



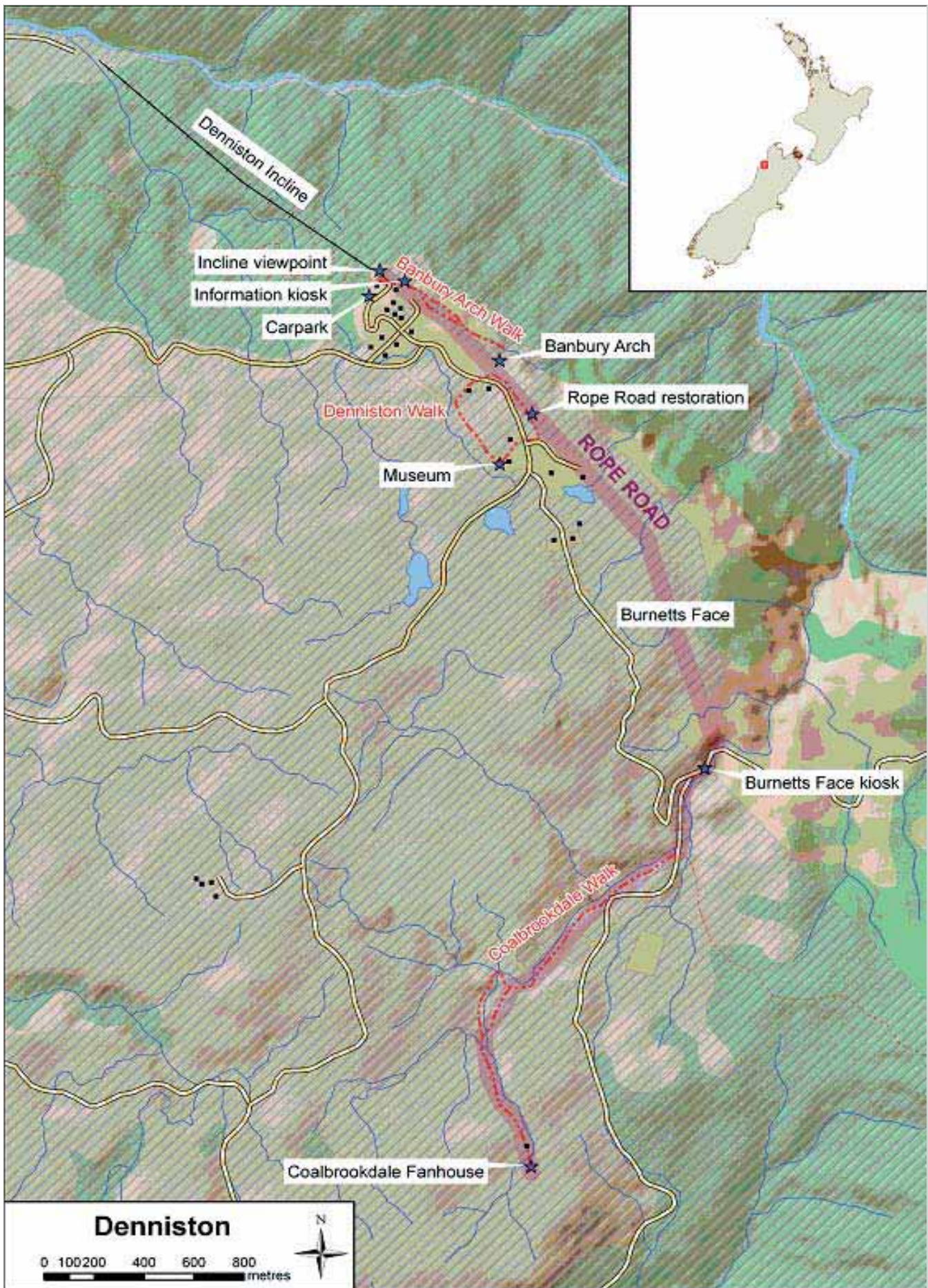
Heritage Appreciation & Conservation at Denniston

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Department of Conservation
Te Papa Atawhai





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 Denniston Concept Plan
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Cover image: Denniston miner, working underground

Banner: Sections of the incline from top to bottom, from Friends of the Hill image on page 11

PROPOSAL

To create a “Coalfields Park” at Denniston.

DESCRIPTION

Denniston is the broad name for a collection of historic settlement, mining and transport sites on and immediately below the coal plateau east of Westport. It is accessible via 9 km of winding, sealed road from Waimangaroa, which is 16.5 km east of Westport on State Highway 67.

Mining began in 1878, and before long there were three townships, several mines and a complex system of rope roads bringing coal across the plateau to the top of the Denniston incline. More than 30 million tonnes were lowered to the railhead 500m below by the time the system closed in 1967. By then improved road transport between the mines and the more hospitable coastal flats had left the townships almost deserted. Mining has continued on a gradually reducing scale up to the present day.

Once the most productive coalfield in New Zealand, the Denniston plateau is also historically significant for the engineering works which enabled its coal to reach the markets. Its communities of up to 2000 people who endured primitive living conditions in a harsh, isolated environment make a fascinating social study.

Although much has been removed, enough remains of town and industrial sites to put together a strong picture of work and life on the plateau. These relics are under constant threat from natural decay, regeneration of cleared areas and human impact, but the continued presence of people with a close and active interest in the area’s history will ensure that recent conservation efforts will have lasting effects.

The NZ Historic Places Trust recognises the significance of the place through the Denniston Historic Area, and registration of two individual sites as places of national significance being the incline and Banbury arch.

HISTORY

The coal plateau was well known to Maori, who may have used it as part of a route into the upper Buller. Maori guides accompanied early European visitors to the region, including a German geologist, Julius Haast, in July 1860.

During that visit Haast discovered a coal seam in the southern headwaters of the Waimangaroa River. He named the valley Coalbrook Dale after a coal mining village in Shropshire, England, and a rocky cliff above the valley Burnetts Face after his companion, James Burnett, an English colliery engineer.

Robert Blair Denniston, engaged by the government to survey the resource in 1873, also managed to interest Dunedin financiers in mining the plateau. The resultant Westport Colliery Company opened a mine in 1878 and completed the self-acting incline (a system first mooted by Burnett) in 1880, exhausting all its capital in the process.

Restructured into the Westport Coal Company it drove the initial small Banbury mine through to Burnetts Face in 1882, then opened the larger Coalbrookdale and Iron Bridge mines establishing an endless-rope haulage system to link them with the incline. Meanwhile a township developed with a school in 1882, postal service in 1883 and police station in 1885; that same year access to “the hill” improved with the completion of a bridle track.

As the settlements grew there were also hotels, churches, sports facilities (including a swimming pool, tennis courts and a recreation ground), a volunteer hall, a hospital, a high school, renown brass bands and, in 1902, a proper road. The total population peaked at almost 1500 - including 842 at Denniston - in 1911. The mines, collectively the country’s biggest producer, had already yielded their greatest annual output the previous year when a workforce of 446 hewed and trucked away 348,335 tons of coal.

Living conditions did not advance at the same rate. An architect appointed by a royal commission to report on the plateau townships in 1919 found them in a shocking state - and described them as “disgracefully dirty, with large families crammed into dank little shacks in a dreary landscape with an appalling climate”. His call for replacement of the existing settlements with a model mining township went unheeded, although much better houses were built in the 1920s.

Reduced production during the 1930s depression and improved road transport in the better years which followed, accelerated a drift away

The first Denniston settlement site, along an exposed ridge high above the Waimangaroa River, was ever after known as The Camp in view of its canvas origins.

Friends of the Hill collection



from the plateau towns. Coalbrookdale and Burnetts Face were deserted by 1956, while Denniston was down to 310 and still dwindling. However mining and boring for new seams went on vigorously under the State Mines Department which had bought the company's assets in 1948.

Among improvements brought by the government was an aerial system which replaced the old rope road in 1954 to carry coal over the plateau. In 1967 the incline, described by generations of Denniston people as the "eighth wonder of the world", was closed as motor lorries took coal down the road. Coalcorp, the last government agency to mine at Denniston, closed its operations in 1995, leaving private companies to continue on a comparatively reduced scale.



Denniston Rope Road.
*Friends of the Hill
collection*

ORIGINAL PHYSICAL FEATURES

Early arrivals found a faulted plateau of metamorphic and sedimentary rocks, interspersed by Tertiary coal measures. These are part of the high quality bituminous deposits known as the Brunner series. Poor soils and a harsh climate 600-700 metres above sea level supported tussock and scrub, with stunted trees in gullies.

Gradually more substantial dwellings and a few business places were built there and around the incline brakehead, spreading onto the hillside behind as the population increased.

Mining started at the Fisher or Banbury mine, from where trucks of coal were hauled to the brakehead by horse along a tramway. That was replaced by a steam-powered endless rope system after the mine tunnel was driven through to Burnetts Face in 1882. Its seams worked out early, the Banbury became a travelling way.

The incline, dropping 510 m over a distance of 2 km, was in two sections, each operated by gravity, with loaded railway wagons descending and

pulling empty ones up under the control of powerful hydraulic brakes. From Conns Creek yards at the foot of the incline they were added to trains bound for the Westport wharf. The formation was a walking route - and an illegal and dangerous ride for some people - until a bridle track up the hill was completed in 1884.

To deliver coal from the newly established Iron Bridge and Coalbrookdale mines, a new system of steam-powered rope roads was built. Branch roads from the mines fed into the main Wooden Bridge clipping shed at Burnetts Face, from where the main steam-driven rope road ran through the Banbury tunnel and along to the brakehead. After the tunnel became unstable a new rope road (electrified in the 1920s) was built across the Denniston plateau in 1904. This system was replaced in 1954 by an aerial from the Steps entrance of the Whareatea mine, originally part of the Coalbrookdale workings. This aerial also served the nearby Sullivan mine later on.

Burnetts Face and Coalbrookdale settlements became established up the valley between Wooden Bridge and the new mine. Never quite as large as Denniston in terms of population, they still managed to muster a few hotels, shops, a mission hall and a school between them. In the late 1920s a new township with better housing was developed on the plateau between the established settlements and was named Marshallvale after a mine manager (although better known as Pommietown after the origin of many inhabitants). A hospital, a high school and various sports facilities were also developed in that vicinity. Cedar, out in the Iron Bridge vicinity, was another important settlement.

The plateau near Marshallvale was also the site for mine developments including a coal-fired electric power house (1920) and a bath house (1939). Electricity generation made a great difference to mining and general living at Denniston and the Millerton/Stockton area which was also supplied.

Denniston also changed as increased coal production brought industrial expansion to the brakehead, causing businesses and dwellings to be moved. Town developments included a new school, replacing the original institution which occupied a precarious site at the Camp. A full road up from Waimangaroa was completed in 1902; giving townspeople not only far better communications but also alternative living options as transport improved.

PHYSICAL MODIFICATIONS

The effects of mine closures and depopulation were seen on the landscape first at Burnetts Face and Coalbrookdale, which were deserted by 1954. At Denniston a lot of buildings were abandoned for demolition or removal from the 1960s onwards.

However the greatest blow was the closure of the incline in 1967. Denniston's greatest feature and a source of considerable pride to local people, it had given efficient service for nearly 90 years. The aerial closed the following year and coal was trucked directly from the mines and down the hill.

HISTORIC SIGNIFICANCE

Denniston is the oldest mining settlement on the Buller coal plateau. The start of mining there in 1878 was an important event in local and national history, as it opened up a nationally important industry supplying a global market.

There are also associations with significant people in West Coast and New Zealand history, starting with Haast who made the initial discovery, continuing with Young Brothers who designed the incline and including numerous other people who became well known in mining.

Besides having the potential to provide knowledge of important industrial history, Denniston offers a great opportunity for a social study of an isolated community in a harsh environment where living conditions remained comparatively primitive well into the 20th century.

PHYSICAL AND TECHNOLOGICAL SIGNIFICANCE

Denniston is an outstanding historic site: a near ghost town with remnants of its mining, transport and settlement sites around it. These include the rare fanhouse, the impressive Banbury arch and parts of the unique incline.

Designed by a Greymouth engineering company, the Denniston incline differed from those at Millerton, Stockton etc in that it handled full-sized railway wagons instead of mine tubs. One of New Zealand's biggest engineering projects at the time it was built, the system operated virtually unaltered for 87 years, lowering an estimated 30 million tonnes of coal. Enough of the formation, associated machine foundations and Q wagons remain to present a fair picture of how the incline appeared and worked. The hydraulic crane of unknown vintage and manufacture at Conns Creek yard is also unusual.

Despite the difficulties, those who lived there made determined efforts to make the place habitable and provide facilities to make life more pleasurable - even to the extent of having soil carted all the way up the hill to top-dress the bowling green. Similar enterprise went into organising social events, some of which are part of West Coast legend.

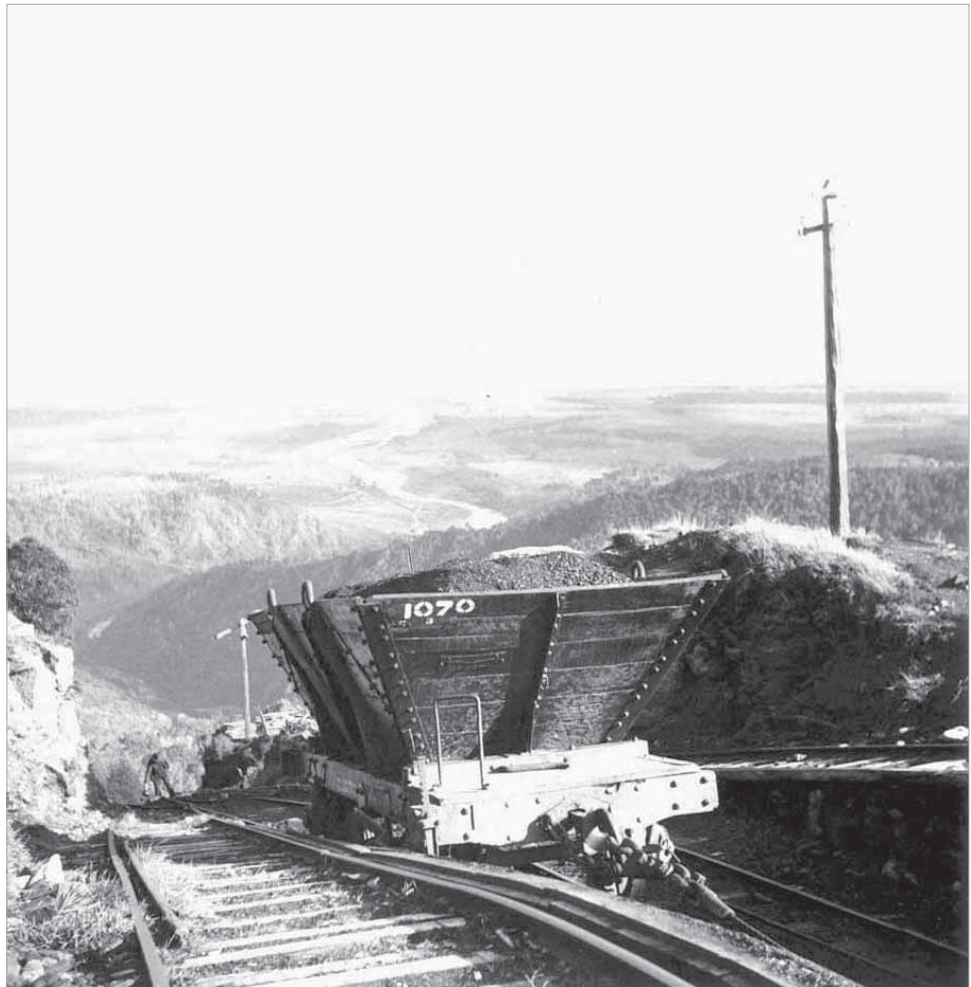
Photo: Denniston Street, 1906. Haining's Hotel is on the left. Photographer unidentified.

ATL Ref. No. 1/2-003429-F



In a country not noted for its stonework, Denniston has some fine examples. Outstanding is the Banbury arch, built by Cornish stonemasons who may have been responsible for some of the other stone walls at the brakehead, along the Burnetts Face-Coalbrookdale rope road and at Conns Creek yards.

The brick fanhouse, one of few remaining in the country with Sirocco fan and ventilation doors intact, also has remains of its electric motor and drive gear for the steam plant which preceded that. The fanhouse is the destination point for a rare walk through history via three connected rope road formations, lined with many other interesting relics.



Coal being transported on the Denniston Incline, 1945. *Photographer: John Dobree Pascoe*
ATL Ref. No: 1/4-001353-F

Original caption reads:
“A truck at the top of the Denniston Incline down which coal is taken to the railway on the coastal plain far below. At its steepest pitch, the incline falls at a grade of 1 in 1.34.”

Although comparatively recent, the 1939 bath house is a well-preserved example of an important work and social centre. It is amid a group of sites including the high school (now the visitor centre), bowling green, recreation ground, tennis court, swimming pool and one of the best preserved rope road cuttings.

Also of technological interest are the reclining chimney near the Kiwi compressor site and the jig mechanism in a tunnel near the top end of the Taipo rope road. That rope road is another well-preserved example of its type, with numerous relics along the way and an intact foundation for the braking mechanism at the top end.

CULTURAL SIGNIFICANCE

Situated on one of New Zealand's most spectacular settlement sites, Denniston was certainly in its time one of the most isolated and least favoured places in the country. The fact that former inhabitants remember it fondly, and people still choose to live there, speaks volumes for its past social values and enduring mystique.

They also had pride in their townships, surroundings and mines. For example the incline was often referred to as "The Eighth Wonder of the World".

Denniston Incline from the bottom. *Friends of the Hill* collection



OTHER FACTORS

The success of Denniston's mines, and particularly its incline which proved coal could be delivered to sea level economically, led to the establishment of mines at Millerton and Stockton. However Coalbrookdale coal, as it was marketed, remained paramount. Even the Royal Navy kept it in bunkers all over the world to ensure their ships had steady supplies of the best steaming fuel then known.

According to the Tai Poutini/West Coast Heritage Development Strategy there are four Major Historic themes highlighted on the West Coast.



Top of the Denniston incline, [ca 1885-1910] *ATL Ref. No: 1/2-035121-F*
 Coal trucks on cable roperoad railway, ca 1905 Photographer: W. Humphreys
ATL Ref. No: PA1-o-990-12



- Maori and Pounamu
- Gold and Multi national immigration
- Coal, class, capital and community
- Forest management and the quest for sustainability/ protection

All the criteria for Key heritage projects are met by Denniston with significant sites such as:

- Denniston Incline rated as the eighth wonder of the world and awarded distinction recognised by the Engineers Institute on site plaque.
- Banbury Arch, a classified Historic site, provided an excellent example of stone masonry for which Denniston is famous, with numerous examples of various designs of stone walling throughout the site.
- The Denniston rope road haulage system is still in place.
- The Friends of the Hill visitor centre is an established destination within the old Denniston School.
- The Denniston village is readily accessible with many remnants such as the tennis courts, swimming baths and old bathhouse.
- Burnetts face and Coalbrookdale offer an experience to visit the old mine entrances with the Historic fanhouse still intact.
- Stonework constructed by craftsmen especially contracted from Cornwall.
- An aerial rope way tower complete with buckets and running assembly.

Because of all these attractions plus many more Denniston is the ideal destination to illustrate Coal Mining heritage on the West Coast with an already established Buller Coalfields Heritage Trail featuring Coaltown and an excellent collection of mining relics from the area.

The Department of Conservation manages the key Historic Heritage sites at Denniston with a vision of establishing Denniston as the premier site to interpret Coal Mining Heritage. This heritage traces its origins to the coalfields in Britain and the threads remain embedded in the place.