



The Tucson Garden Railway Society

TIMETABLE

Send Articles, Photos, Announcements to:
Claudia Nelson: ccgnelson@gmail.com

October 1, 2018

TGRS Dues is Due, Due, Due!!!

(for the year July 1, 2018 to June 30, 2019)
\$30.00 PER MEMBER OR FAMILY

Please make check payable to TGRS and send to:

RUTH TAYLOR
TREASURER, TGRS
4081 S. TARANTULA HAWK PLACE
TUCSON, AZ 85735

General Meeting Saturday, October 20, 2018

Where: Jack & Rosalie Forgues
[61786 E. Sandlewood Road](https://www.google.com/maps/place/61786+E+Sandlewood+Road,+Tucson,+AZ+85739)
Tucson, AZ 85739

When: 9:00 am trains running
10:00 am general meeting

Directions:

From N. Oracle Road (RT. 77) turn right onto Saddlebrooke Blvd. at the signal. Turn right onto Mountainview Blvd. Just after the tennis courts, turn right onto Clubhouse Drive. Follow Clubhouse Drive to Northwood Road, turn right onto Northwood Road and continue to Winding Trail Drive. Turn left onto Winding Trail Drive, continue to Sandlewood Road. Turn left onto Sandlewood Road and continue down the street to 61786 E. Sandlewood Road.

Quail Ridge Garden Railroad

Our garden railroad came into existence in April of 2006 when we moved into our new home in SaddleBrooke. We decided that it would be easier to have an elevated railroad that would work with our landscaping plan. After two attempts at building the

elevated railroad, we decided to add elevated pads and a new rock canyon to our existing landscape.



Our track plan consists of two independent loops with a switchyard for each loop. The time period for our layout is the early 1950's to the late 1980's. We have approximately 1,200 feet of track and 26 switches. We run both steam and diesel locomotives on the Quail Ridge Railroad. The locomotives are electric powered with QSI sound /decoder boards installed. To create a more dramatic focal point for the Quail Ridge Railroad, we added a three story mine at the entrance to the railroad. The layout has several buildings which are either metal with plastic siding added or scratch built. But as time goes by we will be adding more structures to the layout. I'm in the process of add new section to our railroad, which will include Bird House City, rideable train layout, Zip line area with people sliding down the line from other areas of the layout. This area is a work in progress and we hope you will enjoy seeing what we have added to our Garden railroad.

Folding chairs would be greatly appreciated.

WELCOME NEW MEMBERS

WESLEY & LORI WHITMAN

ANDY & PAM KERR

JAMES & DEBRA ELLSWORTH

SOCIAL ACTIVITIES

By Chuck Cook

SOCIAL LUNCHEON

Wow, I think we had a record low number for lunch in Sept. But, we all had a great time. In October we will again head to [The Red Garter Saloon](#), located at 3143 E. Speedway just east of Country Club, on Wednesday October 17th. The food is always great, the service excellent, and the conversation varied and fun. In September one member, there for the first time, said how great the hamburger was – that is what brought me to this place some 15 years ago. Be there at 11:00 for pool (no rules, loose scorekeeping and lots of fun), or 11:45 for lunch. Call Chuck Cook at 977-7673 with any questions.

ROAD TRIPS

At the last meeting there was some talk of members going on some road trips. I am open to any ideas. So far we have a trip to McCormick Park in Scottsdale as almost certain. Any other places you want to go? How far are you willing to travel? Any local places hold interest like Titan Missile Museum or Pima Air and Space? Send me an e-mail at chuckcooktucson@gmail.com with any ideas.

TUCSON GARDEN RAILWAY SOCIETY

GENERAL MEETING

September 15, 2018

John and Audrie Fennema's Home



Thanks were given to the Fennemas for hosting and “treating” us so well. There were approximately 31 members present for the meeting. The meeting was called to order by Dennis Maher in Glenn Mitchell’s absence.

The minutes of the June General Meeting were approved as published in the Newsletter.

The Treasurer’s Report was accepted as read by Dennis in Ruth Taylor’s absence:

| | |
|----------------------------|----------------|
| Checking (as of 09/09/18): | \$ 3,022. |
| Savings (as of 09/09/18): | <u>17,289.</u> |
| Total on Deposit: | \$20,311. |

| | |
|---------------------------|---------------|
| Receipts (from 06/10/18): | \$ 621. |
| Expenses (from 06/10/18): | <u>1,171.</u> |
| Net Revenue: | \$ -550. |

| | |
|------------------------------|---------------|
| Year to Date Recap (2018-19) | |
| Receipts: | \$ 301. |
| Expenses: | <u>1,111.</u> |
| Net Revenue: | \$ -810. |

Dues paid 2018-19 as of 06/10/18: \$870 (28 renewals and 1 new member)

OLD BUSINESS:

Public Layout Status – the only update to any of our layouts was from The Children’s Museum – repairs to two engines by Gary Martin. The Tucson Botanical Gardens currently has five engines in good working order.

NEW BUSINESS: Per Willis Fagg, Upland Trains has moved and is planning an open house on October 20th.

Reminder: club elections are next May – consider stepping up and volunteering!

VICE-PRESIDENT’S REPORT:

The October BOD will occur on 10/18 (Mitchell residence) and the General Meeting on 10/20 at the Forgues’. October 20th is also the date for the Leukemia & Lymphoma Society’s Light the Night event at Park Place Mall. Last year a meal was provided for the workers. Setup is at 2pm and we will run from 4:30 until about 8pm.

The annual Carmichael/Pappas Open House is scheduled for 11/03 – save the date and RSVP.

There will be a swap meet on November 9 and 10.

The November General Meeting will be 11/10 at the Martins’ following their Open House.

The Christmas holiday party will be 12/01 at Noon, again at the Golden Corral, 6865 N. Thornydale Road

Prescott Valley Swap Meet August 18, 2018

with a voluntary gift exchange (train-related and \$20 maximum value).

The dates for the Gardens' Luminaria Nights have not yet been published. They usually take place the first two weekends of December.

Ocotillo Learning Center is having a Polar Express Day, 12/20 (preschool and kindergartners), more information to follow.

Information on the December VA hospital display dates, Etc. is still pending.

January 19 is the date for the General Meeting at the Gadsden-Pacific Division Toy Train Museum; more information to follow.

A "head honcho" for the 2019 Rails in the Garden is needed. Layout volunteers are needed as well.

It has been suggested that we extend the summer hiatus to include the months of June and September. More discussion is planned at future meetings.

NEWSLETTER EDITOR'S REPORT:

Pictures and stories (old and new) are encouraged and new ideas are welcome.

COMMITTEE REPORTS:

Membership: Per the treasurer's report, 29 paid and 7 honorary/lifetime members as of 6/10/19.

Website: No report.

Education: nothing new to report.

Cinics: nothing new to report.

Maintenance: as above under public layout status.

Mentor Program: Gary Martin is mentoring a new member. Just give him a call if you need help.

Social Activities: the next Social luncheon will be 9/19 at the Red Garter Saloon.

OTHER:

Norm Ulmer has 9 engines for sale.

Next General Meeting: October 20 at Jack and Rosalie Forgues' home. Please check the October Newsletter for time and details.

Respectfully submitted,
Gina Blackwell, Secretary

Random photos



The Gang



TGRS Vendors



Look at this!

My Life as a Railroader

By John Fennema

Fireman (Part 3)

The school was another 3 weeks of rules, rules, rules, test, test, and test. We did get a couple days of running a switch engine back and forth. After rules class was over, my class went to Kansas City for 3 weeks of simulator training. Simulator training was a mix of classroom during the morning, learning the workings of a locomotive and then running in the actual simulator. SP had one of the most up-to-date simulators, using Laser discs and rocking motion. Most of the simulator time was running on our new assigned territory. Since I was going to Tucumcari, my run was 333 miles to El Paso. Little did I know that I would be on the 2nd longest SP run between terminals.

We returned to El Paso for a few more days and then onto Tucumcari. There were only 4 of us from the class that were transferred to Tucumcari, the rest stayed in El Paso. As a Fireman, you were called with an Engineer who gave advice & suggestions. My first run and everyone after that was a learning experience. The run from Tucumcari to El Paso was Direct Traffic Control (DTC), where the dispatcher authorized you to move your train from one "block" to another. Each "block" varied in distance but averaged 10 miles. Although signaled, you had verbal authority from the Dispatcher. There were 29 blocks in the 330-mile subdivision; you would call the Dispatcher when you were ready to depart, and he would say "SP9600, with Engineer Fennema, you are authorized to proceed Westward 6 blocks, Tucumcari to Santa Rosa, take siding (or hold the main) at Santa Rosa". The conductor would repeat instructions and off we would go. When we arrived Santa Rosa and took the siding, we would release our authority and the Dispatcher would then give the Eastbound authority pasted



Deep discussion



I won!



I won, too!

Santa Rosa. Sometimes the wait was short, others an hour or longer, based on opposing traffic. He would then give us more authority to proceed Westward; sometimes 1 block other times 5. The most I was given at one time was 18 blocks from El Paso to Vaughn; I was running a new, expedited train with a guarantee of 41hrs from LA to Chicago. I was constantly learning the undulating territory, every signal, siding, curve, and road crossing, where I was going to gain speed or slow down. A trick I learned was that if you looked out the window and the next distant signal was high; you were going uphill and vice-a-versa going downhill. The last 3 miles into El Paso were Centralized Traffic Control (CTC) which meant you governed by the signal to move that the dispatcher would operate, no verbal authority. Typically, I would share the run with the engineer, others would let me run the entire trip, and only 2 never let me run, which was fine, it's his train. After 90 days, I was given my check ride by a Road Foreman, certified and marked up as an Engineer.

Engineer (Part 4)

Upon promotion to Locomotive Engineer, now I am the one who makes the decisions as far as running the train. Each train reacts differently and the first consideration is the type of Locomotives in your consist; GE's react 3-4 seconds slower than EMD locomotives when throttling up for more speed. I prefer EMD's over GE's and I loved the immediate feeling of power when throttling up to notch 8, the maximum power notch. In addition, foreign line locomotives on the headend (BN, CSX, NS, KCS, CP, CN and others) have different cab set-ups. Even though the motive power is the same, each RR customizes its cabs. BNSF are the best, NS the worst. Alerter (if not pushed every 30-45 seconds, train goes into emergency, all brakes applied) buttons are in different locations, BNSF seats are comfortable, UP horrible, computers screens in NS cabs are on the side due to fact

that they run long nose forward. I must consider how many loads, empties, tonnage, types of cars, and horsepower per ton. And you are constantly monitoring all the airflow gauges, Power/Braking amps, and speedometer. For instance, a loaded intermodal train will slow slower than an empty one when brakes are applied. There is little slack action on intermodals. Auto-rack trains have longer drawbars, take more time to set up brakes, whereas, when releasing the brakes, patience is a virtue, meaning you have to wait for all the slack to run out before adding another throttle notch or you'll end up braking it in two. Manifest trains have a combination of all sorts of cars and again, patience for the airbrakes to release when ready to move.

Over time, computers became more and more prevalent, running the power supposedly more efficiently and conserving fuel (meaning velocity fell dramatically). First thing was Distributive Power Unit (DPU or remotes) in 1990's. My first experience with DPU's was on a coal train. I had no training, just a book and was told to figure it out on the fly. DPU's or remotes are on the back of the train or in-train and can be controlled synchronize or independently. DP's were also speed increaser's, on a 16,000-ton coal train, if I had 3 locomotives on the headend, I was going 9 mph up some hills, with 2 units on the headend and a DP at the end, I was going 12mph. There are two computer screens, one for the head-end power and one for the remote.



(to be continued...)

THE ELBLĄG CANAL and “RAILWAY”

by David Nelson

Recently, on a brief visit to Poland, Claudia and I were lucky to experience a unique example of 19th century engineering ingenuity. In the early 1800s there was a desire to facilitate the transport of agricultural products and especially timber from the pine forests of the Wschodniopomorskie Lake District of what is now northern Poland. Since this was before railroads were built in this part of Europe, the solution was to link the lakes with canals, eventually leading to the Elblag river. This river flows into the Vistula lagoon, which then gives access to the Baltic Sea.

The canal was commissioned by the King of Prussia, as this area was part of Prussia in the early part of the 19th century. Construction of the canal (1844-1860) was typical of the times, except that one section required a vertical lift of almost 100 meters. This would have required more locks than practical. The architect for the project, Georg Steenke, borrowed an idea that he had seen used on the Morris Canal (northern New Jersey). This solution was to use inclined planes or slipways to link various elevations of the canal. This is shown diagrammatically in the figure below.



On each incline two parallel sets of tracks extend into the water of both the upper and lower canals. Each track has a wheeled platform that sits in the water, one at the upper canal and one at the lower canal. The boat is driven over the platform, tied to the rails, and a steel cable is activated that simultaneously pulls the lower platform up and the upper platform down, so that the platforms counter-balance each other. As the platform moves out of the water, the boat settles down on the platform. The picture below shows a pleasure

boat on a platform passing us going down as our boat goes uphill.

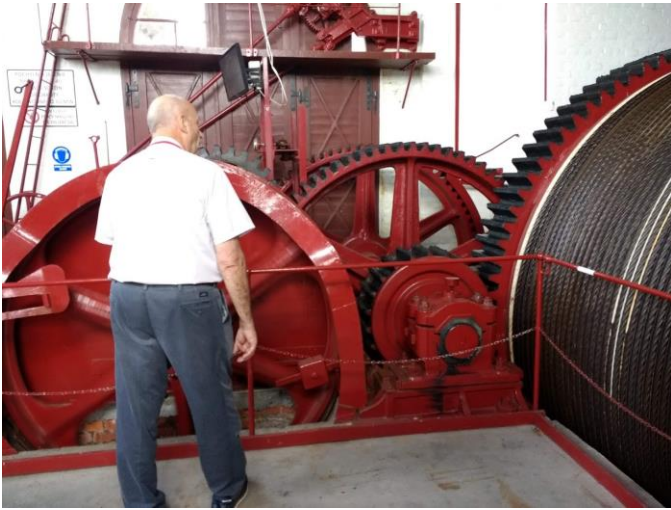


The system that moves the boats on the slipways or inclines is all powered by water that is diverted from the upper lake, flowing down channels to the lower levels. At each level the falling water drives a metal water wheel that is connected to a series of gears that ultimately turn a drum, around which the cable that connects the platforms is wound. All, except for the cable, is pretty much the original 19th century machinery.

Because our tour group was small and all from Viking, we were treated to a tour of the machinery that drives the platforms. We were told that tour groups don't usually get to do this.



Steel water wheels power the system.



A complex series of gears transfers power from the water wheel to the cable drum and allows the engineer to control the speed of the cable.



Perspective showing the shallow and steeper inclines of the tracks.

This also shows how the direction of the cable coming from the water wheel house is changed by looping it over wheels perpendicular to each other.

For those who like numbers:

- Each incline or slipway has two different grades. At the bottom and top is a shallow grade of 1:24. As the upper platform or carriage starts down the incline, its weight helps pull the lower platform up, allowing a steeper grade of 1:12.
- The original boats/barges were designed to accommodate the limits imposed by the incline. They had a maximum length of 24.48 meters, a maximum width of 2.98m and a maximum draft of 1.1m. They carried loads of about 50 tons. Originally, the boats/barges were pulled through the canal to the slipways by horses.
- The gauge of the tracks is 3.27 meters.

- Today the canal system is used by tour boats and by pleasure boaters (including boats as small as kayaks).

References:

https://en.wikipedia.org/wiki/Elbl%C4%85g_Canal

https://en.wikipedia.org/wiki/Morris_Canal

Lake Tourism: An Integrated Approach to Lacustrine Tourism Systems/Edited by C. Michael Hall and Tuija Harkonen. Aspects of Tourism: 32.

The Old Engineer Sez: ". IT IS A LOT BETTER TO BE SEEN THAN VIEWED."

Trivia Corner

Courtesy of Jerry Wilson

SUN KINK: A condition in which high temperatures cause the rail to overexpand and push the trucks sideways. Such conditions could cause a derailment.

SIDETRACKED

By Claudia Nelson



In Moscow, stray dogs have learned to commute from the suburbs to the city. They reach the city, scavenge for food, then catch the train home in the evening.

Model Train Swap Meet
Save this Date
Saturday, October 13th
All Scales Welcome



Historical Society



9:00am -1:00pm
 Glendale Christian Church
 9661 N. 59th Ave.
 Glendale, AZ 85302

Sponsored By
 Arizona Railroad
 Historical Society
 (Formerly West Valley Railroad
 Historical Society)

Everything Trains, Food, Fun!!
 Admission Only \$5.00

Vendor Tables \$25.00 each
 To sign up, send stamped
 envelope and check or
 money order to:

ARHS
 P.O. Box 5643,
 Glendale, Az. 85312-5643



For More Info, Call:
 OR
 Craig Faris 623-340-3529
 DeWayne Koltin 623-308-1574



ALL ABOARD

TGRS MEMBERS

You are invited to the 15th annual

Open House

AT

Gary and Peggy Martin's

EAGLE MOUNTAIN GARDEN RAILROAD

Date: SATURDAY, NOVEMBER 10, 2018

**Place: 4625 E. Cerro de Aguila,
 Tucson Az.**

**1. General Open House 10:00AM
 to 3:00PM**
Open free to general public.

**2. TGRS November Meeting will
 be begin at 4.00pm**

**3. Food and beverages will be
 served after 5:00PM for club
 members, their families, and
 other special guests.**

**If you plan to stay for the food
 and beverages, please
 RSVP by November 4th with
 numbers who plan to attend.**

520 299-7428 or

pgmartin5@hotmail.com



TCA DESERT DIVISION ANNUAL
TOY TRAIN SWAP MEET
SATURDAY NOVEMBER 24, 2018
 9:00 AM - 1:00 PM
 Formerly known as the Turkey Meet



EL ZARIBAH SHRINERS AUDITORIUM
 552 N. 40th St. Phoenix, AZ 85008
 40th St. and Fillmore St.

Exit 2 Loop 202 or McDowell Rd via Hohokam Expressway SR 143

TRAIN MEET HOURS

SATURDAY NOVEMBER 24, 2018

9:00 AM - 1:00 PM

Admission \$5

Children Under 16 Free w/adult

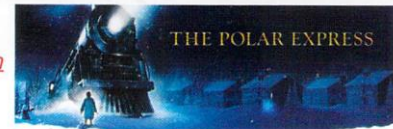
1:00 PM - 2:00 PM Table Top Auction
Free with Show Admission



Featuring

- Admission \$5/person - Children under 16 Free w/Adult
- It's all about the trains! - Over 130 tables loaded with bargains just in time for the season or your holiday gift
- 12,000 Sq Ft of Toy Trains, track, operating accessories and more - All Scales
- Multi-scale Test Track - test your purchases on site before you buy
- "The Train Doctor" - tune-up your train in time for Christmas
- Have a Train to Sell? Multiple Vendors on site will buy your train TODAY!
- Hourly Door Prizes - Raffle Prizes - Fun for the Whole Family
- End of show seller auction - free with show admission
- Easy access from Loop 202 - or - Hohokam Expressway 143
- Lots of free Parking on site
- Hilton Garden Inn Phoenix Airport North - Special Room Rates available
 FREE shuttle to and from the Shrine Auditorium for hotel guests

Free admission



**Polar Express Night at The
 Gadsden Pacific Toy Train
 Museum**



December 8, 2018 5-9 pm

Go to gpdtoytrainmuseum.com for more information



TGRS Officers and Board of Directors

President: Glenn Mitchell- president@tucsongrs.org

V-President: Dennis Mahar - vicepresident@tucsongrs.org

Secretary: Gina Blackwell- secretary@tucsongrs.org

Treasurer: Ruth Taylor - treasurer@tucsongrs.org

Editor: Claudia Nelson - editor@tucsongrs.org

At Large Board Members:

Bob Averill - memberatlarge1@tucsongrs.org

John Fennema - memberatlarge2@tucsongrs.org

Jack Forgues - memberatlarge3@tucsongrs.org

David Nelson - memberatlarge4@tucsongrs.org

TGRS Website: TucsonGRS.org

Contact: webmaster@tucsongrs.org

[TGRS Membership Application](#)

The Tucson Garden Railway Society is a 501(c)(3) non-profit corporation incorporated in Pima County, Arizona.

Society members are interested in all areas of garden and modular large scale railroading. We welcome new members and hope you will consider joining. Members help each other build layouts and learn about railroading and modeling. The TGRS dues are \$30.00 per year and are due on June 30th of each year. For new members, dues are pro-rated at \$2.50 per month remaining in the year until June 30th, the first year. Additional name badges cost \$1.00 for each badge after the first.

If you are interested in the TGRS please contact one of the officers at the e-mails listed below. If you wish to join immediately, send a check and your name, address and telephone number and the names for any additional badges to:

Jerry Tulino

6911 E. Baker, Tucson, AZ 85710

Calendar

Wednesday, October 17, 2018

TGRS Social Luncheon – Red Garter
Bar & Grill

Thursday, October 18, 2018

BOD Meeting – Mitchell

Saturday, October 20, 2018

General Meeting – Forgues

Saturday, October 20, 2018

"Light the Night" Walk – Park Place
Mall

Saturday, November 3, 2018

Carmichael/Pappas Open House

Friday-Saturday, November 9-10, 2018

Gadsen-Pacific Swap Meet

Saturday, November 10, 2018

General Meeting & Open House –
Martin

Saturday, December 1, 2018

Holiday Luncheon & General Meeting –
Golden Corral

Thursday, December 20, 2018

Polar Express Days – Ocatillo Learning
Center

Wednesday-Friday, December 26-28, 2018

VA Hospital Xmas Display

Thursday, January 17, 2019

Board Meeting – Mitchell

Saturday, January 19, 2019

General Meeting – Gadsen-Pacific Toy
Train Museum

Thursday, February 21, 2019

Board Meeting – Mitchell

Saturday, February 23, 2019

General Meeting – Runcon West

Thursday, March 14, 2019

Board Meeting – Mitchell

Saturday, March 16, 2019

General Meeting – Averill