



West Wiltshire Society of Model Engineers Newsletter

Issue No.20 August/September 2021



Calendar

August

7th – Club Steam Up & BBQ. 10am-4pm.

21st – Saturday Steam Up. 10am-4pm.

September

4th – Saturday Steam Up. 10am-4pm.

18th – Saturday Steam Up. 10am-4pm.

October

2nd – Saturday Steam Up. 10am-4pm.

16th – Saturday Steam Up. 10am-4pm.

News

A Summer of Progress

Like British Rail in the 1980's
"We're getting there"!



Saturday 10th July we held a boiler testing event on site after the prolonged 'rest' many of our club member's engines through last year.



On Sunday July 18th we held our first private party at the outdoor track for over 18 months and the weather was very kind to us indeed.

From 19th July we have now got use of our clubhouse again which is open for our regular Friday (10am to 12pm) and 1st & 3rd Saturday of the month (10am to 4pm) meetings. Disposable cups are in use and all windows and doors will be kept open.

Saturday 31st July saw a good number of members of all ages give their time for a Working Party Day to concentrate on getting the new 5" ground level track completed.

Our regular dedicated Wednesday team of volunteer members have been making progress on maintaining the site and working on the various projects and this Working Party Day enabled a good amount of track to be built and laid on the

far side of the side including the track for the chord line semi-circle.



Last but not least of course is we have our members Club Steam Up & BBQ to look forward to on 7th August with the chance to see the club site 'alive' with as many engines in steam as we can again and the chance to catch up with members who we have not seen in some cases for a long time now.



Our Elevated Track is Growing...

The recent warm weather got me thinking as I was driving my 3 ½" Tich around our 3 ½" & 5" dual gauge raised track. The noise made as I crossed the joints in the rails had changed as the gaps had closed up and the locking pin on the lifting bridge was more difficult than usual to fit into place.

I am reliably (?) informed that the elevated track is 600ft long. In the middle of summer the temperature can get up to 32°C and in the depths of a winter night the temperature can drop to -8°C so that is a differential temperature of 40°C experienced by our track between the hottest day in the summer and coldest night of the winter.

So how much does our elevated track 'grow' over the course of a year?

I work in metric SI units for engineering calculations so some conversion is required but I will show the answer in both metric and imperial units to cater for everybody in the audience.

$$600\text{ft} = 183\text{m}$$

$$\text{Expansion coefficient of steel} = 0.000012 \frac{\text{m}}{\text{m}^\circ\text{C}}$$

$$\text{Differential temperature} = 40^\circ\text{C}$$

$$183 \times 40 \times 0.000012 = 0.088\text{m}$$

$$0.088\text{m} = 88\text{mm} = 3.46''$$

That works out rather well...so the answer is that between the coldest winter night and the hottest summer day our track 'grows' in length by approximately 3 ½" which just happens to be the smaller gauge of the dual gauge track and the gauge of my 3 ½" Tich which I was driving and made me think of calculating this invaluable fact for the next newsletter!

