

The background image shows a grassy hillside with several large, flat, rectangular stone blocks embedded in the ground. These stones are arranged in a line, suggesting they were once part of a tramroad. The stones are weathered and have small holes in them. The surrounding vegetation is a mix of green grass and dry, brownish grass.

Tramroads of the Brecon Beacons

Tramffyrdd Bannau Brycheiniog

Roy Manning and Charina Jones



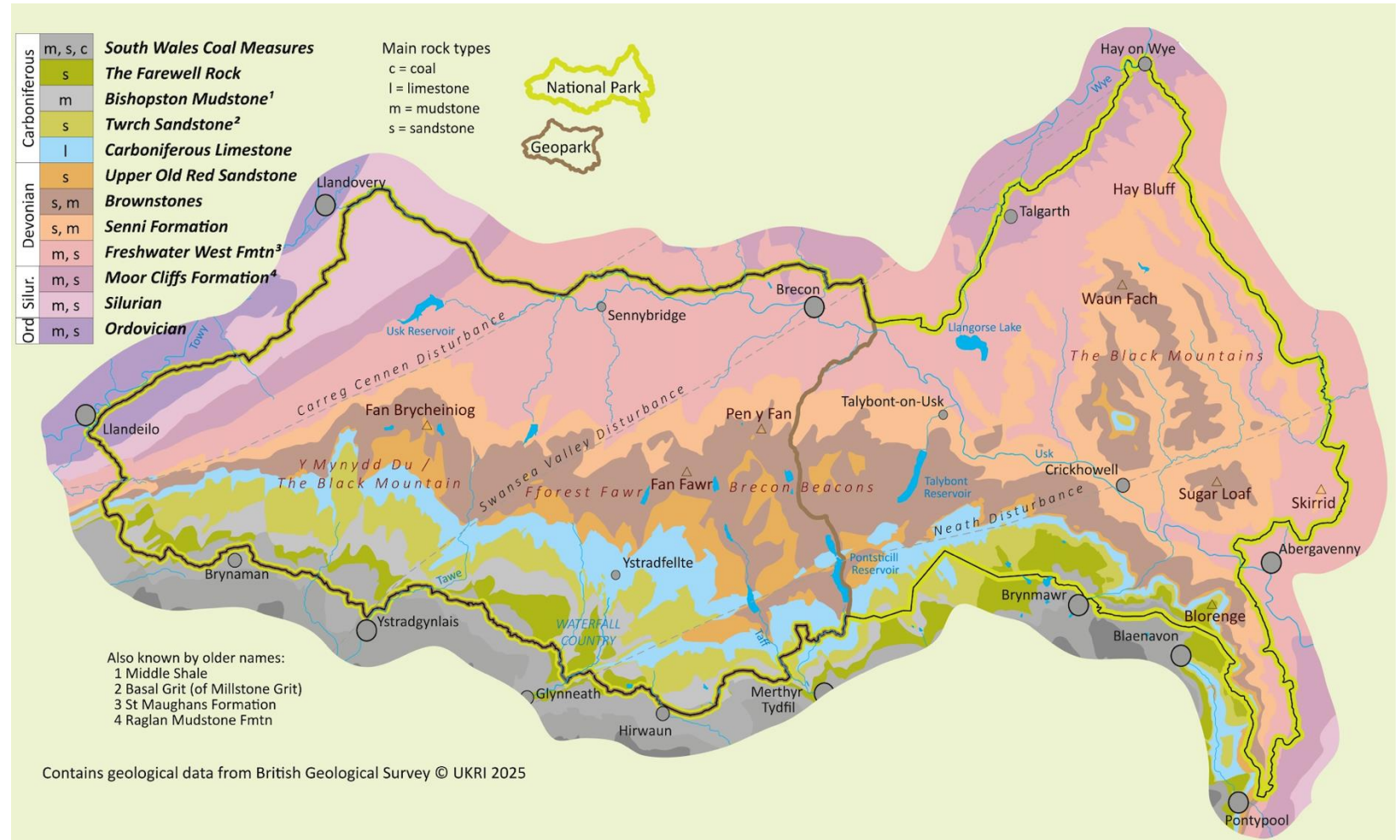
# My talk

- History of the Tramroads
- BBPS Tramroads Project – Progress to date (Charina Jones)

# Geology

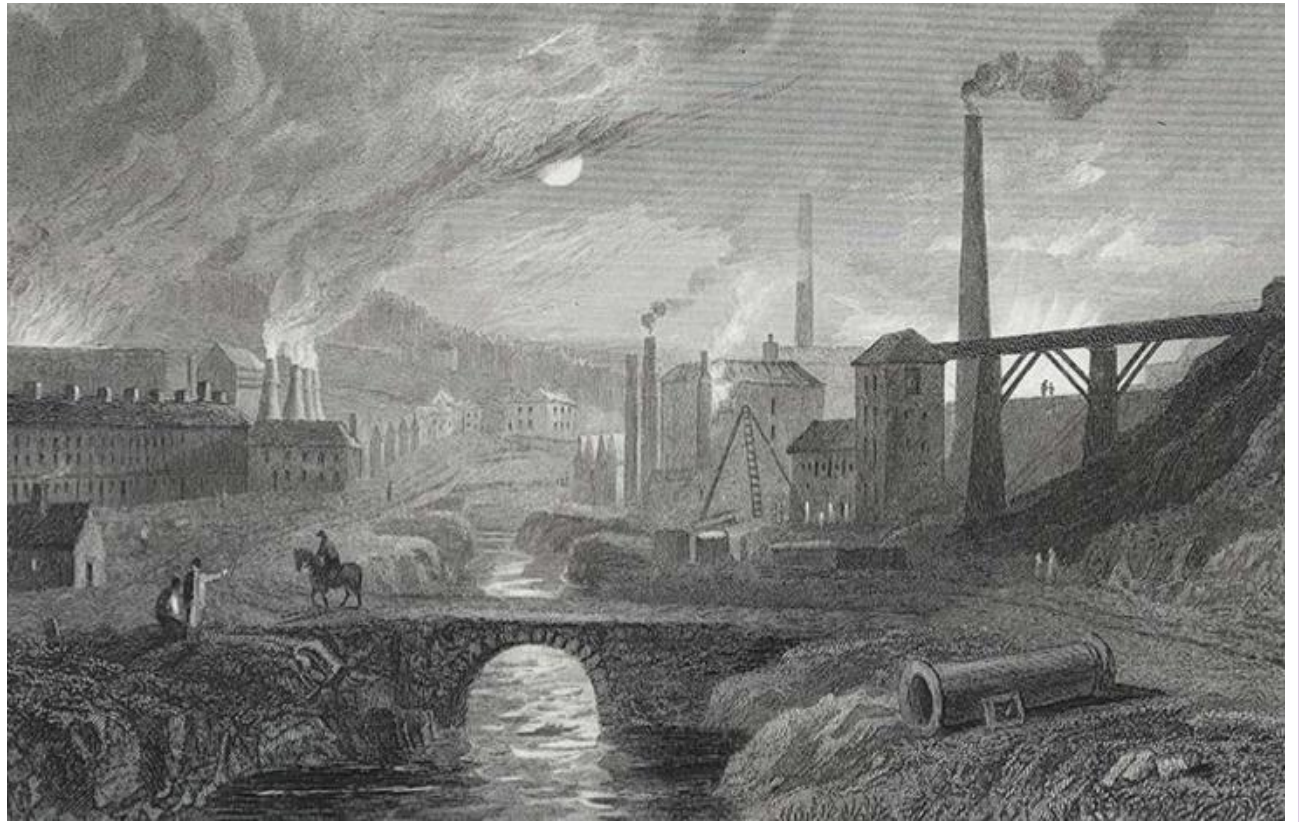
All of the rocks in the Park are sedimentary and were laid down between 420 and 360 million years ago

- 2/3 Old Red Sandstone
- Limestone
- Ironstone
- Coal



# History of the Tramroads

- Industrial Revolution (1750 – 1900)
  - Iron Production
  - Coal mining
  - Iron ore extraction
  - Limestone extraction
  - Quick Lime Production
- In South Wales approx. 400 miles of 'Plateway' tramroad was built and in operation between 1790 and the mid 1800's
- Their working life was only 50 years but they are still with us today



Nant-y-glo works around 1830

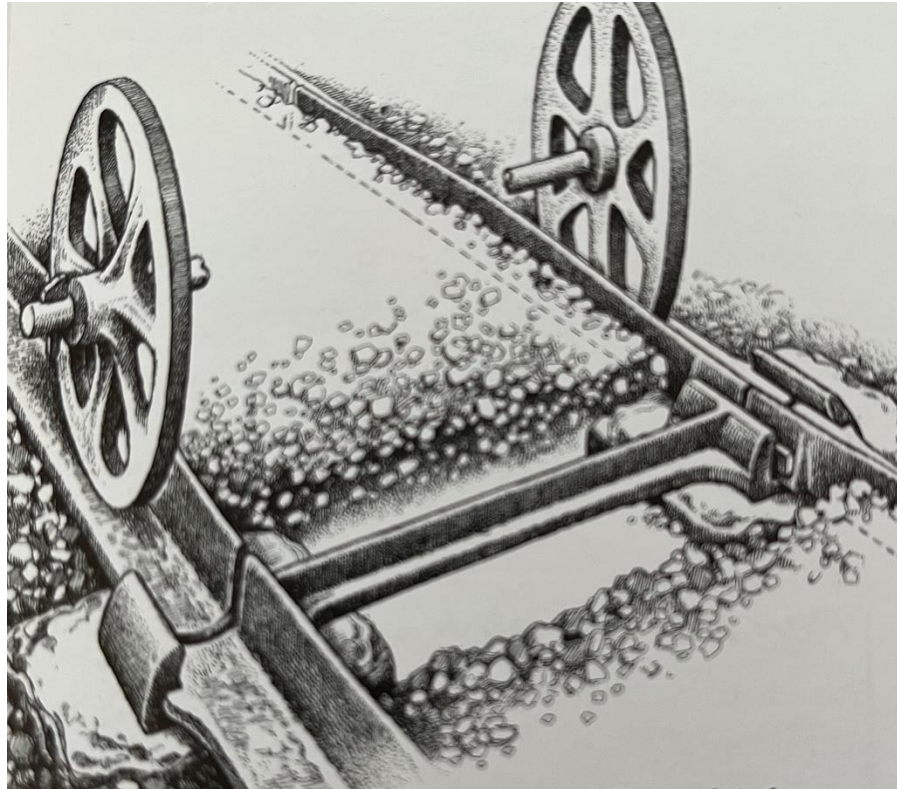


# Brecknock and Abergavenny Canal

- Act of Parliament 1793
- Before work started on canal, the first tramroad – Llam-march (Gellifelen colliery near Bryn-Mawr down the Clydach valley and over the Usk to an iron forge at Glangrwyney)
- Work started on the canal in 1797 on the 19 mile stretch between Gilwern and Brecon and it was opened in 1800
- Joined to the Monmouthshire canal in 1812
- 225 anniversary celebrations this year!



# Tramroad Details



- Plain Wheel
- L-shaped plate rail (gauge 3ft 6in)
- Tie-Bars on Stone Sleepers
- Wagons generally made of wrought iron, but some had elm sides
- Weight empty half a ton
- Loads were originally limited to 1.5 tons, but this was increased to 2.25 tons in 1835



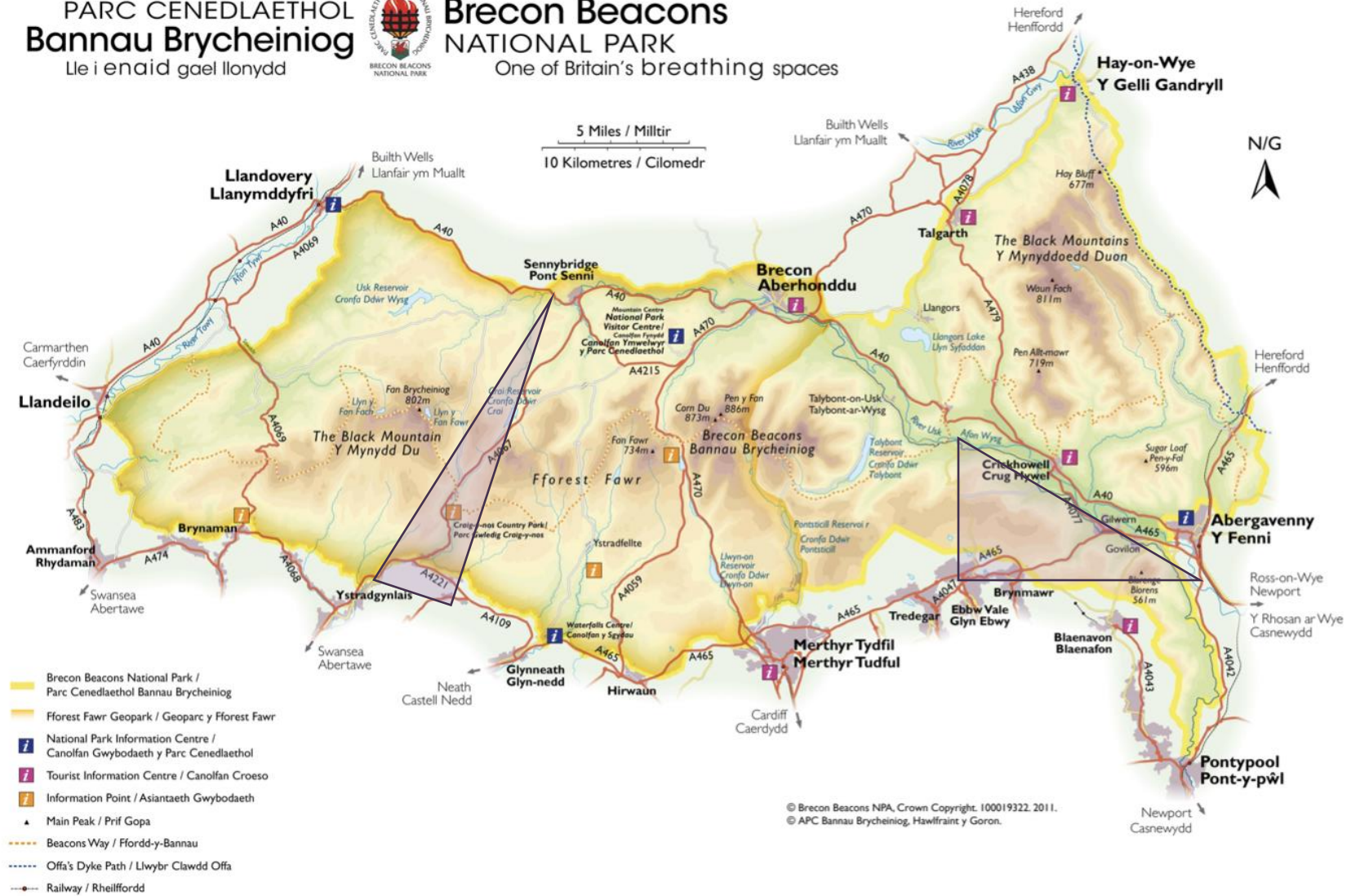


# Where are they

PARC CENEDLAETHOL  
**Bannau Brycheiniog**  
Lle i enaid gael llonydd



**Brecon Beacons**  
NATIONAL PARK  
One of Britain's breathing spaces

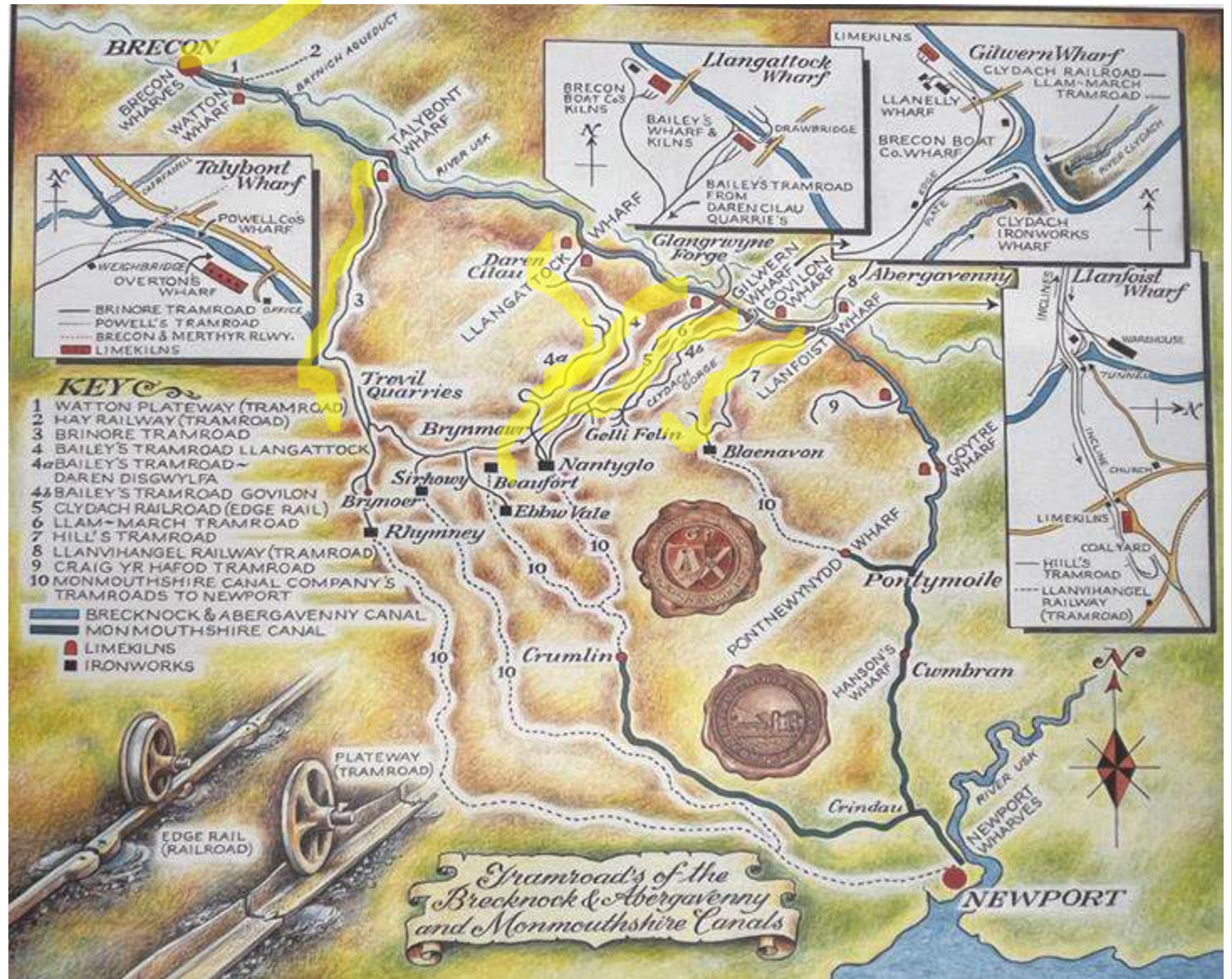


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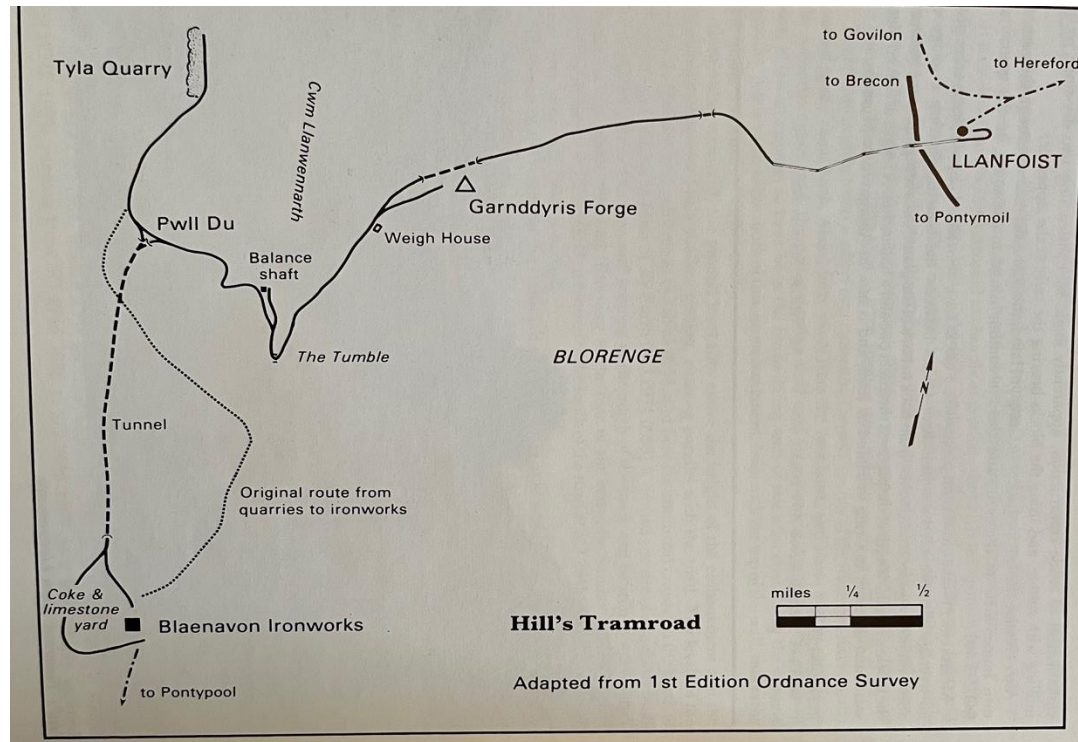
# Tramroads in the East

- Hill's Tramroad
- Bailey's Tramroad (Govilon)
- Llam-march Tramroad
- Clydach Railroad
- Bailey's Tramroad (Llangatock)
- Bailey's Tramroad (Daren Disgwylfa)
- Llangatock Tramroad
- Brinoer Tramroad
- Hay Tramroad





# Hill's Tramroad



Llanfoist Warf



# Blaenavon Ironworks

Established in the late 18<sup>th</sup> Century

Closed in 1860's





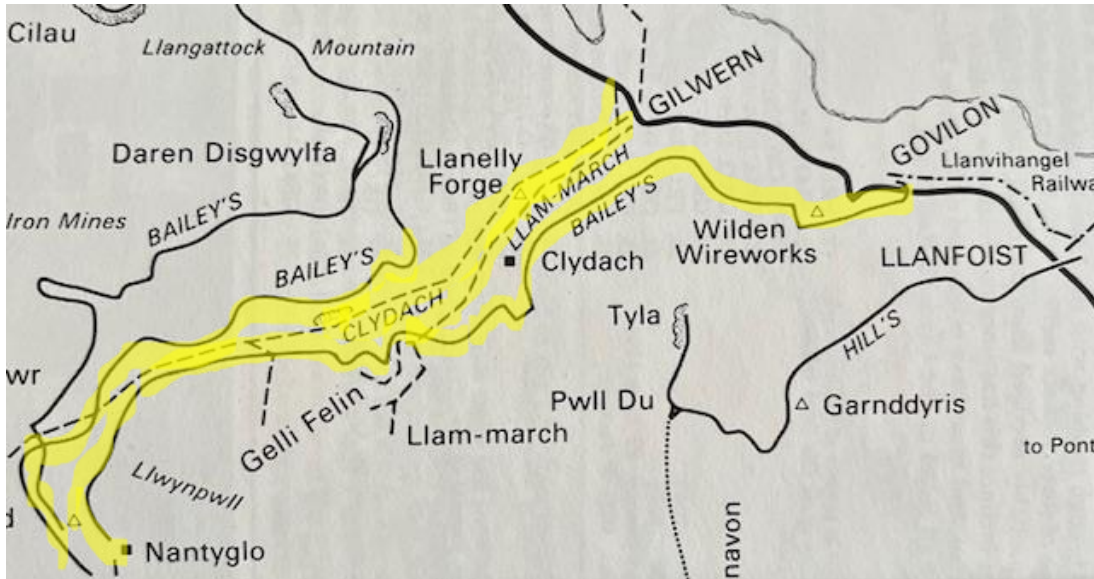
# Hill's Tramroad

- Line operational 1822 - 1850
- Connected Blaenavon Ironworks to B&A Canal

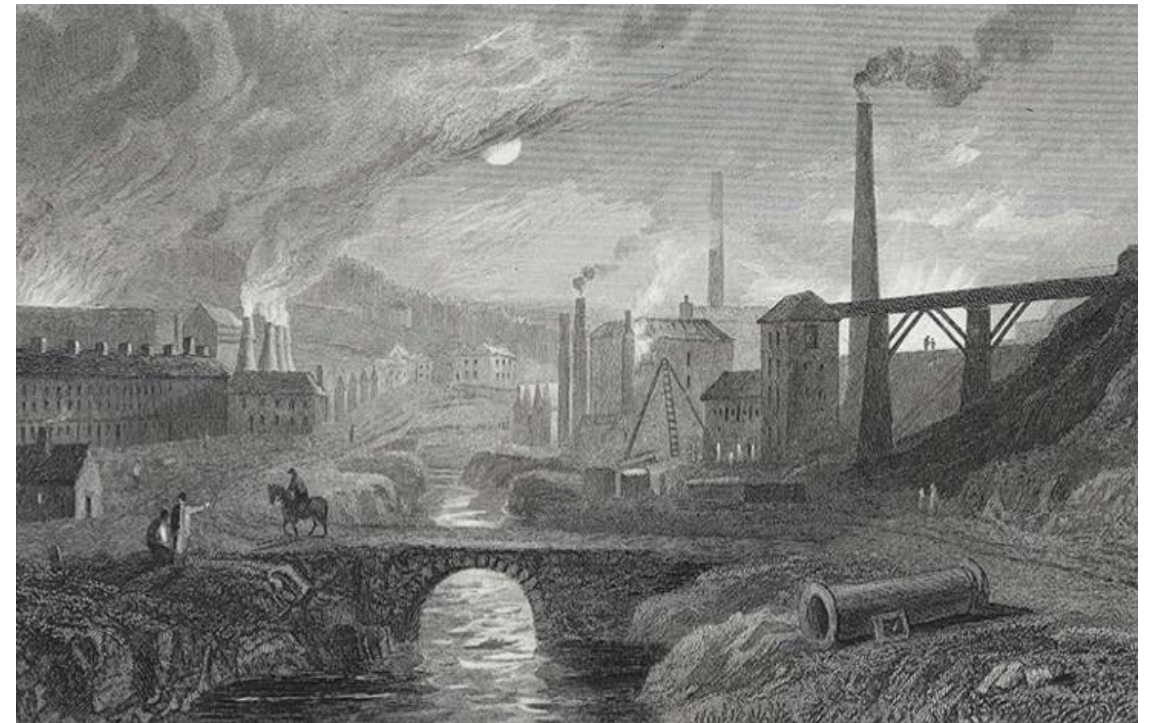




# Clydach Tramroads



- Bailey's Tramroad (Govilon)
- Llan-march Tramroad
- Clydach Railroad
- Bailey's Tramroad (Llangattock)
- Bailey's Tramroad (Daren Disgwylfa)

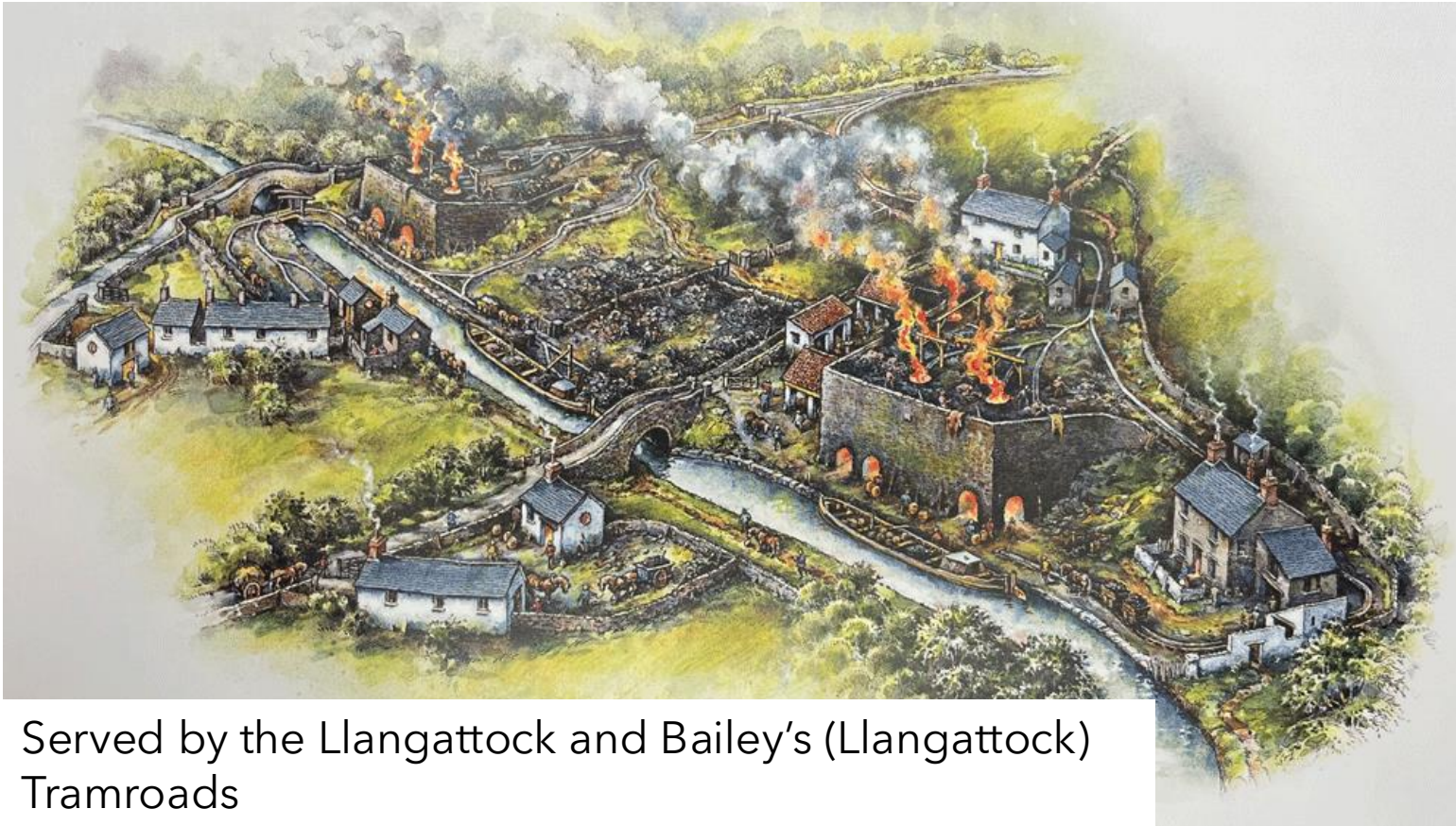




# Llangattock Wharf

Lime Kilns constructed 1815  
Expanded in the following decades  
to become the biggest along the canal

- Tramroad and incline construction 1814 - 1815
- Cost £2,000 (£228,000 now)
- Closed 1860's

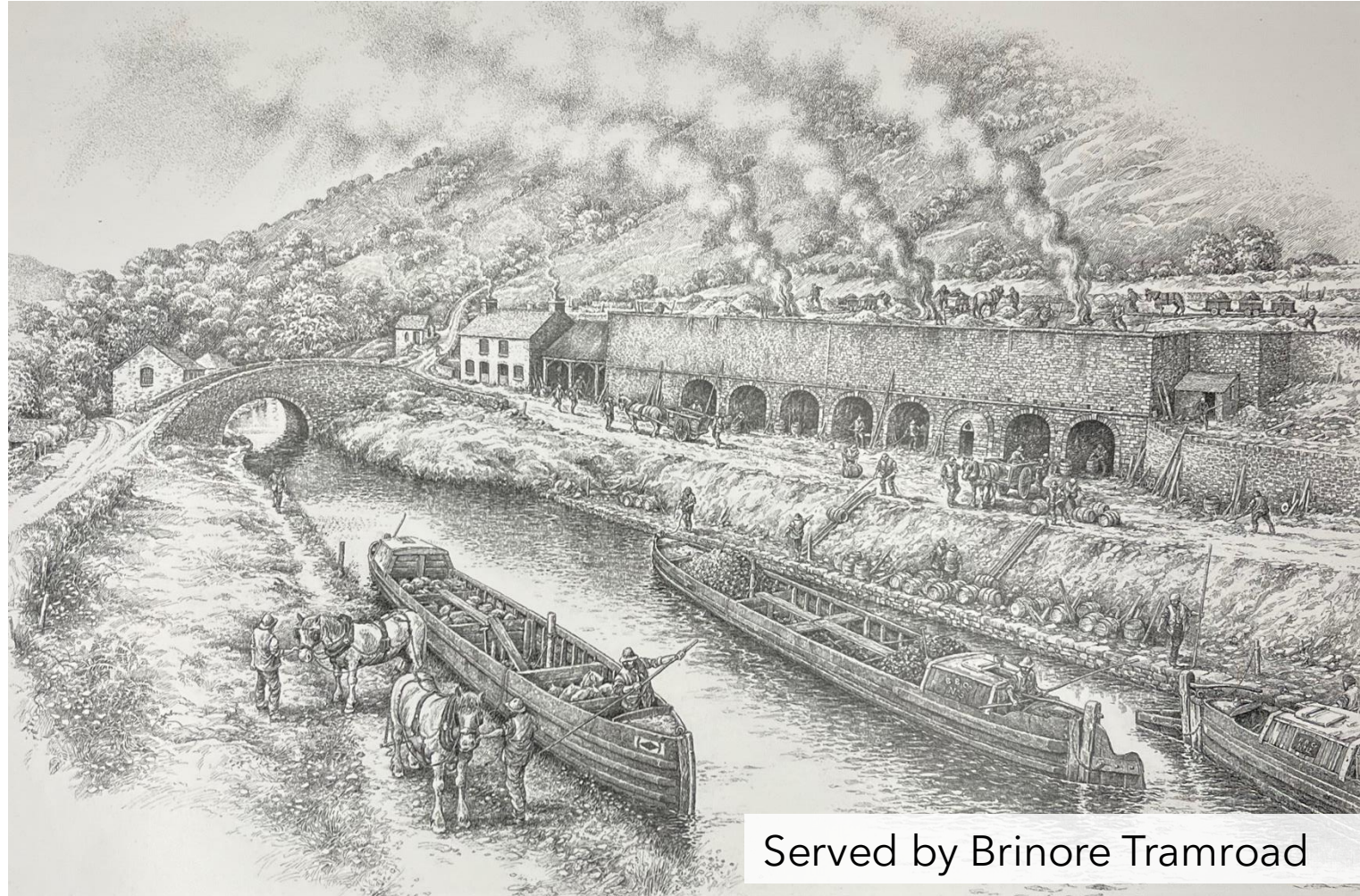


Served by the Llangattock and Bailey's (Llangattock) Tramroads





# Overton's Wharf



Constructed 1815  
Tramroad closed in 1863

8 miles long and linked the  
Tredegar iron works and  
Trefil limestone quarries to  
the B&A canal

## **Engineer**

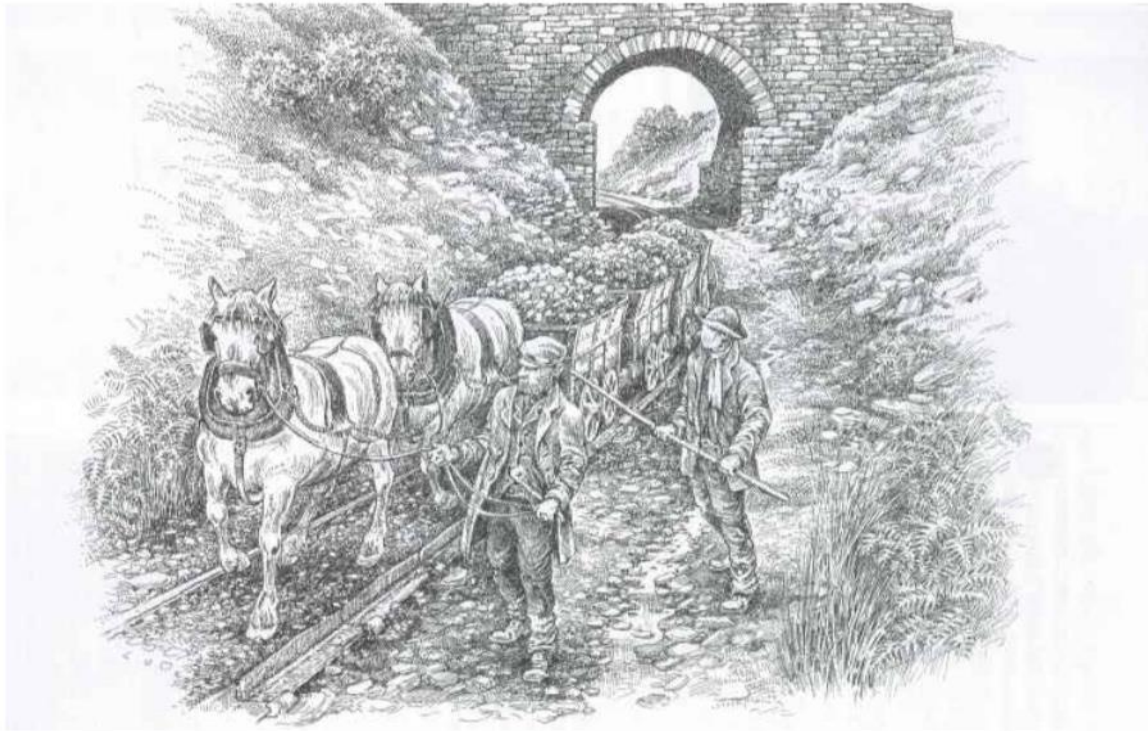
George Overton (born 16  
Jan 1775)

Built Merthyr tramroad  
which Richard Trevithick  
tested and ran the 1<sup>st</sup> steam  
locomotive

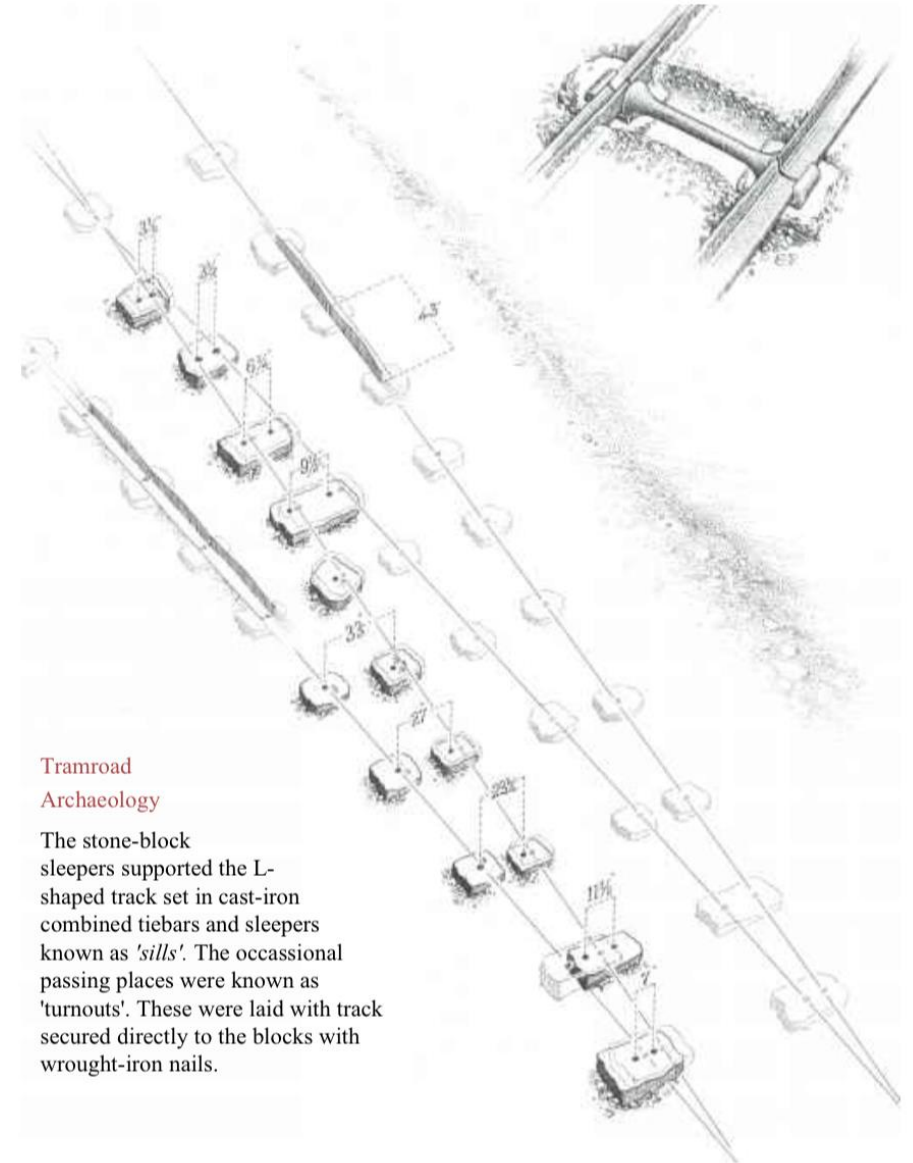
Conducted the first ever  
survey of the Stockton &  
Darlington Railway



# Brinore Tramroad



*The Bridge over the Brinore Tramroad at Pen Rhiw-calch*



## Tramroad Archaeology

The stone-block sleepers supported the L-shaped track set in cast-iron combined tiebars and sleepers known as '*sills*'. The occasional passing places were known as '*turnouts*'. These were laid with track secured directly to the blocks with wrought-iron nails.



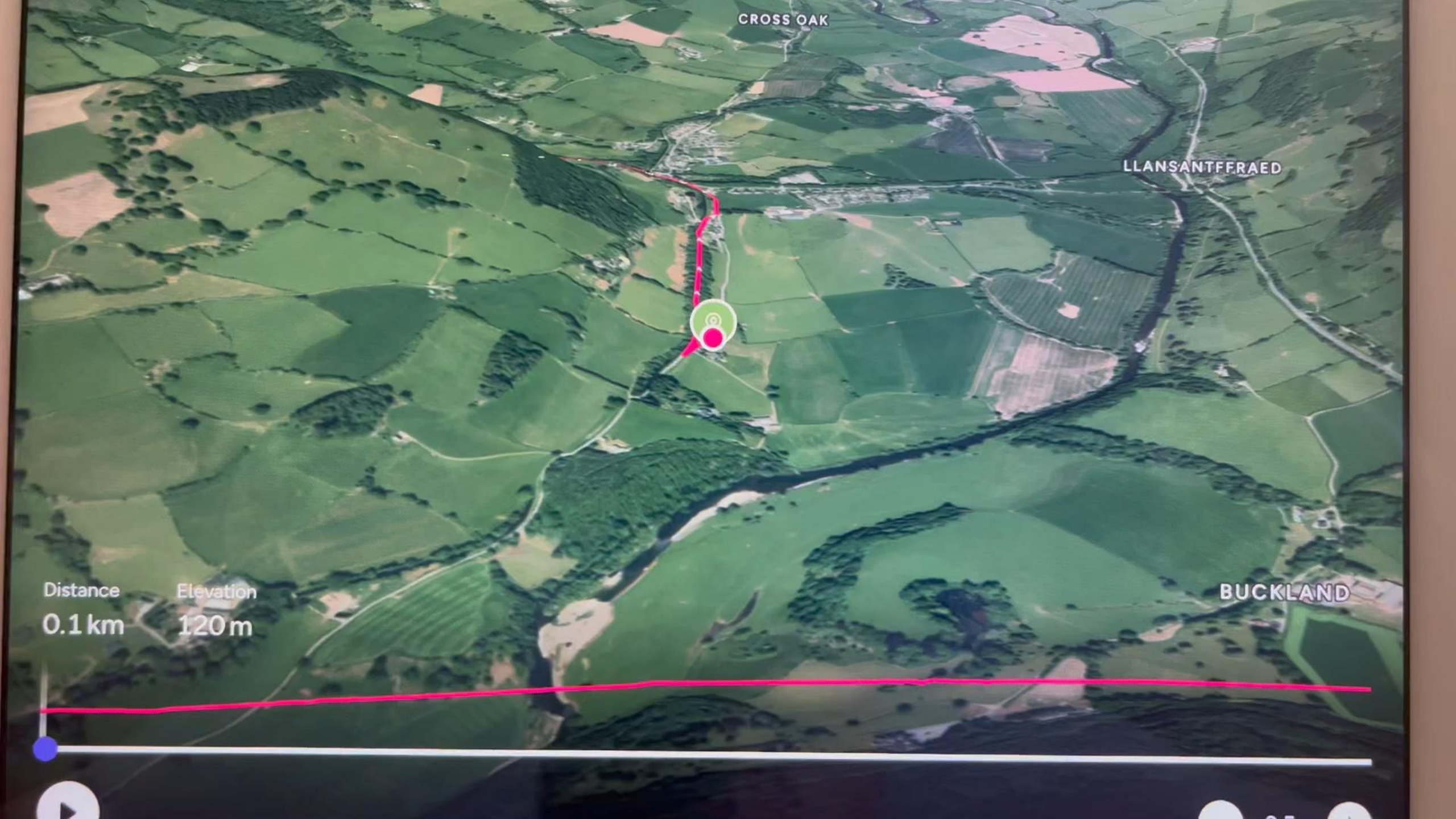
CROSS OAK

LLANSANTFFRAED

BUCKLAND

Distance  
0.1 km

Elevation  
120 m





# Brinore Tramroad





# Bye-Laws, TO BE OBSERVED ON THE BRINORE *Tram-Road.*

**T**HAT all Trams be numbered & marked with the Name of the Proprietor.

That the Trams be kept to a proper Gauge. That if any loaded Tram get over the Plates, it must be immediately unloaded, and not drawn back by Force on the Plates.

That no Tram, when loaded, shall exceed in Weight 40 Cwt. Short Weight (or 37 Cwt. Long Weight).

That no loaded Tram be allowed to travel otherwise than along the Tram Plates.

That when loaded and empty Trams meet between the Turns-out, the empty Trams must draw back to the Turn-out.

That no Person shall be allowed to use Carts, or any other Carriage than a Tram-Carriage, on the said Tram-Road.

That no Tram be allowed to remain on the Road, except on or opposite to a Turn-out.

That a Penalty, not exceeding THIRTY SHILLINGS nor less than TEN SHILLINGS, be inflicted for Breach of either of the above Laws.

## THE BRINORE TRAM ROAD COMPANY.

### RATES OF TONNAGES & TOLLS TO BE TAKEN ON THE Brinore Tram Road.

#### TONNAGE.

For Lime and Limestone -	1d. per Ton per Mile.
For Iron, Tiles, Slates, Bricks, Stones, Clay, and Sand	1d. per Ton per Mile.
For all materials for the repairs of Roads	1d. per Ton per Mile.
For Hay, Straw, and Corn in the Straw	1d. per Ton per Mile.
For all kinds of Manures	1d. per Ton per Mile.
For Timber, Sleepers, and Pitwood	1½d. per Ton per Mile.
For Coals, Culm, Cokes, Cinders, and Charcoal	2d. per Ton per Mile.
For all kinds of Grain	2d. per Ton per Mile.
For Goods, Wares, and all sorts of Merchandize	2d. per Ton per Mile.
For all Cattle, Sheep, Swine, and other Beasts	4d. per Ton per Mile.

#### TOLLS.

For every Horse, Mare, Gelding, Mule, or Ass, (not carrying or drawing any Goods, Wares, or Merchandize) the sum of	1d. each.
For all Cows and other Cattle (except Sheep, Swine, and Calves) the sum of	½d. each.
For all Sheep, Swine, and Calves, the sum of	5d. per Score.

By Order of the Committee,

THOMAS C. PERKS,

CLERK TO THE COMPANY.

Shire, Hall, Brecon,  
August 31st, 1855.

## Brinore Tramroad Conservation Forum

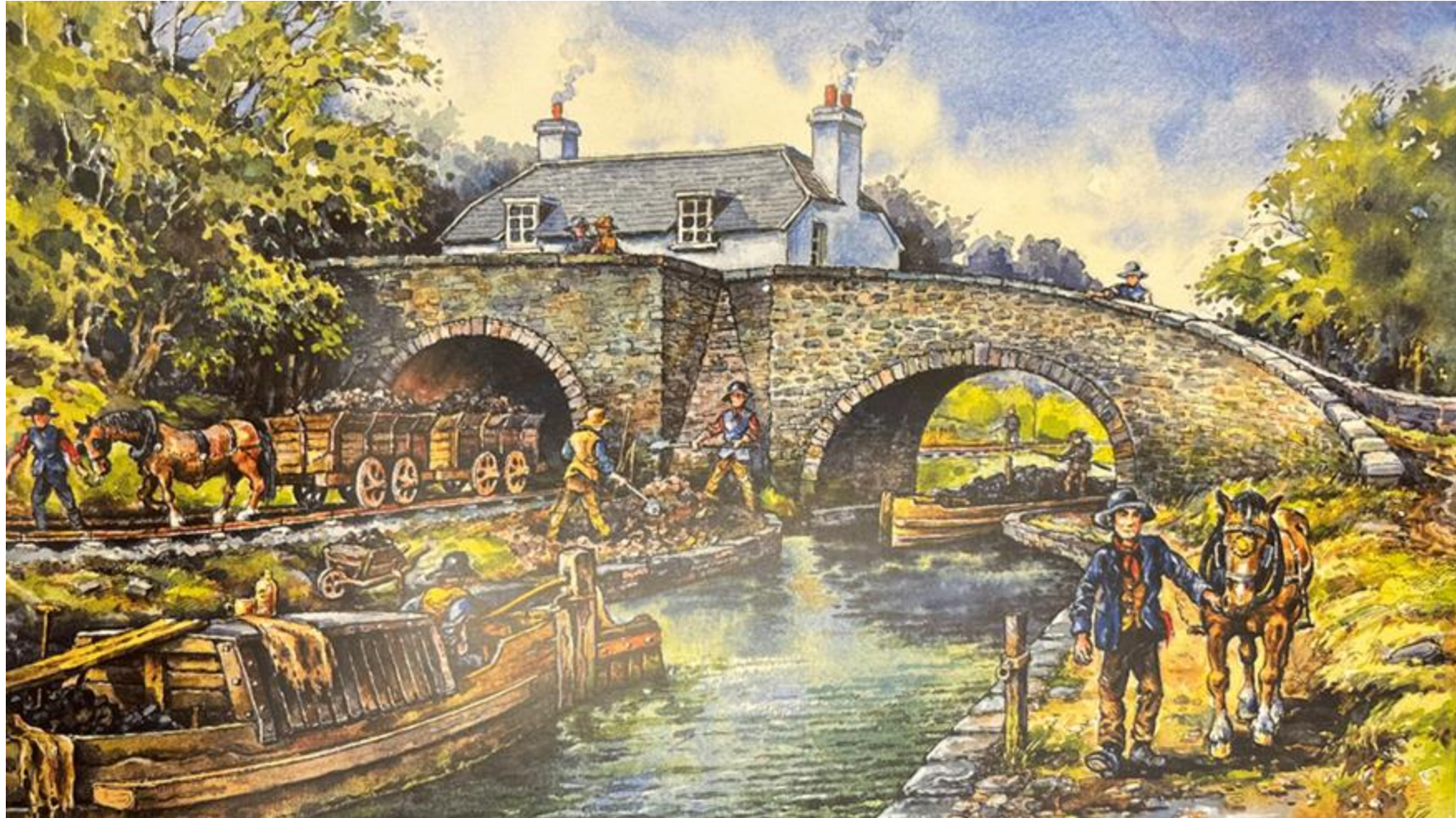
<http://Brinore-tramroad.Powys.org.uk>

Y Gaer Museum, Art Gallery  
& Library now houses the  
BTCF's archive



# Watton Wharf

Hay Tramroad - Opened 1816  
Coal, Lime and Limestone  
Closed 1860





# Watton Wharf Today





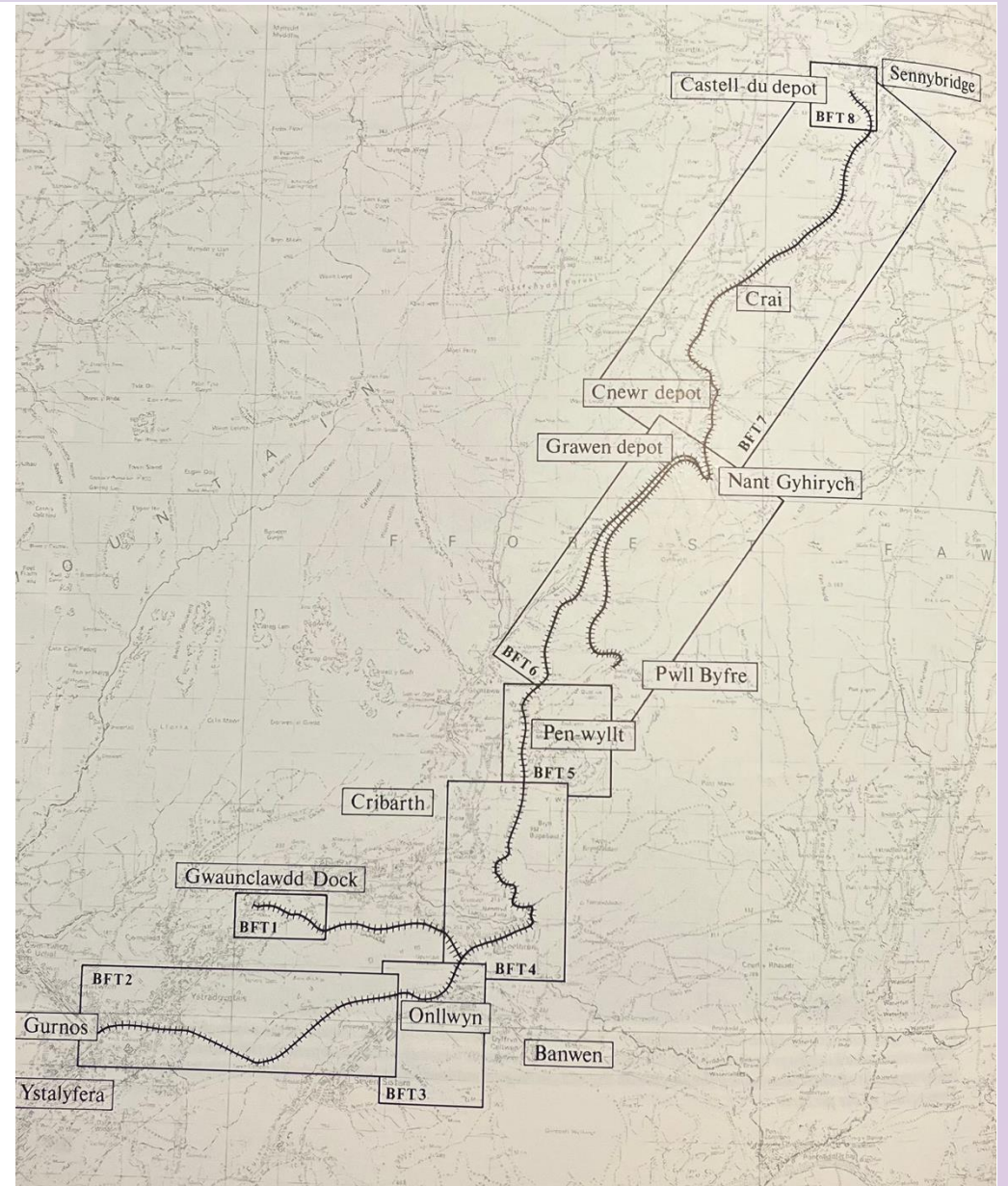
# Watton Limekilns



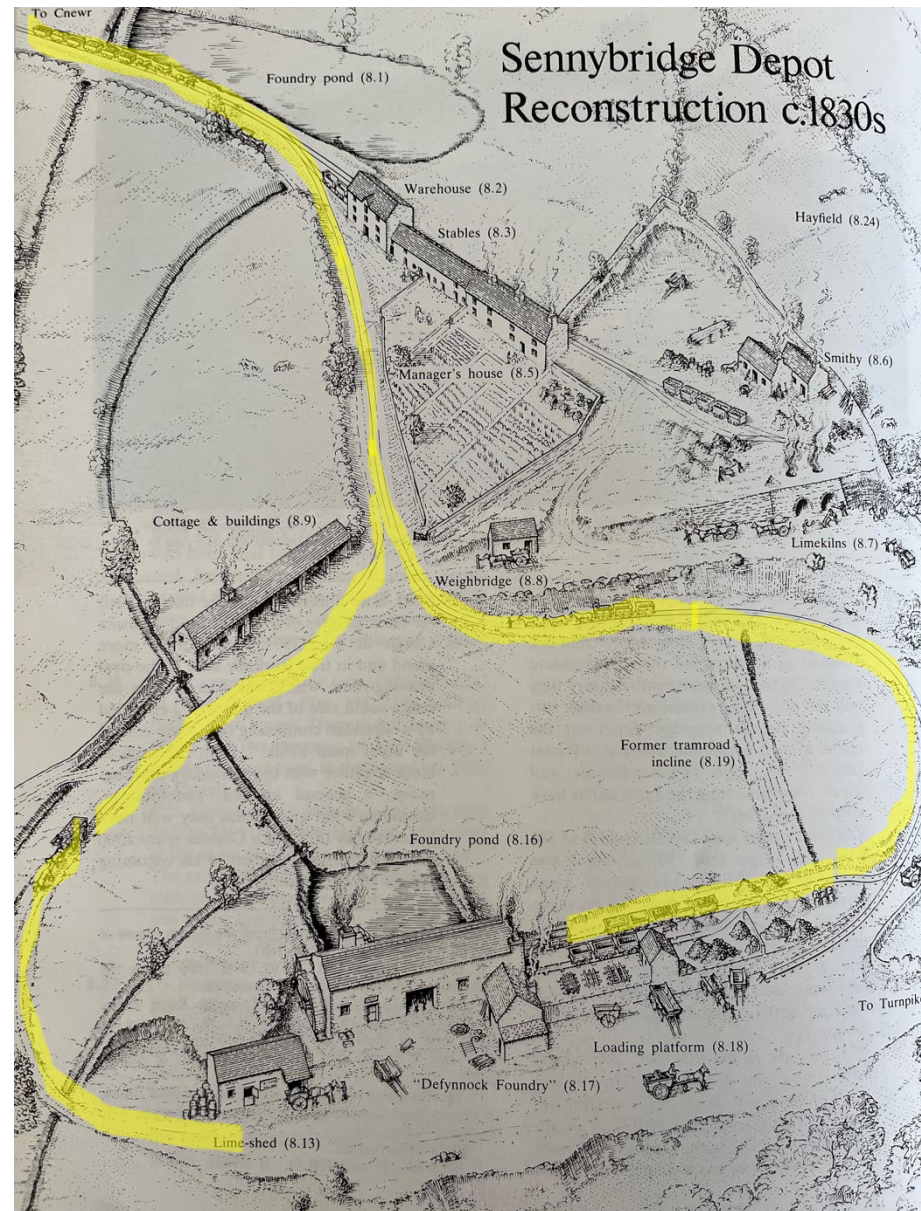


# The Brecon Forest Tramroads

- Built by John Christie circa 1821
- 21 miles of tramroad 1/3 of which was road/rail formation
- Bankrupt 1828
- Line closed 1863
- Carried coal and lime serving rural markets and was less profitable than the tramroads in the east
- John Christie died in 1857 aged 83









# Brecon Beacons Tramroads Project

## Objective

Through a collaborative approach involving several organisations, to identify former tramroads with a view to safeguarding their heritage and sustaining their roles as routes for walking

## Partners

Bannau Brycheiniog National Park Authority (BBNPA)

Heneb (The Trust for Welsh Archaeology)

Welsh Government's historic environment service - Cadw



Cronfa Datblygu Cynaliadwy  
Sustainable Development Fund  
BANNAU BRYCHEINIOG



# Volunteers

- Covered by BBNP volunteer framework
- Receive full training
- Work in pairs or small groups
- Various Roles
  - Mapping, Field Survey, Data Manager, Researcher and more....

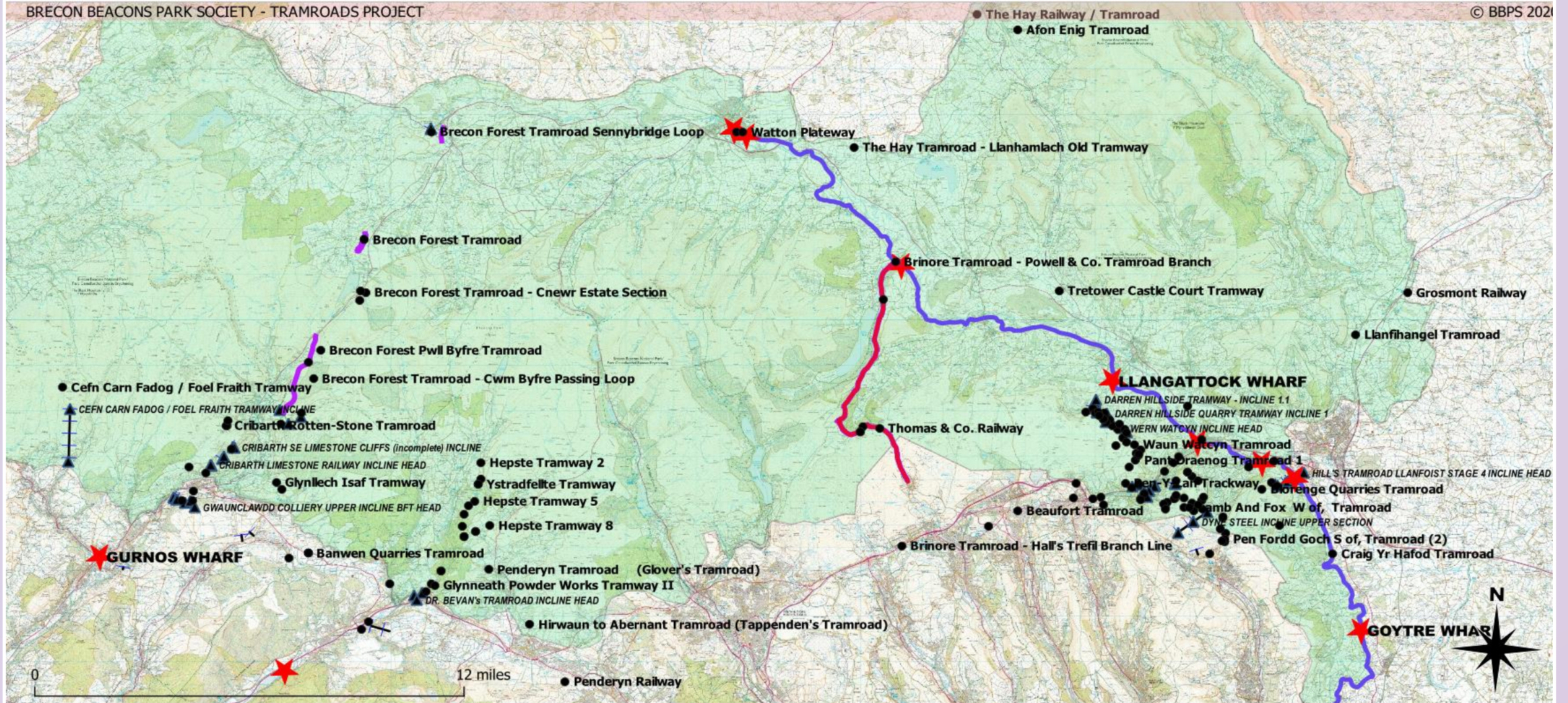


# Key Activities

- Mapping
- Surveying
- Monitoring and Maintenance
- Scheduling
- Sharing









# Mapping

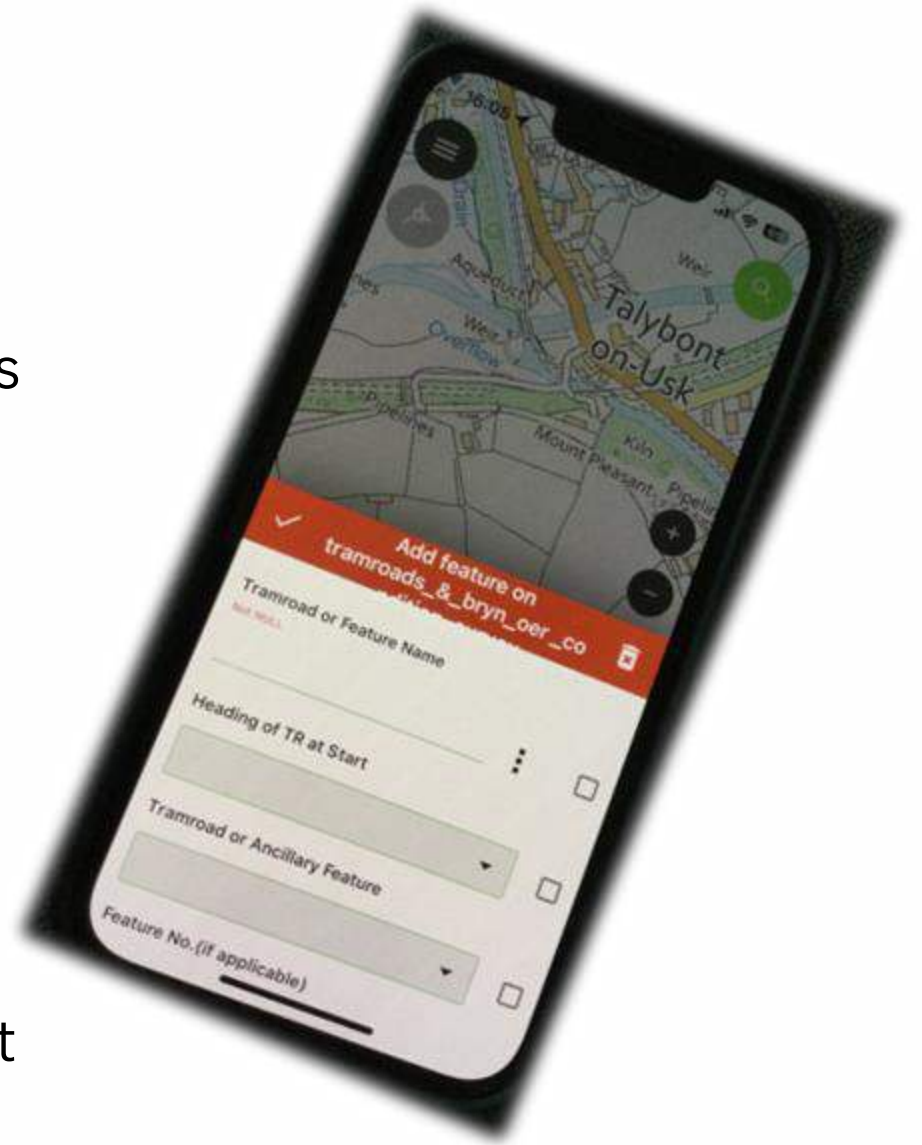
- Before surveying the tramroads, it is necessary to plot their routes
- Volunteers use QGIS and historic mapping to identify and trace the routes of tramroads
- Routes are then assessed against modern mapping, aerial photography and land ownership to determine viability for survey
- C.40 potential known routes across the park
- Future mapping of additional routes and associated features





# Surveying

- A pre-cursor to active management and possible scheduling of sections of Tramroads is accurate surveying
- Draft methodology by CPAT (now Heneb) revised and agreed
- Information will be collected on a hand-held device loaded with Qfield software
- Volunteers will be trained in feature identification, condition recording and threat reporting





# Monitoring and Maintenance

- When the Tramroads are accurately surveyed, work can proceed on long-term monitoring and maintenance
- This will involve working parties working with Park Rangers, the Park Archaeologist, Henneb, Cadw as appropriate
- Possible 'adopt a monument' approach to individual tramroads
- Continuous feedback of information to the Historic Environment Record
- Funding bids for necessary work



# Scheduling

- When appropriate, we will be putting forward proposals to Cadw to Schedule sections of Tramroad or specific features
- Criteria assessment





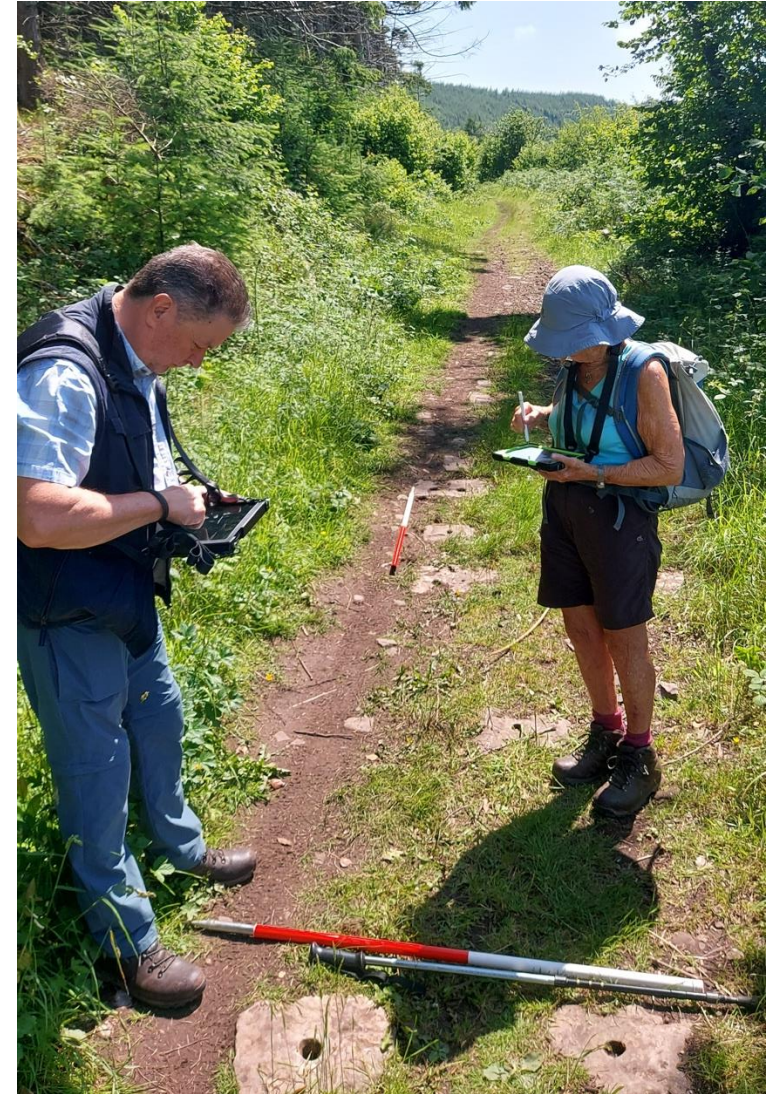
# Sharing

- Results of survey shared through various activities and online engagement
- Talks, walks and promotional materials
- Website showing tramroad routes and associated information including photographs
- Engagement with schools
- Engagement with local communities
- Engagement with communities bordering the Park



# Progress so far

- 10 volunteers
- 5 training sessions
- C. 1/3 Brinore tramroad re-surveyed





# Thank you for your attention

Drawings by Michael Blackmoore

Maps by Gordon Rattenbury

Historic Documents – Brinore Tramroad Conservation Forum

Geological map courtesy of Alan Bowring (BBNPA)

Photographs – R Manning