

TRACK LAYING AND BALLASTING WITH WOODLAND SCENICS

In this 'how to' we are going to cover the basics of track laying and ballasting your layout for that finished look.

Ballasting is considered by many to be the finishing touch to any track system, big or small and can really be a rewarding job once done.

There are lots of articles covering this on the internet and in magazines but here we guide you step by step using the tried and tested methods by combining the best of the rest.

On the real railways the Ballast acts as a drainage system and stops the track from wandering around the landscape. on our models the ballast can also be used to hold track in place as we will see.

The colour of the ballast varies from region to region and is not often particularly neat and tidy. For this reason it is worth looking at the colours found out on the line of the prototype you are modelling and then blend a ballast from the many colours available to suit. Take your camera when you visit. see footnote ¹

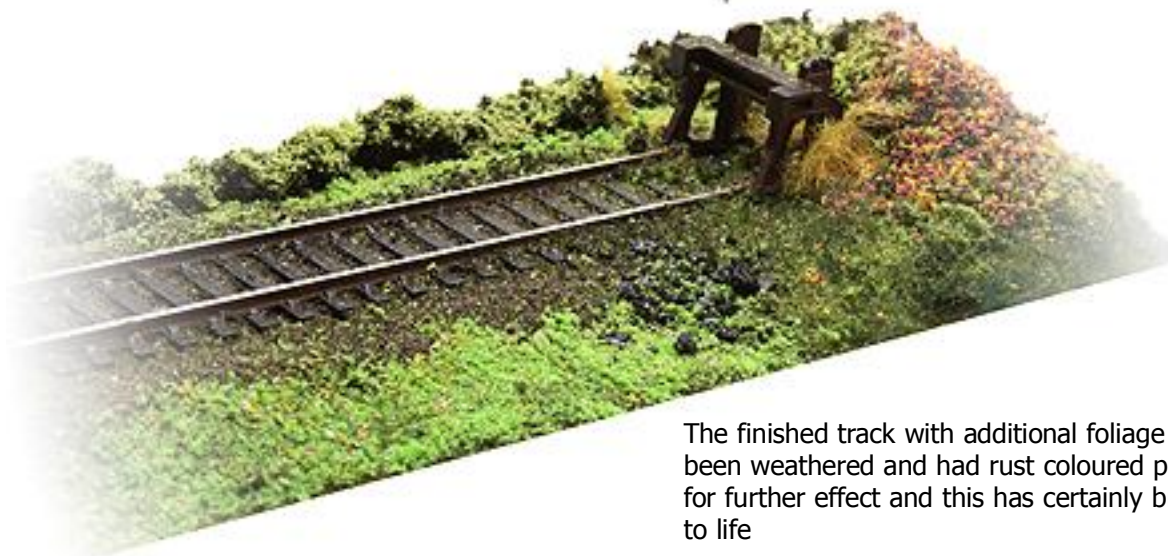
Our main considerations are to get it as neat as we can to begin with then add the realism of untidiness at a later stage for this reason this is not a quick job and should be done over a few days or even weeks to avoid rushing it as the the final result would end up looking messy and not very realistic.

We assume you have decided on your final layout and have the necessary wiring worked out with power feeds ready to be put in place and provision made to install the electrics as you go through the laying procedure including any point motors (see our article on point motors for information on these).



***Above:** A selection of Woodland Scenics products used to ballast the layout. From left to right we have: Ballast (available in 3 sizes and different colours), Foam Tack glue for sticking the track and bed down, a scenic sprayer, Scenic Cement for the ballast (and grasses) and at the back the trackbed (also available in N and O gauge)*

In addition to those products mentioned you will also need a pipette (as sold by us), some mixing pots, a 1/2 inch paint brush and a selection of the usual tools.



The finished track with additional foliage added. This has also been weathered and had rust coloured paint added to the rails for further effect and this has certainly brought the whole area to life

¹ Please **do not stray onto the railway networks lines** whilst doing your site visit as apart from being dangerous, it is illegal and carries some huge fines. Take photos and observations from the station platform and over pedestrian bridges. - Don't forget to **ask permission** on the stations as some do not allow photography and as it is privately owned property and however strange it seems, they are within their rights to do so. However, no one can stop you in a public place since section 44 was revoked by the home office in 2010

1

We begin by marking out our trackbed, This can be simplified by using an old wagon with card wrapped around it to provide padding and therefore the correct width, then using a pencil held over one axle with an elastic band.

When this is run around the layout in each direction a clear demarcation line will be formed showing the location for the trackbed.



2

With the track laid out, temporarily tacked in it's final position and tested, we carefully mark out the boundaries by simply pushing the truck back and forth around our layout



3



We now have an outline neatly drawn on our base-board.

Next lift the track and drill any track power feed holes ready to accept the wiring

4

As we are demonstrating a curved section of the layout we need to cut the trackbed in half along it's width and turning the track bed over we find that Woodland Scenics have helped us out by conveniently pre scoring the trackbed. Cutting it in half eliminates any buckling caused by the inner circumference being shorter than the outer one.

This means it is simply a case of cutting along this line to produce the two halves



5

With the power feed hole drilled ready and the track bed cut in two we are ready to start gluing.

Make sure the area along the glue line is clean and clear of debris and tools.



6



Apply a thin bead of the Foam Tack glue directly to the base board between the pencil lines and then spread it out to form an even coating



7

We can now stick the track bed in place.

Before the glue goes off we have enough time to check that the track bed is laying in the correct place and a dry run is recommended to make sure you are happy with the beds position.



8

Once we are happy all is well, use some pins to stop it moving while the glue dries.

Foam Tack glue (depending on environmental conditions) dries fairly quickly (approximately 15 minutes) so once laid you have time for a quick cuppa!



9

With the track bed fixed in place we can start to lay the track.

Another thin bead of glue is applied on top of the bed and again smoothed out. Into this the track can be firmly pressed in place connecting the fish plates as we go.



10

You can temporarily use track pins to hold the track in place, it is now generally accepted that for quieter running these pins should be removed once everything is fully glued down as the pin can transfer audible vibrations into the base board reducing the effect of the track bed.



If you are going to paint (weather) your rails and sleepers then this is best done at this stage so that you do not accidentally get paint on your newly laid ballast. That done, decide on the blend of ballast you are going to use and mix it ready in a pot taking care to note the quantities of each colour and size you use so that you can simply recreate the blend later as needed.

When the track is firmly fixed in place we can start ballasting. Using some white glue (undiluted PVA) create a bead along the shoulder of the track bed on both sides as shown above (10).

11



Sprinkle some of the blended ballast along the shoulder of the track bed and brush it roughly into place up the shoulder pressing it firmly into the glue.

The PVA will hold the ballast on the shoulder and provides a cover that forms the base of your final sculptured track bed and there is no real need to let it dry unless you find yourself at a convenient point to take a break.

We are now ready to lay the rest of the ballast into the trackwork.

This is done dry, i.e. no pre gluing required. Just pop a heap of ballast at one end of the section and work your way round. It is better to do this in stages - do not try to cover huge areas at once



Using a 1/2 inch paint brush, sweep the ballast between the sleepers so that it ends up just below the sleeper height and spills out over the edges



You can finalise the laying of the ballast with a smaller brush, removing any stray bits from the top of the sleepers and on the rail sides. Patience is required together with a steady hand. The longer you spend on this step the better the final result and the less cleaning up will be required.

When you are happy with the look of the ballast you need to give it a soaking using the Woodland Scenics "Scenic Sprayer" filled with "Wet water".

To make the "Wet Water" fill the bottle three quarters full of cold water and add four drops of washing up liquid and mix thoroughly. The washing up liquid stops the water forming surface tension and this will allow it to soak correctly into the dry ballast, this then aids the Woodland Scenics Scenic Cement to flow into every nock and cranny around your track.

Once ready spray a misting of the wet water solution over the track and ballast taking care not to disturb the ballast or create dimples. This is best done from a height and not close as in the picture. Although as you become more experience you can start to get in closer and more accurate with your watering.



Again this should be done in small manageable sections

With the ballast fully wetted we are ready to apply the Scenic Cement.

You may find it advantageous to pour a quantity of the Scenic Cement into an old mug or pot first then replace the cap and set aside the larger bottle so it does not get knocked over.

Fill your eye dropper with cement from the source container and methodically start to drip the cement onto the ballast working down the centre then out to the sides a couple of inches at a time.

On the sides stay close to the track sleeper edges and allow the cement to flow down and out of the edges. you are looking to see the cement pool slightly above the ballast and the wet water will ensure that it flows everywhere. If you find that indents or blobs start forming apply another misting of wet water to the area as it can dry out quite quickly especially in hotter weather.

Allow the cement plenty of time to fully harden - it can take anything from 12 to 48 hours depending on the environmental conditions and do not be tempted to poke at it. A small test patch elsewhere will help you gauge when it is safe to touch it.

The final clean up just involves vacuuming up the stray bits. Set the vacuum cleaner on to upholstery mode and use the brush attachment for this. Ask your partner how this vacuum cleaner stuff works first or find the instructions ;)



When all is dry and dusted, your imagination can be let loose. and adding foliage, grasses and bushes can produce a very realistic feel to your trackage. All the scenic items shown in the above picture are from Woodland Scenics range available from Buffers Model Railways. Just ask the girls to guide you in the right direction and let your minds eye run riot.

On the following page we have included a shopping list for the products used which we hope you will find useful.



The layers - baseboard, track bed, track, ballast



WOODLAND SCENICS BALLASTING SHOPPING LIST

SHOPPING LIST

These are the items you will need . simply print this page out and bring it with you to the shop. A member of staff will be happy to assist you.

Don't forget you can also order these items on line and have them sent via post or courier. Just logon to www.buffersmodelrailways.com for full details.

- Ballast
- Scenic Cement
- Scenic Sprayer
- Foam Tack glue
- Track bed
- Track pins
- Pipette
- Brushes

Also ask about our ballast hoppers

