

# PGRS TRACKIN'



## Newsletter of the Piedmont Garden Railway Society.

**June 2018**

*Editor: Scott Williams*

*Sent in from J.R. Snider:*


Some things never change:

"A model railroad is a theatrical production  
The tracks are the stage,  
The bridges and scene are the section,  
The trains are the actors,  
And the operating schedule is the plot."

Frank Ellison "The Art of Model Railroading"; Model Railroader magazine 1944.

**Ah, June is finally here again. The sweater wearing evenings are gone and we're in to those days when it's pleasant to be outdoors most every day in shorts and T-shirts.**

One downside I've noticed about this in my new yard this spring was...**Gnats**. Tiny flying insects that want to hang about your head and shoulders, they don't sting you or nuthin', **but**...they're a constant nuisance flying about your head, getting in your eyes, nose, ears, etc. and after working outside for an hour or so you want to give it up and run for the indoors.

In my yard they seem to be what I think are called the standard fungus gnats  and are spoiling my outdoor enjoyment and apparently they thrive in damp grass, pools of water, and moist leaf litter and I've been researching how to eradicate the little bastards and I'll share my findings.

They aren't harmful in any way in normal numbers but they're obnoxious. **These tiny flying insects love damp yards and I've read are attracted to Carbon Dioxide just like mosquitoes, certain fragrances, and bright colors like yellow, and moisture in your eyes etc., so if you happen to exhale while you're in your yard...they'll find you.**

The main thing you can do physically is **keep your yard from being too damp, improve drainage, and keep your lawn mowed low.** I happen to live not too far from a creek and large wooded areas so I can't change anything off my property. But, there are some other things recommended to do if this is a problem in your yard.

When you work outside the most effective repellent spray is DEET on your shoulders and hat and that should keep them away from your face. If you don't like that solution then supposedly pure Vanilla oil with no cane or corn syrup added or Citronella oil also repels them.

Planting certain plants in your garden may also repel Gnats and Mosquitoes. Those plants are; **Citronella Grass, Horsemint, Catnip, Marigolds and Eucalyptus.**

There are other biological deterrents that can reduce their numbers too. BTi is a natural bacteria that spread on the lawn will destroy the larval stage of gnats and other insects but won't do anything to the adult irritating stage of the flying critters and may need to be repeatedly spread throughout the season. **Gnatrol:** [http://www.igrowhydro.com/Gnatrol\\_1quart.aspx](http://www.igrowhydro.com/Gnatrol_1quart.aspx)

There are also certain nematodes you can apply/invite into your yard that will also thrive on flying insect larvae. <https://greenmethods.com/nematodes/> roundworms that are available through many websites.

I've also read spreading/dusting food grade diatomaceous earth [DE] on the lawn and plants in your garden when no rain is expected for a few days, similar to the stuff folks use in their pool filters but food grade. It's another thing you can spread on your yard with no harm to humans, pets, etc.. It gets under their skin plates and chews all kinds of chitinous shelled insects, larvae, fleas, ticks, etc. to shreds. There are numerous websites that explain how to make a shaker to distribute DE on your lawn/plants. Basically a big can with holes in the bottom.

Bright yellow sticky traps/tape work pretty well for the **adult** Gnats and you can make a trap out of a 2 liter soda bottle. Try cutting the top 1/3<sup>rd</sup> of the soda bottle off, fill it part way with vinegar, or some wine and take the top half of the bottle and insert it upside down like a funnel. The bugs go in, but they can't get out. A drop or two of dish detergent in the vinegar solution helps drown them. You would want to place any traps a little distant from where you plan to be in your yard, not right where you happen to be sitting or working which would obviously attract them closer to you.

Finding a spot on your property with a few hours of morning sun about 15' high to place **bat boxes**, might also be a good solution. These flying mammals will eat hundreds of pounds an hour of irritating flying insects at no cost or maintenance to you and a non-chemical solution. <https://www.nwf.org/Garden-For-Wildlife/Cover/Build-a-Bat-House.aspx>

What **won't work** for flying insects long term apparently is foggers, [only a temporary chemical solution at best for a short time only], bug light/zappers supposedly only attract more of them and destroy critters you have no wish to kill like moths, etc.. Installing bug light bulbs/sodium lights for outdoor lighting will attract less flying insects to your yard at night.

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### **MRC Genie for Large Scale update from Larry Williams;**

"Doug Miller, a member of the Apple Valley club, had talked with me about the MRC Genie system. He had seen some engines on the **Warrior Run Train Shop** module at the Mid Atlantic Narrow Gauge show and said he was impressed.

They are radio control dcc and sound systems combined. I have seen them for as low as \$55. They offer two models, one for HO and one for S,O, & G. At that price, I wanted to try one, but the large scale model was always sold out. I wrote to MRC and they said actually they haven't made the large scale model; maybe by the end of 2017. When I wrote back early 2018, they said no, maybe later. Doug insisted he had seen them running, but it didn't seem like the HO model would be big enough.

Recently Doug and I were both able to go to the Mid Atlantic show and talked to Clem from Warrior Run. It turns out that the HO version has a 2 amp rating. The reason MRC will not market them for Large scale is that they are selling them as a battery or track power system and they are only rated for 14 volts, plus most G gauge stuff is rated of 5 amps. In other words they should be fine on a smaller G scale battery powered loco. Clem had one in a Bachmann Davenport and a Porter sidetank. For battery he uses a single lithium cell (3.7 volts) and a little voltage step card (the size of a quarter) that increases the voltage to 12 volts. Other battery set ups would be fine. He just sells the step up card.

They are very compact and although the sound isn't as good as Sierra or Phoenix, it sounded better than other less expensive systems. It also has a very small speaker for HO. If you could fit a larger speaker that would be an improvement.

They seem like a great fit for a small steam or diesel, or a railbus. There are two steam models; 21500 and 21501 (light and heavy) and a diesel model 21700. They have a variety of sounds that can be programmed.

MRC's website has some more information:

<https://www.modelrectifier.com/locogenie-s/125.htm>"

Larry Williams

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**Progress at Bob Thompson's layout:**



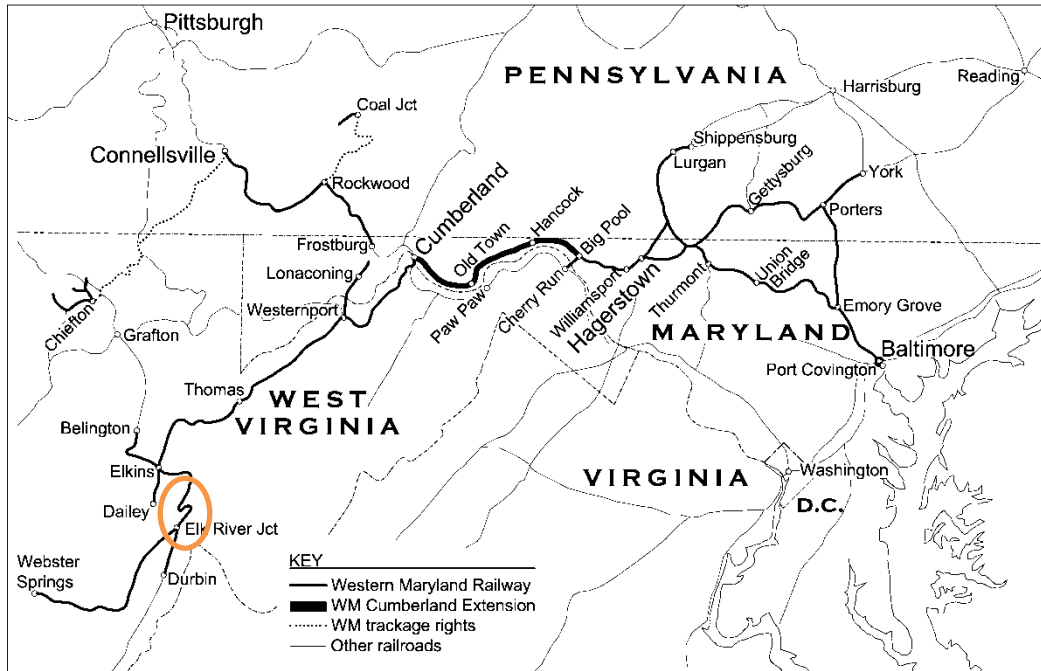




Bob says this about his new construction:

"I've been making progress on the raised part of my railway since Christmas. Here are a few pictures. Lots more work yet but getting closer to installing track. As far as I know there are no other garden railway people in my area. **I would love some help and ideas.** Yes, I installed all forty railroad ties by myself. Note the wonderful turntable I got from Dave Smith last month. Also there is a steaming track for firing up live steam." Bob Thompson

<http://www.wmwestsub.com/gcesub/elkriverjct.htm> this is a prototype railway that I'm loosely following.



If our records are correct Bob lives in Union Grove NC, west of Winston Salem and if I understand Bob's link, he appears to be modelling the Western Maryland RR in the Elk River Junction area. If I am wrong he can correct me and fill us in more in the next newsletter.



Your progress looks great Bob! I too am buying up treated lumber from Lowe's to get my backyard railroad up and running this summer with a raised layout here in Fletcher NC. Keep

those photos coming in of your progress. If anyone's near Bob and/or wants to offer assistance with his project his email address is: [minibob@yadtel.net](mailto:minibob@yadtel.net)

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Thank goodness for Laser Levels...

This is my progress here at 22 Wildwood in my man cave/train room. My goal this month is to get all of the trains out of their boxes that have been piled in the middle of the floor in the back bedroom for the last year and up on shelves and store the boxes downstairs. Then I'll build a work bench and an office desk so my computer gets off of the dining room table and my trains get off of the kitchen counter and in to my office / man cave space.



My shelves are made by gluing 1.5" lattice strips on the middle of 1x6" pine boards and mounting them on 6"x8" L brackets that I got at ACE hardware.



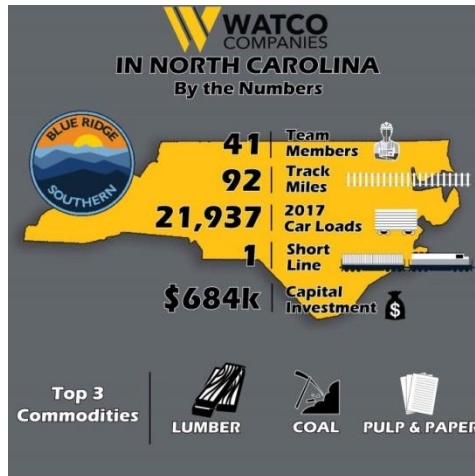
I glued up more shelves but I bought up all the brackets my local ACE had and waiting for them to restock more brackets. I need about 10 more shelves for Locos and I'm thinking of mounting



long shelves going around up near the top of the room to display all of my rolling stock. I think having your trains stored in the packing boxes is not as enjoyable as having them on display and when you want to grab trains to run them it's a hassle sliding them all out of their Styrofoam packing in their boxes. This way I can grab the ones I want to run quickly.

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Interesting graphic from Jerry Bartle from Watco pertaining to local operations:



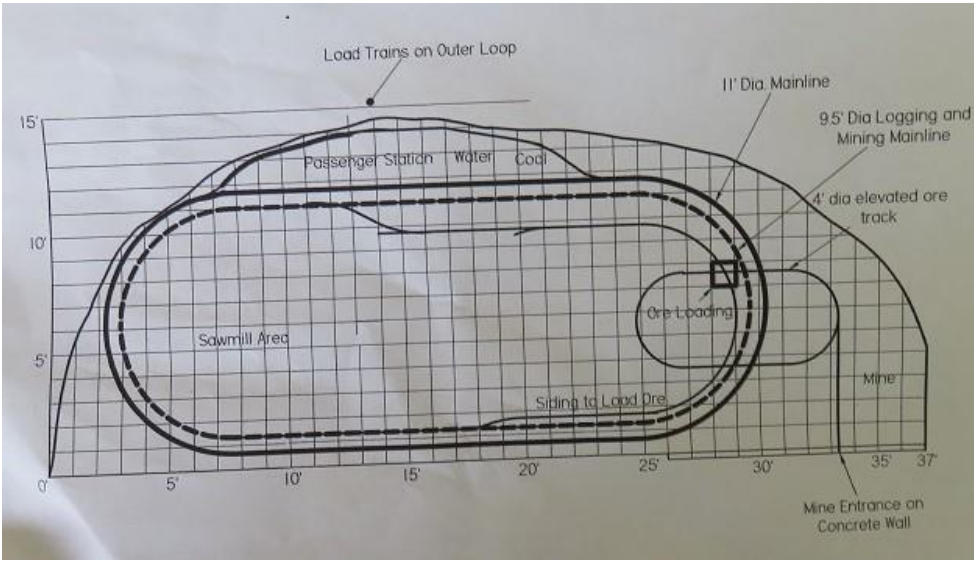
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### The Randy Dancer

May 22<sup>nd</sup>, with ominous forecast predicted, the PGRS [and neighbors] soldiered on at Randy and Kathy Thies home to lay down tracks on the architectural block retaining wall 'bump out' that they added to the downhill slope of their mountainside home to expand their layout.



The day began at 9am after coffee and doughnuts over plan reviews and establishing Union rules regarding coffee and bathroom breaks and sick leave etc. Site security was supplied by multiple K9 units on the premises and no squirrels or rabbits caused a disturbance at the site.



The task at hand.



Randy had one crew in the garage working on removing screws and cutting tie joiners on the underside of 5' lengths of straight track to be fed to the railbenders out in the field.



Larry Williams and Doc Watson manned the railbenders while Todd Jacobus and yours truly worked the Dremel tool and installed the rail clamps to join the track sections.



Doc Watson takes a short break after installing the passing track and mainline around the station to supervise Larry and Todd's progress connecting the outer radius curves.



Before breaking for a hearty lunch of Ribs, Collard Greens, Beans, Cole Slaw, Beer, and Railroad themed cookies, Randy test runs his HLW Big John to test the track connections thus far and the Superintendent pronounces the work to be A-OK. A good time was had by all.

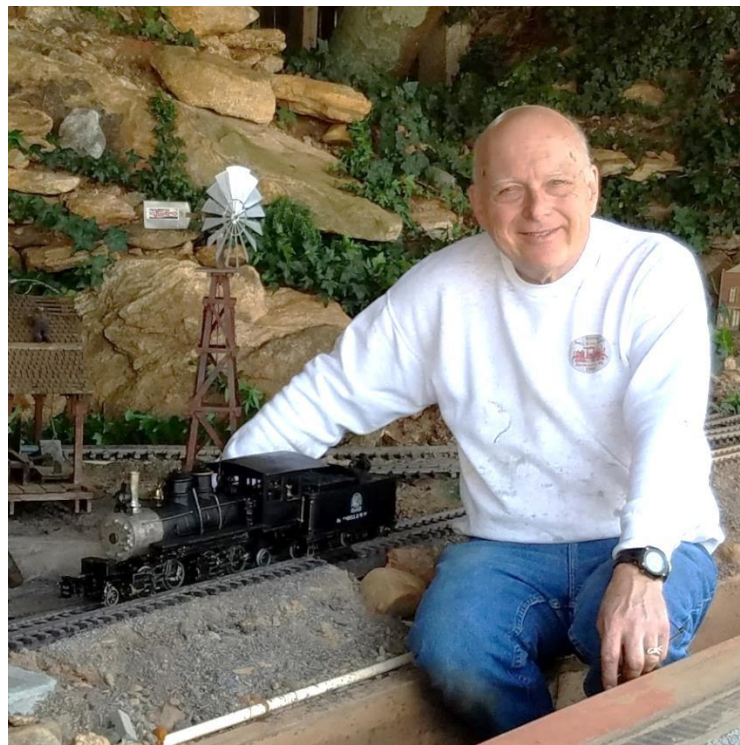
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**Member Photos:**

The Apple Valley Model RR pulled the trigger on a **BIG** ticket item recently and installed an awesome retractable 30' motorized awning system for their passenger platform G Scale layout for guests to view [and more importantly I think], so their engineers can run their trains in comfort from the Sun's strong rays during operating hours. No more patio umbrellas at Apple Valley. Y'all need to check this out.



More photos from last month's Gandy Dancer event sent from Nancy Rigsby;









Biltmore Travels garden layout at Biltmore being set to run by Leslee, Jim and Rob. This year Biltmore did the plantings and they look much more impressive.



Rob getting in there to fix the track for smooth running.

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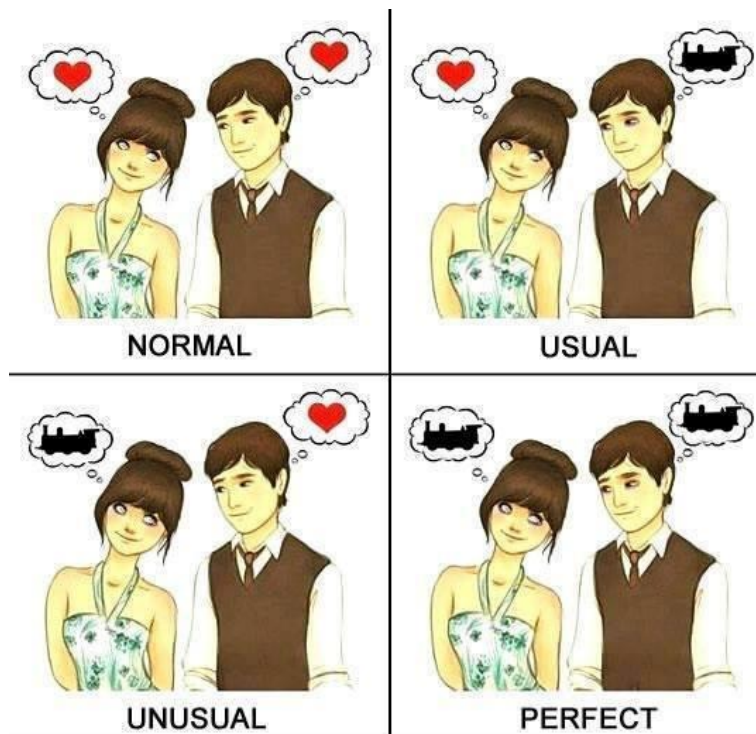
Workers riding the Biltmore supply train up from Biltmore Village to the mansion during construction.



Woodworking and stonecutting shops and the site office structures on the Esplanade during construction of Biltmore House. The rail line came up from the mainline and crossed to the far side of the esplanade and looped up to the front door as you can see in middle left of the photo. Recent pavement work this summer on the Esplanade turned up some rail spikes that were buried in the ground. The woods between what is now parking lot C, and to the right side of the Approach Road still bear the scars of the old rail line running in a straighter course from Biltmore Village's rail spur.

The 'Wayside Grille' restaurant today is in the old Biltmore Village railway station and is a fun/affordable place to eat and enjoy the architecture of the railroad station that George Vanderbilt's guests would have arrived at to visit Biltmore House. Typical of its time it had segregated waiting areas and while you eat your meal the Norfolk Southern and the Blue Ridge Southern's diesels still rumble a few feet behind the old platform without much vibration inside. The old station has been flooded out more times than folks can count when the Swannanoa, Sweeten Creek and the French Broad rivers overflow.

Viewed from above on Google maps you can see the layout of the old Wye rail spur behind the old station and across the tracks where there are other buildings today, the area in the middle of the wye is the former location of the brick factory that produced all the bricks for Biltmore House. The house was built on steel frames, with brick walls and Indiana Limestone used as a veneer in six sections with firewalls and a fire annunciator system to show where any fire was occurring.



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Video of interest. Really nicely done Garden Layout:

<https://www.bing.com/videos/search?q=steve+hughes+spokane+division&view=detail&mid=85EB4B7509D51B7324E685EB4B7509D51B7324E6&FORM=VIRE>

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Trivia Question: Trains need to leave the mainline sometimes to go off to rail lines to other cities and towns or to deliver and pick up the goods at industry sidings and stops along the line or to switching and staging areas to reconfigure the consist. How do they do this? They do this by means of a “switch” or more correctly, a **“turnout”**.

A turnout is **“open”** if it allows the train to stay on the mainline, if it is **“closed”** or ‘locked’ it diverts the train to another track.

Do you know how these turnouts work and the name of their parts?

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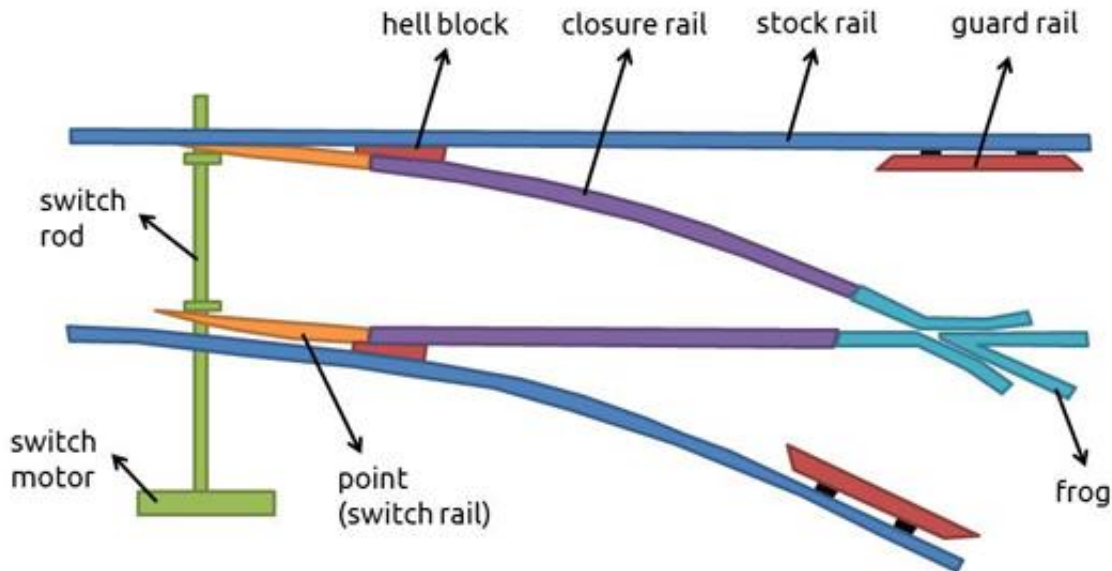
\*\* A reminder from Terry Ketcham that PGRS club members are invited to come by the Apple Valley Model Railroad Club in Hendersonville the last Saturday of each month to run their large scale trains on the club layout from 10 – 2 pm.

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Trivia Answer: Let's look at "switches" for a few minutes and discuss how they work and their individual parts from an article stolen from: <http://www.railsystem.net/turnouts/>

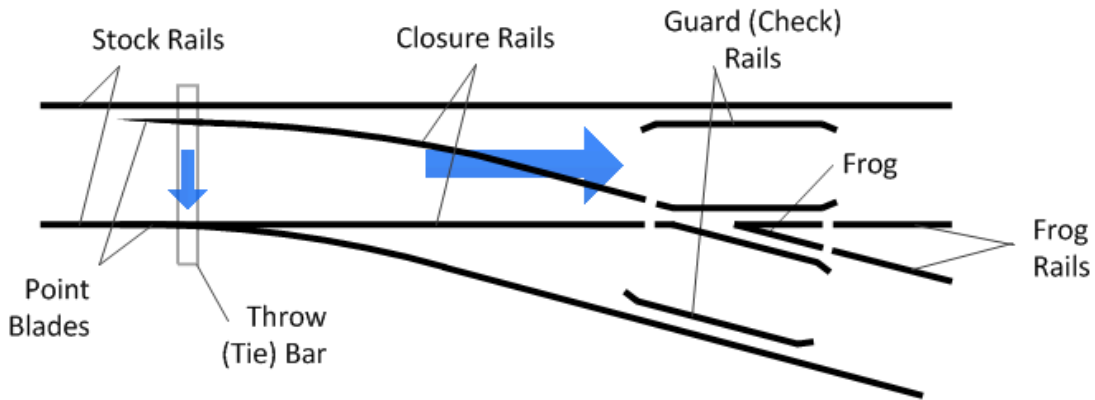
## Turnouts

Turnouts and crossovers, including switches, frogs, guard rails, stock rails, and closure rails; rail fastening assemblies unique to turnouts; and miscellaneous components associated with turnouts, including switch rods and gauge plates. Crossover tracks, double crossovers including the central crossing frogs or diamond area, and single and double slip switches are included in this category. The cross ties to support turnouts and crossovers can also be considered part of special trackwork, especially concrete switch ties, which require far more design and fabrication effort than ordinary timber switch ties.



- [Editor's note in picture above Hell Block is supposed to be a Heel Block]

Track crossings that permit one track to cross another at grade. Such crossings can be designed as a rigid block or can include movable center points.




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**Points** (*switch rails* or *point blades*) are the movable rails which guide the wheels towards either the straight or the diverging track. They are tapered on most switches, but on *stub switches* they have square ends. In ordinary conversation, it is common to use the word “switch” when referring to a “turnout,” which is technically incorrect.

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**Stock rails** are the running rails immediately alongside of the switch rails against which the switch rails lay when in the closed position. The stock rails are otherwise ordinary rails that are machined, drilled, and bent as required to suit the design of the turnout switch and the individual switch point rails.

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**Frog** is a component placed where one rail crosses another, refers to the crossing point of two rails. The rest of the English-speaking world calls such units by the more obvious term “crossings.”

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**Closure rails** are the straight or curved rails that are positioned in between the heel of switch and the toe of frog.

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**Guard rail** (*check rail*) is a short piece of rail placed alongside the main (stock) rail opposite the frog. These exist to ensure that the wheels follow the appropriate flangeway through the frog and that the train does not derail.

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**Heel block** assemblies are units placed at the heel of the switch that provide a splice with the contiguous closure rail and a location for the switch point rail to pivot at a fixed spread distance from the stock rail.

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**Switch point rail** stops act as spacers between the switch point rail and the stock rail. Stops laterally support the switch point from flexing laterally under a lateral wheel load and thereby possibly exposing the open end of switch point rail to head-on contact from the next wheel.

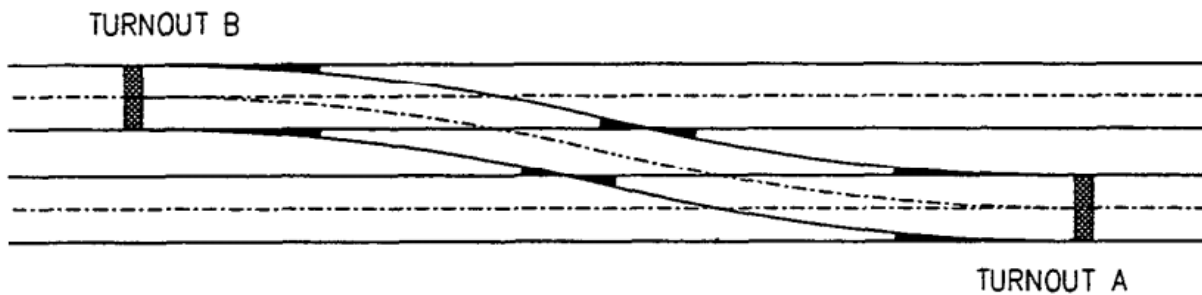
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**A switch operating device** moves switch rails. Switch rails can be thrown (moved) from one orientation to another by either a hand-operated (manual) switch stand or a mechanically or electro-mechanically (power-operated) switch machine. In both cases, the operating devices are positioned at the beginning of the turnout opposite the switch-connecting rods near the point of the switch rails.

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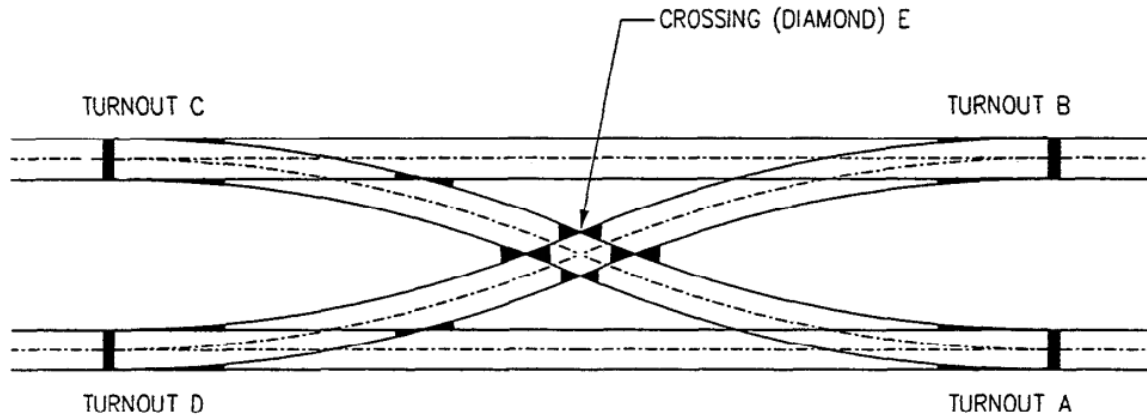
**Turnout Types;**  
**1- Single Crossover**

A single crossover consists of two turnouts positioned in two tracks that allow the vehicle to go from one track to another. The two tracks are usually, but not always, parallel, and the turnouts are usually identical. A pair of single crossovers—one right hand and one left hand—that are arranged sequentially along the tracks is called a universal crossover.



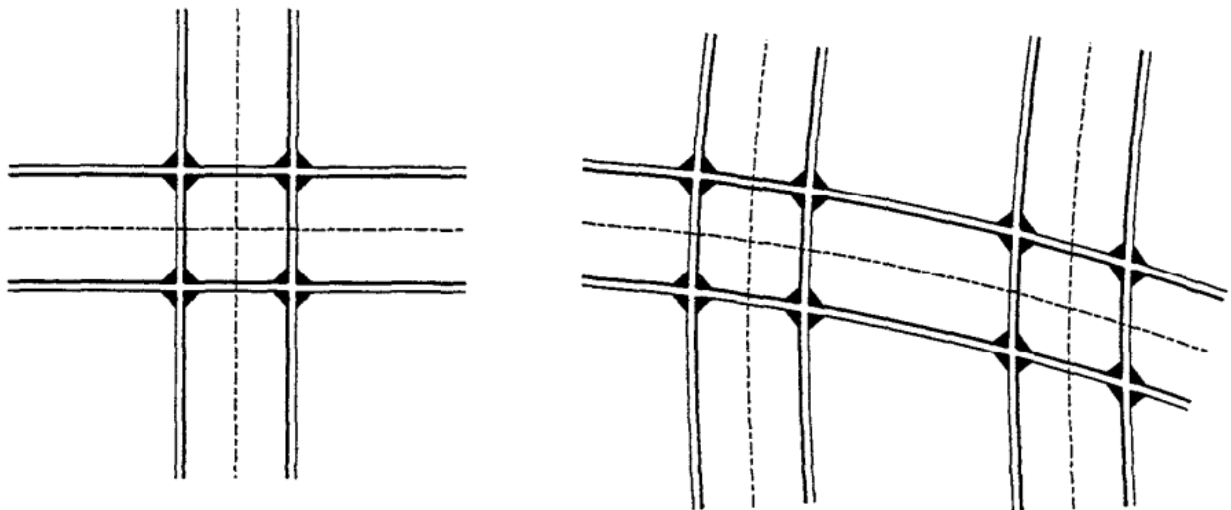
**2- Double Crossover**

A double crossover —sometimes called a scissors crossover—consists of two crossovers of opposite hand orientation superimposed upon each other. In addition to the four turnouts involved, a track crossing diamond is needed between the two main tracks. A double crossover is typically used only when it is necessary to be able to switch from both tracks to the other in either direction, but there is insufficient space to install a universal crossover as described above.



### **3- Track Crossing**

Track crossings, as the name implies, permit two tracks to cross each other. Track crossings are often called either crossing diamonds or simply diamonds, due to their plan view shape.



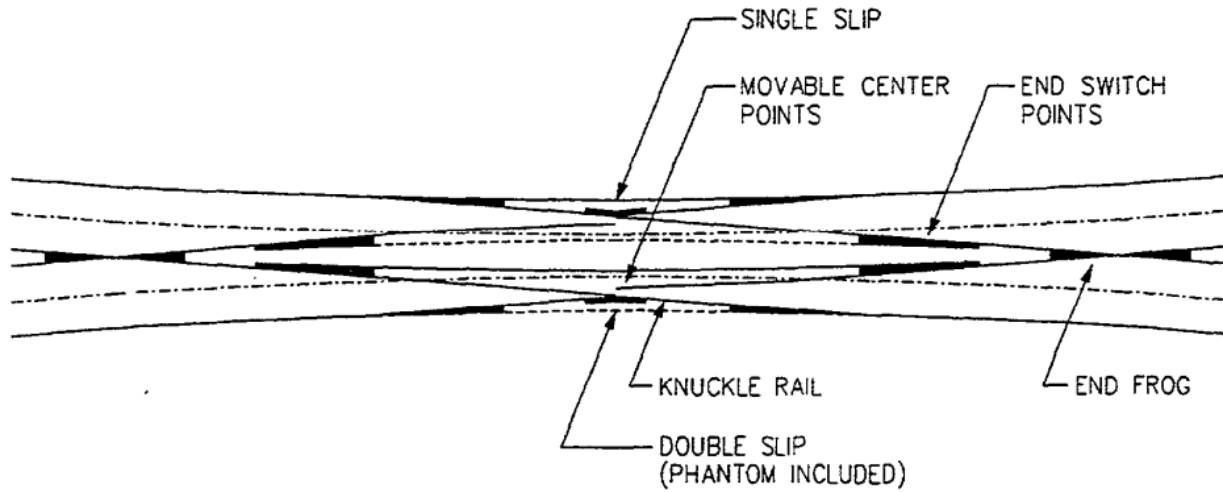
### **4- Slip Switch**

A single slip switch works on the same principle as a double slip but provides for only one switching possibility. Trains approaching on one of the two crossing tracks can either continue over the crossing, or switch tracks to the other line. However, trains from the other track can only continue over the crossing, and cannot switch tracks. This is normally used to allow access to sidings and improve safety by avoiding having switch blades facing the usual direction of traffic. To reach the sidings from what would be a facing direction, trains must continue over the crossing, then reverse along the curved route (usually onto the other line of a double track) and can then move forward over the crossing into the siding.

A double slip switch (double slip) is a narrow-angled diagonal flat crossing of two lines combined with four pairs of points in such a way as to allow vehicles to change from one straight track to the other, as well as going straight across. A train approaching the arrangement may leave by either of the two tracks on the

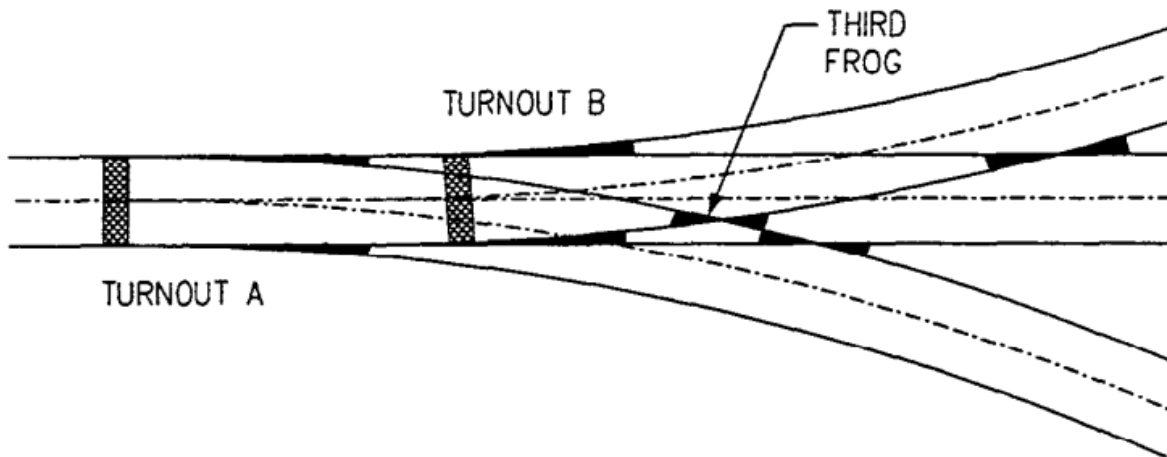


opposite side of the crossing. To reach the third possible exit, the train must change tracks on the slip and then reverse.

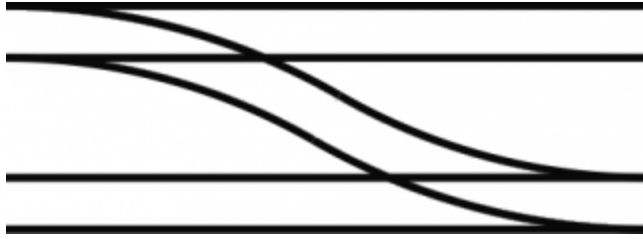


### **5- Lapped Turnouts**

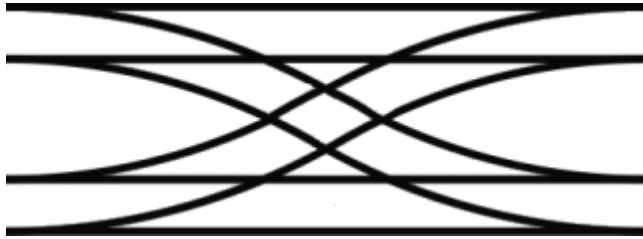
Lapped turnouts can be used to achieve a more compact track layout in constrained locations. In a lapped turnout, as seen in following picture, the switch rails for a second turnout will be placed between the switch and the frog of the initial turnout. This introduces a third frog where a closure rail of the first turnout crosses a closure rail of the second turnout.



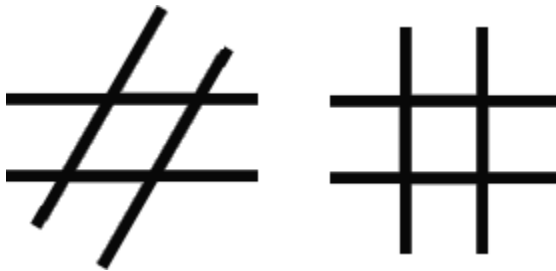
Single Crossover



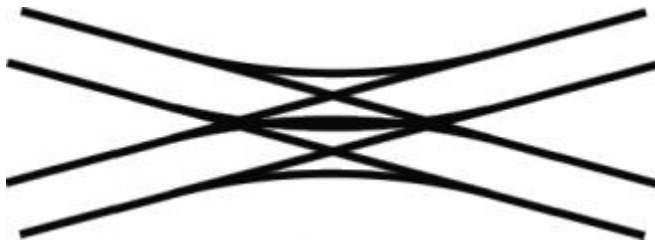
Double Crossover



Crossing



Double Slip Switch – English Connection



Equilateral (Wye) Turnout



Three-way Turnout



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### Membership:

Please consider sharing this newsletter with friends who might be interested and if they wish to become members ask them to contact our PGRS Secretary/Treasurer for a membership form.

Don Watson  
125 Mistletoe Trail  
Hendersonville, NC 28791

[docwatson@morrisbb.net](mailto:docwatson@morrisbb.net)

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### Train Lover Luncheons:

The current luncheons are:

Columbus Area: Meets every Third Thursday of every month at [Larkins Carolina Grill](#), 155 West Mills Street in Columbus, NC 28722. @ 1:00 PM. Contact Pete Gendron: 954-812-6270

Greater Greenville Area: Meeting the first Tuesday of every month - at 11:30. [Meeting at the A&P Restaurant on Rte 14 in Greer](#). Contact Ken Majchrzak at: [kemajchrzak@gmail.com](mailto:kemajchrzak@gmail.com) or call Ken at: 864-385-4951

Asheville Area: Meets the 4th Thursday each month. We meet at 11:30 AM at [Gondolier Italian Restaurant and Pizza](#) located at 1360 Tunnel Road, Asheville 28805. Contact Tim Wagner [timwagner2012@gmail.com](mailto:timwagner2012@gmail.com)

The location is on the east end near the VA hospital, so it is recommended that you access Tunnel Road from I-40, exit 55. Take a left at the first light after you exit and a left at the next light. The venue will be on the right a few hundred yards from the intersection.

Charlotte luncheons are meeting at [Bubba's BBQ](#) 4400 Sunset Rd. (exit 16, rte. I-77).  
at 11:30am on the third Tuesday of each month.

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Send any idea, project, photo, something you found surfing on the Internet, etc., no matter how great or small you may think them to be to your newsletter editor. We all love trains so...if it's about trains, and you've got it on your computer, chances are you won't be the only person who might enjoy reading about it.

Send your input to: [srwavl@outlook.com](mailto:srwavl@outlook.com)

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### Business Related to Our Hobby

Any Member who has a business related to our hobby is welcome to submit an entry for inclusion in **PGRS Trackin'** each month.



Garden Railroad Design  
Old Trains Wanted

### Jim's Train Sales

O & G Gauge New & Used Trains

**Jim Hendley**

Etowah, North Carolina 28729

Lionel, MTH, USA Trains, PIKO, LGB  
Bridgwerks Power Supplies, Bachmann  
Split-Jaw Rail Clamps, O & G Gauge Track

Email: [jhh1218@att.net](mailto:jhh1218@att.net)  
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**Peggy Keyes**  
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[RightTrackTrainMuseum@gmail.com](mailto:RightTrackTrainMuseum@gmail.com)  
828/625-5551

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