

= Barmouth Bridge =

Barmouth Bridge (Welsh : Pont Abermaw) , also known as Barmouth Viaduct , is a single @-@ track largely wooden railway viaduct that carries the Cambrian Coast Railway across the River Mawddach estuary on the coast of Cardigan Bay , Wales . It sits between Morfa Mawddach and Barmouth in Gwynedd and caters for rail , foot and cycle traffic .

The bridge opened in 1867 , and originally included a drawbridge section at its north end for tall ships to pass , though this was later replaced by the current swing bridge section . In 1980 , woodworm threatened the safety of the bridge , which needed major repairs to avoid closure . Tolls were collected for foot and cycle traffic until 2013 . The bridge is a Grade II * listed structure , and has one of the longest timber viaducts still in regular use in Britain .

= = Location and structure = =

The bridge crosses the estuary of the River Mawddach from Morfa Mawddach near Arthog northwards to the edge of Barmouth . The line is operated by Arriva Trains Wales , with connecting services south to Aberystwyth and east to Welshpool and Shrewsbury . The section containing the bridge is on the Cambrian Coast railway between Machynlleth and Pwllheli . The bridge is a Grade II * listed structure about 699 metres (764 yd) long and contains 113 wooded trestles supported by a series of cast iron piers . It is one of the longest timber viaducts still standing in Britain .

A footbridge is incorporated on the eastern side and pedestrians , cyclists and motorcycles can cross the estuary by the side of the track . Since 1996 , this has formed part of the National Cycle Route that links North and South Wales . The footbridge is owned by Network Rail but an agreement is in place with Gwynedd County Council , who pay for 10 % of the annual maintenance in exchange for a licence to use the bridge .

Most of the bridge is built on a gravel bed covered by shifting sand . The north end by the swing bridge section is next to the rock of Ffigle Fawr at the base of Cadair Idris , and the river channel here can flow up to 9 knots (16 @.@ 7 km / h) . The first two spans here are built directly onto the rock .

There is no nearby crossing for road traffic . The nearest spanning the Afon Mawddach is a toll bridge at Penmaenpool about 5 miles (8 km) further upstream and permits vehicles up to 2 @.@ 5 tonnes . Heavier vehicles must use the first public road bridge , which is at Dolgellau about 10 miles (16 km) from Barmouth .

= = History = =

The bridge was first proposed as part of the Cambrian Line between Aberystwyth and Pwllheli by the Aberystwyth and Welsh Coast Railway around 1861 - 2 . It was designed by Benjamin Piercy and Henry Conybeare in 1864 , and opened on 10 October 1867 . Conybeare decided to construct the viaduct from timber as it would be cheaper to import by sea than iron . As built , it included a wooden lifting drawbridge section at the northern end to permit the passage of tall ships . It was never in regular use since the opening of the railway killed off competition from boat traffic . In 1899 , the drawbridge arrangement was changed to the current swing bridge arrangement . It is still theoretically in operation , though it has not been opened since 1987 as part of a test operation .

In 1946 , the bridge was nearly destroyed after a live naval mine washed ashore close to the bridge during stormy weather . The mine briefly swept one of the pillars , but did not detonate .

Passenger train services over the bridge declined significantly after the Ruabon to Barmouth line via Llangollen and Dolgellau was closed in 1965 , causing all traffic to take the longer and slower route from Shrewsbury via Machynlleth and Dovey Junction . The old trackbed from Morfa Mawddach railway station to Dolgellau now forms the Mawddach Trail , a walk and cycle trail .

By 1980 the bridge 's structure had come under attack from marine woodworm , which threatened its closure . British Rail discovered that woodworm had eaten into 69 of the supporting pillars and estimated it would cost £ 2 @.@ 5 million to repair . Locomotive @-@ hauled trains were banned ,

which immediately resulted in the loss of traffic from Tywyn , including explosives traffic to and from the factory at Penrhyndeudraeth . That traffic was re @-@ routed via Maentwrog Road railway station and the Conwy Valley Line . However , Gwynedd County Council were opposed to closing the bridge completely as 40 % of all railway traffic in the area was tourist related . The government applied for a £ 2 @. @ 5 million grant from the EEC to repair the bridge , with a further £ 4.6m being spent on improving the signalling . The bridge was closed entirely to traffic for six months during the temporary repair works eventually undertaken , and 30 of the piles were replaced .

On 13 April 1986 , a British Rail Class 37 37427 was named " Bont Y Bermo " to celebrate the (short @-@ lived) re @-@ introduction of locomotive @-@ hauled trains following repairs in 1985 ? 1986 . Following major repairs the weight restriction was relaxed in 2005 , and locomotive @-@ hauled trains have again been allowed to cross .

In March 2013 , the Barmouth Viaduct Access Group (B @-@ VAG) , was established to investigate an alternative route from the town centre to the bridge , as the current walkway is steep , narrow , and unsuitable for buggies or wheelchairs . In June , the toll was removed after the collectors left and were not replaced . The council have not yet decided how to pay for the bridge 's maintenance costs , which were £ 39 @, @ 405 for the year . This has proved to be problematic as the revenue collected from tolls has not been sufficient to cover the council 's share of costs , and there is not a sufficient budget to employ any full @-@ time staff to collect payments .

Gwynedd County Council has proposed closing the bridge to pedestrians and cyclists for cost reasons , as it needs to find £ 9 million worth of savings by April 2016 . The potential closure of the bridge is one of over 100 cost saving options totalling £ 13 million to be put to a public consultation in Autumn 2015 ; the council currently pays Network Rail £ 30 @, @ 800 per year towards maintenance costs . A petition calling on the council to " cease considerations of closing this much loved walking and cycling route " attracted 20 @, @ 000 signatures within a week . In February 2016 , it was reported that the bridge would not close .