North Wales Model Engineering Society
West Shore, Llandudno, LL30 2PQ

NEWSLETTER – SEPTEMBER 2025

DROUGHT CONDITIONS.

This last week has seen North Wales put under drought conditions.

We, in the LLandudno area have our water supplied from LLyn Cowlyd located between Dolgarrog and Capel Curig and I'm reliably informed it has never dried up and is unlikely to. Anglesey, Gwynedd and other regions of North Wales the situation is totally different.

A few years ago I visited LLyn Tryweryn located between Bala and Trawsfynydd to witness an almost empty reservoir. Water was still flowing through the dam in the form of Afon Tryweryn but the remains of Capel Celyn were visible.

The valley was flooded in order to supply Merseyside and Lancashire with water in the late fifties and early sixties. My photo shows the remains of the cemetery. Two of the graves are still there, the others have been moved to a site adjacent to the main road. The railway ran along the right-hand side of the lake with the dam visible in the background.

Another valley that received the same treatment was the Elan Valley near Rhayader in Mid Wales, this time to supply the city of Birmingham. This was a major feat in engineering as it was designed without the need to use pumps to operate the pipeline. During the 1880's Birmingham Corporation realised that due to its fast-growing industrial needs, an extra source of water was urgently required.

Having realised that rainfall in the Elan Valley was approximately seventy inches annually, they concluded that by flooding the valley by constructing a large dam, this would meet their demands.

To construct the dam required Birmingham Corporation to purchase the valley and its surroundings, a total area of 72 square miles. 33 miles of temporary railway track would be required and also a village to house the many construction workers. The work commenced in 1893.

The dam has an elevation of 171 feet above the destination of this seventy three mile long aqueduct in Frankley West Birmingham, thus allowing the water to flow by gravity. Most of the route was constructed using the cut and cover method of pipework but where rivers, valleys and railways were encountered, steel pipework called siphons were employed. The lowest point on the whole route is where one of the siphons crosses beneath the River Severn. At this location the water pressure is 234 lbs/ square inch.

The whole route was completed and commissioned in 1904, and these days is operated by the Severn Trent Water Company.

I've often travelled down the A 470 looking for past railway tracks etc. my next challenge will be to see if there is any evidence of this aqueduct crossing under the road.

How many more valleys are likely to be flooded in the future?

TRACK ISSUES AT WEST SHORE.

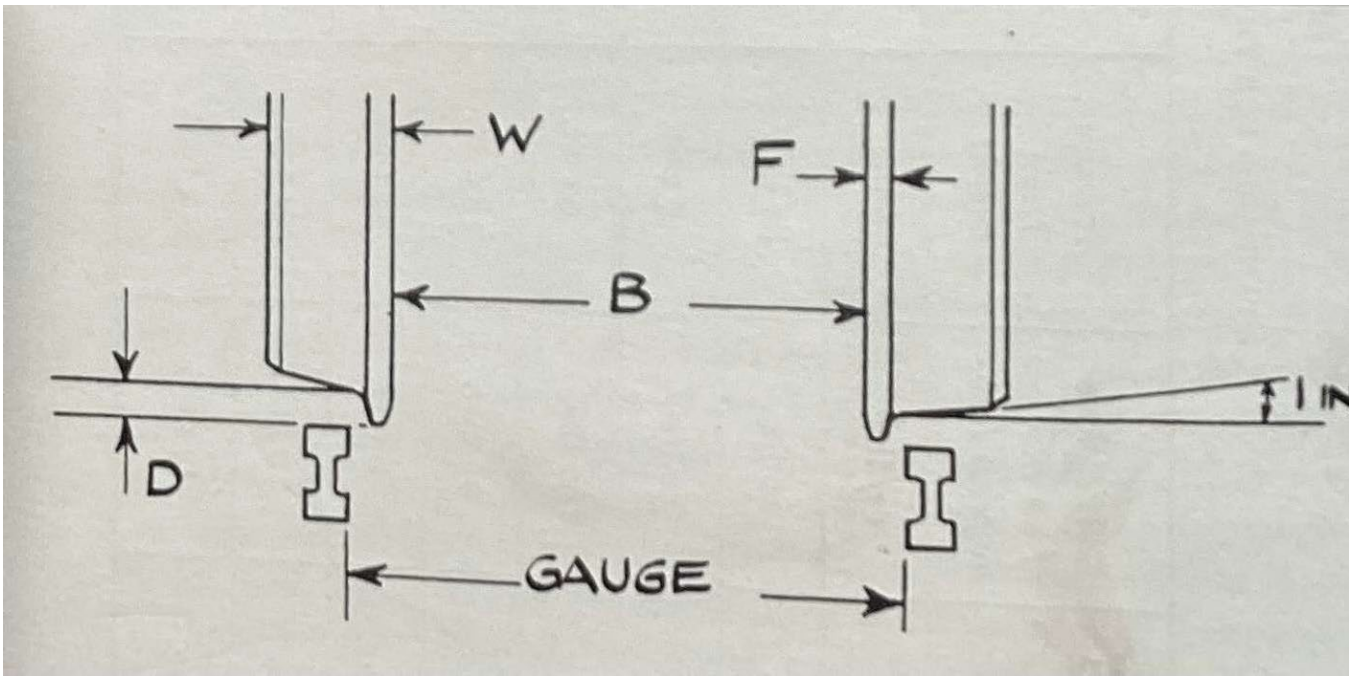
Having had a few derailments at the track over the summer months for no apparent reason has made the committee scratch their heads and ask the question, why?

Checking the track with a track gauge showed no problems. The abnormal heat we've recently experienced could have caused expansion of the track, but most probably the wheel profile could be the answer. On a straight up and down track or a track with very gradual curves the wheel profile might not be critical, a track like ours with tighter curves the whole scenario changes.

An article in the May 2025 ME&W called for a standardisation of wheel profiles. Although there is plenty of information on the internet the onus is on the owner of the loco.

Below are the recommended wheel standards from Martin Evans': Manual of Model Steam Locomotive Construction. I'm reliably informed "The 7 ¼ inch society" have their own standards as with the GL5 ground level 5-inch society. Bristol MES have an "approved" list on their web site.

Gauge	*B*	*W*	*F*	*I*
$1\frac{1}{4}$ ins.	28 mm.	4.5 mm.	1 mm.	1.5
$1\frac{3}{4}$ ins.	41 mm.	5 mm.	1.25 mm.	1.75
$2\frac{1}{2}$ ins.	$2\frac{9}{32}$ ins.	$\frac{5}{16}$ in.	$\frac{1}{16}$ in.	$\frac{3}{32}$
$3\frac{1}{2}$ ins.	$3\frac{9}{32}$ ins.	$\frac{13}{32}$ in.	$\frac{5}{64}$ in.	$\frac{1}{8}$
5 ins.	$4\frac{11}{16}$ ins.	$\frac{9}{16}$ in.	$\frac{3}{32}$ in.	$\frac{5}{32}$
$7\frac{1}{4}$ ins.	$6\frac{13}{16}$ ins.	$\frac{13}{16}$ in.	$\frac{1}{8}$ in.	$\frac{3}{16}$



Recently our traverser was damaged due to someone alighting from their locomotive whilst on the traverser and then stepping on the cable. The cable is kept under tension using a similar design to a plastic chain link. This plastic chain link has been damaged therefore a new length has been purchased with the original being replaced. To replace this was not cheap.

As we do have a no blame culture in our society, we are not blaming any individuals. I'm hoping this can be a good learning point.

ALL DRIVERS PLEASE NOTE. HAVING COMPLETED YOUR TRACK ACTIVITY, PLEASE ALIGHT FROM YOUR LOCOMOTIVE (and driving trolley) BEFORE REACHING THE TRAVERSER.

WEST SHORE COUNCIL LEASE.

The saga of securing a new lease for our site at West Shore from Conwy Council has finally reached a satisfactory conclusion. With all the legal fees, council admin costs, this has not been cheap.

An annual rent of £500, an increase in third party insurance cover to £10m (twice what we were paying previously) means this will be very demanding on society finances. Public running financing is going to be very important for us in the future, again we do need more active members to help run our business at the track.

ANNUAL GENERAL MEETING.

Once again, a final reminder to all our members that our society will have its AGM at our clubhouse in LLandudno on Wednesday, 10th September 2025 at 10:00. Please attend. You might have some great ideas on how we run our society and maybe improve certain areas.

BEAUMARIS BIG WHEEL.

Anyone travelling along the A55 past LLanfairfechan and Aber must have seen the Big Wheel located on the sea front at Beaumaris. At fifty metres in diameter, I'm reliably informed this is the largest mobile big wheel in the country. Although huge, compared to the 120 metres (394 feet) of the London eye it's a not so big wheel.

One evening as I went to bed, I was looking across the Menai Straits from our front bedroom, conditions were perfect so I decided to take a photo of this wheel. Having fetched my camera, opened the window and adjusted the settings, what happened next? - They switched the lights off on the wheel!

It was eleven o'clock at night so I missed my chance. Seconds later I witnessed a reddish coloured meteorite travel along the whole length of the Menai straits. Just fantastic. Again without my camera.

Thanks to Brian for the information regarding the Elan Valley and the Beaumaris wheel.
See you all at the AGM.

That's all for this month

Kind Regards,

Harold Jones