

22 Beddgelert and its railways

The village of Beddgelert, a staging point on the 1802 Caernarfon-Aberglaslyn road and nowadays jammed with coaches and cars in the summer season, was for thirteen years the “frontier station” of a remarkable narrow-gauge railway system. This extended from near Caernarfon in the north to Porthmadog - a distance of some 27 miles - and as planned a branch would have diverged at Beddgelert to serve Capel Curig and Betws-y-Coed also. The Welsh Highland Railway had its origins in the North Wales Narrow Gauge Railway built in 1873, running from Dinas near Caernarfon to tap the slate quarries on Moel Tryfan (see below). Meanwhile another scheme had been promoted to reach Beddgelert from the south as the “Portmadoc, Beddgelert and South Snowdon Railway”. In its latter form this was to be an electric railway and some construction was commenced around Beddgelert involving gradients of 1 in 25 circa 1919. The company however met with financial problems, and the NWNG line had already been abandoned after quarry closures in 1916. Thus it was left to the newly formed Welsh Highland Railway to pick up the pieces from 1922. This it did with commendable speed, refurbishing the NWNG route, extending it to Beddgelert, realigning and completing the PB&SSR with gradients suitable for steam engines and upgrading the erstwhile Croesor Tramway southwards into Porthmadog: a through service of trains over the whole line started in 1923. However, this enthusiasm was short-lived and after only a few years the line became moribund, was taken over by the Festiniog Railway Co. and finally closed down again as early as 1937. Later history is hardly more encouraging since although a preservation society was formed in 1964 with the declared intention of refurbishing the whole route, bureaucracy has intervened to cause three major changes of plan and little real progress has resulted. However it hopes to have open by summer 1979 its first three-quarters of a mile of track along the Beddgelert Siding alignment in Porthmadog. It is sobering to recall that the preservation organization has now been in existence for as long as the original railway was running. Even so the attraction of a preserved railway hereabouts is easy to visualize - the section south of Beddgelert amongst others contains some truly remarkable scenery.

The station site at Beddgelert is to be found behind the Goat Hotel (588480). Trains from the south and north would usually meet here and exchange passengers, but facilities were very basic and not appreciated by those whose connecting trains were delayed by the frequent mechanical mishaps.

To the left the line enters a cutting (pictured left below), at the far end of which two routes diverge. That straight ahead crosses the road by means of a substantial stone bridge (below right) which has never carried a train; this is the unfinished course of the PB&SSR electric line, and further uncompleted work can be seen in the field beyond.



Meanwhile the WHR proper turns to the right, passes under the road and straightaway crosses the Afon Glaslyn on a magnificent 70 ft-span steel girder bridge. On the far side of this the two routes re-converge to head south down Aberglaslyn pass. This famous section has become a well-used footpath and includes two short tunnels and one longer one hewn from solid rock in the hillside above the river. The view of the pass is far superior to that obtained from the road on the opposite side.

Above the line, various isolated copper mine workings dating from circa 1782 may be noted, and there is a more extensive one of particular interest in the valley just beyond the south end of the long tunnel. Cwm Bychan mine (602472) was working late, being started only in 1925 by the Nantmor Copper Co. The equipment used was suitably modern and included an overhead cableway or telferage system 4,500 ft long on 11 pylons, to convey mined ore down the valley to a loading point on the WHR just outside the tunnel mouth. Parts of the system including steel towers, buckets and pulleys survive and represent a transport system unique in this area of the country. Of the actual mine workings there remains little of interest.

Returning to Beddgelert, the WHR route northwards leaves the station heading south west, and performs several contortions to gain height before finally coming to point in the correct direction. Gradients and curves are spectacular on this first stretch, and the even steeper false starts of the PBSSR route will be found to add confusion. After about a mile Forestry Commission land is entered and further exploration is not worthwhile. The railway route and main road keep fairly close company up to the summit by Pitt's Head and down into Rhyd-Ddu village. The station here (now the car park at 571326) was the original terminus of the NWNGR line from the west, extended by the WHR, and has long been the start of a popular and short walking route to Snowdon summit.

There were minor slate quarries on the far side of Llyn-y-Gader (565519) from which a tramway skirted the lake in the general direction of the main line, but never reached it. Near where it peters out stood a woollen factory, now a private house. It is possible to reach the mines and quarries of the Upper Pennant valley on foot from here (see section 27) rather than approaching by road from the Porthmadog direction.

The section of railway from Rhyd-Ddu westwards is well worth exploring on foot, having excellent scenery and interesting constructional features. It is now the current favourite for starting the preservation operations but no work has yet been carried out here. Initially the line follows the contours by a series of twisting reverse curves (picture right) and passes adjacent quarry workings once served by sidings and spurs.

Remarkable also hereabouts are the number of farmhouses and cottages having waterwheels; although none are now workable, they survive at Clogwyn y Gwin (574536) and Ffridd Isaf (575328). Most are small 8 or 10 ft wheels and were probably originally installed to operate threshing machinery, fulling stocks and butter churns. A logical later use was to drive a generator - a Pelton wheel has replaced the conventional large wheel at Bron y Fedw Uchaf (571544) and is so connected. It is surprising that more use is not made of these idle wheels in these days of high energy costs.

A third waterwheel is to be found on the side of a farmhouse hard by the popular Snowdon Ranger footpath to Snowdon (Llwyn Onn, 566553, picture above); just below it the building by the railway line (pictured left below) is the former Snowdon Ranger Station, a neat stone and



yellow brick structure typical of those provided elsewhere but now the only one to remain intact. The lakeside setting of the railway on this stretch deserves to be better known.



The extensive workings of Glanrafon Slate Quarries were connected to the main railway by an incline that descends on the north side. The ruined building at the foot was a weighbridge (573640; picture above right) and there were two sidings to exchange the quarry traffic, which was carried from 1873-1916. It was the failure of these quarries that principally caused the first abandonment of the railway before revival by the WHR. Just beyond the site of the sidings is Glanrafon bridge, the one major engineering work that caused considerable delay to the opening of the original route. Its proportions are massive for a narrow gauge line and it is still impressive today, crossing a deep gorge with its cascading mountain stream. The picture (right) is by David Mills.....



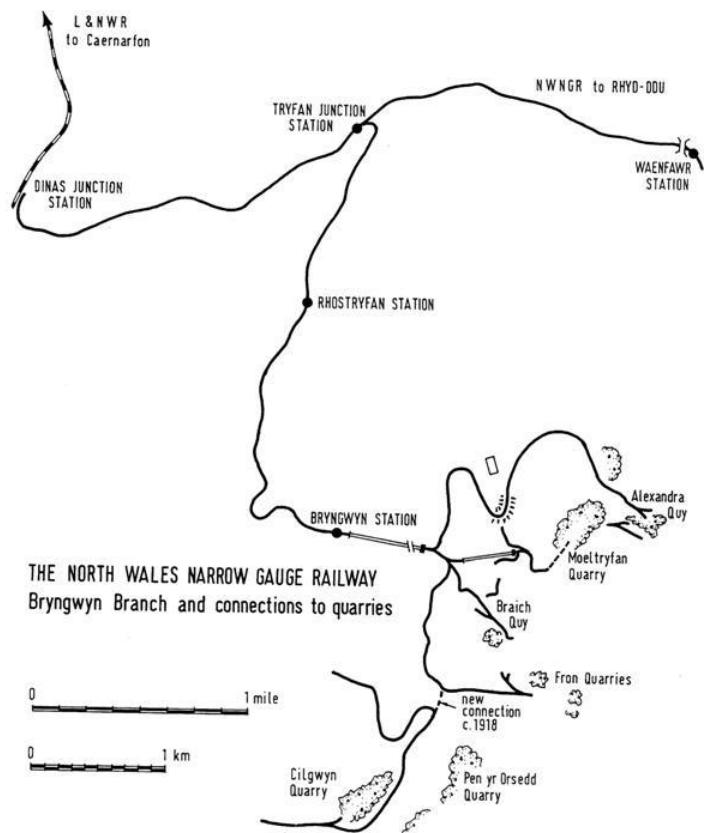
At the far end of Quelllyn Lake, a pleasant stretch of trackbed closely follows the river past sites of woollen and corn mills. Further sidings and inclines served the Silurian and Garreg Fawr iron ore mines to the north, a fascinating rabbit-warren of workings which can still be explored with care (540574). Before connection to the railway here, the ore was carried on an aerial ropeway right over the top of the mountain, and joined Glynrhonwy slate to eventually reach a railway outlet near Llanberis. Some traces of the ropeway pylons may still be found.

Bettws Garmon station (533578) is some distance from the village houses. Another branch trailed in from the south at this point; its source of traffic visible on the hillside was the Hafod-y-Wern slate quarry. To the north are further derelict slate workings, those of Garreg Fawr and Treflan, and yet another branch trails in further up the line towards Waenfawr, having pursued a devious course raised up on a dry stone embankment clear of the valley flood plain. To complete the various sources of traffic along the line, the Dudley Park granite quarry siding trailed in from a large crushing mill near Waenfawr Station (527588). This was a later working feeding the Welsh Highland line and not the earlier NWNGR as was the case with most of the others, which were long abandoned by the time of the re-opening.

As befits the recent date of this mill, it was a vast and ugly corrugated iron edifice now largely demolished or collapsed. A string of six or seven inclined planes may be followed up the hillside to the actual workings - a vast amount of effort expended for what was to be a very short-lived concern. In the vicinity of the branch junction large amounts of old fish belly tram rail will be found used as fence posts. However this came not from the local line, but either from the neighbouring and much older Nantlle Tramway or from the Festiniog Railway, which copied the pattern for their original track of 1836.

From Waenfawr the main line of the railway continued to an interchange with the L&NWR south of Caernarfon, at Dinas Junction. The principal and most remarkable branch of the system diverged at remote Tryfan Junction to pursue a switchback course into the hills and thus tap another important group of slate quarry workings situated around Moel Tryfan. Something of the character of this line may be sampled by driving over the unfenced mountain road from Waenfawr to Rhosgadfan a little to its east. Passenger trains were run on the branch and these terminated at Bryngwyn (500561); a more unlikely site for a railway station cannot be imagined. The inclined plane from the quarries was at least arranged so that runaway wagons would not crash into a stationary passenger train, but mishaps on the adjacent road level crossing were numerous. Our sketch map of the area will hopefully aid comprehension of what follows!.....

Beyond the incline drumhead no less than four routes converged, and trains were made up here to descend to the main line. Some of these branches have been obscured by vegetation in this boggy terrain, but that to the left is worth following: features such as a $1\frac{3}{4}$ chains radius 180 degree curve on a 1 in 25 gradient just to the south of Hermon Chapel, and a 30 ft high embankment (508565) eventually lead it into the opencast pit of Alexandria slate quarries on the east side of the mountain. The pictures right and below on this stretch are by David Mills.....



Moel Tryfan quarry itself (514558) was connected by a tunnel and footpaths to Alexandria, and a walk through the workings brings one back to the starting point via an incline forming the second of the four converging tramway routes. The quarries on Moel Tryfan were amalgamated to form the Caernarvonshire Crown Slate Quarry Co. in 1932. Although the tramways ceased operation upon closure of the WHR route in 1936, internal traffic was still handled by rail using diesel locomotives up until final closure in 1966. This old enamel sign was recently still in situ on the explosives store.....

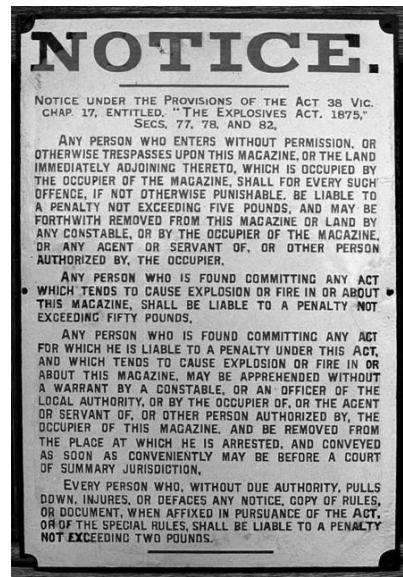
Most of the quarry plant has since been dismantled, but the main interest of this area is the ingenuity shown by the tramway builders. This is most apparent in the southernmost of the diverging lines, running close to the road then crossing the village green at Vron Square (506549) and gaining height via a double switchback to reach the furthermost point of this network at Cilgwyn quarries, about 5 tortuous miles from Tryfan Junction.

More Nantlle fishbelly rail survives along this section (picture below; here holding up a sheep fence consisting of large slate slabs).....

Cilgwyn was distinguished as not only the largest but also by far the oldest quarry of the group - it was a pioneer user of tramways and inclined planes as early as 1789.

Its rail outlet was originally connected not to the NWNG system but to the Nantlle tramway (see section 23 following) in the valley to the south; the lengthy siding we have just traversed was not put in until 1915 and was only used for about one year.

Cilgwyn Quarry was finally closed in 1956 and demolition has been fairly comprehensive; the site now serves as a rubbish tip for a large area of Gwynedd. From the edge of the slate waste tips right on top of the mountain, the workings and aerial ropeways of Pen yr Orsedd Quarry in the Nantlle Vale (still in operation) are plainly visible: they are fully described in the next section.



Keith A. Jaggers November 1978

Updates – February 2012

As is well known, the **Welsh Highland Railway** has been fully restored since the mid-1990s, and now runs from Caernarfon Quay to Dinas Junction (opened 1997 on the former L&NW railway Afon Wen branch trackbed) then onto the WHR proper, to Waenfawr (opened September 2000), Rhyd-Ddu (August 2003), Beddgelert (April 2009) and through to join the Festiniog Railway at Portmadoc in 2011.

Although this is a magnificent achievement, and one that in the 1970s we never expected to see in our lifetimes, it means of course that the delightful trackbed explorations we enjoyed then are no longer possible; there are however numerous points at which roads and footpaths intersect or run parallel to the route, allowing more relaxed enjoyment of the scenery and engineering than is possible from the train.

The stations at **Beddgelert, Rhyd Ddu and Waenfawr** (pictured right and below) all have new buildings and platforms on the original sites; the water tower at Beddgelert is the reconstructed original.



Request-stop halts are provided at **Snowdon Ranger** and **Plas y Nant**.

The PB&SSR **stone overbridge** south of Beddgelert, and bridge abutments in the adjacent field (right) are unchanged, a testimony to their sturdy but futile construction. New **girder bridges** on rebuilt abutments were installed at the Glaslyn river crossing nearby, also at Glanrafon, **Betws Garmon**. The station building at the latter remains a ruin; a new halt may be built in future, but on a different site nearer to the village and camp sites. The weigh-house and office at **Glanrafon Siding** is also a derelict ruin. The slate quarry incline rising up between the waste tips here is nowadays barely visible. The long tramway siding to **Hafod y Wern** slate quarry is now a good single track road which runs through the quarry area itself. The stone embankment of the other branch to **Garreg Fawr & Treflan** has a public footpath running near to or along it. The **Dudley Park granite quarry** crushing mill building at Waenfawr station unsurprisingly finally collapsed many years ago and has been removed; the quarry area itself however now forms the Dudley Park Nature Reserve and trail.



The original station building at **Snowdon Ranger** is visible behind the new halt platform; it is fenced off and part of a private residential property (picture below left).....



At **Dinas Junction** both the former WHR station office (above right) and the goods shed have been fully restored. The building at **Tryfan Junction** is being renovated by the Welsh Highland Heritage Group.

At **Cwm Bychan** copper mine the 1925 era cableway pylon towers have been conserved and are listed structures. The two mine adits are still visible. At **Llyn y Gader quarry**, Rhyd Ddu the incline, flooded pit and levels are still evident, and the former tramway is now part road and part footpath; all rails have gone for scrap. The old **woollen factory** building nearby remains as a private residence.

The current status of the **farm waterwheels** at Ffridd Isaf and Clogwyn y Gwin is unknown; the former is a private residence advertising B&B accommodation, and the latter a working farm recently offered for sale. Likewise it is not known if the **Pelton wheel** at Bron y Fedw Uchaf survives; a public footpath runs past this property. The waterwheel at **Llwyn Onn**, Snowdon Ranger is still in situ but unrestored (picture right; the new halt station is in right background).....

The slit adits along the lode at the **Silurian & Garreg Fawr iron mines** remain conspicuous, and the ruins of the incline and weigh-house may be seen along the footpath running north-eastwards from the main road beside Ystrad Isaf farm.



The **main tramway incline** up from the former NWNGR **Bryngwyn** station is now largely indistinct and bisected by road improvements, but the upper end to the drumhead by Fronheulog farm is slightly better. The further reaches of the sinuous northern tramway route from here to **Alexandra Quarry** are still easily walkable, but **Hermon Chapel** has sadly gone, so passing ramblers can no longer be entertained as we often were by the evocative pounding of its venerable harmonium on Sunday mornings!

After a long period of disuse **Moel Tryfan Slate Quarry** has been worked again on a small scale since 2007. A lorry access road has been constructed through it and into the con-joined Alexandra levels, one of which is now occupied by an outdoor public shooting range! This may however mean that our recommended circular walk returning via the old Moel Tryfan main incline may no longer be viable; please carefully observe all fences and warning notices.

The branch tramway route to **Fron** and **Cilgwyn Quarries** draws alongside the road on the left side going south, opposite Glan farm and follows it down to Fron Square, deviating to the left again slightly for a short distance opposite Lon Buarth, as far as the terrace of former workmen's cottages. A lane leads into the old Fron quarry eastwards from the square. The double-switchback Cilgwyn **tip tramway line** is still very prominent to the south of the square and may easily be followed on foot.