

Tramroads of the Brecon Beacons

Tramffyrdd Bannau Brycheiniog

Roy Manning and Charina Jones

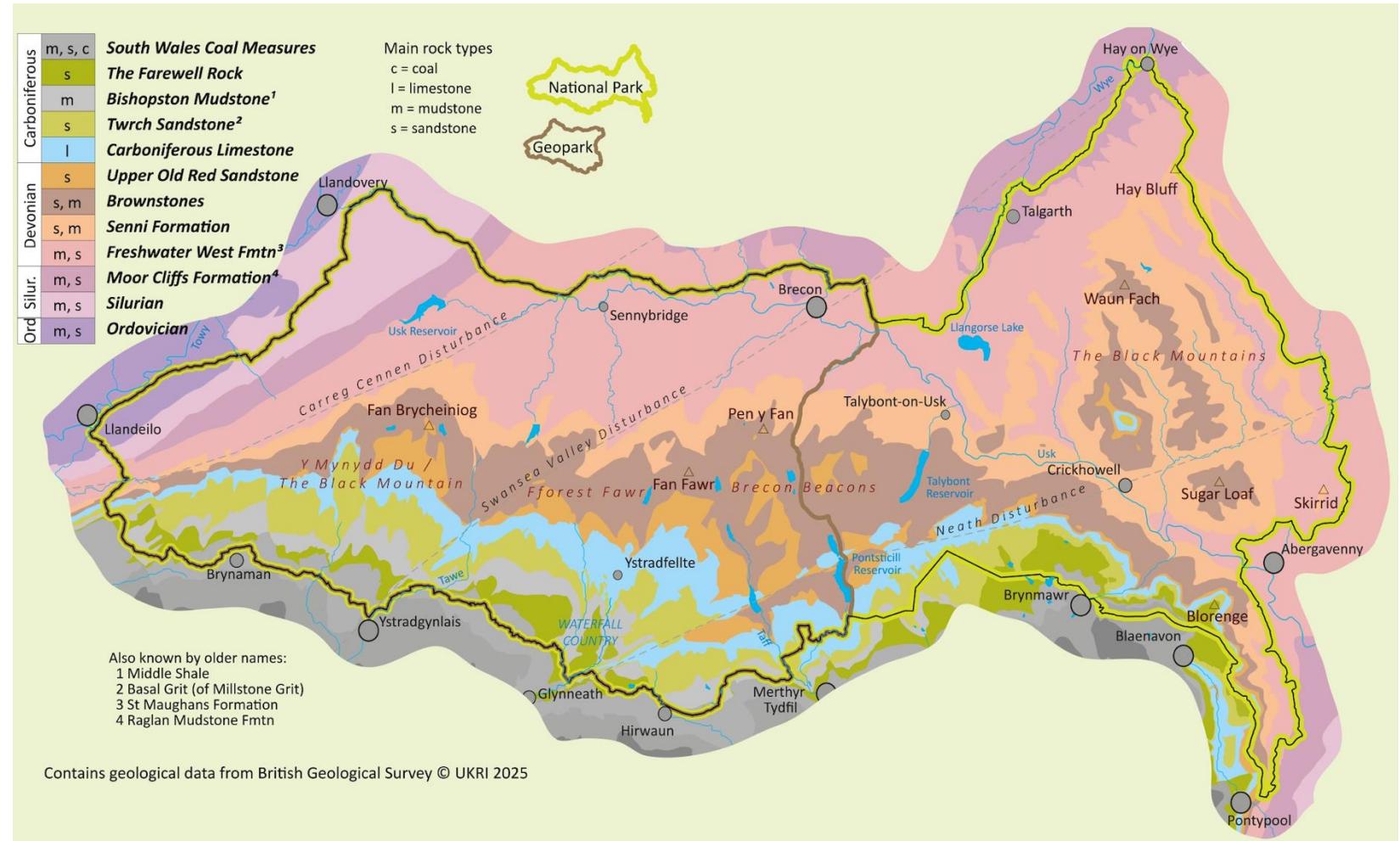
My talk

- 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

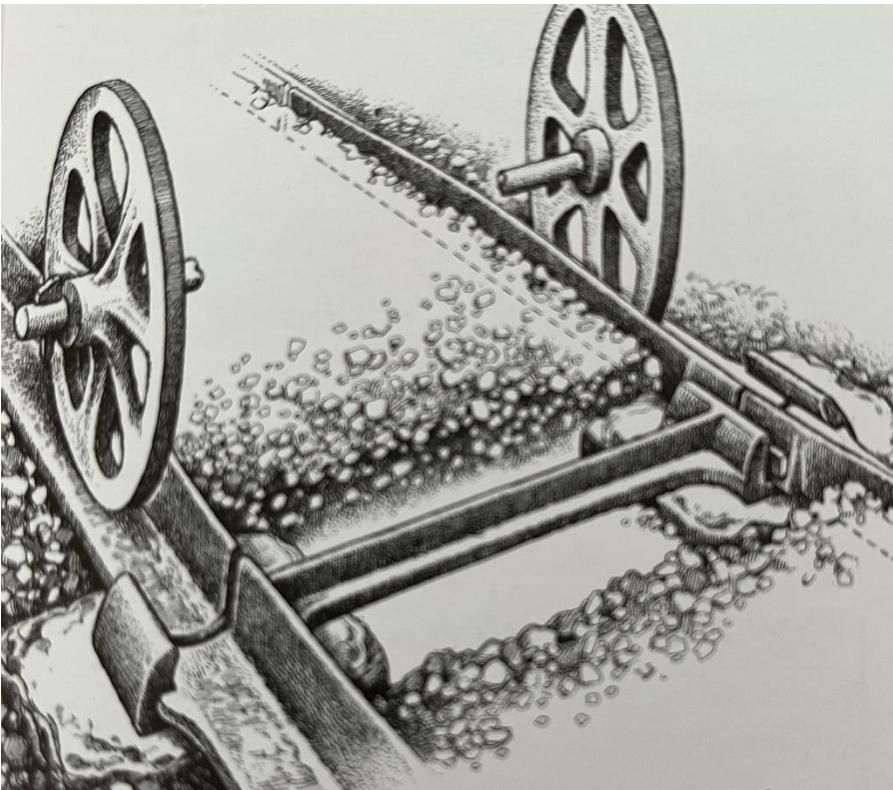


Nant-y-glo works around 1830

Brecknock and Abergavenny Canal

- Act of Parliament 1793
- Before work started on canal, the first tramroad - Llam-march (Gelli-felen 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



Brecon Beacons
NATIONAL PARK

Lle i enaid gael llonydd



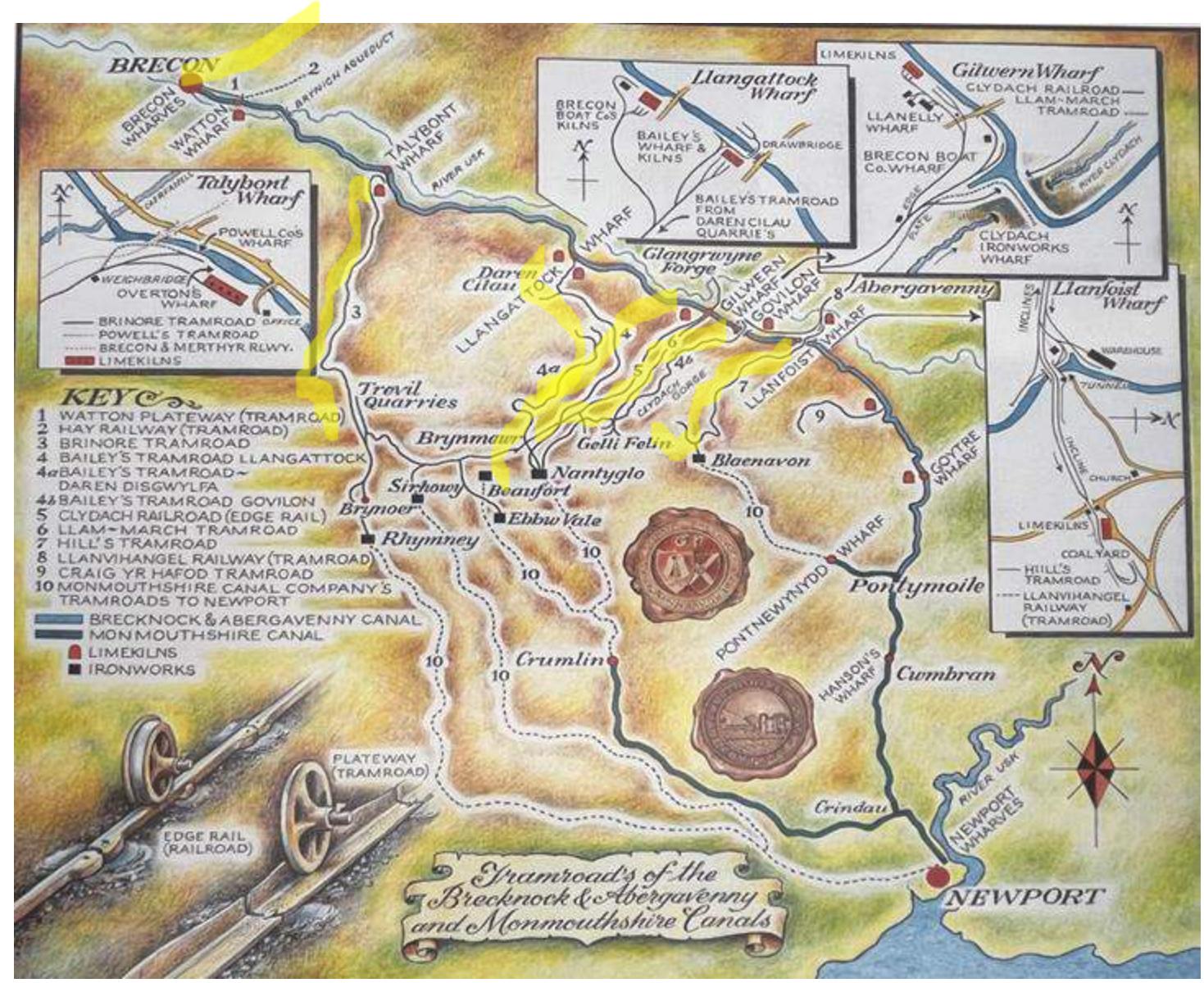
Brecon Beacons NATIONAL PARK

One of Britain's breathing spaces

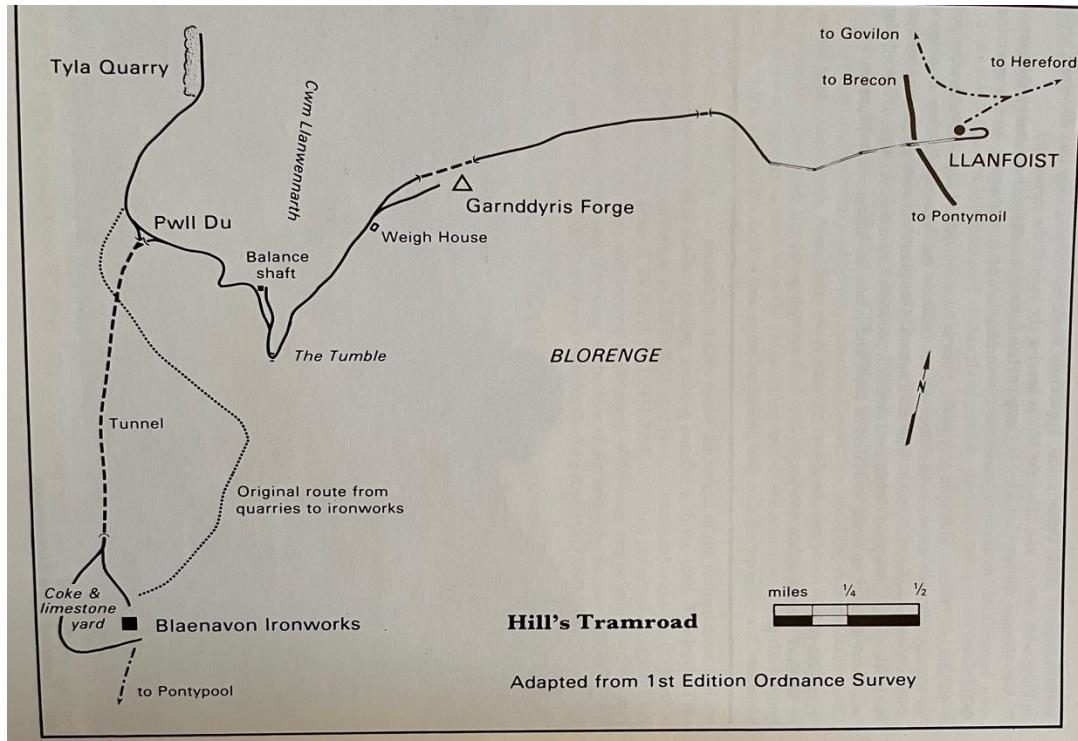


Tramroads in the East

- 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



Blaenavon Ironworks

Established in the late 18th Century
Closed in 1860's

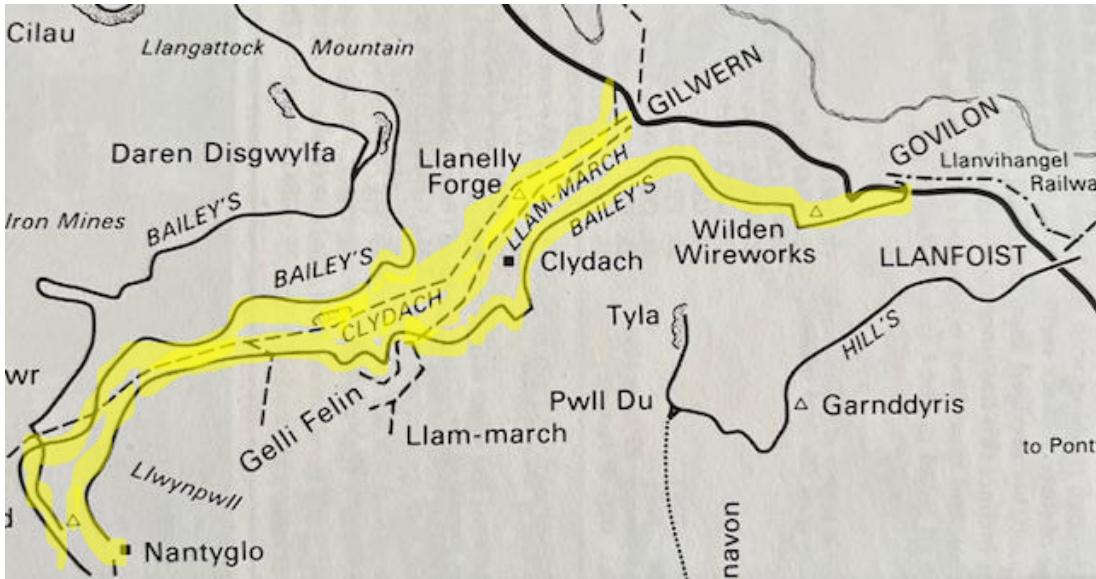


Hill's Tramroad

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



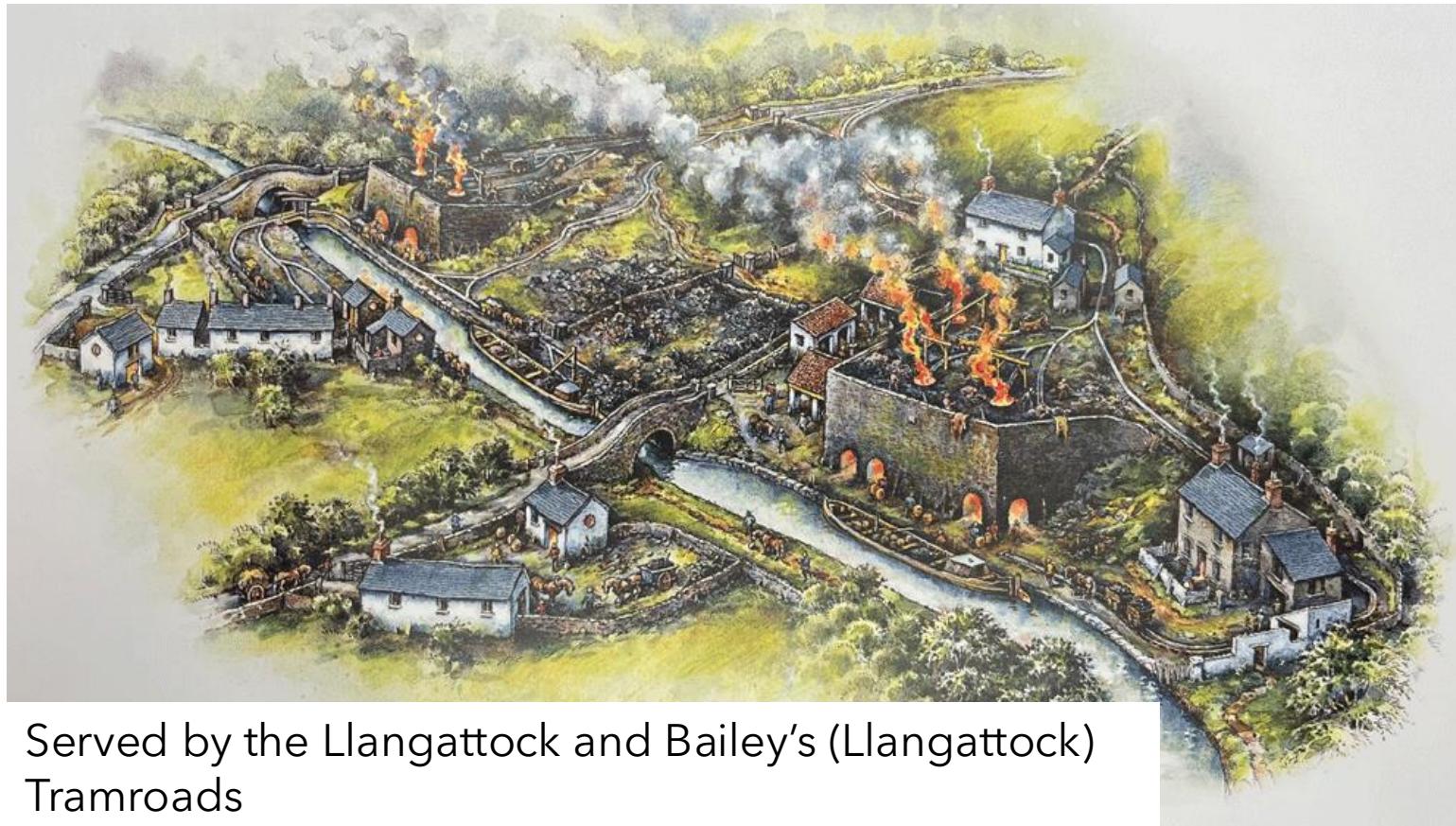
Clydach Tramroads



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



Llangattock Wharf



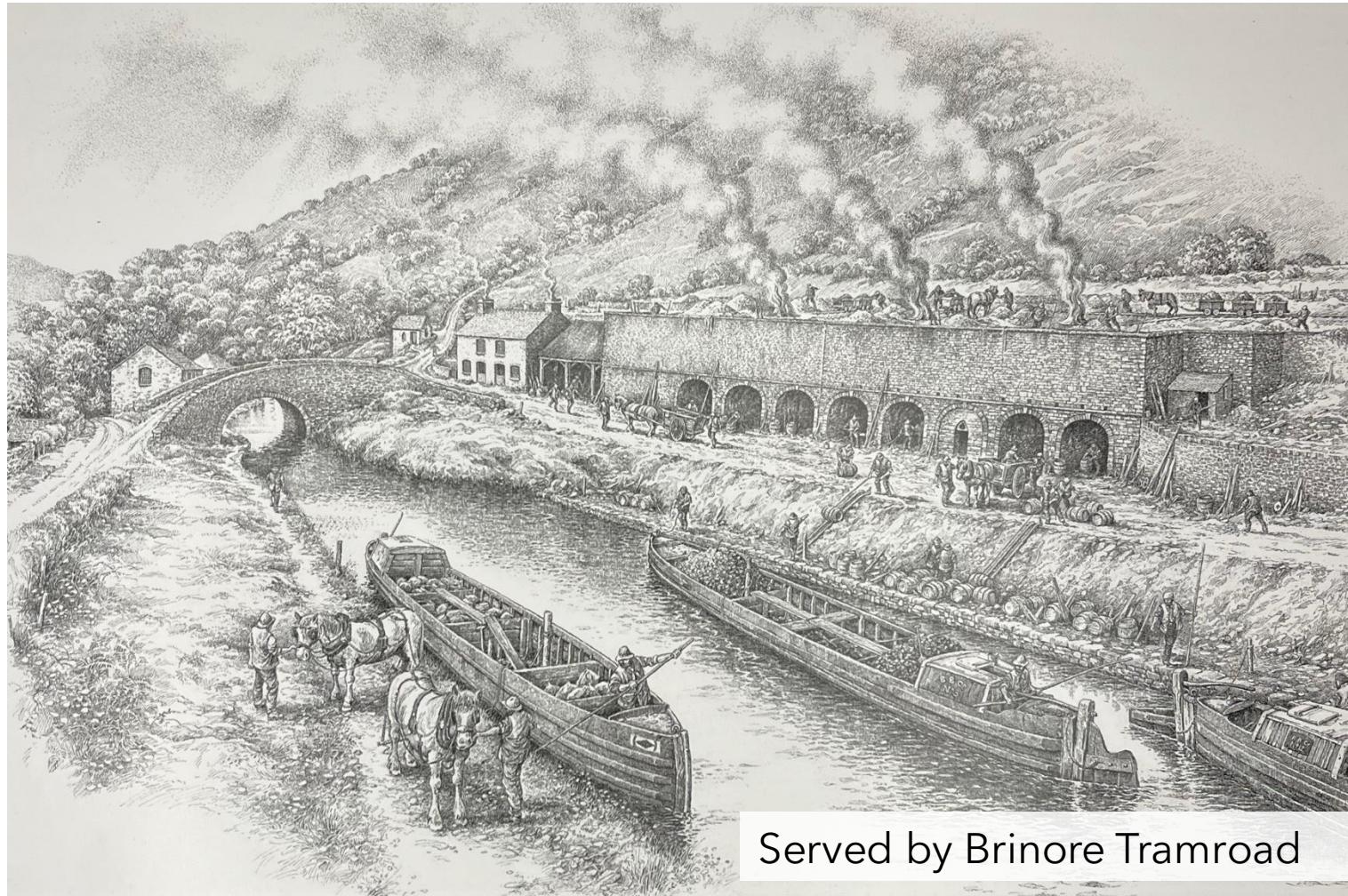
Served by the Llangattock and Bailey's (Llangattock) Tramroads

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



Overton's Wharf



Served by Brinore Tramroad

Constructed 1815
Tramroad closed in 1863

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

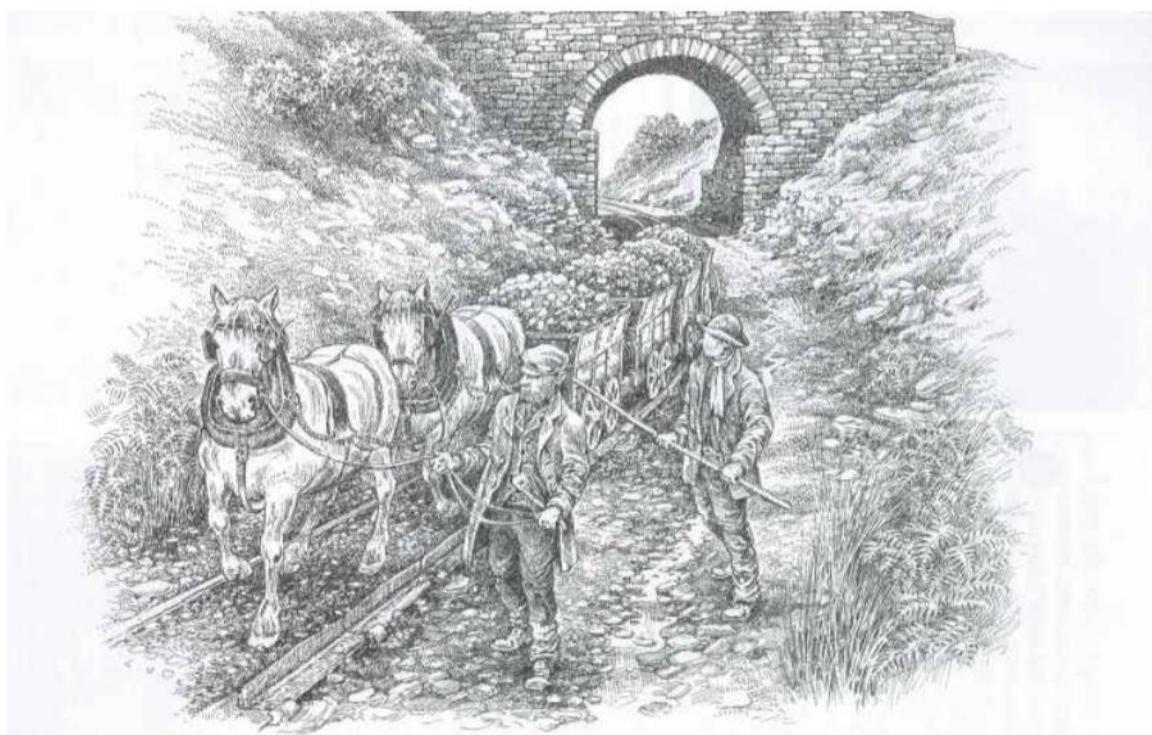
Engineer

George Overton (born 16 Jan 1775)

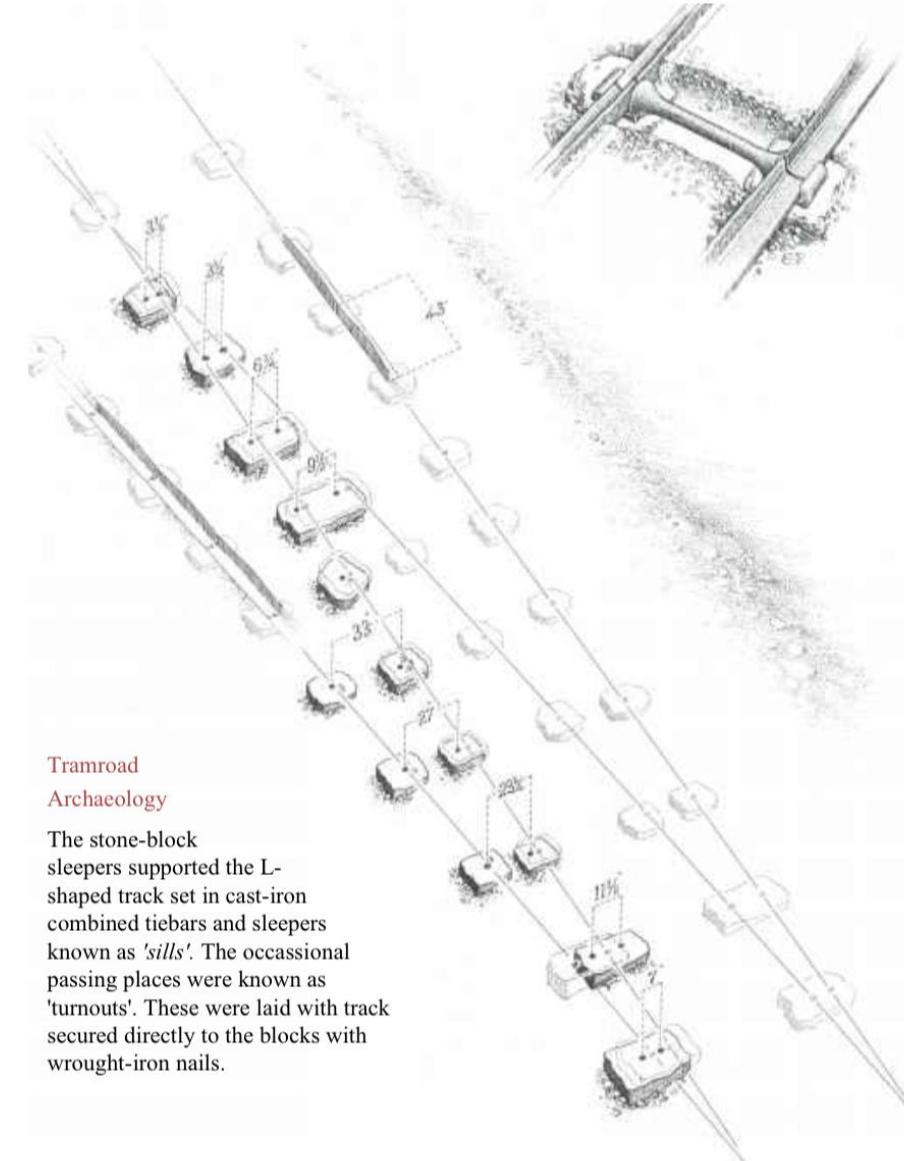
Built Merthyr tramroad which Richard Trevithick tested and ran the 1st steam locomotive

Conducted the first ever survey of the Stockton & Darlington Railway

Brinore Tramroad

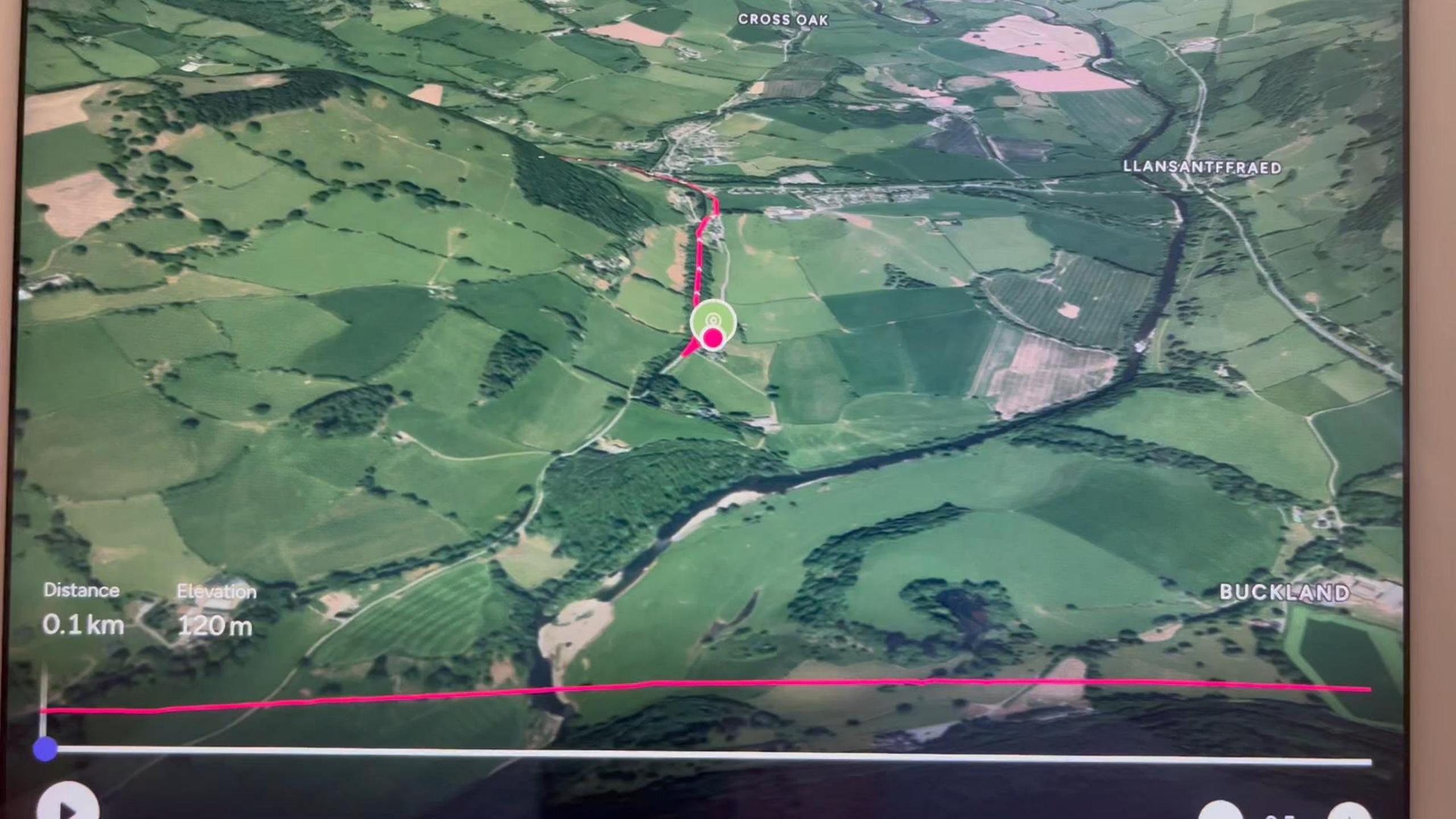


The Bridge over the Brinore Tramroad at Pen Rhiw-calch



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

Distance

0.1 km

Elevation

120m

BUCKLAND

Brinore Tramroad



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

THAT 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, Briks, 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 Merchandise	-	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 Merchandise)	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.

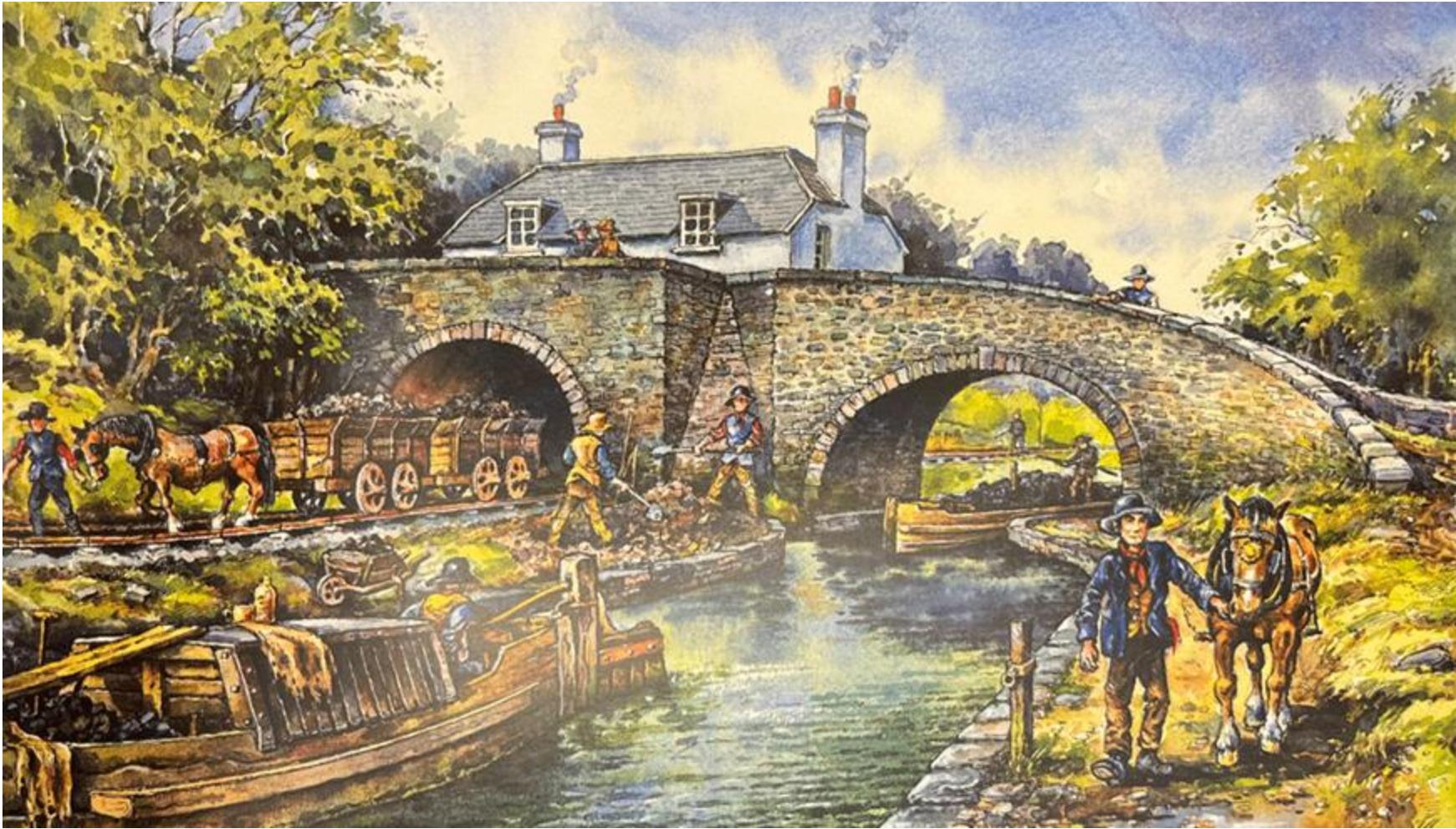
Brinore Tramroad Conservation Forum

<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

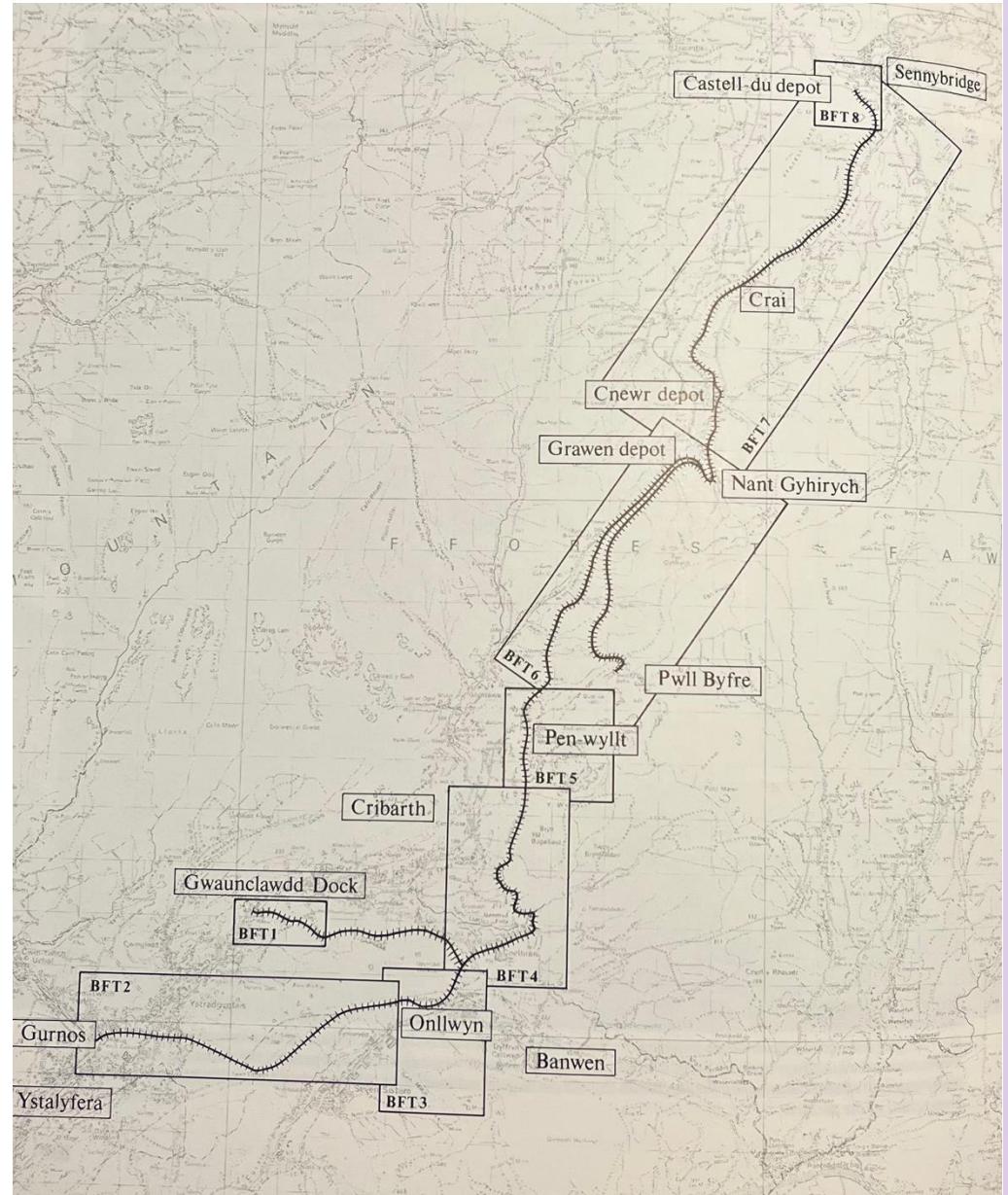


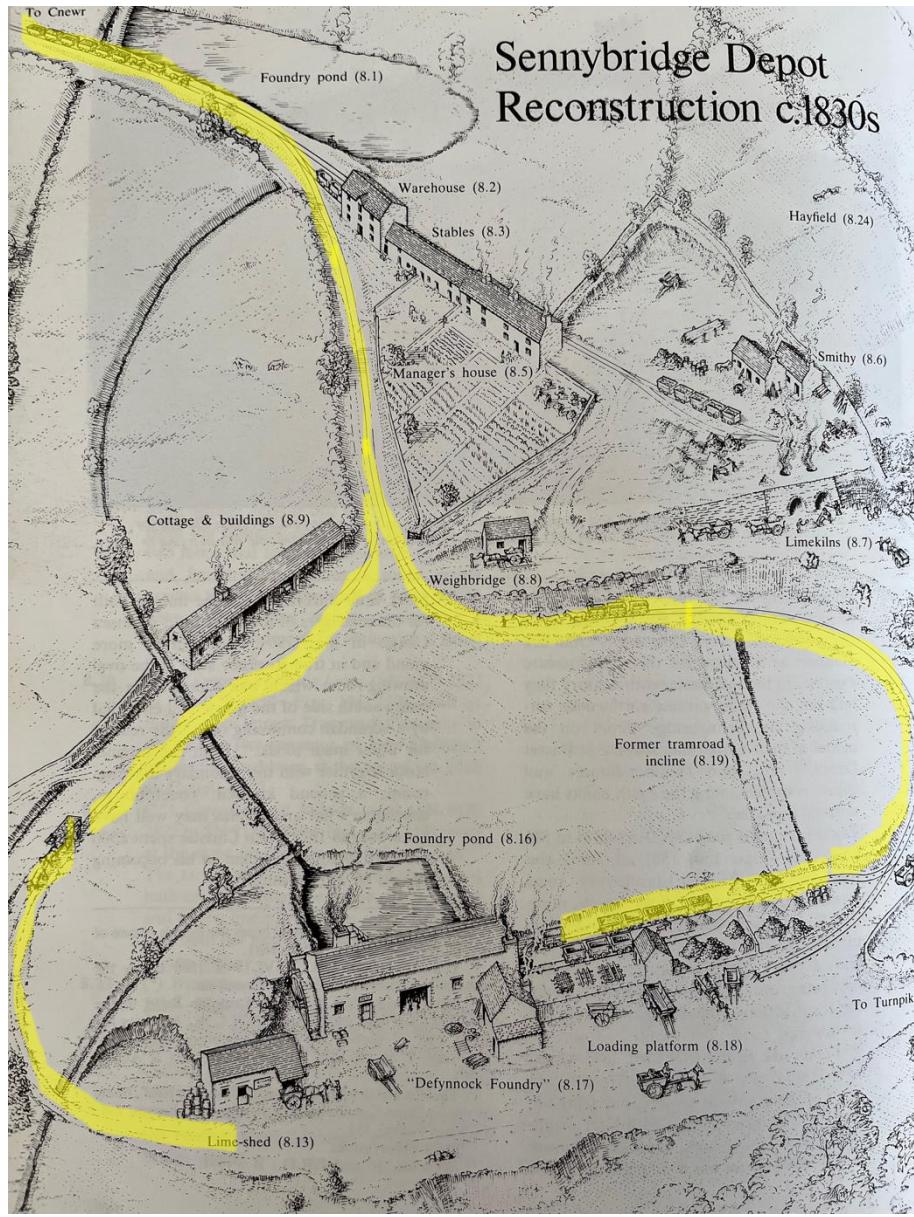
Watton Limekilns



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

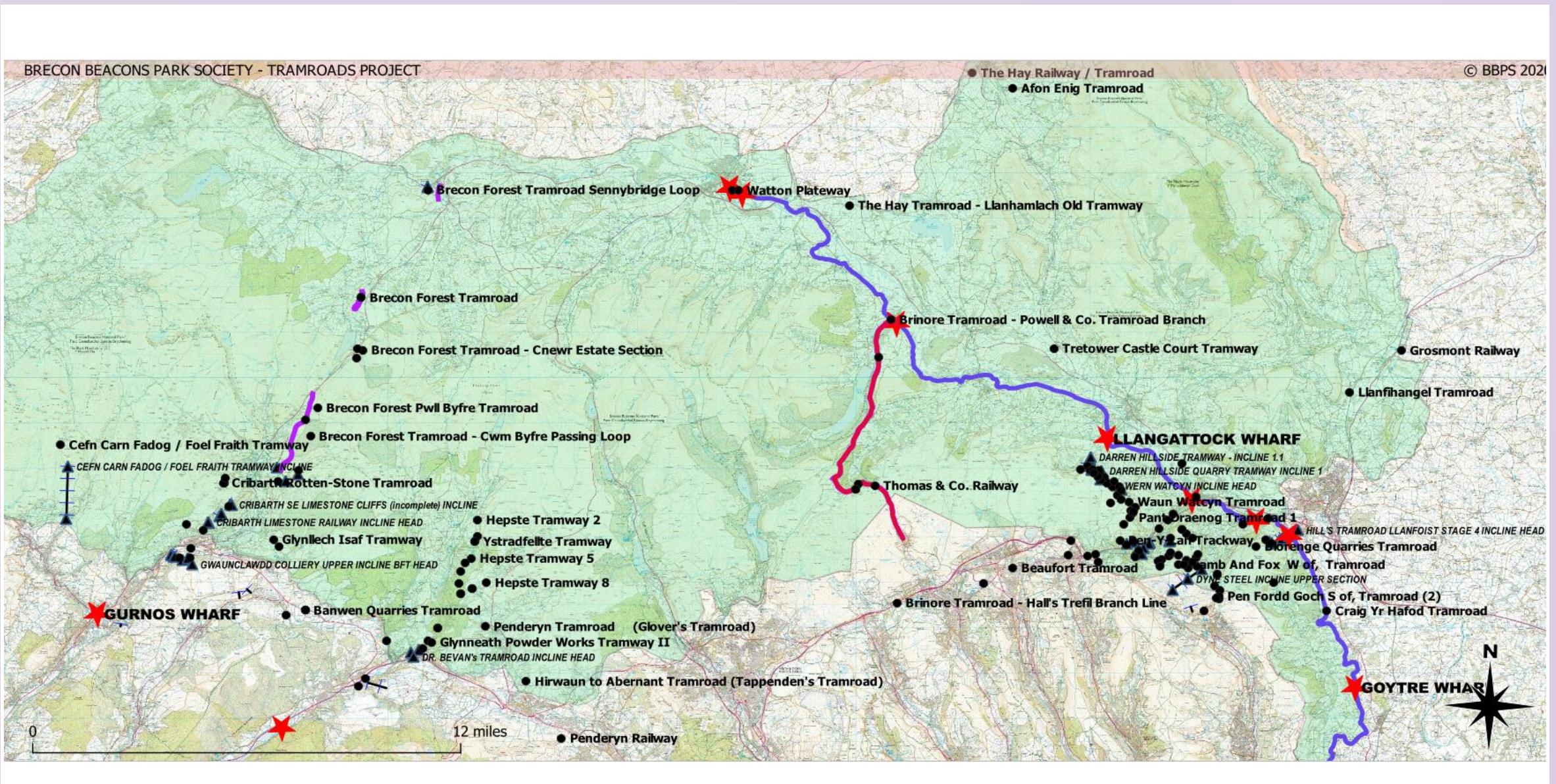
Volunteers

- 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

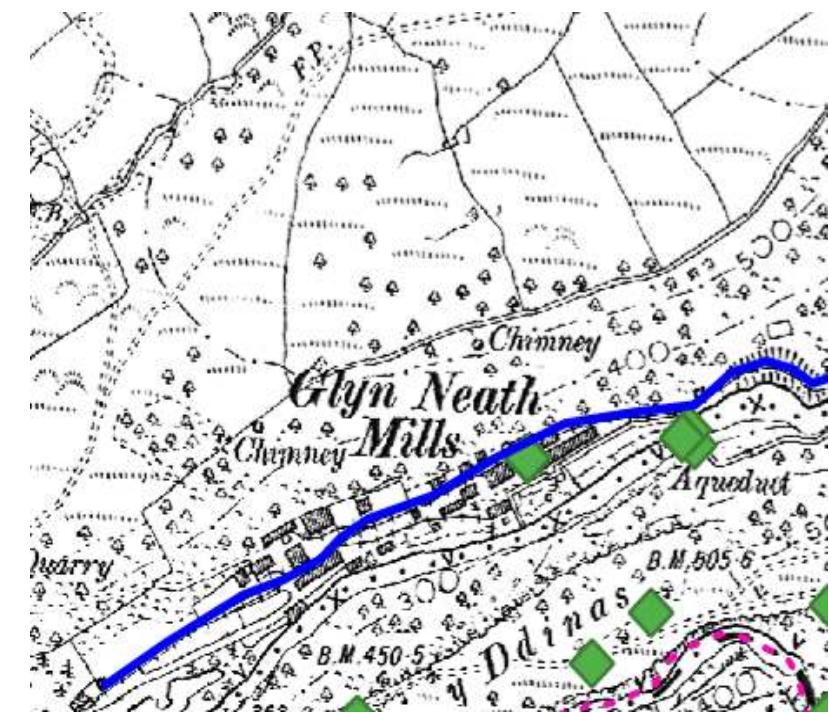
- Mapping
- Surveying
- Monitoring and Maintenance
- Scheduling
- Sharing





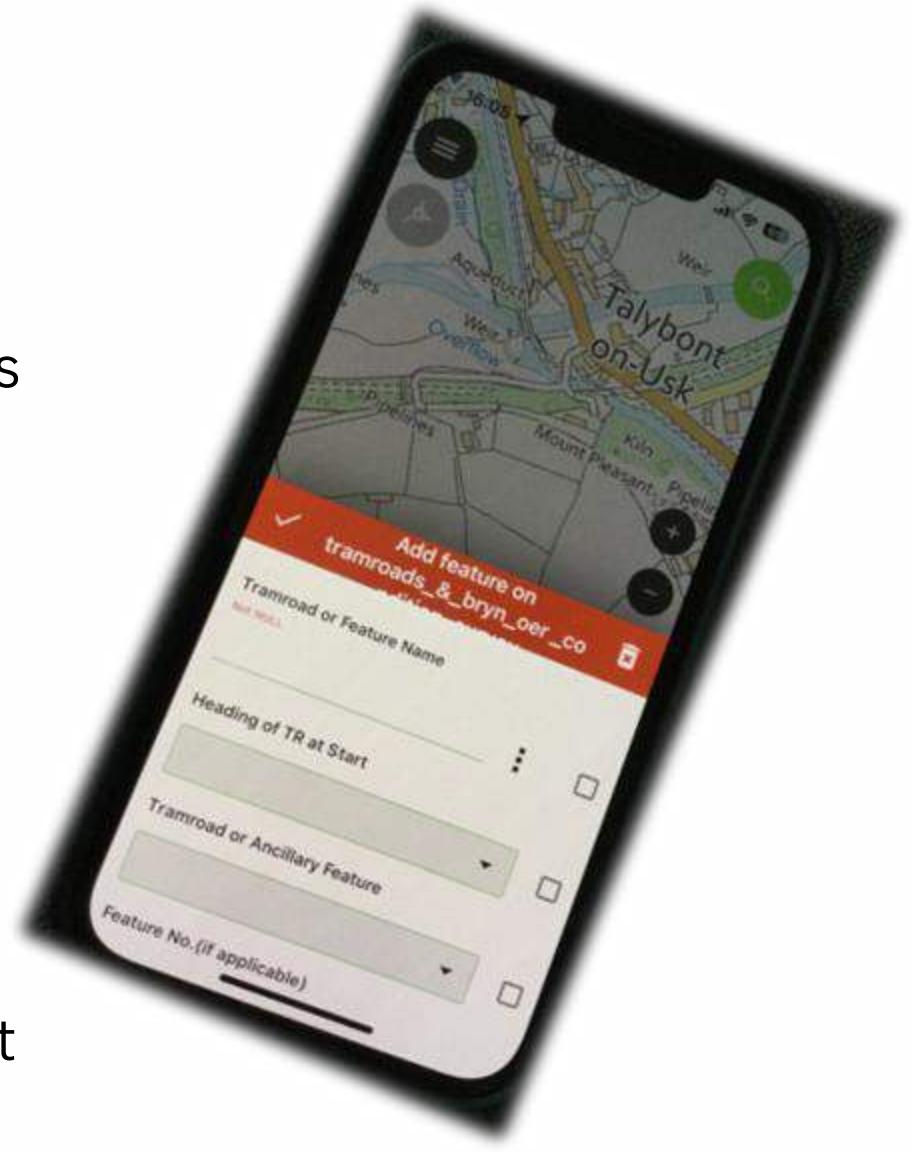
Mapping

- 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, Heneb, 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

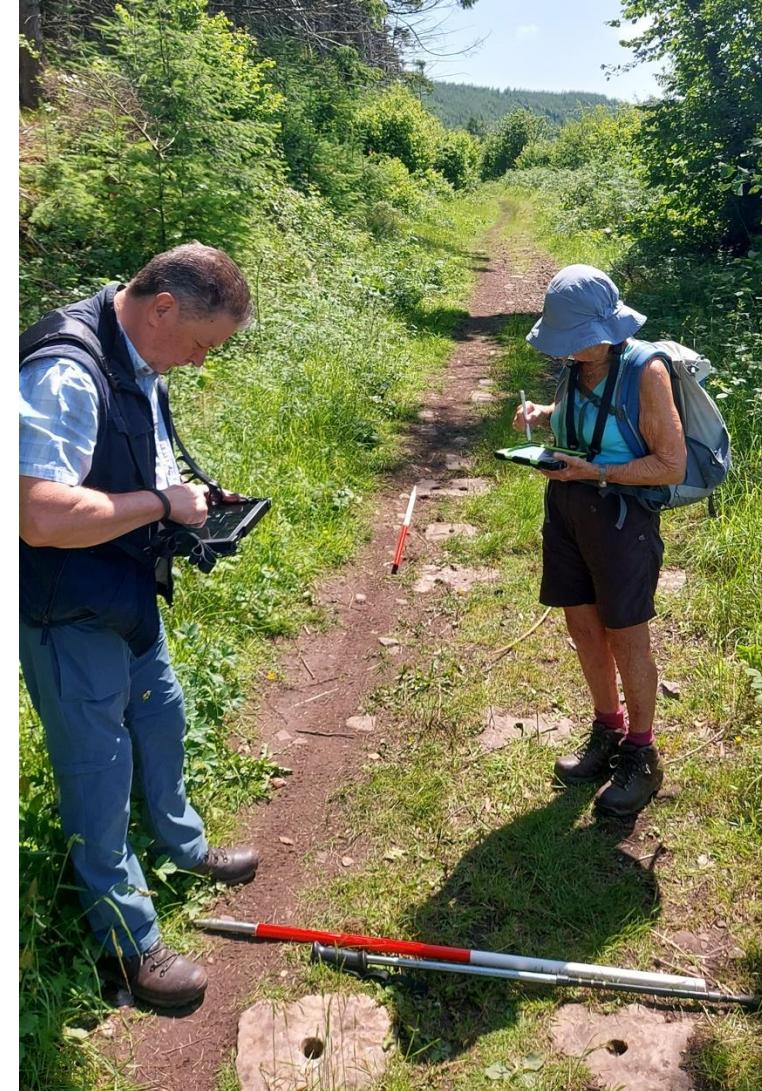


Sharing

- 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