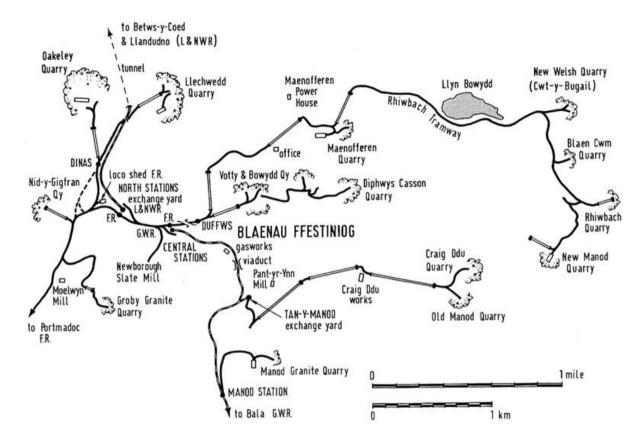
## 29) <u>Blaenau Ffestiniog and district</u>

The town of Blaenau Ffestiniog, until recently carefully avoided by tourists and neatly excluded by the National Park boundary, was the third great centre of the slate quarrying industry in Gwynedd. Indeed the town owes its existence entirely to this industry; the former rural community was centred on the old village of Llan Ffestiniog 3½ miles to the south. The earliest quarry workings were started at what became the Diphwys Casson Quarry in about 1765, and the giants of Oakeley, Llechwedd and Maenofferen were soon well established or amalgamated from several smaller concerns. Some of the quarries are still in operation whilst others have only recently closed, and only now is some attempt being made to reclaim the desolation produced by continuous indiscriminate tipping of the mountains of grey slate waste which surrounded the town. Our plan shows the locations and their railway connections......



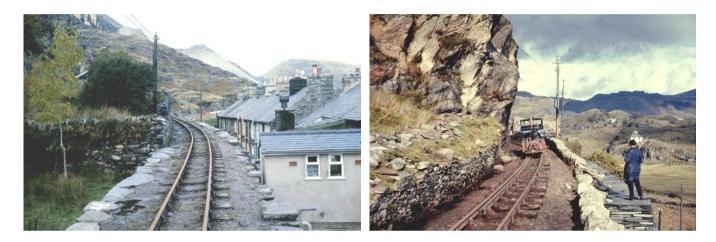


This picture looks out southwards over the town from high up in the Oakeley Slate Quarry workings; The L&NWR station and yard is at centre left, with the GWR premises in the distance above it. Across the foreground the run various narrow gauge Dinas branch routes.

The former main route of the Festiniog Railway is rejoined by the new deviation line, described in the previous section, in the vicinity of Tan-y-Grisiau. The old station building here is largely demolished, but the goods shed with its wagon turntables adjacent may be noted. At the north end a branch diverges to the left up an incline, whence it can be followed to the lakeside slate quarries of Cwmorthin (680465) and Conclog higher up the valley. These quarries ceased work in the 1950's.

This valley is also a convenient means of access on foot to the Wrysgan Quarry (678456) but the tramway connection to the Festiniog Railway did not come this way. Instead, an extremely steep incline goes straight up the side of the mountain to the south - it is easily visible from the CEGB reception area at Tan-y-Grisiau - and disappears into a short tunnel near its summit. The top end of this may be easily located in the quarry workings: two cable-winding engines, an early steam-powered machine and the lorry engine which replaced it are still there despite closure as long ago as the 1930's.

By 1977 the old Festiniog main line had been refurbished from the Blaenau direction as far as the road bridge above the village, and the track runs along a slate wall almost on top of the backyards of the quarrymen's terraced cottages. Our pictures (below) show this work in progress...



Moelwyn Woollen Mill (690453) is visible from the line, and is being partially restored. The derelict 8 ft metal waterwheel is still in situ and there is other equipment in the mill itself, including the last set of fulling stocks to be used in North Wales.

A steeply graded branch tramway from the Groby granite quarry (693454) crosses the village road and can be traced rising to join the main railway from the right. In a short distance the environs of Blaenau Ffestiniog are reached, under the shadow of the vast waste tips from the Oakeley slate mine. The railway route splits into three just before the river bridge, the left hand track leading up a steep incline to the small Nid-y-Gigfran quarry high on the hillside. Straight ahead is the former route to Dinas terminus and the Oakeley quarry, which was obstructed by tipped waste in 1899.

The replacement line to Dinas curves in alongside the BR standard gauge branch from Llandudno, to join the main Festiniog route at Glan-y-Pwll junction (693461). A locomotive shed and turntable were situated here and a level crossing carries the line round to the former passenger exchange station, across the road from the BR branch terminus which is still in use. The semaphore signal by the footbridge is a relic of the old line, disused since 1939.

Our picture (right) shows the derelict FR station looking south, with the BR station offices visible over the wall towards the left side.....



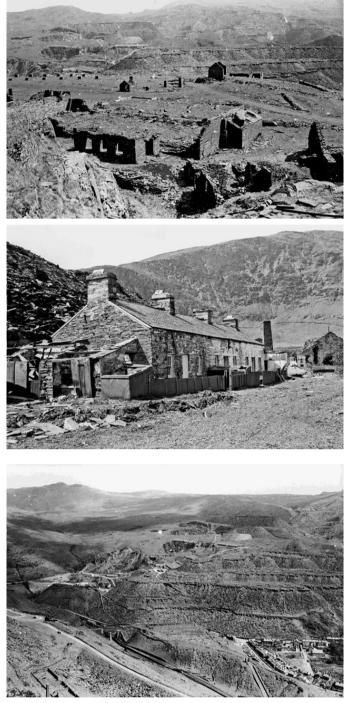
Unlike the terraced quarries of Penrhyn and Dinorwic and the open pits of the Nantlle Vale, the slate seams at Blaenau dip deeply into the ground and this has resulted in most of the workings here being in the form of mines. The Oakeley concern achieved fame as the "largest slate mine in the world" (as opposed to the largest slate quarry) but it was really an amalgamation of several smaller companies in which Samuel Holland had become the principal partner and instigator. The earliest workings on the site date from circa 1800, but the period of most intensive working was, as elsewhere, circa 1880-90. This resulted in the tipping of waste over the whole mountainside, some of which has been removed only very recently. Our picture shows some of the abandoned older levels......

Following closure in 1970 part of the surface workings have been opened to the public, with a small museum and photographs of the former operations. One of the electrically powered incline winding houses has been rebuilt, and a terrace of miners' cottages (right) decorated and furnished in styles from various periods of its existence. Some of the underground workings and most of the surface remains may be explored on foot.

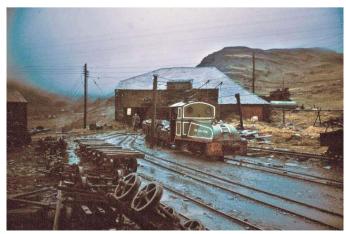
On the opposite side of the valley the rival Llechwedd quarries, started by John Whitehead Greaves in 1846, became almost as large as Oakeley. This picture shows the Llechwedd workings reaching up the hillside, as seen from the higher levels of Oakeley on the opposite side. Far below can just be seen the standard gauge BR line between slate walls, with the former high tramway trestle bridge crossing it to right and below centre......

Llechwedd too have embarked upon a very successful tourist operation, though as a profitable adjunct to continuing work in the mine itself. A trip on the reconstructed mine tramway takes the visitor into part of the workings, giving a good general impression of the methods of winning the slate from underground caverns and the conditions endured by

also a pioneer in the use of electricity for haulage on Coalition", is displayed in the exhibition area. It is an overhead electric locomotive converted from a Bagnall 0-4-0 steam tank engine at the quarry workshops in 1927, and was one of two (the other being "The Eclipse") used on the tramways around the main dressing mills level. These are situated above the public area in that part of the quarry still operated, and some of the heavy copper overhead trolley wire system is intact here, although disused since the introduction of further battery locomotives in 1972-3. Our pictures show the locomotives at work and at rest on this level a few years ago.....



Victorian miners. Modern battery locomotives are now used to draw passenger trains, but Llechwedd was also a pioneer in the use of electricity for haulage on its mine tramways; one of the locomotives used, "The Casilitian" is displayed in the exhibition area. It is





Slate sawing and dressing in the mills is still carried out by mainly traditional methods. Products now leave Llechwedd by road, but there is the possibility that the old cable incline down to the Festiniog Railway at Dinas (696468) could be reconstructed to carry visitors. At the foot of this incline, the trans-shipment dock alongside the L&NW railway siding is still largely intact, complete with narrow gauge tracks, sheds and hand crane.

The L&NW line was the second railway to be built to the town of Blaenau Ffestiniog to tap the growing slate traffic. It was originally proposed and partly constructed as a narrow gauge line from Betwsy-Coed, but finally started operations after rebuilding as a standard gauge line with trains running through from Llandudno Junction. It is still in use for passenger trains. The 2 miles 206 yards tunnel is the longest in Wales and marks a dramatic change in scenery from the Conwy estuary and wooded Lledr valley to the

grey waste tips of Blaenau. Evidence of shafts and tramways used during its construction may be found on ground level above it, e.g. at (696483). The southern portal, of stone, carries the date of opening, 1879: the original works and modifications for the standard gauge had occupied a period of four years.

Extensive exchange sidings were in use until 1964 between the BR line and the Festiniog Railway, opposite the present passenger station, as seen in our pictures. The B&W view was taken in 1965, and the colour pictures in 1966 and 1978 respectively.....



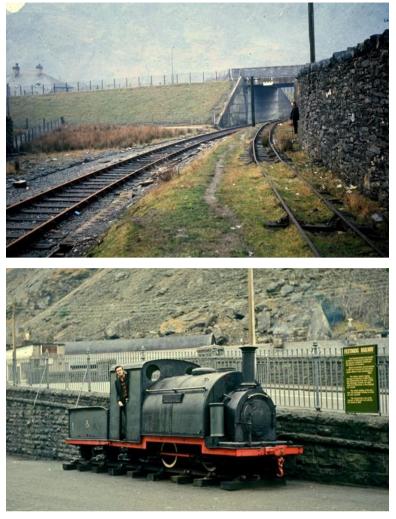


The FR trackbed continues southwards through the town on the route of the present standard gauge line, which was not constructed until 1963. This was as a result of rail access being required for construction of a nuclear power station at Trawsfynydd and joins the former L&NWR line to a branch of

the Great Western Railway whose own terminus was at Blaenau Ffestiniog Central station (701459). This picture shows the standard and narrow gauge tracks looking north in 1970; the BR station is just through the road overbridge......

The GWR was the third and last railway to reach the town. It was reconstructed as late as 1882 out of a former narrow gauge line, the Ffestiniog and Blaenau Railway. The junction with the rest of the GWR system was 25 miles to the southeast at Bala. Part of this line was flooded by the Llyn Celyn reservoir scheme after closure in 1960, hence the need for the new link to re-gain access to Trawsfynydd.

The Central station also once had extensive exchange sidings with the FR, as well as cross-platform interchange for passenger trains. Today only the platform survives, but the site is proposed as a new joint BR/FR terminus for the town. The Festiniog steam locomotive "Princess" of 1863 is displayed here as a symbol of the company's intention to reinstate its former route, which should occur during 1979 or 1980......



The old Festiniog line continued beneath the main road bridge to its own terminus at Duffws, closed to passengers in 1930. The distinctive station building survives here (703460) in good repair though in somewhat undignified use as car park conveniences. Beyond, inclines ascend to the left and straight ahead to another slate quarry complex, part of which is still in operation with much of interest to be seen.

Maenofferen quarry can be reached either up the left hand incline or by the adjacent access road leading to the office level at the foot of a further incline (708465). Latterly road lorries have been loaded with slate at the sidings here, where narrow gauge wagons of FR, L&NWR and GWR origin (below right) can still be seen .....



The double-tracked cable incline beyond was the very last of its type to remain working in Wales by 1978, but this may well change since Maenofferen has recently been taken over by the Llechwedd Co., who are constructing a roadway right into the quarry workings. In the meantime, a small Ruston diesel

locomotive still occasionally makes the short trip around the hill from the main dressing sheds to the incline-head with a few loaded slate wagons, which are then manhandled into position for the gravity descent of the incline. It would be a shame if this last working example of a once-common feature of the North Wales landscape were to be dismantled. Our picture (right) looks down this incline.....

Maenofferen Mill (713467) is largely complete and still in operation, bordered on two sides by a large area of outdoor stacking yard for the various sizes of finished slates. Incoming slabs from the mine enter the main building at the far end, via a tramway emerging from a short tunnel......





One disadvantage of the mining technique is apparent here, since both good rock and rubbish have to be trammed to the surface; the wagons have latterly been hauled by small diesel locomotives. In some quarries, e.g. those at Croesor, it had been possible to mine upwards so that most of the waste rock could be left behind on the quarry floor: this is not however generally the case here, and mines such as Oakeley and Maenofferen have been worked increasingly deeper over the years. The latter's levels now reach to over 1,000 ft below the surface and extend horizontally for up to one mile.

The main entrance to the workings is at the far end of the short tunnel just mentioned. A steep three-track incline (right) descends into a gaping black hole to reach a vast underground gallery in which is located the mine machinery and ventilating plant. Although this incline is electrically worked, the equipment is of considerable antiquity and well worth inspecting. Remains of an steam winding engine earlier installation can also be seen. One of the three tracks on this incline is reserved for winding the workmen, who descend on special wagons



with inclined seats and a head guardrail; signalling is by electric bell code. On the lower-level incline, descending from the plant gallery level to the various working floors, even these luxuries are dispensed

with; the men travel astride ordinary open slate trucks and communication with the outside world is by means of a rope and pulley bell system.....

Down on the levels themselves, slabs of slate prised from the working faces are manhandled onto the wagons using only a primitive shearlegs, and then trammed to the incline foot. The



blocks are carefully marked with their point of origin, since the old "bargain" system of working is still employed whereby the rock-man at the quarry face and the dressers in the mill act as a team whose output is used to calculate bonus payments.

Although the tramway from the former Festiniog Railway terminus has latterly run only as far as Maenofferen, it used to continue for another 2 miles into the hills as the Rhiwbach Tramway to serve other small outlying quarries. A short incline out of the Maenofferen workings raises the route on to a bleak upland plateau. It can then be followed alongside the shore of Llyn Bowydd to Cwt-y-Bugail or New Welsh quarry (733468) and Rhiwbach (739461), only a short distance from Penmachno village. Rhiwbach Quarry is unusually situated in that the tramway feeder incline had to run downhill against the load, and was powered by a stationary steam engine at the bottom driving a continuous chain haulage system. Both the incline engine house with stack, and another housing the mill engine survive; there is also a schoolhouse, barracks and official's house, with the latrines block at a discrete distance.

A double reversing spur from near the Rhiwbach incline head provided tramway access to New Manod Quarries, (732455). The first building encountered still carries the Company name and was the works office. Art treasures were stored in this mine during the war, and to judge from the heavy door still guarding the entrance, it may still be used for purposes other than quarrying. A short section of tramway is still occasionally operated by a battery locomotive, and terminates in a short incline to the dressing mill. Nearby are some interesting remains of an early steeple-cab electric locomotive.

From Llyn Bowydd an alternative descent to Blaenau is possible, through the abandoned workings of the Diphwys Casson and Votty & Bowydd quarries (706643) which were closed in 1964, to reach Duffws via the second of the station inclines. Alternatively one may cut back across the moorland to the top of the Llechwedd workings. This latter route passes the Maenofferen turbine house (709470), which generates hydroelectric power used in the mine, and also fed into the National Grid. The equipment was installed circa 1910 and is supplied with water from a reservoir above by a long stone leat. From other reservoirs nearby a further complex system of leats leads down into the upper workings of Llechwedd, where they once fed several waterwheels powering the dressing mill machinery.

Arriving comparatively late on the scene in Blaenau, the Great Western Railway line from Bala was connected to only a few minor quarry workings around the Manod district of the town. The first four miles to the village of Llan Ffestiniog was originally constructed as the narrow gauge Festiniog and Blaenau Railway in 1866, and physically connected to the Festiniog Railway in the vicinity of Central Station. However, it was purchased by the GWR in 1884, rebuilt to standard gauge and extended southeastwards to join the rest of their system.

Most of the extensive Blaenau Ffestiniog Central station site (which was jointly owned by the GWR and FR) and slate transhipment yard has now been built over, leaving just a single track wandering past the old platform. Going south, the remains of the old town gasworks are to the right, including part of the retort house which was fed with coal from chutes directly below the railway. The stone viaduct (706455) replaced a wooden trestle structure, and the earlier narrow gauge line followed the contour of the hillside some yards to the east.

A turntable, engine shed and slate exchange yard was situated at Tan-y-Manod (706452), and from here a switchback incline and tramway crossed the main road to reach the foot of another, longer incline system

serving the Craig Ddu Slate Quarries. The lower level of these workings (714455) still appears to be operated occasionally as a one-man affair, material from the waste tips being dressed on traditional machinery and taken away down the incline by lorry. The saw table, by G. Owen of the Union Foundry in Portmadoc, is driven by a Crossley Oil engine. The upper quarry levels also seem to be worked, as the adit tramway is still intact and powered by an old two-cylinder horizontal steam engine (picture right; nowadays run on compressed air). Also here are the remains of several generations of lorries, abandoned exhausted after a life spent clambering up and down the rough quarry trackways.



Just below the lower Craig-Ddu incline a fine woollen factory building known as Pant-yr-Ynn Mills is being restored (708454). Some machinery has been renovated and installed prior to eventual reopening as a tourist attraction. Power is supplied by the 25 ft diameter overshot waterwheel, recently rebuilt to operable condition (picture below).....



The Bala railway pursues a delightful winding course to Ffestiniog, including a sweeping horseshoe bend near Teigl Halt (right).....

Ffestiniog station (picture below left) marks the terminus of the old Festiniog and Blaenau Railway, but the present standard gauge track continues through remote Maentwrog Road station (below right) to the nuclear power station site at Trawsfynydd, whose huge bulk is seen in the left distance of our picture......

Further along the GWR line the crushing mill of the Manod granite quarry, owned by the Pengwern Granite Co, was served by a standard gauge siding crossing the main road (708447). There is a 2 ft gauge hand-winch operated incline which was used to haul equipment to the top of the mill, to which the working levels behind were connected by a further system of narrow gauge tramways and chutes, part of which survives intact. This quarry was working from the early years of this century up to the 1950s.





Beyond, the former railway route strikes a bold course into the hills along a ledge cut into the mountainside, crossing a fine stone viaduct at Cwm Prysor (775388) on its way down to the junction at Bala.

Meanwhile, to return to the starting point of our tour of Gwynedd there is a choice of road: over the barren hills to Pentrefoelas or Penmachno, or the "A" classified but no less steep route over the Crimea pass (built in 1855) back to Betws-y-Coed. For those on foot, or willing to forsake the car, a trip on Blaenau's surviving railway route through the long tunnel and down the valley to Llandudno is also to be strongly recommended.

Keith A. Jaggers November 1978

## **Updates – March 2012**

The **Festiniog Railway's** upper terminus from 1978 to 1982 was at Tan y Grisiau. As well as the refurbishment of the last section of the route into Blaenau, that period also saw both the BR Conwy Valley tracks and the FR extended to a **new joint station** in the town, on the site of the old GWR premises. One result of this was that the standard and narrow gauge tracks swapped sides on the approach from the north. Our pictures show this work in progress, the first making an interesting comparison with our 1970 view in the main text above......

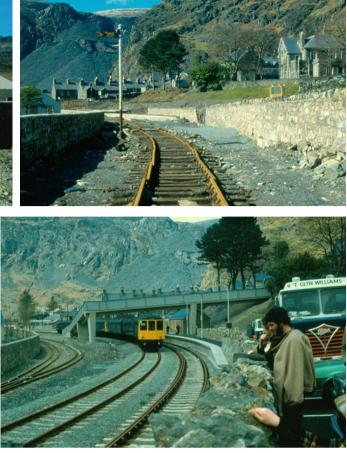






And here is the scene at the new station, looking north in late April 1982, when the BR platform had just been brought into use  $(22^{nd}$ March), and the Festiniog (on the left) was still under construction – it was opened on  $25^{th}$  May. The train pictured was a 6-car diesel unit forming a special excursion, stabled on the loop line to leave the platform clear for the normal service trains......

Back at **Tan y Grisiau station**, the tracks were realigned and levels changed to suit the new deviation line, so that the one surviving original



FR building here is now curiously below rail level. The **Cwmorthin incline** turning off to the north of the station may be seen, particularly above the point where it passes under Cwmorthin Road. The tramway to the quarry runs on a slight embankment from the top; the quarry area itself is tended by **"Friends of Cwmorthin"** and still contains interesting artefacts. Access is possible through a gate with combination lock code; for details see the Friends website. The **Wrysgan incline** and tunnel still constitute a challenging climb, but for the less energetic the access road to Stwylan Dam intersects it near the top. Various bits of very corroded machinery can be seen in the workings. The **Moelwyn woollen mill** building, prominent on the side of the road northwards out of Tan y Grisiau village, is currently undergoing restoration work, including its little waterwheel.

The road named Oakeley Square lies along the route of the former **Groby tramway**; beyond it is obliterated by the by-pass road construction. The quarry itself appears to be used as a rubbish tip.

At **Glan y Pwll** on the outskirts of Blaenau, extensive waste slate removal around the base of the giant Oakeley Quarry tips has revealed once more the old course of the narrow-gauge **Dinas Branch** line. The **Nid y Gigfran quarry incline** to its left is still clear, and the later Dinas branch has track relaid for about half its length, leading to a new storage shed for the re-opened Festiniog Railway. The Glan y Pwll yard is used as the FR's Outdoor Engineering Department.

**Oakeley Slate Quarry** was sold by McAlpines to Rigcycle Ltd (part of the Langan Group) in 1997; this resulted in the Gloddfa Ganol tourist activity being closed down and its portable artefacts being dispersed elsewhere. Sadly, the renovation work which had been carried out on the workmen's cottages and other structures has since been subject to extensive vandalism. The quarry itself was closed for safety reasons in 2010 after serious rock faults were discovered; it is now officially "mothballed" pending further detailed inspection and assessment.

Meanwhile the **Llechwedd Caverns** tourist operation has continued to develop and remains popular, with its underground tours. However the proposal to reinstate the incline down to the transhipment wharf was not proceeded with, and it remains overgrown. The two quaint **electric locomotives** are currently stored at the Welsh Highland Heritage Centre museum at Gelert's Farm, Portmadoc, pending a decision on their possible restoration. Quarrying activity at Llechwedd continues on a small scale, mainly comprising untopping of underground levels and removal of the supporting pillars of good quality slate. At the

**tranship siding** site alongside the main road the sheds survive but there is no track or cranes now. The abutments of the nearby high **tramway bridge** survive on the west side only. Higher up on the main road, one of the L&NWR **tunnel shafts** is clearly visible on the west side, with its accompanying mound of excavated rock. The Conwy Valley railway's former terminus and yard at **North station** has been mainly cleared, its relatively modern booking hall and station offices building derelict and boarded up.

The former **Duffws station** building is nicely renovated and still functioning as Public Toilets in the main central car park of Blaenau Ffestiniog. The FR locomotive **"Princess"** is now displayed in the "Spooner Bar" area of Porthmadog Harbour station.

Of the **quarry inclines** beyond the car park, that straight ahead to **Votty & Bowydd** is now a good footpath for most of its length, giving access to explore around the extensive workings. That to **Maenofferen** is built upon at the bottom end and overgrown above Bodafon Road, but much clearer towards the top, where it runs on fine stone embanking just west of the roadway up to the quarry. Under Llechwedd ownership, underground mining ceased at Maenofferen in 1998, but unstopping continues hare also on a small scale. The main **dressing mill** is intact but unused; the present status of the incline down into the mine, with its interesting operating machinery, is not known.

Above the quarry, the **Rhiwbach Tramway** ascends by its first incline, whose drumhouse stands gauntly at the top. A good scenic footpath then leads along the route, past Llyn Bowydd to **Cwt y Bugail Quarry**, where there is still plenty of interest to see among its ruined buildings. **New Manod Quarry** is still in operation, now owned by the Langan Group (Welsh Slate Co.).

The Maenofferen **turbine house** building looks to be in good repair (it is close to the top of the first Rhiwbach incline), but it is not known whether it remains in operation (or operable).

Leaving Blaenau Ffestiniog by the **Great Western Railway** route southwards, the track is still in place as far as Trawsfynydd nuclear power station and in fairly good condition, but largely unused since the latter ceased operation in 1991. In 2009 a businessman proposed to reopen the line as a commercial venture, and some undergrowth clearance work was undertaken, but the promoter now seems to have disappeared without trace (late 2011)! The **viaduct** by the former gasworks is also in good order, but the old Festiniog & Blaenau Railway narrow gauge alignment just to the east has been filled in to provide a hard standing area for commercial vehicles. The **Tan y Manod** yard site is overgrown, with no buildings remaining. The lower part of the **Craig Ddu tramway** from here has been obliterated, but the main incline is walkable, accessed from the east end of Llys Iorwerth. At the quarry the steam winder and various other metal artefacts remain littered around, but extremely corroded now.

**Pant yr Ynn** woollen mill building survives with its fine waterwheel, operable but not normally open to the public. The **Manod (or Madoc) granite quarry** tramway is largely indistinct, with part of the area occupied by a transport company. There is little of interest to see here.

Further south on the GWR branch railway, **Festiniog station** has been demolished but those at **Maentwrog Road**, **Trawsfynydd**, **Cwm Prysor and Frongoch** remain as private residences. The former goods shed at Maentwrog Road also survives. The Cwm Prysor **viaduct** and the "mountain ledge" section of railway route westwards from it are still well worth visiting on foot.

The **Conwy Valley Railway** remains operational from Llandudno Junction to Blaenau, and is popular in the summer months. The A496 **Crimea Pass road** has been widened and straightened in recent years, losing much of its former character.