; each foot of track represents \$2.50; one of the engines went for \$2,000.

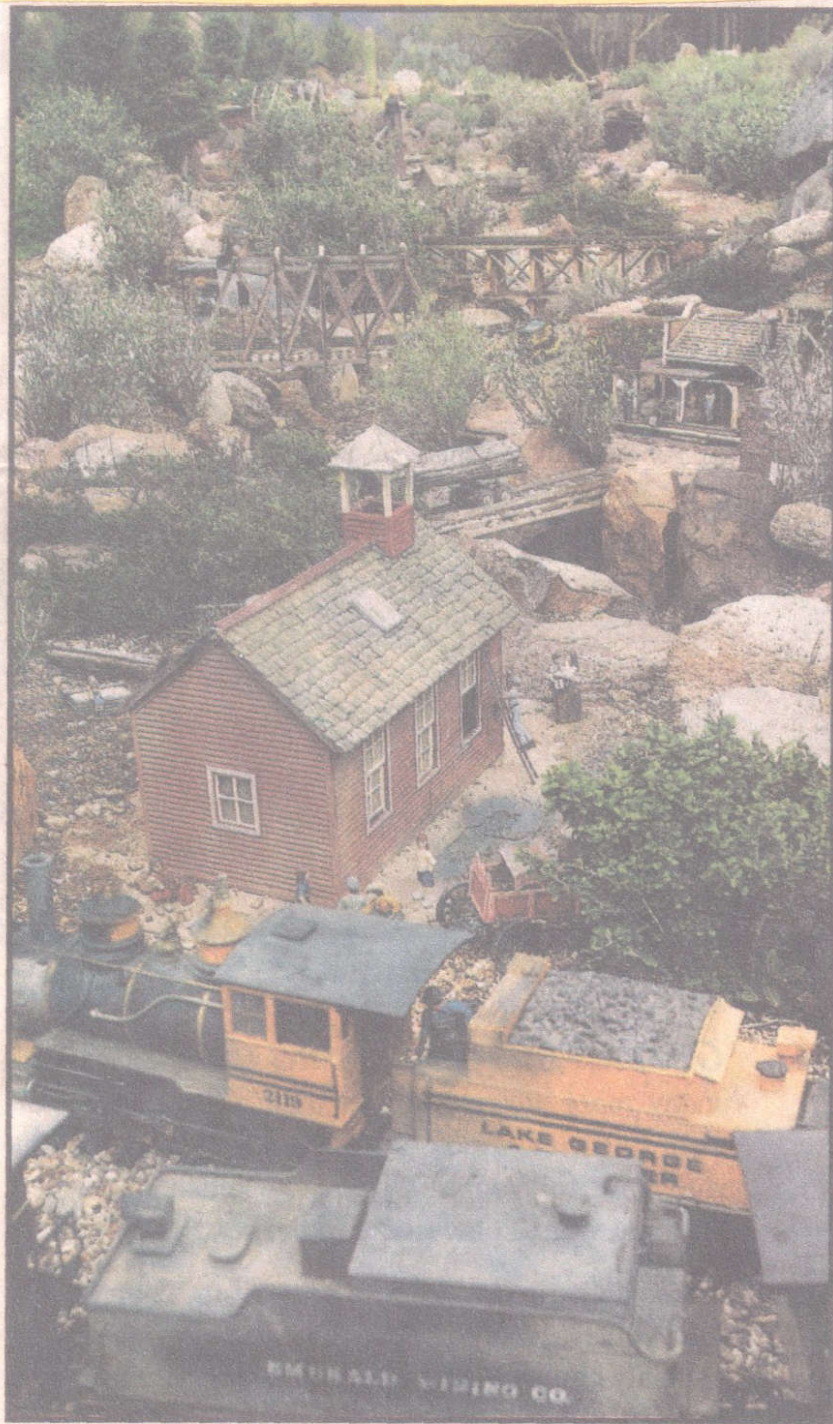
Many of the scenes' objects came from hobby shops, Ace Hardware on East 22nd Street, The Home Depot and Garden Railways magazine. But Gary also creates items.

The retired engineer constructs tiny Styrofoam buildings such as Fagg's Fine furniture store, which appears in the garden and is named after club member Willis Fagg. The material holds up well in the desert climate.

Gary sculpts figures from clay and often handcrafts model railroad cars for customers in the eastern part of the United States. To avoid sun damage, most figures usually remain in boxes and only go outside for special occasions, such as the upcoming tour.

Gary suggests that visitors bring walking shoes for the tight garden trails and stay at least an hour to see all the scenes.

Meanwhile, he'll continue to devote at least one hour daily to garden maintenance. Routine tasks include cutting shrubs back and replacing ballast. "It is just and replacing ballast. "It is just



The Eagle Mountain Railroad line has about a quarter-mile of track, plus numerous scenes reflecting Arizona life between the 1890s and the mid-1930s.

Tucson Botanical Gardens

2003 Home Garden Tour



Celebration of Gardens

Saturday
April 5th
10 am–4 pm

Sunday
April 6th
10 am–4 pm

MEMBER TICKET

Admit One - \$12

TBG: 2150 N. Alvernon Way

1. 4625 E. Cerro de Aguila

2. 6237 E. Via de la Yerba

3. 1544 W. Oak Shadows Pl.

4. 2950 & 2980 E. River Rd.

5. 2933 E. Helen St.

PIMA COUNTY FAIR

April 17-27



XBox Odyssey



Shark Encounter



Sea Lion Splash



Baseball Exhibit

Games, Food & Fun!

Concerts & Events

- ★ April 18 - Fireworks / HP
- ★ April 19 - Chris Cagle!
Corvette Car Show
Teacher Appreciation, \$1 Admission
With School Employee ID
- ★ April 20 - Sunrise Service
Easter Celebration
Los Tigres del Norte
- ★ April 21 - Dollar Day \$1 Parking,
\$1 Admission, \$1 Rides
- ★ April 22 - Senior Day
\$1 Admission For 55+
- ★ April 23 - Fairest of the Fair
College Night \$1 Admission With
College Student ID
- ★ April 25 - Fireworks
Karaoke Finals
- ★ April 26 - Demolition Derby
Military Appreciation \$1
Admission With Military ID
Foreigner Lead singer, Lou Gramm
Blue Oyster Cult
- ★ April 27 - Family Fiesta Day With
Rogelio Martinez y Banda Kampesino

Wrist Band Days

- ★ April 17 - RC Cola ★ April 20 ★ April 24 - Pepsi & Wendy's

ADMISSION

\$6.00 ★ Ages 6-10 - \$1.00 ★ Parking - \$3.00

GATE

May except opening
April 17th at 6pm

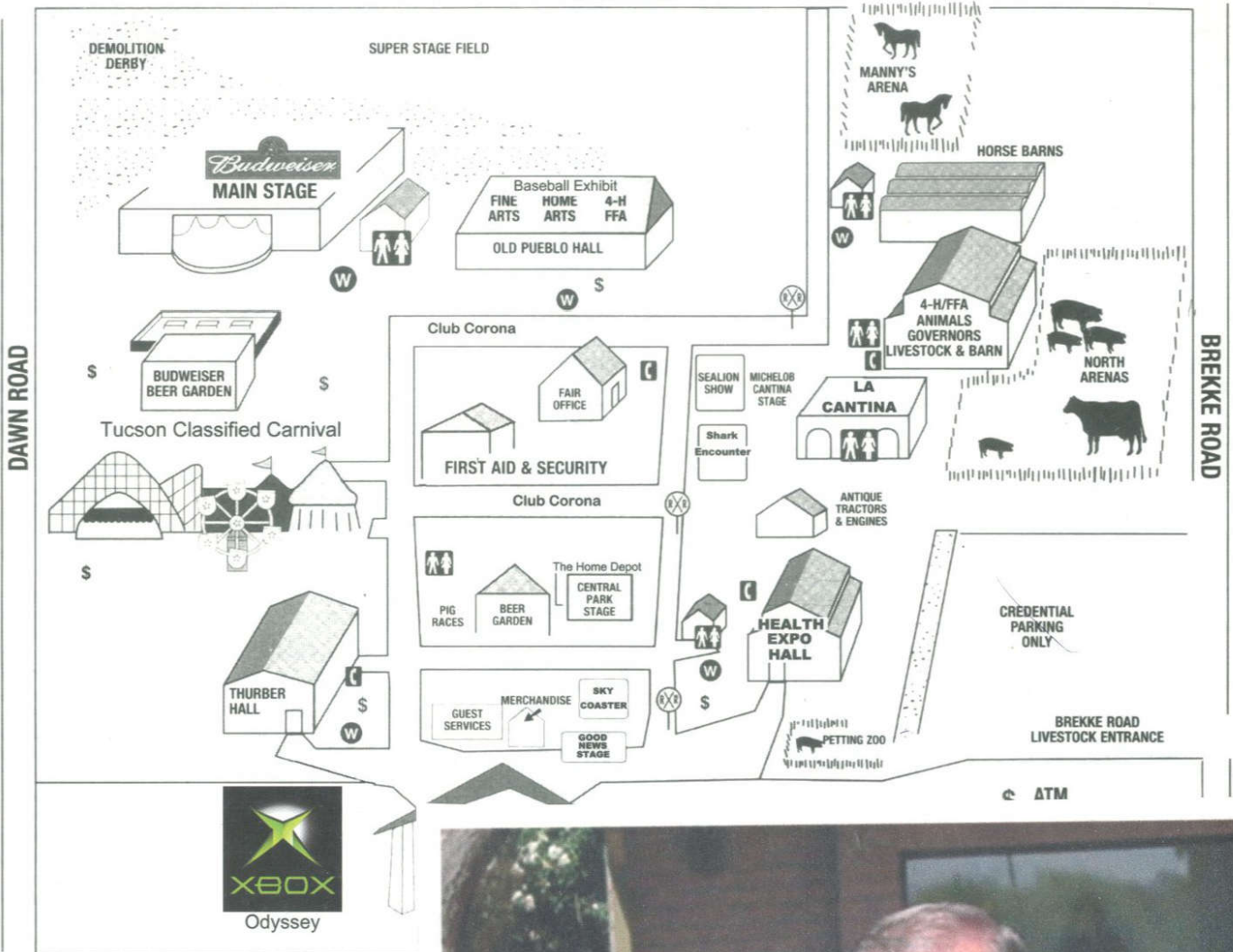
TUCSON CLASSIFIED CARNIVAL

Opens weekdays at 2pm and 11am
Saturdays and Sundays

, South of I-10 • 762-FAIR • www.swfair.com



RITA ROAD



Car and Truck Rental of Tucson

DON CLARK OF TUCSON

Tucson Garden Railway Society

Show Day Chairman Duties

1. If possible, have available for your use a cell phone. Notify the Vice President the number of that phone, so that your people can be contacted in an emergency.
2. On the day prior to your work day, contact all members who are scheduled to work the shifts of your day. Should anyone be unable to serve, try to arrange a substitute. If you are unable to get a substitute, contact the Vice President for help.
3. Assist your volunteers to the greatest extent possible while they are on duty.
4. At the end of your day, collect the Raffle Ticket Sales proceeds and arrange to turn them over to the Treasurer. Record the ticket number of the last ticket sold, and the number of tickets sold that day. This, too, is to be turned in to the Treasurer.
5. Should any problems arise that cannot be immediately solved on site, contact the Vice President or President, in that order.



Tucson Garden Railway Society

Sign-up for the Pima County Fair, April 17th thru 27th

Set-up Monday, April 14th, 10 AM: Ulmer, Fitzner, Stoessers, Dirksens, Alan & Lee, Sleeper, Junkers, Skinner, Duda, Martin, Izen, Buchholz, Cooks, J. Anderson
More setup Tuesday, 15th, 10 AM: Ulmer, Fitzner, Stoessers, Dirksens, Sleeper, Junkers, Skinner, Duda, Buchholz, Fagg, Cooks, Martin, Dorgans
And finish setup Wednesday, 16th, 10 AM: Fitzner, Dirksens, Junkers, Springstead, Buchholz, J. Anderson

Run Trains, Thursday, 17th: Day Chairman Bob ~~Dirksen~~, Cell phone number 490-5987

From 6 PM til 10PM: Skinner, Martin, Buchholz, W & D Fagg
647-7136 294-7428 760-0147

Run Trains Friday, 18th, : Day Chairman Norm Ulmer, Cell phone number 275-9676

From 10 AM til 4:00 PM: Duda, J & M Cook, Fitzner, Izen, J. Anderson

From 4:00 til 10 PM: Skinner, J & S Sanders, Eberbachs

Run trains Saturday, 19th, Day Chairman Gary Martin, Cell phone number 869-5264

From 10 AM til 4:00 PM: Merheb, Dirksen, Lee & Alan, Bob Hoffman

From 4:00 til 10 PM: W & D Fagg, Buchholz, Fitzner, Rick Gast

Run trains Sunday, 20th, Day Chairman Norm Ulmer, Cell phone number 275-9676

From 10 AM til 4:00 PM: Springstead, J & S Sanders, R & M Eberbach, I. Ulmer

From 4:00 til 10 PM (need 2 more people): Skinner, I. Ulmer, Buchholz

Run trains Monday 21st, Day Chairman Bob ~~Dirksen~~, Cell phone number 490-5987

From 10 AM til 4:00 PM: W & D Fagg, S Anderson, Buchholz, Leaver?

From 4:00 til 10 PM Buchholz, Fitzner, J & M Cook, J. Miller
578-0064 760-2325 886-7611

Run trains Tuesday 22nd, Day Chairman Joe Stoesser, **no cell phone.**

From 10 AM til 4:00 PM: Dirksen, Skinner, Martin, Buchholz, Tiefenbach, & Madden

From 4:00 til 10 PM Dirksen, Martin, Buchholz, R & M Eberbach

Run trains Wednesday 23rd, Day Chairman Norm Ulmer, Cell phone number 275-9676

From 10 AM til 4:00 PM: Dirksen, J & M Cook, S Anderson, C. Cook

From 4:00 til 10 PM: Duda, Waesch, Gustillo, Fitzner, D. Junker

Run trains Thursday 24th, Day Chairman ~~Bob Dirksen~~, Cell phone number 490-5987

From 10 AM til 4:00 PM: Skinner, Buchholz, Tiefenbach, Madden, S Anderson.

From 4:00 til 10 PM: Duda, Ulmer, Buchholz/W & D Fagg

299-3101 299-9401 825-7546

Page 1
Pima County Fair (cont'd)

Run trains Friday 25th, Day Chairman **Bob Dirksen**, Cell phone number **490-5987**

From 10 AM til 4:00 PM : Ulmers, S Anderson, C. Cook, Fagg, ^{SA}

From 4:00 til 10 PM : Stoessers, Lee & Alan, Fagg & Lathrem
⁵⁵⁴⁻⁵⁵⁴¹ ⁵⁴⁴⁻⁹⁷³⁸

Run trains Saturday 26th, Day Chairman **Bob Dirksen**, Cell phone number **490-5987**

From 10 AM til 4:00 PM : Skinner, Ulmer, Buchholz, Fitzner, Fagg

From 4:00 til 10 PM Mitchells, Buchholz, Wilson, Lathrem

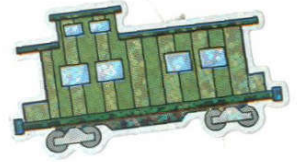
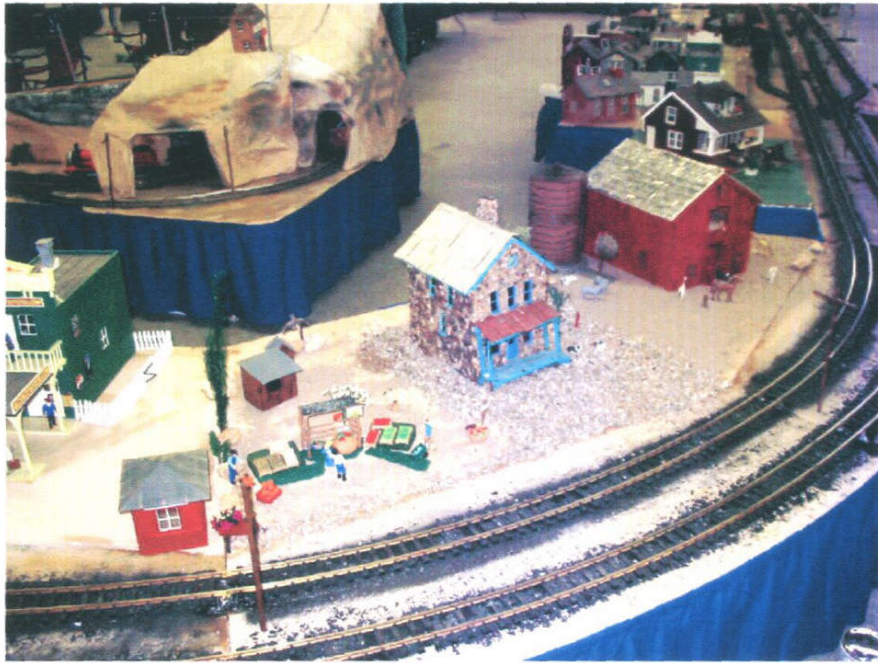
Run trains Sunday 27th, Day Chairman Joe Stoesser **no cell phone**.

From 10 AM til 4:00 PM: Lee & Alan, Tulino, Izen, Buchholz

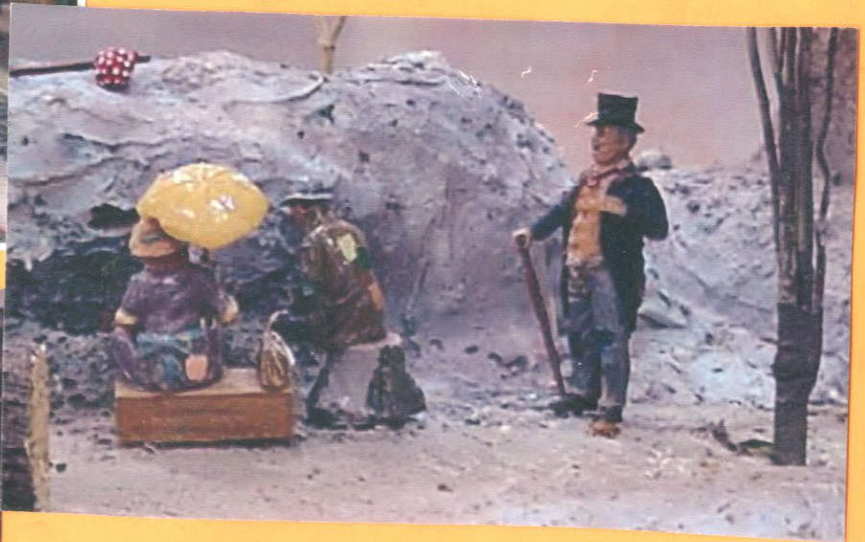
From 4:00 til 10 PM : Dirksen, Skinner, Mitchells, Izen

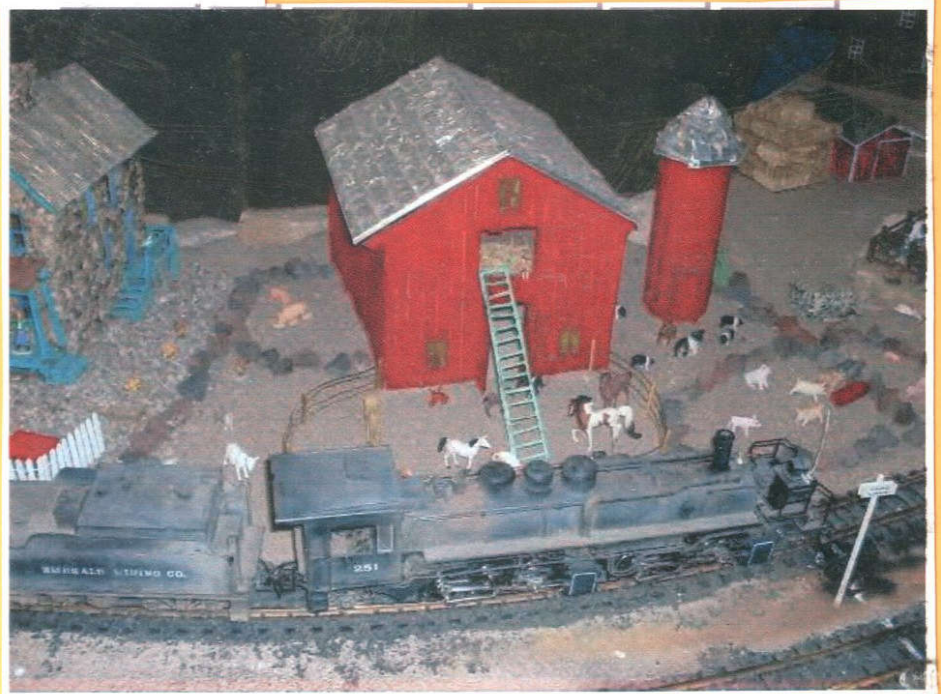
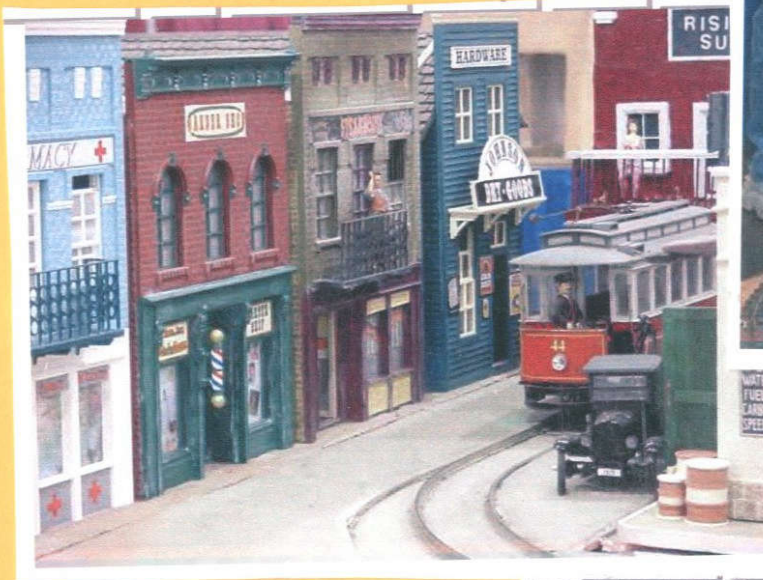
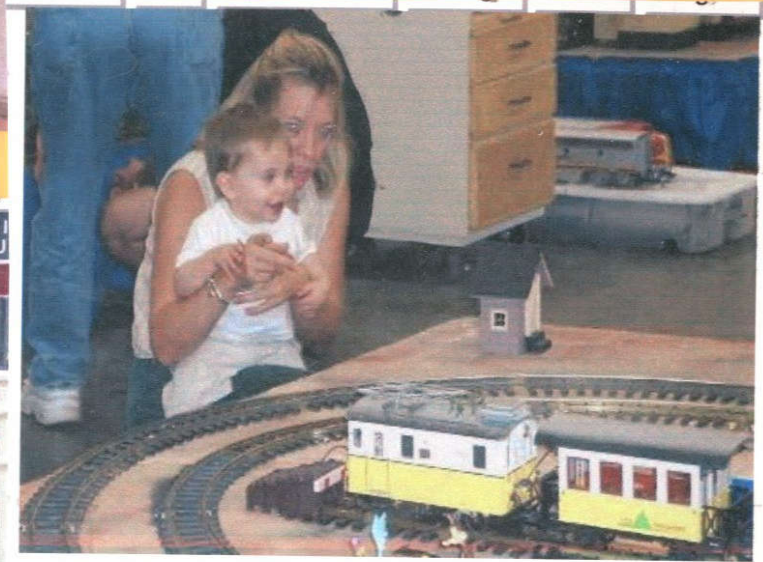
Tear down, Sunday 27th, 5 PM (**Come one, come all!**) _____

Tear down, Monday 28th: (**The more the merrier**) Dirksens, Sleeper, Skinner, Duda, Martin,
Dorgans, Sanders, Fagg, Junker



**Arizona
Home Show
June 13, 14, 15
2003**







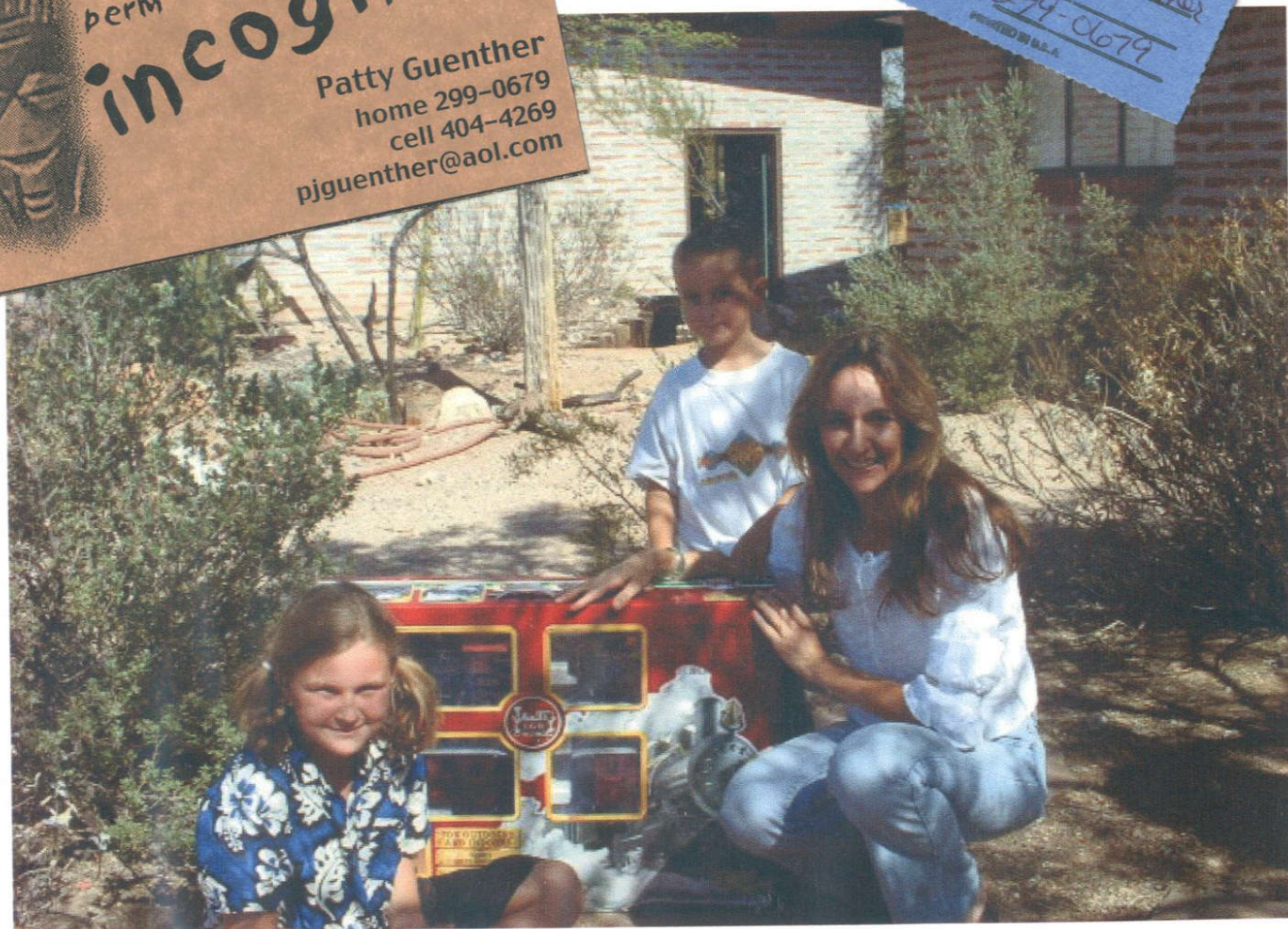


color
cut
perm

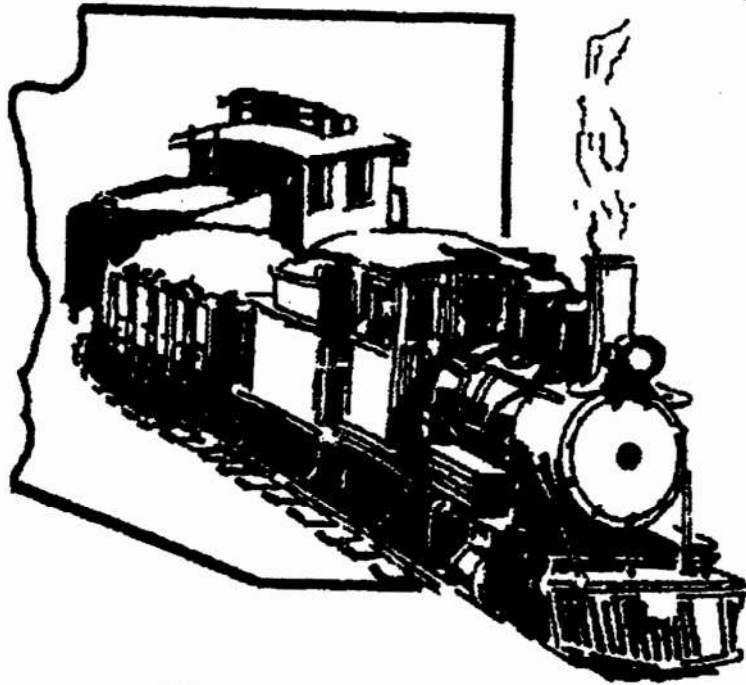
incognito

Patty Guenther
home 299-0679
cell 404-4269
pjguenther@aol.com

Name Patty Guenther
Address Patty Guenther
Phone No 299-0679
PRINTED IN U.S.A.



ABTO



Arizona Big Train Operators

OPEN HOUSE

**NOVEMBER 8,
2003**

TRAIN SCHEDULE

- | | |
|---|---------|
| 1. Bill and Herta Nagle's
1137 N California, Chandler
480-899-9054 | 9:45am |
| 2. Ed and Carole Dunshie's
3326 East Fairfield, Mesa
480-807-3575 | 10:45am |
| 3. Rodney and Janet Benner
15837 N. 21 st Pl., Phoenix
(Lunch and meeting)
602-971-2478 | 12:00pm |
| 4. Glenn and Katie Sampson
4222 W. Monte Cristo, Phoenix
602-938-9752 | 1:45pm |
| 5. Kal and Barbara Miller
1145 W. Northview, Phoenix.
602-725-3001 | 2:45pm |
| 6. Jerry and Joanne McKenzie
8598 Canterbury Lane, AZ City
520-466-5938 | 4:00pm |

BILL & HERTA NAGLE'S INDIAN MOUNTAIN & MINING R.R. UND DER WESTERWALDER GUTER ZUG

Welcome...to our very conventional and straightforward garden railway. This layout is being built to enjoy running trains...PERIOD. The few turnouts are manually controlled...we abhor derailments. To further simplify the operation, there are 5 separate and independent loops: two for the European layout and 3 for the early American sections. Track power is utilized throughout, controlled from a central location.

The European section is quite authentic. It represents the era from about 1940 to the present. The architectural styles have changed little, especially in the rural areas of Germany and Austria.

The American Western layout is conventional including the Indian Ruins that are a tourist attraction for the residents of the Western town.

The ASARCO mine complex furnishes employment for the residents. The unfinished double tunnel area will eventually facilitate a way for the upper level passengers to traverse their way down to the Western town via a road, path, or steps, or perhaps a cog train. A small RR station on the mesa will serve these folks as well as shuttle passengers coming from a yet to be determined set of structures to be located down the South side of the house...probably a min or rural village. Planned also is a train parking area, hopefully located in a control "booth".

We elevated the layouts utilizing retaining wall bricks from Home Depot. The fill is 0 – ¼ decomposed granite fines. The American layout's shape denotes its past life as a swimming pool.

The structures are a combination of scratch built (my wife built the large castle) and kits.

ED AND CAROLE DUNSHIE'S MMI&E RAILROAD



The MMI&E magical Railroad has approximately 600 feet of track in two separate raised modified dog bones. Most of the locomotive power, both steam and diesel, is LGB with just a sprinkling of Accucraft and a pinch of MTH. The remote control for the railroad is supplied by the LGB multi train system (MTS) with decoders installed in each locomotive. The trains run through so much lush landscaping that you will not believe you're in the desert (lots of shade for viewing). There are half a dozen or more bridges, both wooden and steel, including a replica of the famous New York City Hell Gate Bridge measuring over 18 feet long. Also a pond with water fall and a little Mexican village complete with cactus and a mariachi band that plays music when the train passes by. The trains wind through a shed that later becomes storage area when they are no longer in use. The railroad is always under going changes but is always available for viewing.

RODNEY & JANET BENNER'S REDROCK RAILROAD



The Redrock Railroad is located in Phoenix, AZ. Owned and operated by Rodney and Janet Benner. The layout consists of about 1000 feet of track in the desert settings of the 1950's. The layout consists of a main loop with a smaller inner loop. Two trains can be run at one time with the larger freight and passenger trains running on the large outer loop and a Bachmann Climax or an Aristo C-16 on a new larger inner loop that I just completed. Making stops at the R&J mine and other spurs. We use mostly Aristo Craft products and also some Bachmann. The layout extends around our pool area and has a desert backdrop with mostly cactus and desert landscaping. The layout was just started in December of 1998. Janet and I are currently active members in Arizona Big Train Operators one of the great large scale clubs in Arizona

SKUNK CREEK & DEER VALLEY R.R. GLEN & KATY SAMPSON



This version of the railroad was begun in the spring of 2000. The original four year old railroad was demolished, and a new era began. First area to be constructed was the Mine Mountain feature. This area took all too many months, of casual construction. All rocks were hauled in from the desert and construction, while being previously designed, changed frequently. This section consists of a three level Mine, Tipple, and Stamp Mill feature serviced by an LGB 0-4-0 Daisy, and three Hartland ore cars, all slightly modified, which run on an out and back loop.

Once this section was completed we proceeded to phase two, the main line which goes along the north side of our pool, and returns around mine mountain, onward through the town of Cactus Junction, then through a tunnel under Coyote Mesa completing the loop. Two other loops were constructed inside the main loop around the mountain. This area is still under construction. During this phase, Katy decided to layout and builds the Grizzly Flat feature. A loop line was laid to allow the Teddy Bear tour train to circle the town. This line is serviced by and LGB Chloe engine and two tour cars.

Coyote Mesa scenic loop came next, utilizing the area over the tunnel where we can run our fun little items, such as the Lionel Coyote and Roadrunner hand car, and our own Tooter Ville Trolley.

Each main loop utilizes track power. A Bridgeworks Mag 15, with three Aristocraft Train Engineers providing the control. All the loops are isolated, providing battery potential, or for my Ruby live steam engine to be run. The Mine Mountain, Coyote Mesa, and Grizzly Flats Loops are independent home made preset level power units.

Our layout is still very fluid, and always under construction. Additions, changes, and fine tuning are a constant. Major plans for the future are: a cog line, a rail yard, and engine house and repair facility. Our limited area to expand is a challenge, but has been fun.

KAL & BARBARA MILLER'S
WHISKEY FLATS RAILROAD

Welcome to the Whiskey Flats Railroad. This railroad has been in the planning, development and construction stage for the past 12 years. The gauge of the tracks is "G" gauge and is the largest of the model railroad gauges. The scale of the rolling stock is 1 to 22.5, which means the real trains are 22 ½ times larger than the Whiskey Flats Railroad. A 14 amp per track transformer at a 12 to 18 volt DC level provides electrical power.

Planning of the railroad started in 1991. A total of 9,000 lbs. of sand, 4,000 lbs. of dirt, and 96,000 lbs. of crushed granite was trucked, wheel barrowed, shoveled, and raked into the garden to provide the various grades and elevations. Beneath all of these products are 200 feet of electrical conduit to house the electrical and signal lines.

The various ore carts were imported from Superior, Arizona. The largest cart contains 2,520 lb. of copper ore. This cart was used for extracting ore from the mines in that area. The center cart was used for hauling construction timbers in the mines and the third and fourth carts were used for hauling tools.

Turkey Creek, which meanders through the garden, was constructed from 16,780 lb. of 1" to 3" river rock. Every two weeks in the summer this creek flows at capacity delivering water to the yard.

The track layout presently consists of about 800 feet of solid brass rail track in lengths ranging from 1 to 4 feet. Each track piece is connected to adjacent track with stainless steel track connectors and a special carbon paste to promote electrical conductivity. Because of the quality control that was incorporated into the track construction by the railroad crew, only one electrical contact drives each entire loop of track.

The edges of Turkey Creek are outlined by rectangular white stone called AJO TRAVERTINE. A total of 821 lbs. was required. The pink similarly shaped rock located around the garden consists of 310 lbs. of MONTANA TRAVERTINE. Whiskey Mountain was constructed using 4,073 lbs. of PURPLE QUARTZ mixed with crushed granite. The track gorge and some of the lining along Turkey Creek is constructed from 1,357 lbs. of MONTANA CLOUD. Some of the other rock formations were constructed using 346 lbs. of ECHO MT. GREEN, 635 lbs. of ANTIQUE OAB, 2,000 lbs. of SEDONA RED STRIP, and 160 lbs. of ETTAWA PINK. There are a number of large petrified wood pieces scattered around the garden. Copper Canyon was formed from 800

lbs. of high grade copper ore. The ore carts combined contain 3,000 lbs. of copper ore obtained from various sites.

The track is supported on 450 bricks and covered with SISQU ROCK used as ballast. This ballast took six months to locate and was ironically located inside a railroad boxcar on Grand Ave. where it sat in decayed burlap bags for 25 years. The entire quantity of 4,800 lbs. was purchased at the time as it was felt this rock could not be easily located in the future if needed. The company from which this rock was purchased was so happy to dispose of it after 25 years that they donated 500 lbs. of it to the railroad. The top surface of the entire layout is covered with 16,680 lbs. of 3/8 inch YAVAPAI INDIAN CORAL (pink top cover).

The Loren tunnel, Turkey Creek Log Tunnel, and the Senator Hwy. Tunnels were retrieved by various expeditions into the wilds of the Bradshaw Mountains over the past 11 years. (These expeditions required some participants with strong backs and weak minds!). The red rock formations came from the Camp Woods area about 35 miles North of Prescott, and from the Sedona, Arizona area. Many of the numerous logs and driftwood was retrieved from the Ash Ridge, Big Bug Mesa, Spruce Mt., Turkey Creek, Goodwin, Maverick Mt., Palace Station and Crooks Canyon areas of the Bradshaw Mountains around Prescott.

All of the railroad rolling stock is scaled down replicas of actual railroad cars and engines in a scale of 22.5 to 1. The buildings and vehicles are all to scale ranging from 20 to 1 to 32 to 1. The digital sound systems in the engines are reproduced from actual engine sounds.

Phase I of the railroad was completed in 1996 and consisted of two complete loops of track. Phase II of the Whiskey Flats Railroad was designed after the conductor had given the okay to proceed in 1998. This section consisted of a 10 ft. by 50 ft. section added to the West of the original layout and included the town of Whiskey Flats on the elevated section. Around the town was built a replica of the famous Tehachapi Pass Railroad loop near San Bernardino, California. The completion of this section in August of 2000 allowed for a third complete track loop to be constructed. The loop can be operated independently or it can be tied to track loop No. 1 for an extended track that goes around the complete layout.

The train conductor decided shortly after the completion of Phase II that a Phase III should be constructed. This phase was started in 2001 and was just completed near the end of 2002. It includes the

industrial section of Whiskey Flats and the extended trestle bridge on the West side of the pool. The completion of this section allowed for the expansion of track loop 3.

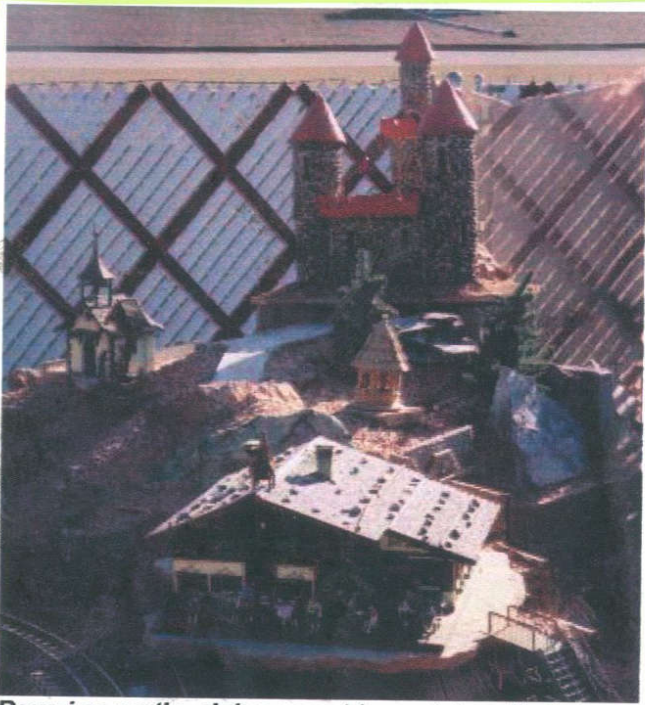
A 400-foot long rope light system was recently installed around the entire layout perimeter and is now operational. The railroad consists of approximately 26 buildings with more being added each year. The iron bridges and trestles were custom made for the railroad by Eaglewings Iron Craft of Phoenix, Arizona. The operating railroad crossing sign and lights came from the area around Superior, Arizona. The Burlington SantaFe Railroad in Phoenix donated the electrical operator for the sign.

There are many things to see in our train garden. Please feel free to walk around the entire perimeter of the layout. We hope you enjoy your time at the Whiskey Flats railroad.

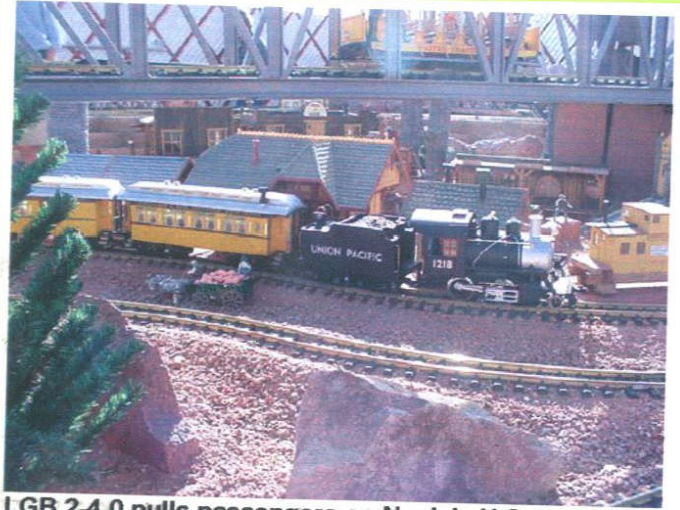
Chief Engineer: **Kal Miller**
Conductor: **Barbara Miller**

JERRY & JOANNE MCKENZIE'S RAILROAD





Bavarian castle, alpine resort (complete with German band on the patio) on the Nagle's German layout



LGB 2-4-0 pulls passengers on Nagle's U.S. layout

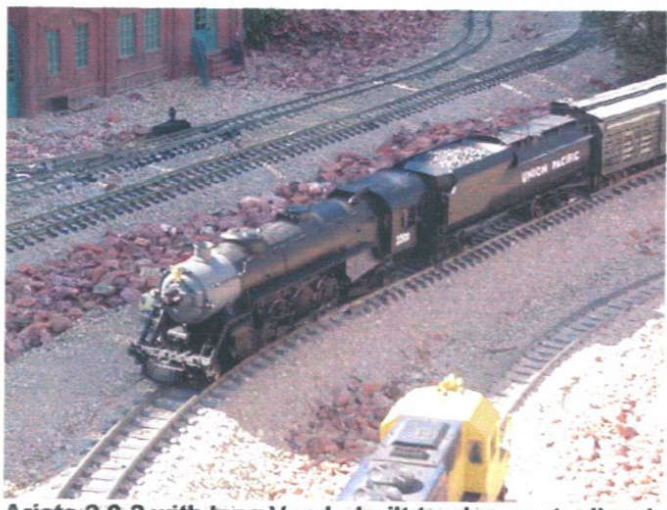


A Sumpter Valley with a short freight enters Hell Gate



LGB's Beyer Garrett pulling European passenger cars

Then it was on to Rodney & Janet Benner's Red Rock Railroad where we saw some nice long trains, both steam and diesel powered (and had lunch).

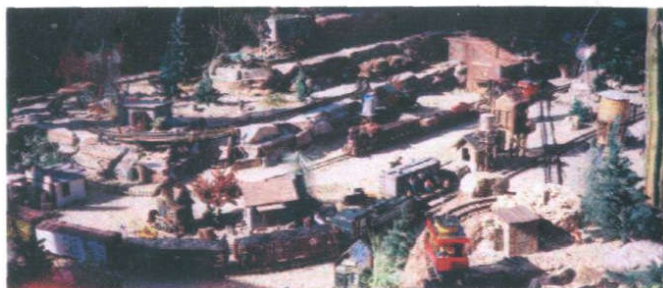


Aristo 2-8-2 with long Vanderbuilt tender meets diesel train with 3 units, 17 cars and a caboose.

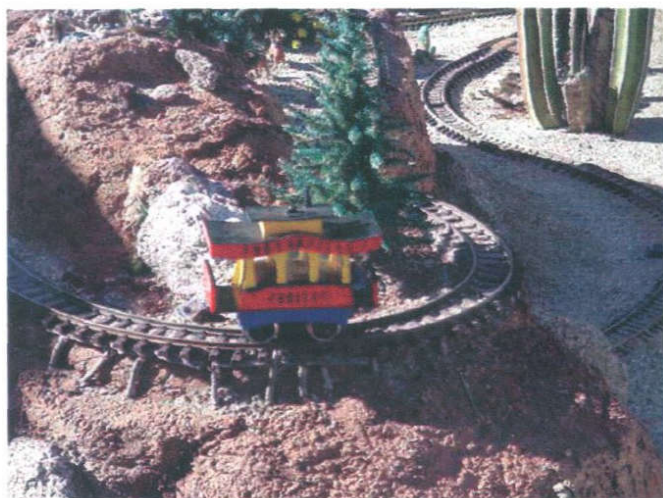


Most of 17 car freight rounding swimming pool

Glen and Katy Sampson's layout had many loops and many detailed scenes including the scratch built Toonerville Trolley.



Loops and trains on left side of the layout



The Toonerville Trolley had its own loop

Then it was on to Cal and Barbara Miller's Whiskey Flats Railroad that featured a long U.P. passenger train, a Tehachapi style loop, steam powered freight and most uniquely, hollow tree trunk tunnels.



Long U.P. passenger train crossed suspension bridge across drainage ditch.

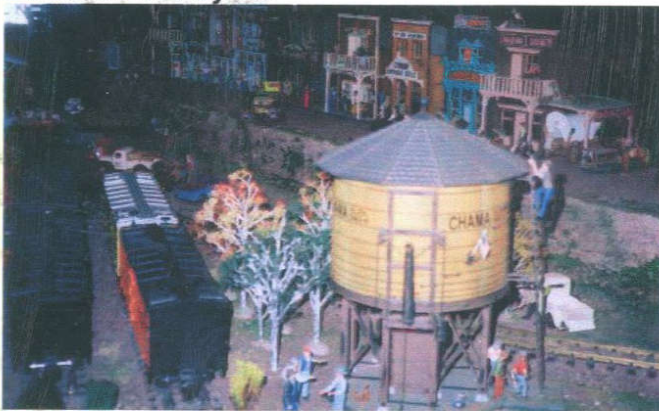


Same train emerging from hollow log tunnel.

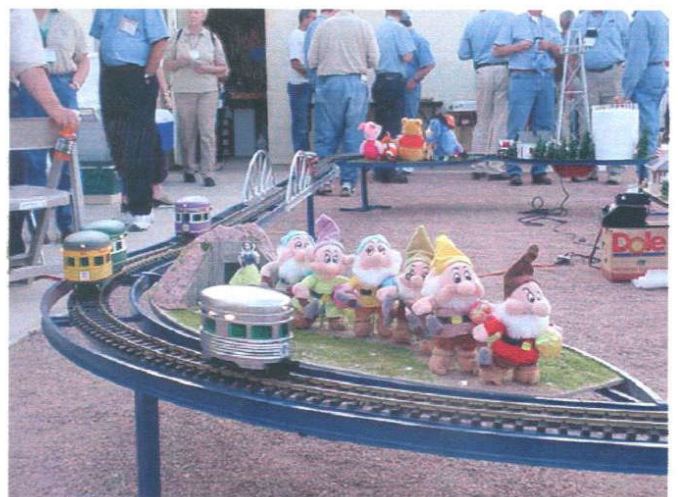
The final stop of the day was at Jerry and Joanne McKenzie's railroad in Arizona City. This place is actually three railroads. There is an extensive but sparsely scened outdoor railroad, a highly detailed indoor railroad and a modular layout which featured racing eggliners carefully watched by Snow White and seven vertically challenged friends (OK, seven dwarfs).



Battery operated remote control train crosses bridge on the outdoor layout.



Part of well detailed indoor layout



Eggliners race under the eye of Snow White and her seven vertically challenged friends

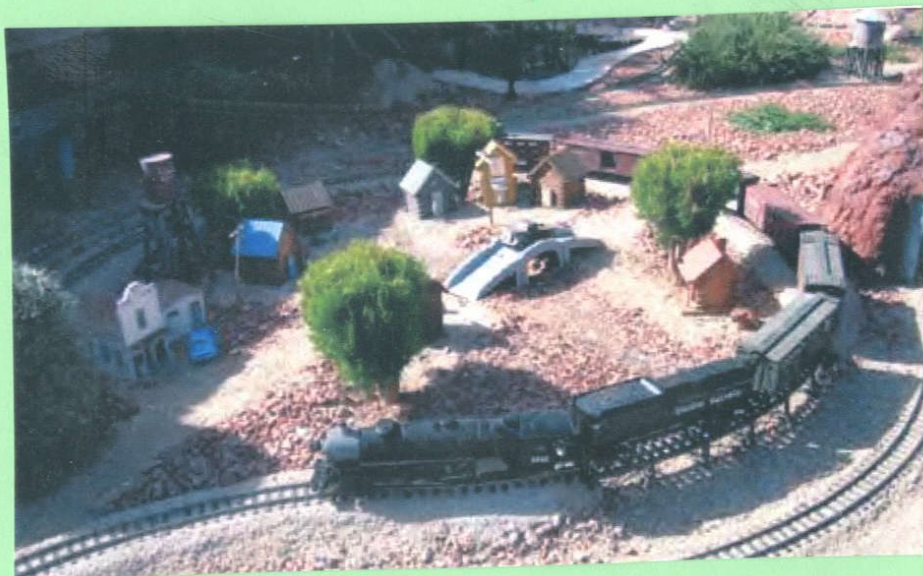


Bill & Herta Nagle's
Indian Mountain & Mining R.R.
11/8/03
ABTO

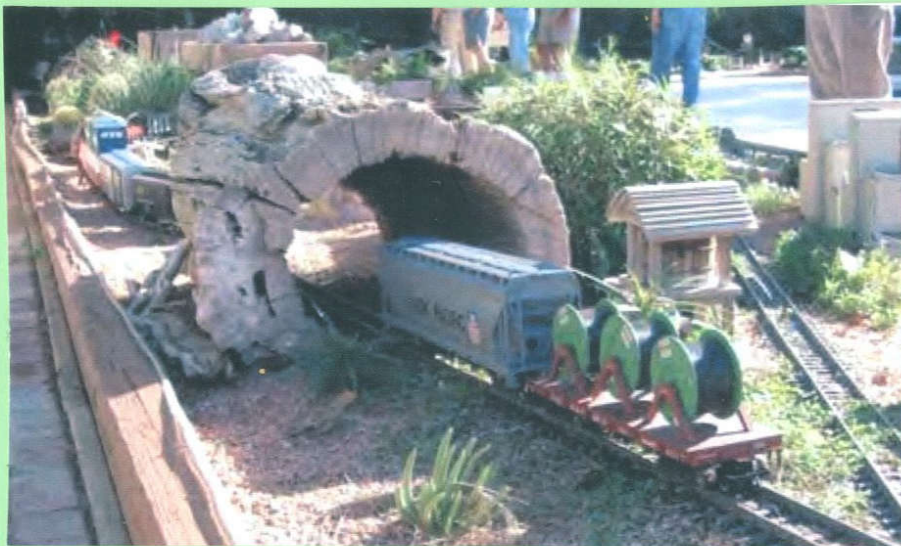
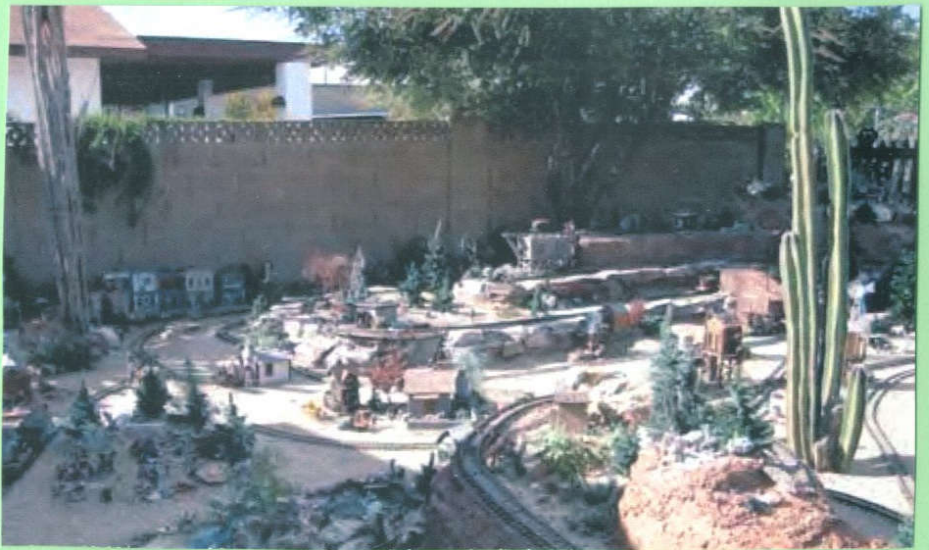


Ed and Carole Dunshie's
MMi&E Railroad
11/8/03
ABTO

Rodney & Janet Benner's
Redrock Railroad
11/8/03
ABTO

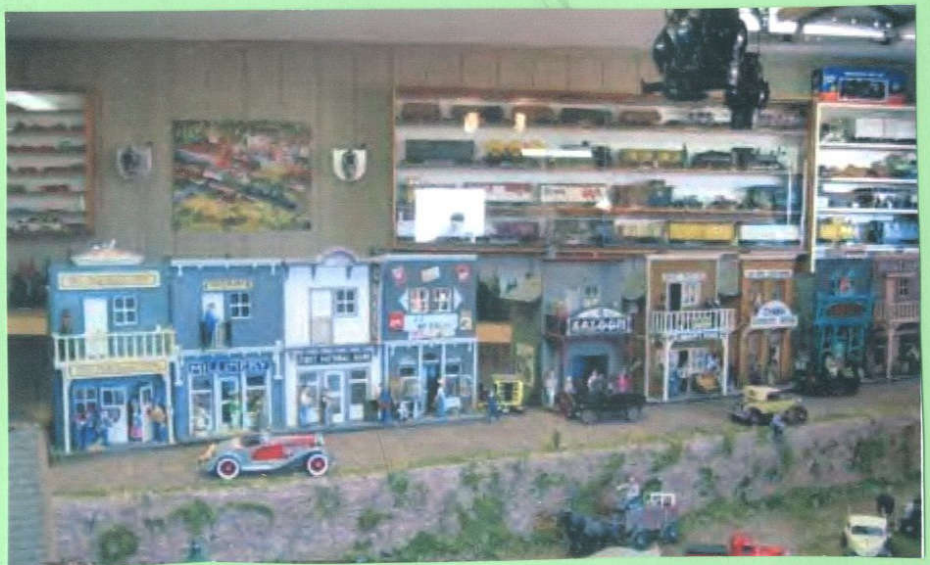


Glen & Katy Sampson
Skunk Creek & Deer Valley R.R.
11/8/03
ABTO



Kal & Barbara Miller's
Whiskey Flats Railroad
11/8/03
ABTO

Jerry & Joanne McKenzie's Railroad
ABTO
11/8/03





Norman Ulmer, Vice President

4935 N. Craycroft Road

Tucson, Arizona, 85718

Phone: A/C 520-299-9401

E-mail: nhulmer@earthlink.net

12 October, 2003

Phoenix Round-About Itinerary

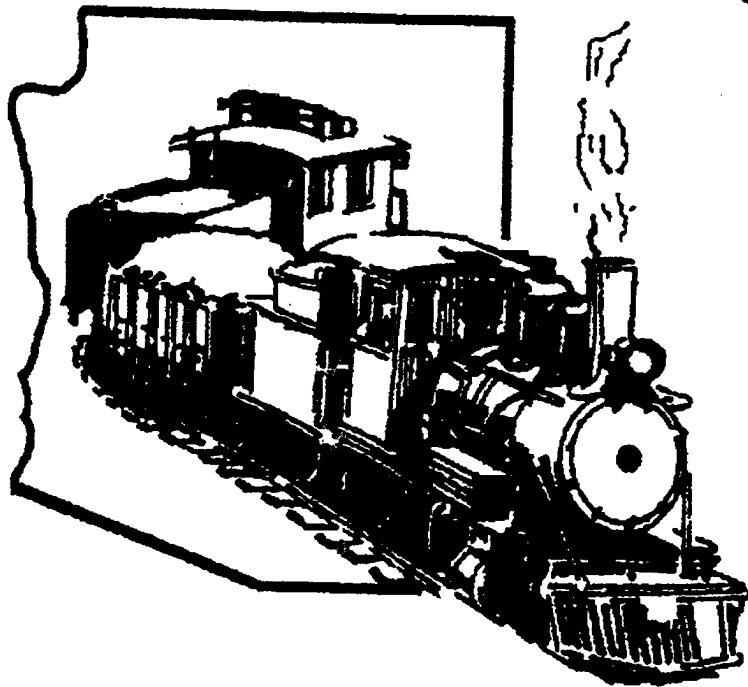
8 November, 2003

Depart Foothills Mall	7:30 Am
Pick up guide at I-10 & SR 587	9:00 Am
Arrive at first stop, Bill & Herta Nagle, 1137 North California St. Chandler, AZ Phone (480) 899-9054	9:30 Am
Arrive at second stop, Ed & Carole Dunshie, 3326 East Fairfield, Mesa, AZ Phone (180) 807-3575	10:40 Am
Arrive at third stop, Rodney & Janet Benner, 15837 North 21 st Avenue, Phoenix, AZ Phone (602) 971-2478	11:45 AM
	This stop includes the lunch break.
Arrive at fourth stop, Glenn & Katie Sampson, 4222 W. Monte Cristo Ave. Phoenix, Az Phone (602) 938-9752	1:30 PM
Arrive at fifth stop, Kal Miller, 118 West Northview Ave. Phoenix, AZ Phone (602) 725-3001	2:30 PM
Arrive at sixth stop, Gerry & Joanne McKenzie, 8598 Canterbury Lane Arizona City, AZ Phone (520) 466-5938	3:45 PM
Return to Foothills Mall at approximately	5:30 PM

JERRY & JOANNE MCKENZIE'S RAILROAD



A B T O



Arizona Big Train Operators

OPEN HOUSE

**NOVEMBER 8,
2003**

TRAIN SCHEDULE

- | | |
|---|---------|
| 1. Bill and Herta Nagle's
1137 N California, Chandler
480-899-9054 | 9:45am |
| 2. Ed and Carole Dunshie's
3326 East Fairfield, Mesa
480-807-3575 | 10:45am |
| 3. Rodney and Janet Benner
15837 N. 21 st Pl., Phoenix
(Lunch and meeting)
602-971-2478 | 12:00pm |
| 4. Glenn and Katie Sampson
4222 W. Monte Cristo, Phoenix
602-938-9752 | 1:45pm |
| 5. Kal and Barbara Miller
1145 W. Northview, Phoenix.
602-725-3001 | 2:45pm |
| 6. Jerry and Joanne McKenzie
8598 Canterbury Lane, AZ City
520-466-5938 | 4:00pm |

BILL & HERTA NAGLE'S INDIAN MOUNTAIN & MINING R.R. UND DER WESTERWALDER GUTER ZUG

Welcome...to our very conventional and straightforward garden railway. This layout is being built to enjoy running trains...PERIOD. The few turnouts are manually controlled...we abhor derailments. To further simplify the operation, there are 5 separate and independent loops: two for the European layout and 3 for the early American sections. Track power is utilized throughout, controlled from a central location.

The European section is quite authentic. It represents the era from about 1940 to the present. The architectural styles have changed little, especially in the rural areas of Germany and Austria.

The American Western layout is conventional including the Indian Ruins that are a tourist attraction for the residents of the Western town.

The ASARCO mine complex furnishes employment for the residents. The unfinished double tunnel area will eventually facilitate a way for the upper level passengers to traverse their way down to the Western town via a road, path, or steps, or perhaps a cog train. A small RR station on the mesa will serve these folks as well as shuttle passengers coming from a yet to be determined set of structures to be located down the South side of the house...probably a min or rural village. Planned also is a train parking area, hopefully located in a control "booth".

We elevated the layouts utilizing retaining wall bricks from Home Depot. The fill is 0 - ¼ decomposed granite fines. The American layout's shape denotes its past life as a swimming pool.

The structures are a combination of scratch built (my wife built the large castle) and kits.

ED AND CAROLE DUNSHIE'S MMI&E RAILROAD



The MMI&E magical Railroad has approximately 600 feet of track in two separate raised modified dog bones. Most of the locomotive power, both steam and diesel, is LGB with just a sprinkling of Accucraft and a pinch of MTH. The remote control for the railroad is supplied by the LGB multi train system (MTS) with decoders installed in each locomotive. The trains run through so much lush landscaping that you will not believe you're in the desert (lots of shade for viewing). There are half a dozen or more bridges, both wooden and steel, including a replica of the famous New York City Hell Gate Bridge measuring over 18 feet long. Also a pond with water fall and a little Mexican village complete with cactus and a mariachi band that plays music when the train passes by. The trains wind through a shed that later becomes storage area when they are no longer in use. The railroad is always under going changes but is always available for viewing.

RODNEY & JANET BENNER'S REDROCK RAILROAD



The Redrock Railroad is located in Phoenix, AZ. Owned and operated by Rodney and Janet Benner. The layout consists of about 1000 feet of track in the desert settings of the 1950's. The layout consists of a main loop with a smaller inner loop. Two trains can be run at one time with the larger freight and passenger trains running on the large outer loop and a Bachmann Climax or an Aristo C-16 on a new larger inner loop that I just completed. Making stops at the R&J mine and other spurs. We use mostly Aristo Craft products and also some Bachmann. The layout extends around our pool area and has a desert backdrop with mostly cactus and desert landscaping. The layout was just started in December of 1998. Janet and I are currently active members in Arizona Big Train Operators one of the great large scale clubs in Arizona

SKUNK CREEK & DEER VALLEY R.R. GLEN & KATY SAMPSON



This version of the railroad was begun in the spring of 2000. The original four year old railroad was demolished, and a new era began. First area to be constructed was the Mine Mountain feature. This area took all too many months, of casual construction. All rocks were hauled in from the desert and construction, while being previously designed, changed frequently. This section consists of a three level Mine, Tipple, and Stamp Mill feature serviced by an LGB 0-4-0 Daisy, and three Hartland ore cars, all slightly modified, which run on an out and back loop.

Once this section was completed we proceeded to phase two, the main line which goes along the north side of our pool, and returns around mine mountain, onward through the town of Cactus Junction, then through a tunnel under Coyote Mesa completing the loop. Two other loops were constructed inside the main loop around the mountain. This area is still under construction. During this phase, Katy decided to layout and builds the Grizzly Flat feature. A loop line was laid to allow the Teddy Bear tour train to circle the town. This line is serviced by and LGB Chloe engine and two tour cars.

Coyote Mesa scenic loop came next, utilizing the area over the tunnel where we can run our fun little items, such as the Lionel Coyote and Roadrunner hand car, and our own Tooter Ville Trolley.

Each main loop utilizes track power. A Bridgeworks Mag 15, with three Aristocraft Train Engineers providing the control. All the loops are isolated, providing battery potential, or for my Ruby live steam engine to be run. The Mine Mountain, Coyote Mesa, and Grizzly Flats Loops are independent home made preset level power units.

Our layout is still very fluid, and always under construction. Additions, changes, and fine tuning are a constant. Major plans for the future are: a cog line, a rail yard, and engine house and repair facility. Our limited area to expand is a challenge, but has been fun.

KAL & BARBARA MILLER'S
WHISKEY FLATS RAILROAD

Welcome to the Whiskey Flats Railroad. This railroad has been in the planning, development and construction stage for the past 12 years. The gauge of the tracks is "G" gauge and is the largest of the model railroad gauges. The scale of the rolling stock is 1 to 22.5, which means the real trains are 22 ½ times larger than the Whiskey Flats Railroad. A 14 amp per track transformer at a 12 to 18 volt DC level provides electrical power.

Planning of the railroad started in 1991. A total of 9,000 lbs. of sand, 4,000 lbs. of dirt, and 96,000 lbs. of crushed granite was trucked, wheel barrowed, shoveled, and raked into the garden to provide the various grades and elevations. Beneath all of these products are 200 feet of electrical conduit to house the electrical and signal lines.

The various ore carts were imported from Superior, Arizona. The largest cart contains 2,520 lb. of copper ore. This cart was used for extracting ore from the mines in that area. The center cart was used for hauling construction timbers in the mines and the third and fourth carts were used for hauling tools.

Turkey Creek, which meanders through the garden, was constructed from 16,780 lb. of 1" to 3" river rock. Every two weeks in the summer this creek flows at capacity delivering water to the yard.

The track layout presently consists of about 800 feet of solid brass rail track in lengths ranging from 1 to 4 feet. Each track piece is connected to adjacent track with stainless steel track connectors and a special carbon paste to promote electrical conductivity. Because of the quality control that was incorporated into the track construction by the railroad crew, only one electrical contact drives each entire loop of track.

The edges of Turkey Creek are outlined by rectangular white stone called AJO TRAVERTINE. A total of 821 lbs. was required. The pink similarly shaped rock located around the garden consists of 310 lbs. of MONTANA TRAVERTINE. Whiskey Mountain was constructed using 4,073 lbs. of PURPLE QUARTZ mixed with crushed granite. The track gorge and some of the lining along Turkey Creek is constructed from 1,357 lbs. of MONTANA CLOUD. Some of the other rock formations were constructed using 346 lbs. of ECHO MT. GREEN, 635 lbs. of ANTIQUE OAB, 2,000 lbs. of SEDONA RED STRIP, and 160 lbs. of ETTAWA PINK. There are a number of large petrified wood pieces scattered around the garden. Copper Canyon was formed from 800

lbs. of high grade copper ore. The ore carts combined contain 3,000 lbs. of copper ore obtained from various sites.

The track is supported on 450 bricks and covered with SISQU ROCK used as ballast. This ballast took six months to locate and was ironically located inside a railroad boxcar on Grand Ave. where it sat in decayed burlap bags for 25 years. The entire quantity of 4,800 lbs. was purchased at the time as it was felt this rock could not be easily located in the future if needed. The company from which this rock was purchased was so happy to dispose of it after 25 years that they donated 500 lbs. of it to the railroad. The top surface of the entire layout is covered with 16,680 lbs. of 3/8 inch YAVAPAI INDIAN CORAL (pink top cover).

The Loren tunnel, Turkey Creek Log Tunnel, and the Senator Hwy. Tunnels were retrieved by various expeditions into the wilds of the Bradshaw Mountains over the past 11 years. (These expeditions required some participants with strong backs and weak minds!). The red rock formations came from the Camp Woods area about 35 miles North of Prescott, and from the Sedona, Arizona area. Many of the numerous logs and driftwood was retrieved from the Ash Ridge, Big Bug Mesa, Spruce Mt., Turkey Creek, Goodwin, Maverick Mt., Palace Station and Crooks Canyon areas of the Bradshaw Mountains around Prescott.

All of the railroad rolling stock is scaled down replicas of actual railroad cars and engines in a scale of 22.5 to 1. The buildings and vehicles are all to scale ranging from 20 to 1 to 32 to 1. The digital sound systems in the engines are reproduced from actual engine sounds.

Phase I of the railroad was completed in 1996 and consisted of two complete loops of track. Phase II of the Whiskey Flats Railroad was designed after the conductor had given the okay to proceed in 1998. This section consisted of a 10 ft. by 50 ft. section added to the West of the original layout and included the town of Whiskey Flats on the elevated section. Around the town was built a replica of the famous Tehachapi Pass Railroad loop near San Bernardino, California. The completion of this section in August of 2000 allowed for a third complete track loop to be constructed. The loop can be operated independently or it can be tied to track loop No. 1 for an extended track that goes around the complete layout.

The train conductor decided shortly after the completion of Phase II that a Phase III should be constructed. This phase was started in 2001 and was just completed near the end of 2002. It includes the

industrial section of Whiskey Flats and the extended trestle bridge on the West side of the pool. The completion of this section allowed for the expansion of track loop 3.

A 400-foot long rope light system was recently installed around the entire layout perimeter and is now operational. The railroad consists of approximately 26 buildings with more being added each year. The iron bridges and trestles were custom made for the railroad by Eaglewings Iron Craft of Phoenix, Arizona. The operating railroad crossing sign and lights came from the area around Superior, Arizona. The Burlington SantaFe Railroad in Phoenix donated the electrical operator for the sign.

There are many things to see in our train garden. Please feel free to walk around the entire perimeter of the layout. We hope you enjoy your time at the Whiskey Flats railroad.

Chief Engineer: **Kal Miller**
Conductor: **Barbara Miller**

TGRS FUND RAISER

"Garden Railway Tour"

By Roy Eberbach on behalf of Jerry Springstead and Jay Sanders

Working Paper October 27, 2003

Date of the Event. - January 24 / 25 2004.

Our committee has done a good bit of research and has chosen this date. The weather should be dry and in the low 70's. At this point there are no major conflicting community events on that weekend. The Superbowl is the following weekend. This date should give us the time to advertise and sell tickets after Christmas and before the Rodeo and Gem Show Events.

Time of the Event. - 12 p.m. till 4 p.m..

We would suggest that the railways be open on Saturday and Sunday from 12 p.m. till 4 p.m. This will give our guests a total of eight hours to visit the layouts and our hosts time to prepare the layouts for show.

Number of railways open on the Event. - 8 each day.

At this time we have had nine members volunteer their layouts for the event. We would like to choose layouts with a spread across the Tucson Metro Area. However we would like to keep the driving between layouts to a minimum. Gary Martin's layout will serve as the centerpiece for the event.

Cost of the Event. - \$5.00 for an Individual ticket and \$10.00 for a Family Ticket.

This cost, we feel is in order for a first time event. It would also encourage families to come out. The family ticket would be good for two adults and children from their household. We would also ask people to bring one canned good per person for the foodshelves.

Advertising for the Event.- We will need the following at a minimum.

- Flyers (5 1/2" X 8 1/2") on brightly colored paper. These will be put in hobby shops, garden supply houses, nurseries, Tucson Botanical Garden, Tohono Chul and at other train clubs such as the Toy Train Operating Museum. Also members will be asked to post one on employee bulletin boards (where possible) at work, school, church and shopping areas.
- Posters (8 1/2' X 11") to be posted at the above and wherever we can post them.
- Free listings in Tucson newspapers, Tucson Magazine, radio and perhaps TV and club and garden newsletters.
- Paid advertising in Tucson newspapers (about \$200.00) will get us

listing in the papers and perhaps an article like the one on Gary's layout for TBG fund raiser.

Ticket Sales for the Event. - Advance sales will be important.

- Members can sell tickets to friends, co-workers, family, etc.
- We could with TBG's permission sell tickets at the Christmas display layout. (December / January.
- We could have a person selling tickets at 22nd. Street Ace on the two Saturdays and Sundays before the event.
- We could sell tickets at the January Swap Meet at T.T.O.M.
- We could sell, with permission at garden centers, on the weekend before the event.
- We should sell at each of the layout locations during the event.

The club will need to provide for the Event. - people and materials.

- We will need at least two club members at each layout location to sell and punch tickets and assist the hosts. (3 or 4 would be better)
- Crossbuck Signs to be set up in front to the host home.
- Sales people for the two weekends ahead of the event.
- Flyers about the club and a membership form.
- Tickets and a sheet with a map showing layout locations and a brief description of each railway.
- Upfront money for advertising materials.

The hosts will need to provide for the Event. - at a minimum.

- A working railway in good order.
- A cell phone in case of emergency. (helpers could provide phone)
- No rest room facilities, nor house tours. (keep house locked) The page which contains maps and railway descriptions will state that there will be, "NO REST ROOMS AVAILABLE".
- Cool water and cups if the day is hot.
- A handout telling about their railway and its history.

Questions to be resolved by the Board of Directors.

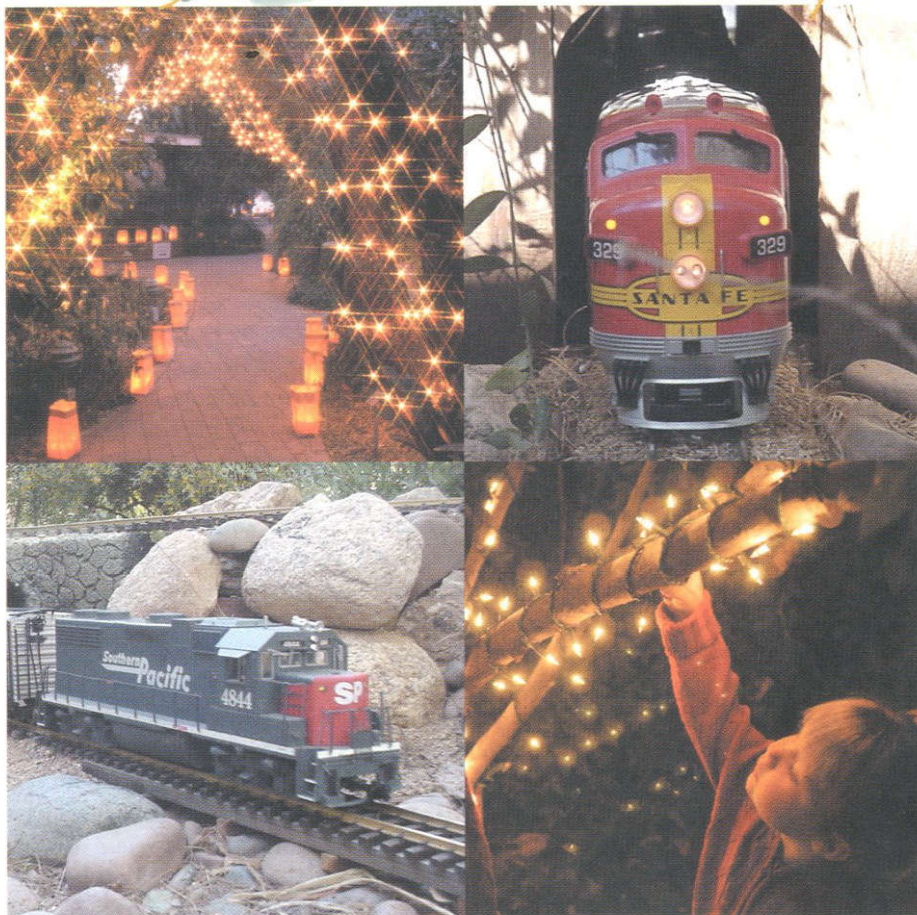
1. Do we wish to set up the kid's layout (in a garage) at one of the layouts? This would require several more people.
2. Does the club wish to raffle off a trainset with this event?

Tucson Botanical Gardens



A Newsletter for Members of the Tucson Botanical Gardens ■ Winter 2003–2004

All Aboard for a Garden Holiday



Garden Railway ★ Holiday In The Gardens
★ Luminaria Nights

Events
pages 2–3

Kids' Corner
page 5

Classes
pages 6–7

Garden Talk
page 10

Thank You
page 11



All Aboard!

Garden Railways Have a Long History

Model railroads are as old as full size trains and garden railroading started soon after railroads began crossing the country. Many railroad pioneers had scale versions of real equipment made to illustrate their ideas. These models grew over the years into trains that could be ridden upon or that served as a source of entertainment. In the 1890s, the Märklin Toy Company introduced a line of special-order tin plate toy trains in several scales with locomotives driven by clockwork, electric motors, or live steam. By the 1960s the larger scales had faded in popularity with the general public and were owned mainly by collectors and live steam enthusiasts.

Another German toy company, LGB, began to produce gauge I or garden scale (G-scale) trains in the late 1960s. Conditions were right and garden railroading took off as the fastest growing segment of the model railroad hobby. Today, garden railroading has become a family hobby enjoyed by people of all ages and genders. It can be as inexpensive or expensive

and elaborate as you want with sets running anywhere from \$100 up to museum quality models costing as much as \$12,000–\$15,000.

Garden railroading combines a fascination with trains and the joy of gardening and can be any size from a small patio garden to many acres of gardens and trains. Some garden railroaders simply run track through an

existing garden so they can watch the trains run and the plants grow. Others build fantasy layouts where dragons roam; or include such specialties such as the London to Hogwarts Express. These garden railroads attempt to mimic in a small scale the full size features of the world around us using dwarf Alberta spruce

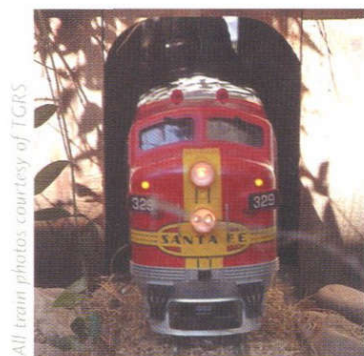
as pine trees, bonzai'd azaleas as chestnuts or oaks, and dichondra, thymes, and mints as ground covers and small shrubs. Plants with small leaves are desirable because they won't grow to a size that will overwhelm the track and buildings. Other garden features are also used to create small representations of the real world such as water features, including streams, ponds, and waterfalls; or forests, plains, and mountains. Sometimes tons of rock and earth are moved into the garden to create hills and valleys to give the impression of tracks wandering through rocky mountain passes.

Once the garden framework is in place, towns, industries, and people can be added to create an infinite variety of scenes. Buildings can be purchased in pre-built or kit form or constructed from plans or photos. The scenes can be populated with figures purchased or carved from polymer clays. The possibilities are endless.

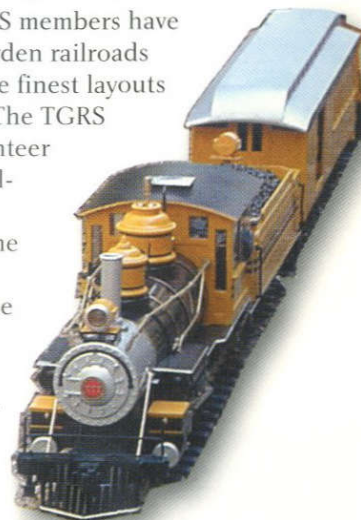
The Tucson Garden Railway Society (TGRS) was started in 1994 by a group of families interested in garden railroading. As a nonprofit educational corporation, the purpose of the Society is to help members learn about and enjoy all facets of garden railroading. They conduct meetings, clinics, workshops, and displays for members and the general public at home shows, schools, churches, county fairs, and other public venues such as the Gardens. Some TGRS members have impressive home garden railroads that rival some of the finest layouts across the country. The TGRS is a completely volunteer organization and welcomes families and individuals to become members.

The TGRS will be setting up a holiday display at the Gardens again this year. We all hope you enjoy the trains!

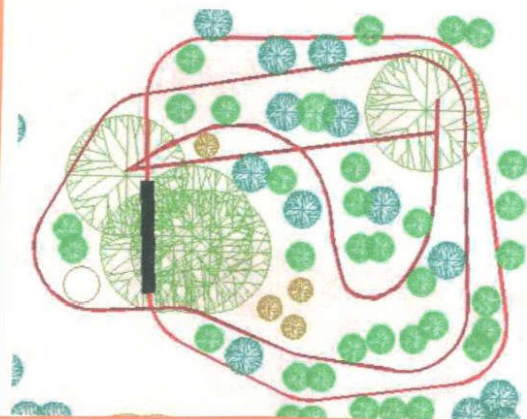
The "Holidays on Rails" exhibit is scheduled to open on November 20th and will be on display, weather permitting, through the winter. For more information on the exhibit, call the Gardens at 520/326-9686, ext. 10.



All train photos courtesy of TGRS



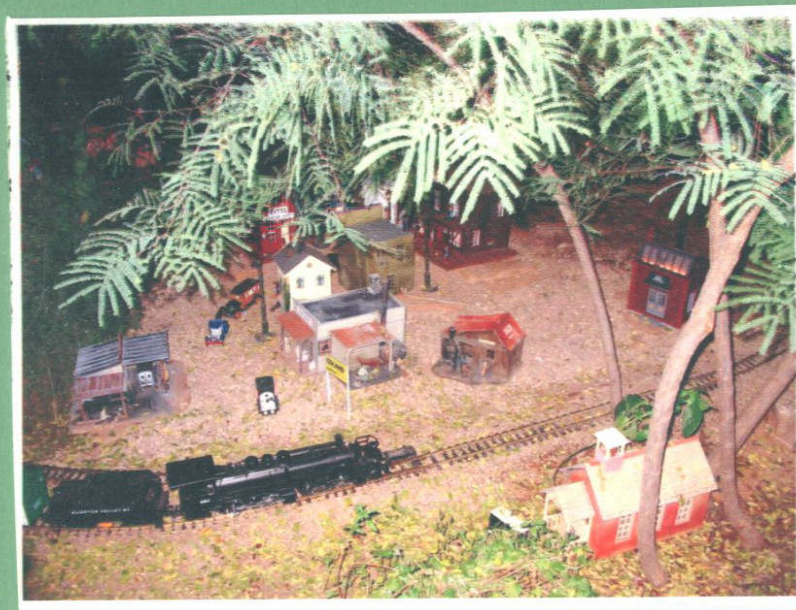
2002 (2 separate loops and a trolley)



2003 (1 continuous loop and a trolley)

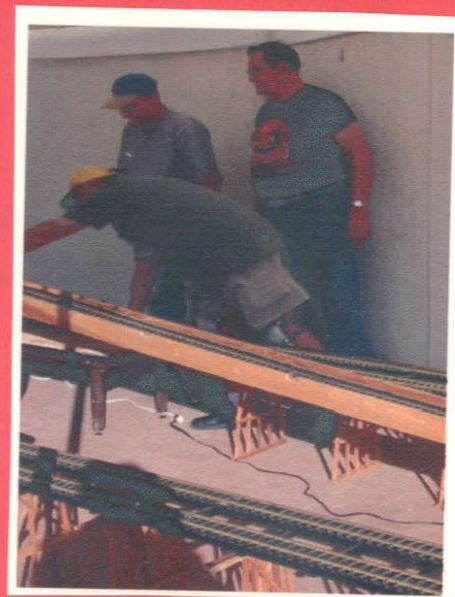
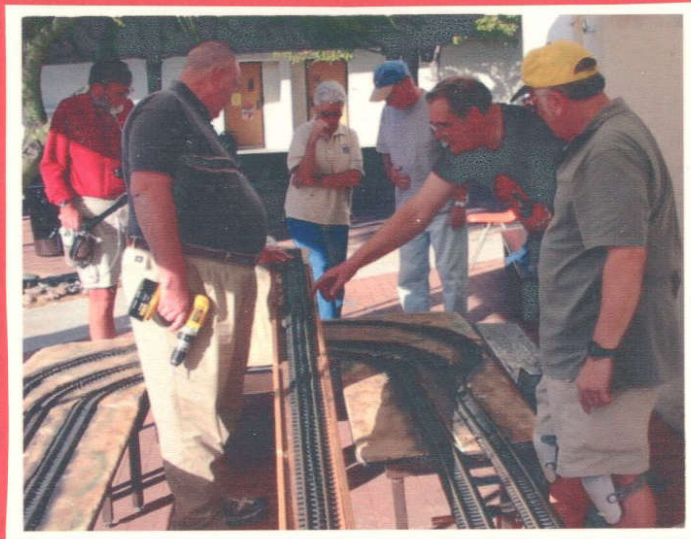








*St. Mark's Early Childhood
Center - December 2003*



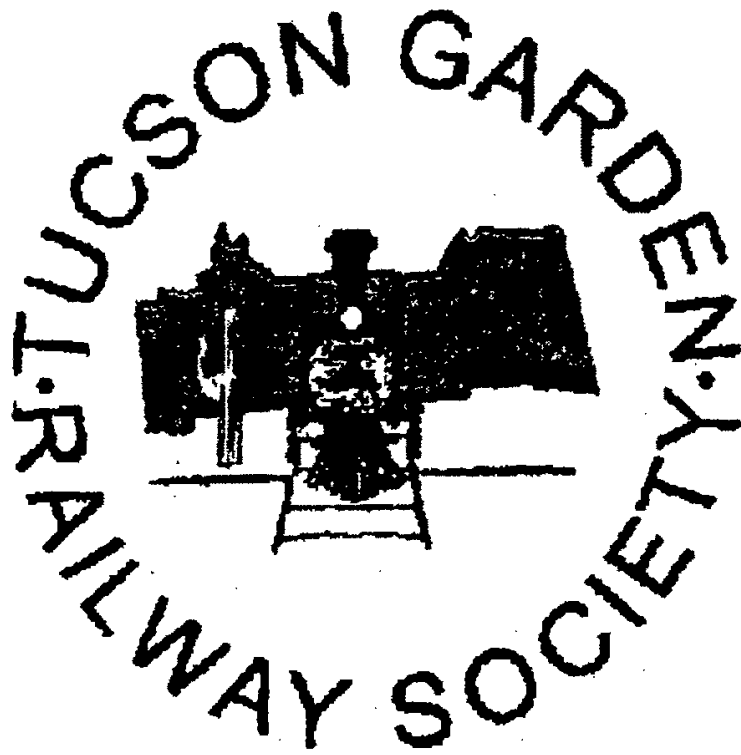


HOLIDAY PARTY

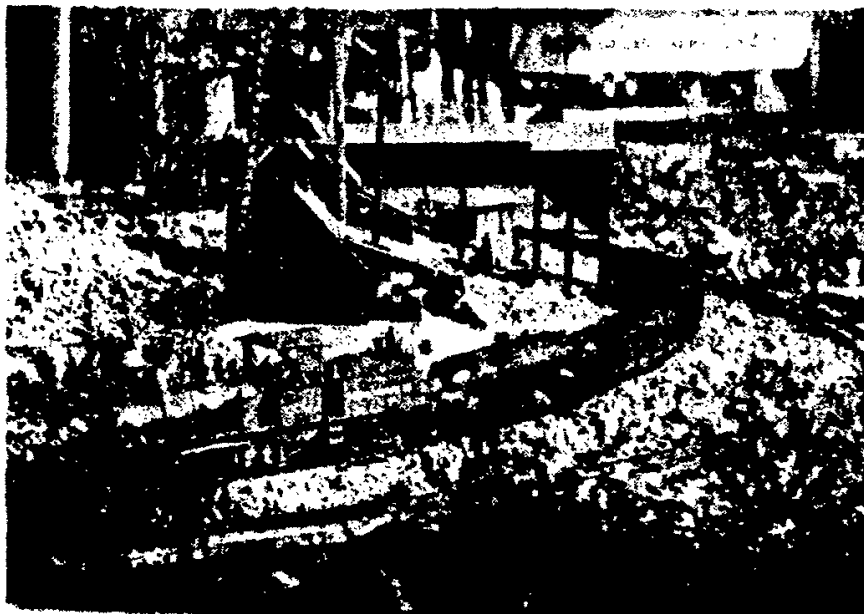
DECEMBER, 2003







The
Tucson Garden Railway Society
Welcomes
the **Arizona Big Train Operators**
to our
Spring Round-About
March 18, 2000





Tucson Garden Railway Society

President:	Jon Anderson -	(520) 529-6554
V-President:	Gary Martin -	(520) 299-7428
Secretary:	Phyllis Dirksen -	(520) 742-9503
Treasurer:	Dick Izen -	(520) 498-4634
Editor:	Nick C. Buchholz -	(520) 744-4932

The Tucson Garden Railway Society would like to welcome all of you to our Second Round-A-Bout. We hope the weather is better this time and we also hope you all have as much fun this time as you did last time. You'll be visiting eight railroads belonging to TGRS members today. We hope you enjoy them. This booklet will tell you a little about each railroad and introduce you to the builders and owners.

The schedule today is tight and ends with dinner at Pinnacle Pete's Restaurant with the TGRS members. Get ready for a fun day.

Today's Schedule

1000 -1030 - Sleepy Hollow RR - Dick and Jeanne Izen

1045 - 1115 - Grand River Southern - Bob and Eileen Schwab

1130 - 1150 - J.J. & A. Railroad - John & Jean Woodward

1230 - 1330 - Lunch at the Eagle Mountain RR - Gary and Peggy Martin

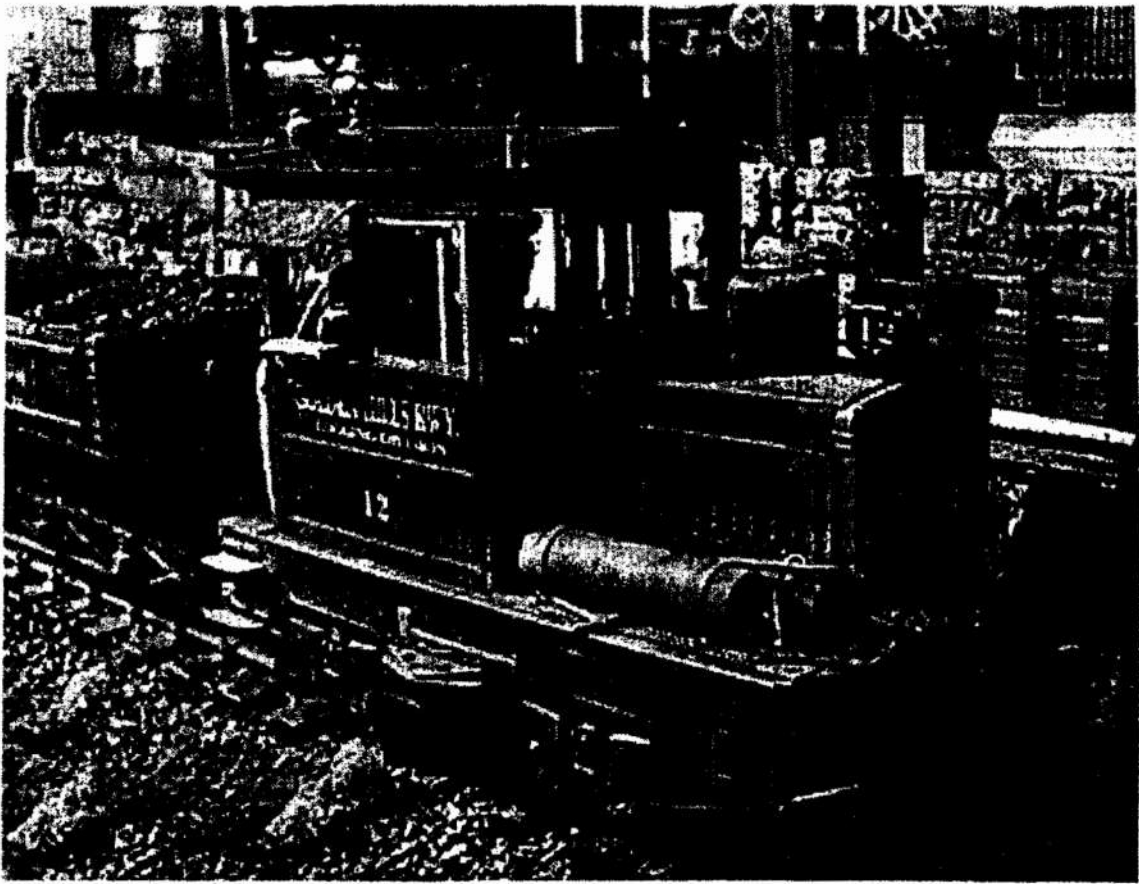
1345 - 1415 - Sunrise & Cimarron RR - Darel, Anne & Kevin Magee

1430 - 1450 -Red Rock Railroad - Mike and Jane Dorgan

1515 - 1545 - Silverado Hills Railroad - Rick And Debbie Taylor

1600 - 1630 - TNT Railroad - Rick And Sue Gast

1700 - Departure - Dinner at Pinnacle Pete's Restaurant



Plymouth Gas Mechanical Industrial Engine Model (I:20.3)

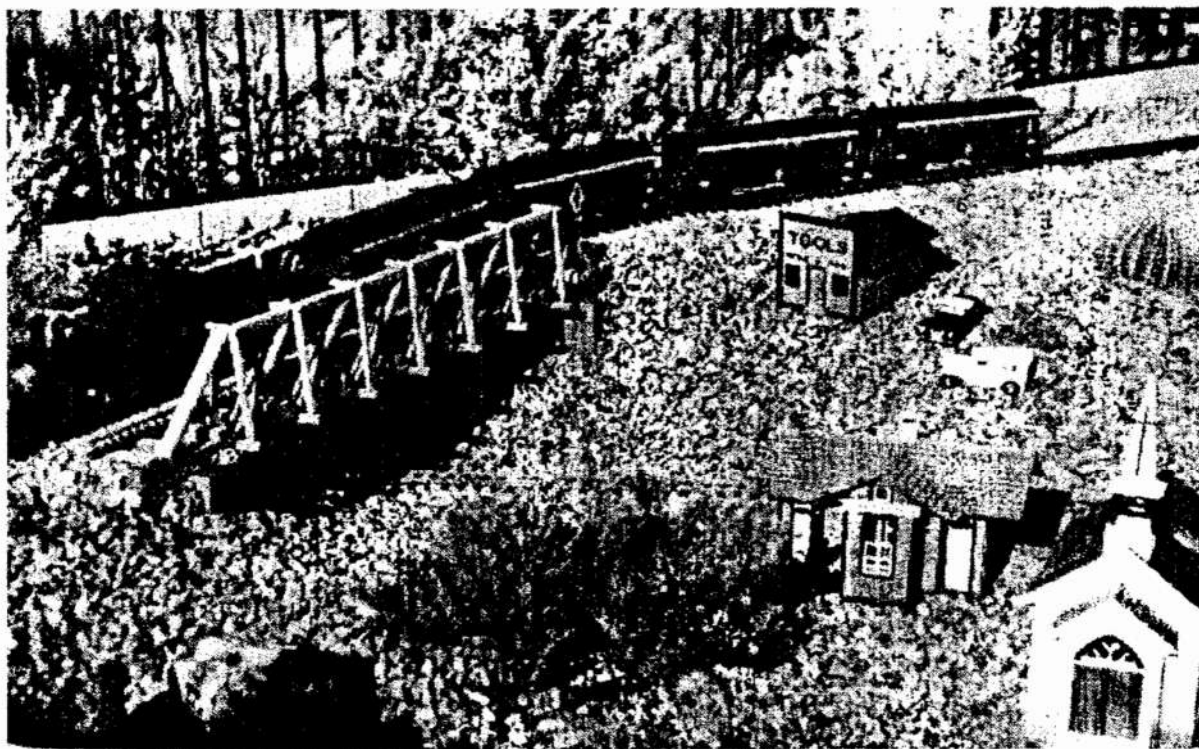


The unfinished Lantana Tunnel on the TP&SD RR

SLEEPY HOLLOW RAILROAD

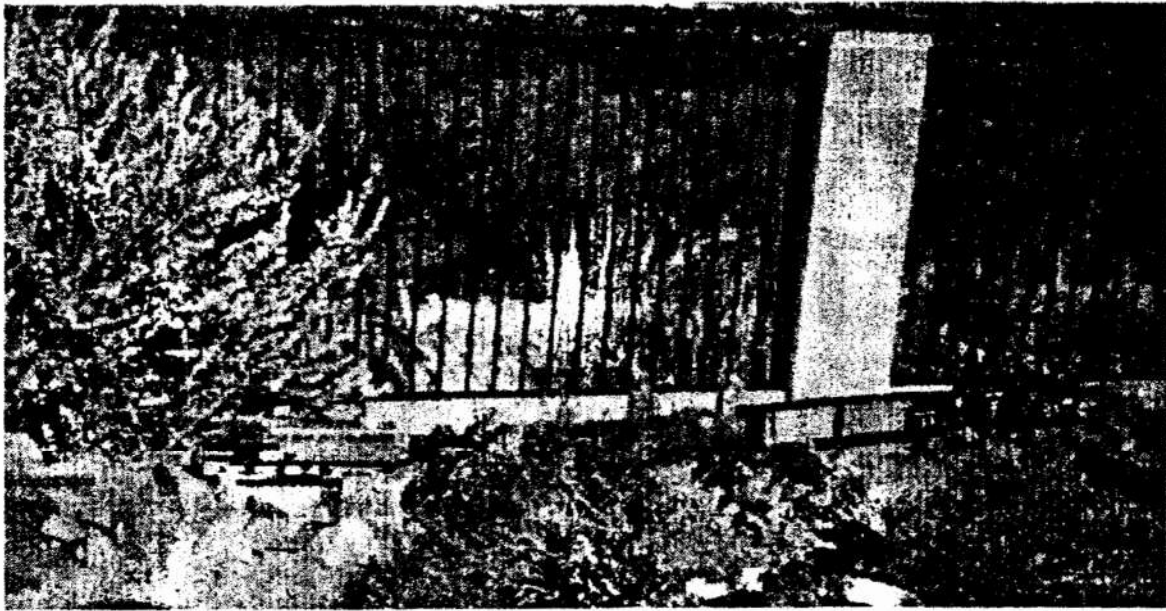


The Sleepy Hollow is a battery operated railroad with roughly 350 feet of track. It is (very) roughly in the shape of a bent figure eight running across the rear of the yard (between the pool and the fence) and down either side. On the right it continues down the side of the house and has a three track stub yard and reversing loop. The railroad features four sidings so that trains can pass and meet. Although not planned, another prototypical element is the occasional derailment, a feature which is being eliminated as I get more ballast down.

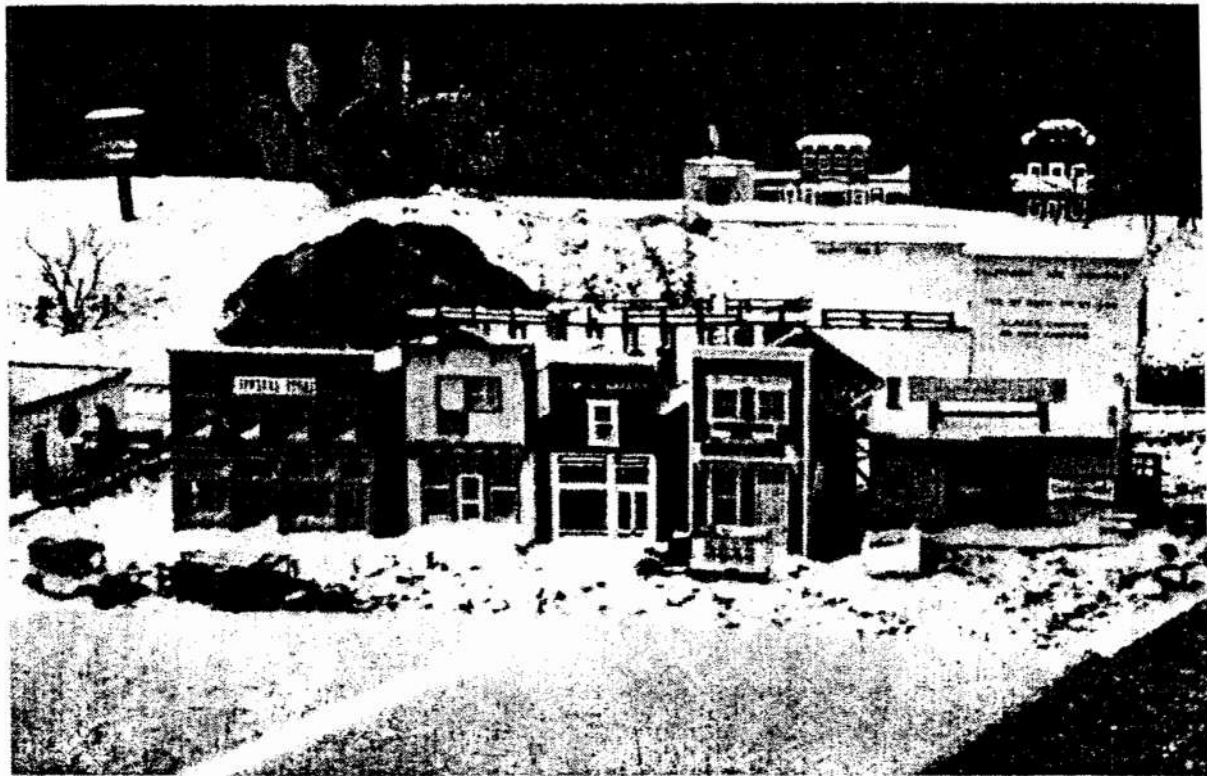


Sleepy Hollow engines carry their batteries in their tender (for steam engines) or in their car body (for diesels) and are equipped with sound. The steam engines and freight rolling stock use Kadee couplers. A couple of the Aristo Craft FA diesel engines and standard heavyweight passenger cars still have Aristo Craft knuckle couplers. An adapter tank car is used to allow those engines to pull freight trains.

Engines and rolling stock are an eclectic mix of narrow gauge and standard gauge equipment. While I prefer steam engines, my grades limit them to shorter trains. In addition I love the way the FA's and the long standard passenger cars look. They seem to fit in well, except when I am running short narrow gauge passenger trains.



My scenery is pretty much natural with full size plants, some rock work and a number of buildings. I have a mixture of kits and scratch built buildings which I think helps to break up the sameness of the basic Pola kits. In addition scratch building and kit bashing has allowed me to get some unique industries. All of the buildings suffer from the strong sun and heat but snow isn't usually much of a problem.

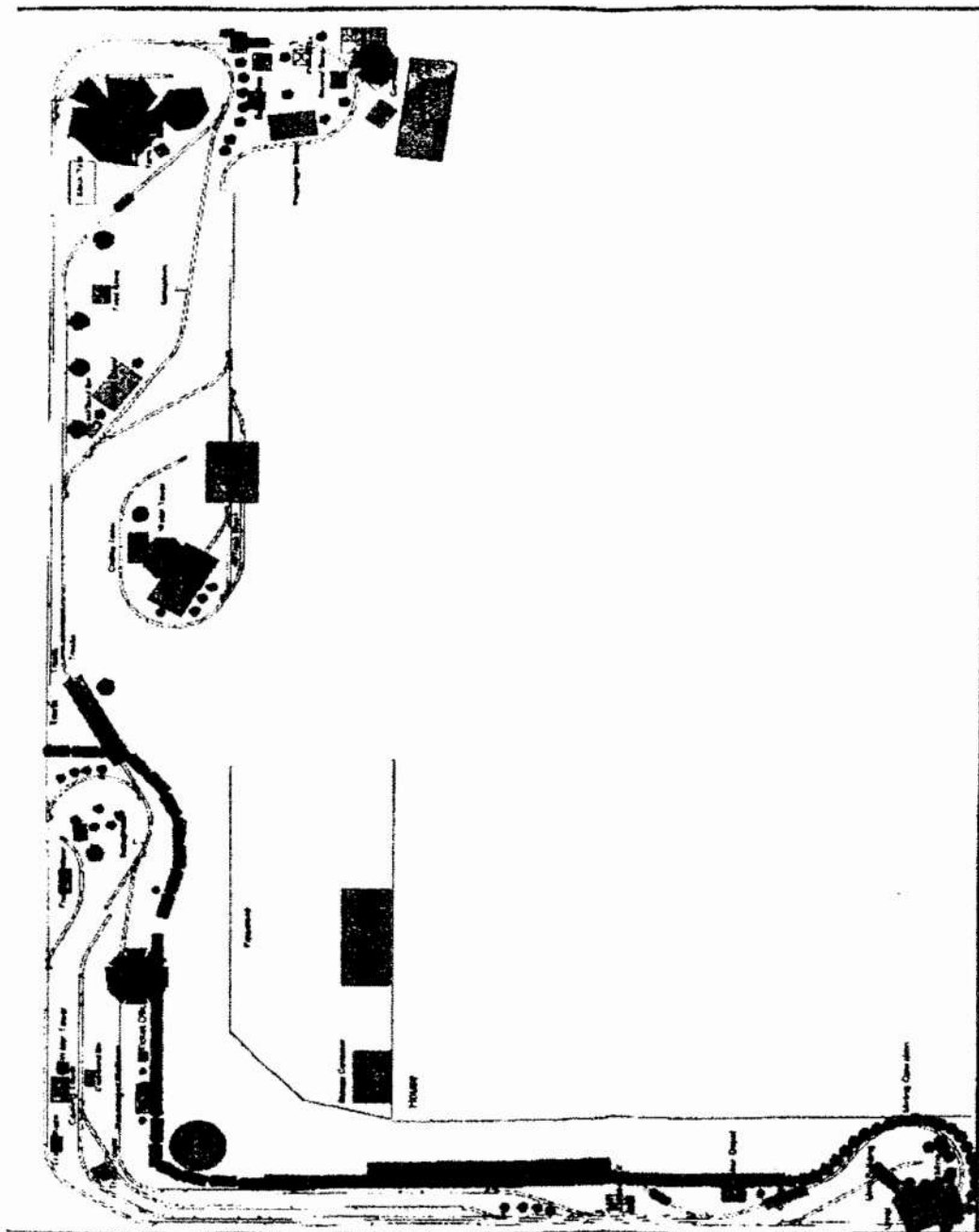


J. J. & A. RAILROAD

The J.J.&A Railroad was started on June 15, 1999. It has about 375 feet of track. The layout is L-shaped. One leg is 60 x 8 feet the other is 35 x 3.5 feet. The JJ&A is an 1880-1930 era railroad. It has 22 buildings including a saw mill with a sound system that sounds like sawing wood.

For motive power the JJ&A uses 1 mogul and 3 forneys from LGB and two C-16 Steam engines from Aristo-Craft. Two different control and power systems are used. The four LGB engines are equipped with Locoline receivers. The power for operation comes from filtered DC power supplies feeding the track. The Aristo engines run using an Aristo Train Engineer system which can be swapped out with banana clips.

The railroad runs a number of different brands of rolling stock. Freight and passenger cars from LGB, Freight cars from both Aristo and Bachmann. Below is a schematic of the track layout



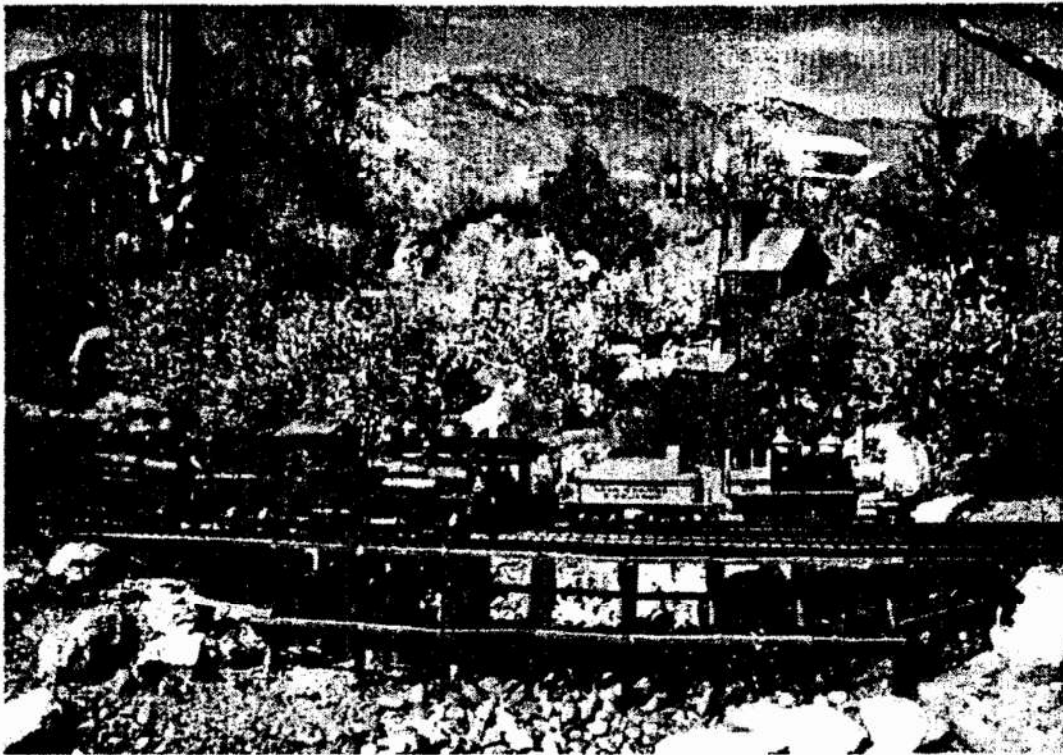
Eagle Mountain Railroad

The Eagle Mountain Railroad has been under construction for five years and as with all railroads it is not yet complete. Gary has been working on the new upper section for just a few months but it is already on the way to completion. The layout is about 40 by 115 feet and includes about 900' of track.

The Eagle Mountain Railroad is a logging and mining railroad set in the late 19th and early 20th Century. There are 30 structures, both kits and scratch-built, representing the range of buildings found in rural areas and small towns both on and off line.

The EMR motive power comes from two ex-D&RG LGB moguls, an ex-Sumpter Valley mallet, a Porter, an 0-4-0 switcher from Hartland, three shays and a Climax. The rolling stock includes logging disconnects, gondolas, hoppers and several passenger cars.

Power and control comes from track power and Aristo-Craft Train Engineers.



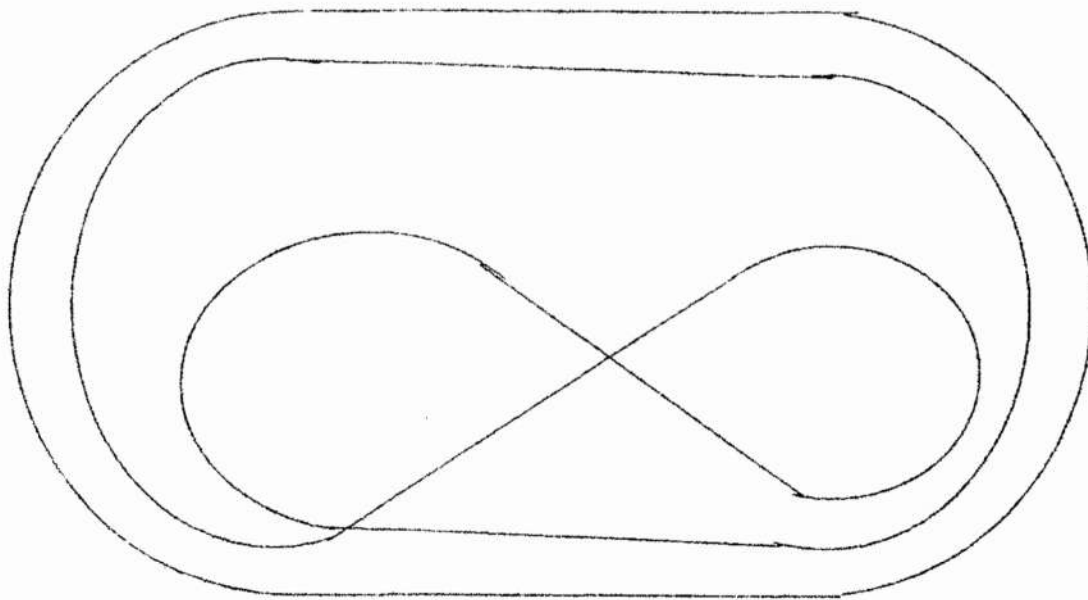
Sunrise and Cimarron Railroad

The Sunrise and Cimarron Railroad was started in 1989. Today it consists of two loops. The outside loop has about 196 feet of track in a large oval. The inside loop consists of 364 feet of track in a folded figure-eight on two levels. The total area of the layout is 24 feet by 84 feet.

While the S&C RR has no off line structures, it does have two bridges and three tunnels. These allow the trains to cross over each other. A trestle is in the process of construction.

The S&C RR has 6 or 7 engines and 25 cars. The S&C uses track power and Aristo-Craft Train Engineer remote control.

On our info sheet Darel comments "I never promised her a rose garden, just lots of rocks"



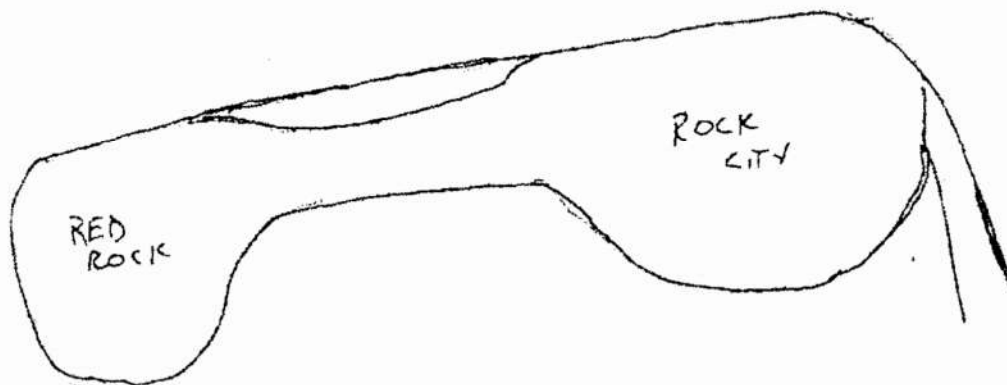
Layout of the Sunrise and Cimarron Railroad

RED ROCK RAILROAD

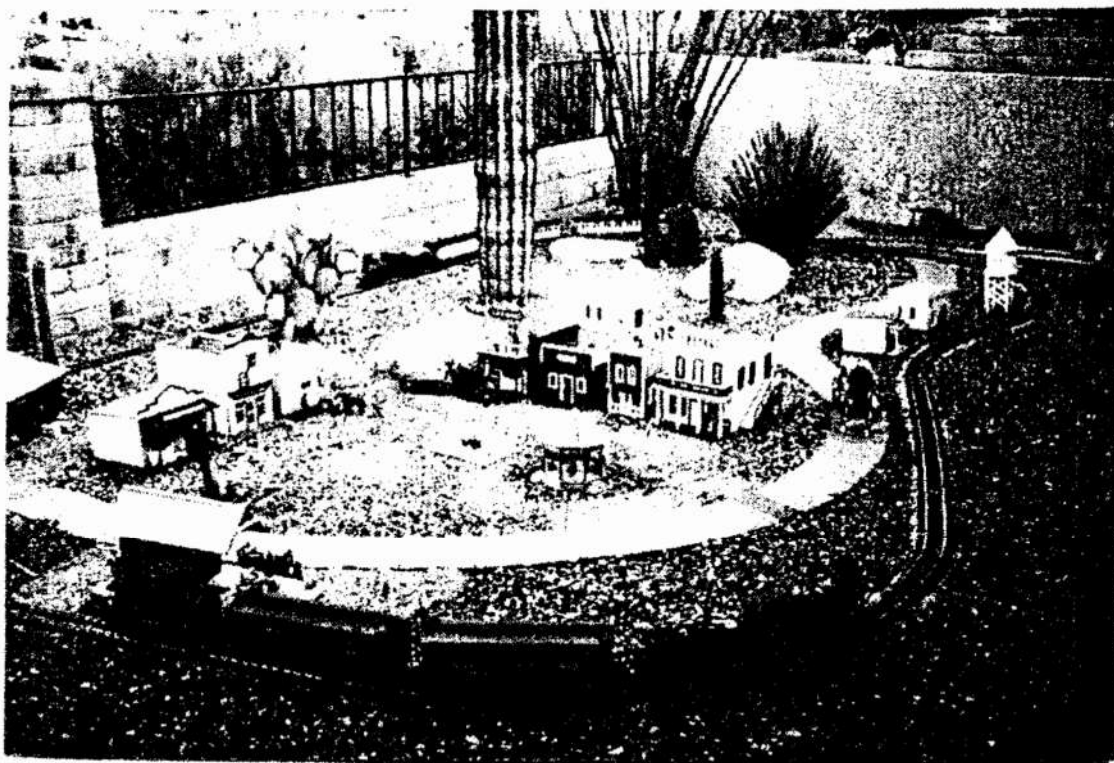
Mike and Jane Dorgan's Red Rock Railroad is less than a year old. Started in July of 1999 the Red Rock is now about 60' by 15' and has about 200' of track. The Red Rock is named after the water tower which still remains at Red Rock on the old SP mainline.

The Red Rock serves Rock City and Red Rock. Rock City is the big town with a depot, mission, downtown area, boot hill, stockyards and other buildings and features. Red Rock is a small town with a rural depot, an Indian village, a fort, settlers homes and more. There are 30 structures and 6 wagons on the layout.

The railroad serves its customers with two engines and an handful of passenger and freight cars. The engines are battery powered with Sierra sound systems.

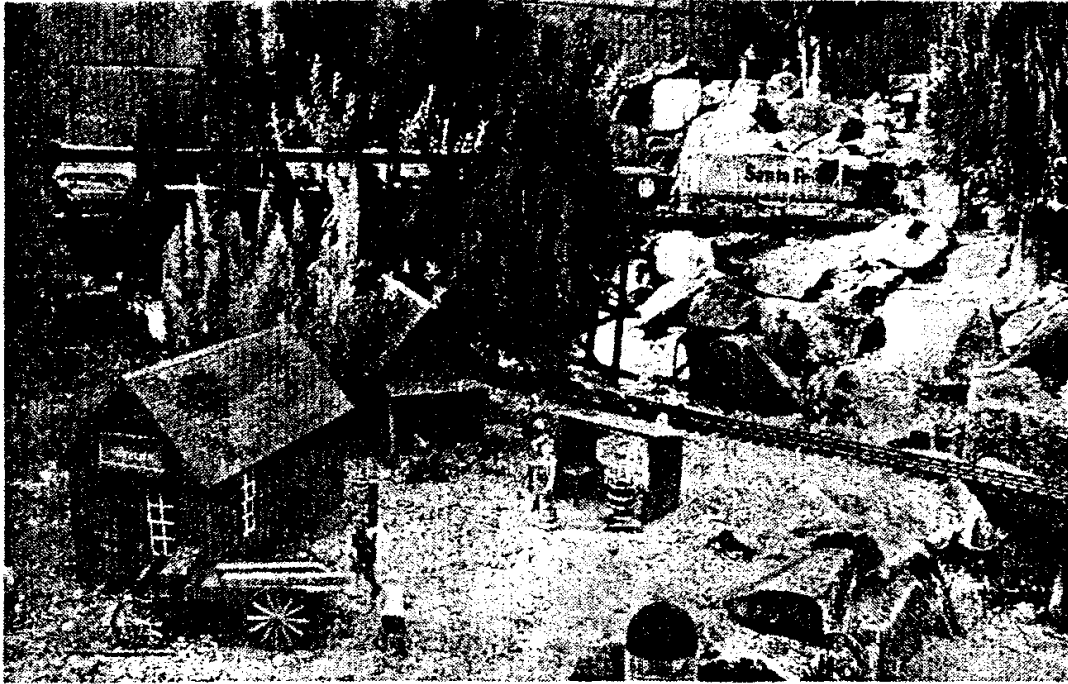


Layout of the Red Rock Railroad

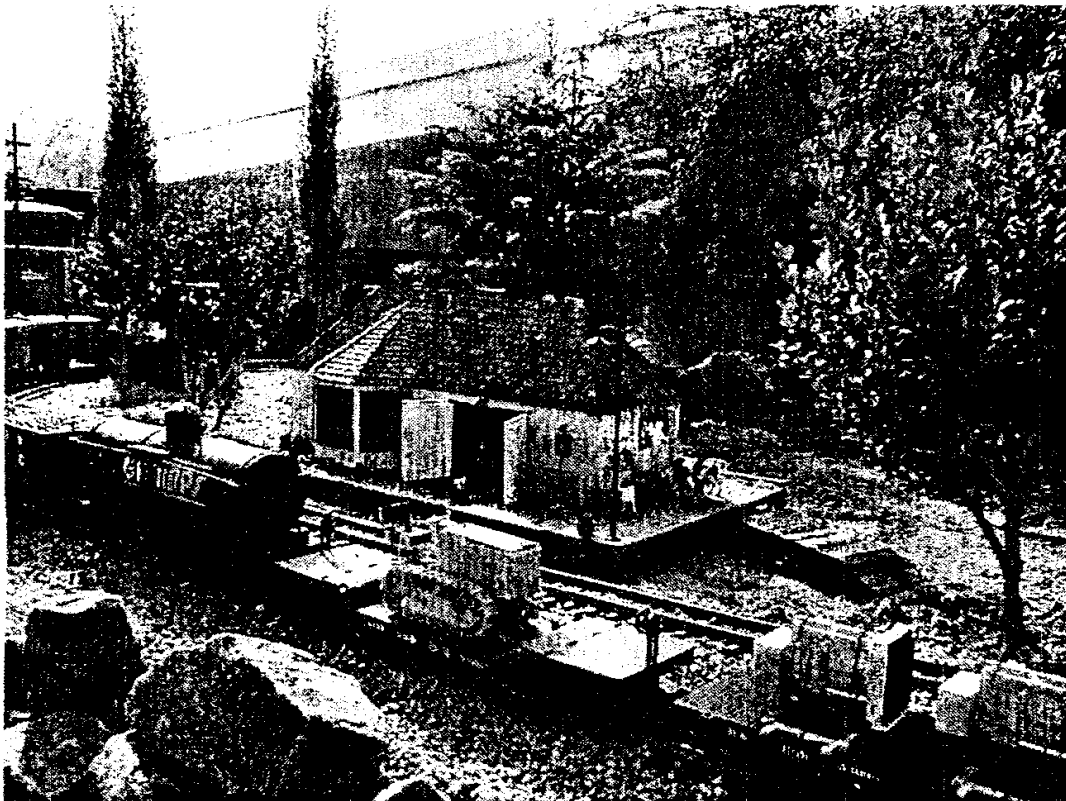


Silverado Hills Railroad

The Silverado Hills Railroad (SHRR) is about 3 years old it includes 500' of track, 70' of which is a ceiling mounted layout in the garage, it represents a mining and small town Railroad around 1950. The motive power includes ten engines. There are 53 pieces of rolling stock



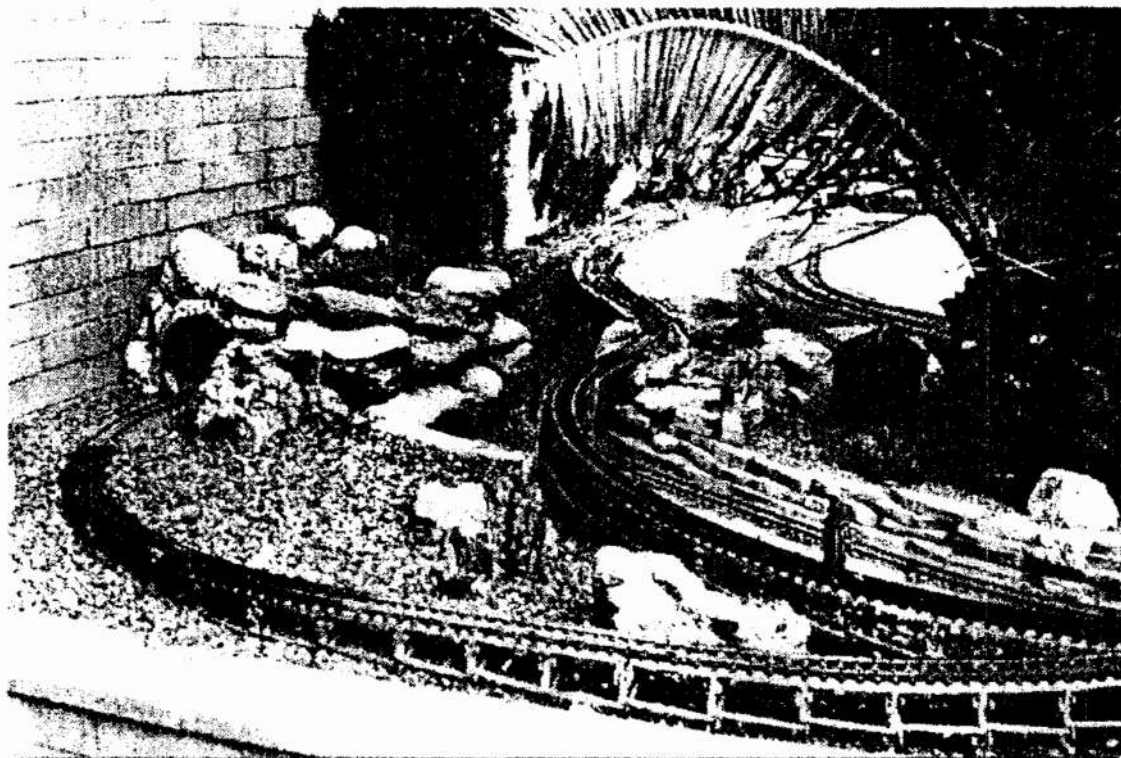
Ten Structures grace the layout including a huge mine Mill house. The layout uses three control systems.



TNT RAILROAD

The TNT Railroad was named after two (now retired) track layers that provided the cheap labor to build the layout. During the year 2000 the owners are eager to start phase three of the Railroad. This means that TNT, alias "Tim and Ted" will be forced out of retirement for the new construction. However, the owners have been informed that the labor rates have tripled since 1995 when the layout was started.

The layout contains about 320 feet of Aristo and LGB track. It covers a space 47 feet by 6 to 12 feet wide. The switches are LGB 1600's. The smallest curves are LGB 1500 curve (5' Diameter).

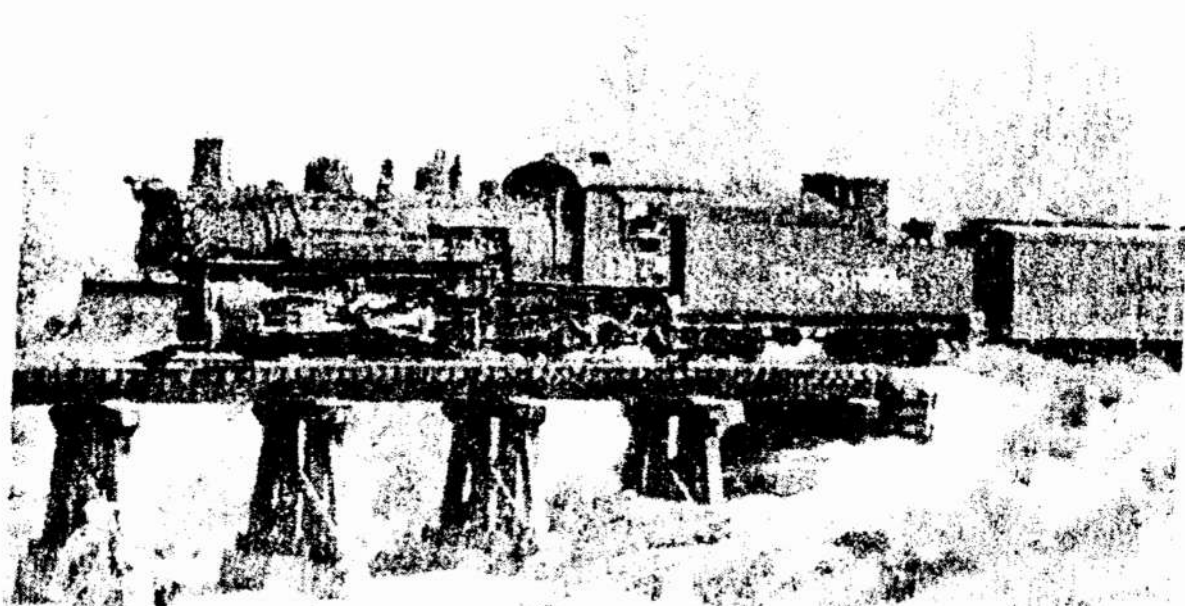


The layout depicts a railroad of the early 1900's. Motive power consists of LGB steam engines and diesels from LGB, USA Trains and Aristocraft. Rolling stock comes from LGB, USA Trains, Delton and Aristocraft.

There are a dozen buildings on the layout including those by Piko, Lionel, Railroad Ave., Aristocraft and Korber.

The power and control comes from 2 - P.H. 10 AMP transformers with Aristocraft Train Engineer remote controls.

Photo © 1965, 1996 by Jerry Appleman



So long
and
see you all
in
the fall

The TCRS