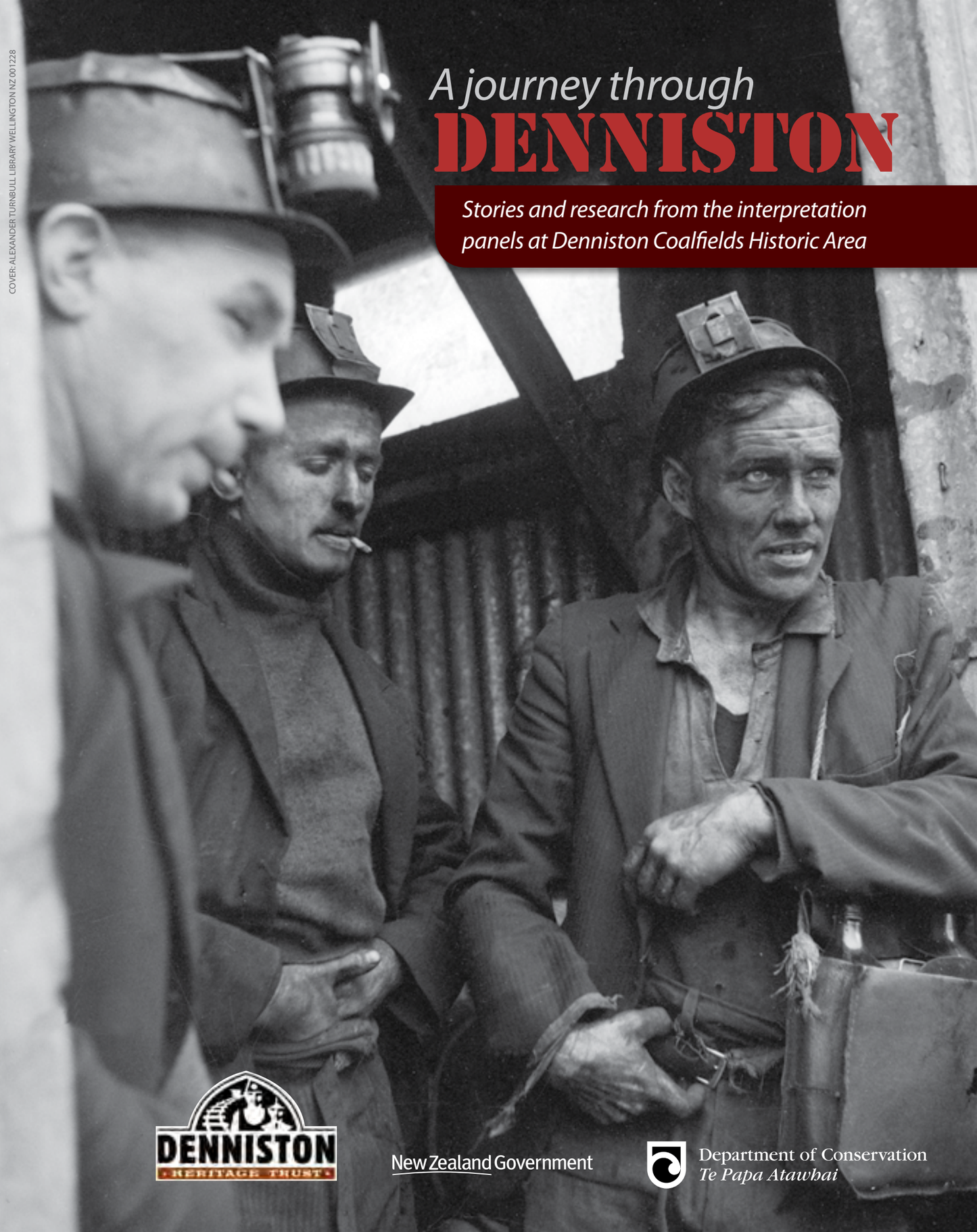

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A journey through DENNISTON

Stories and research from the interpretation panels at Denniston Coalfields Historic Area

DENNISTON HERITAGE TRUST

New Zealand Government

Department of Conservation
Te Papa Atawhai

A girl and her doll, Denniston, 1944.

ABOUT THIS DOCUMENT

Images and text taken from signs and information panels in and around Denniston Coalfields Historic Area. Wording and original design work by Janet Bathgate Design

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FOR MORE INFORMATION ON DENNISTON COALFIELDS HISTORIC AREA

VISIT

Department of Conservation
www.doc.govt.nz/historicdenniston

Friends of the Hill Museum Denniston
www.denniston.org.nz

Coaltown Museum Westport
www.coaltownmuseum.com

www.teara.govt.nz

www.paperspast.natlib.govt.nz

www.timeframes.natlib.govt.nz

READ

The Spirit of Denniston Hill – Dai Hayward

Memories of Denniston Folk – Dai Hayward

Denniston: Then and Now – Les Wright

Denniston's Incline: Coal from the Clouds – Bill Prebble

The Denniston Miners' Union – a centennial history – Len Richardson and Gerard Morris

Coaling from the Clouds – R.J. Meyer

The Denniston Affair – W.A. Munro

The Hill – Celia Adams

The Denniston Rose – Jenny Pattrick

Dancing in the Wilderness – Felicity Price

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New Zealand Government

Department of Conservation Te Papa Atawhai

CONTENTS

FRIENDS OF THE HILL MUSEUM

Introduction

BLACK GOLD

Welcome to Denniston, the area known as the Brakehead at the top of the Denniston Incline. The Incline, locally called the Eighth Wonder of the World, lowered coal 518 metres in altitude from amongst the clouds of the Rochfort Plateau to Conns Creek railway yard at the base of the hill.

Eighty full wagons travelled the Incline a day; around 350 tonnes of coal. Hewn from underground, hauled by rope road across a barren terrain, weighed, screened, stored and poured into wagons, the coal was transported to Westport wharf and dropped into the holds of waiting colliers.

The Westport Coal Company's Denniston operation was a burning star. The coal was of superb quality but the people of the Plateau were the true black gold.

Denniston is a story told by many, each unearthing another memory be it of personal hardship, engineering ingenuity, or humorous recollection. The stories presented here are just a few of many more found in books, on film and in museums.

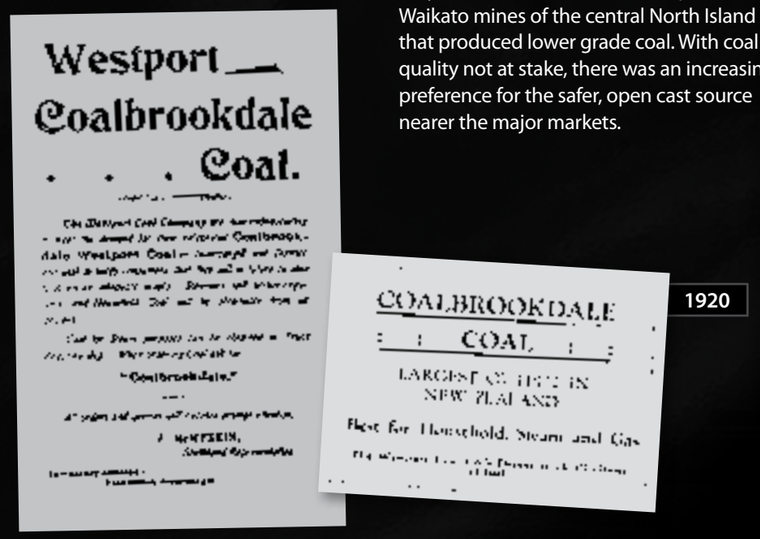
OLD COAL – NEW GOLD

THE AGE OF STEAM

With its bright, black, bituminous coal, Denniston flourished with and fuelled a spirited age of steam that drove the engines of the industrial revolution all around the world.

At the start of the 1870s coal was New Zealand's fifth-largest import, needed to power ships, trains, gas works and factories and used extensively for home heating. This trade deficit was turned around by leaders of commerce such as the Westport Coal Company which formed a 'southern octopus' monopoly to mine the rich West Coast coal fields.

By 1905 New Zealand ranked 17th in the world for coal production and although its total output of 1.5 million tons seems minuscule to the United Kingdom's 236 million tons, the bituminous coal hewn from the Denniston Mines was in high demand at home and abroad for both industrial and household markets. This continued for half a century.



1920

ALTERNATIVE ENERGY

In 1960 New Zealand's coal production peaked at around 3 million tons, one-third of it from the West Coast. Then came a period of steady decline as industrial and domestic users changed to alternative energy. Two former big users to switch away were shipping to oil, and railways to electricity and diesel, while natural gas from Taranaki began to replace coal gas.

Not only did the Denniston mines suffer from the declining demand for bituminous coal, they also lost customers to the open cast Waikato mines of the central North Island that produced lower grade coal. With coal quality not at stake, there was an increasing preference for the safer, open cast source nearer the major markets.

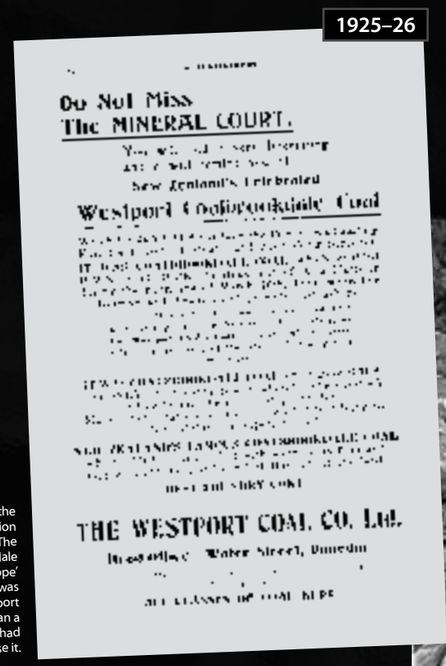
EXPANDING USES

Mined principally to burn in the 1870s, coal is now also used in the manufacture of a wide range of products, many of which we take for granted in our everyday life – soap, washing powder, perfume, printing ink, sheep dip, antiseptic, weed killer, adhesives, timber preservative ... the list goes on.

New and future uses are developing continuously. Synthetic crude oil can be produced from coal through a process called coal liquefication. Coal can be converted to methane through a coal gasification process, potentially creating fuel for cars, or aviation; or mixed with natural gas and used in industry and home heating.

As new processes evolve, future generations might wonder why their ancestors wastefully burnt so much of this rare and precious fossil fuel.

1925–26



ABOVE Advertisement for the NZ and South Seas Exhibition at Dunedin in 1925-26. The part played by Coalbrookdale coal in saving HMS 'Calliope' from a Pacific hurricane was used to advertise the Westport Coal Company for more than a decade after the Royal Navy had ceased to use it.

NEW AGE BLACK GOLD

The oil shortages of the 1970s turned around the fortunes of coal – an energy source that did not depend upon overseas supply. Coal was once again a sought-after commodity world-wide.

Today, New Zealand's Waikato reserves are mostly used for making steel and generating electricity. Those industries consume about two thirds of the total New Zealand production. The high ranked bituminous coals – found only on the West Coast – are once again a premium export product.

New Zealand coal reserves are estimated to be 16 billion tonnes; the West Coast region's estimated in-ground reserves are 983 million tonnes. Over 75% of the recoverable West Coast reserves are in the Greymouth coalfield (mostly underground) and the Buller coalfield (mostly opencast).

1960

MODERN DAY MINING

DISCOVERY AND INDUSTRY 1861–1881

PURE COAL 1861

"... I found, to my great joy, a large seam of good coal. Of course, I stopped my party who very soon returned to assist me in uncovering the seam, which, on removing the moss and ice that encumbered the fall, proved to be eight feet two inches in thickness of pure coal ..."

J. Haast Report 1861

In 1861 German geologist/explorer Julius Haast, accompanied by colliery engineer James Burnett, found a 2.5 metre seam of rich bituminous coal on the Rochfort Plateau. The two men had been commissioned by the Nelson Provincial Government to follow up on an earlier coal discovery by John Rochfort.

Rochfort and Burnett then teamed up the following year, in 1862, to survey the Plateau and established the existence of an estimated 72,600,000 tonnes of coal. In his report, the innovative Burnett suggested that coal could be lowered from the Plateau by a self-acting incline. Eighteen years later that suggestion became a reality.

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WESTPORT COLLIERY COMPANY 1878

Robert Blair Denniston and William Cooper, engaged to carry out topographical and mineral surveys on the Plateau, promoted a vision of coal production to a group of Dunedin financiers. When the New Zealand Government built a railway from Westport to Waimangaroa and ship loading facilities at Westport to service the coal industry, the businessmen were spurred into action. They formed the Westport Colliery Company in 1878 with a capital of £1,000,000. In the process they absorbed two struggling companies that had begun work on an incline and amalgamated many small leases in the vicinity, securing the Coalbrookdale leases of 1000 hectares for a term of 91 years from the New Zealand Government. They started work to establish a mine, which also involved extending the railway up the Waimangaroa River, building an incline and advertising for miners in Dunedin and Britain.

LEFT Engineer-explorer John Rochfort, unknown location, about 1870. The earliest discovery of coal on the Plateau happened by accident. In 1859 engineer-explorer John Rochfort, with two Maori and two European companions, was surveying West Coast rivers when his canoe capsized near Lyell in the Buller Gorge. Rochfort decided to try a more direct route overland to reach the mouth of the river. Crossing the plateau that now bears his name, the party saw small lumps of coal in a creek bed. Due to poor weather they spent no time investigating the source but the observations were reported to the Provincial Government.

WESTPORT COAL COMPANY LTD 1881

With new colliery works completed, the first consignment of coal went down the Incline in 1880. The company then restructured to inject money into the mines operation. In 1881 the Westport Coal Company Limited was formed with four times the original capital, the old principals as new directors, an expanded portfolio including the Brunner and Wallsend mines and their own fleet of colliers to carry their coal to market.

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ABOVE LEFT Colliery engineer James Burnett, date unknown. James Burnett was a skilled English colliery engineer who was engaged by the Provincial Government to carry out geological surveys.

ABOVE RIGHT Geologist-explorer Johann Franz Julius Haast about 1867. Haast named the outcrop he discovered Burnetts Face after James Burnett and the locality Coalbrookdale after an English mining area in Shropshire.

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WESTPORT COAL COMPANY MEMORANDUM ARTICLES OF ASSOCIATION

THE OTAGO WITNESS

12th November 1881

The Argus speaks as follows of the proposed company to extend the capital and workings of the Westport Colliery Company and to acquire a fleet of collier steamers :- "In our advertising columns to-day will be found the prospectus of an important undertaking- the Westport Coal Company, Buller River, New Zealand, which, under the auspices of an influential Dunedin and Melbourne provisional directory, seeks to take advantage of the present state of the money market in this Colony to increase its capital by an issue of shares here.

The company is projected upon the basis of uniting the coalfields belonging to the Greymouth and Wallsend Colliery company with those owned by the Westport Colliery Company, and of expending a considerable amount of additional capital (£100,000), partly in opening up new portions of the very extensive coalfields held by the Westport Company, but principally in building new steam colliers specially adapted to the trade, as the past experience of that Company has shown that until additional facilities for transport by sea are provided, it will be quite unable to supply the rapidly increasing local demand for the coal, or to extend its trade beyond New Zealand.

The Government have shown their sense of the importance of these coalfields by expending about a quarter of a million of money in connecting them by railway with Westport, and in providing wharves and staithes to facilitate shipment.

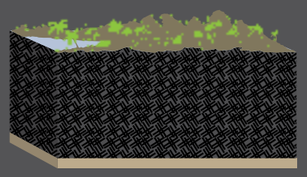
The present proprietors show their confidence by sinking their present capital, viz., £75,000, in shares of the new company, paid up to one-half their subscribed value, and carrying a farther liability of £75,000; and the prospectus affords the fullest information both as to the organisation of the proposed company and quality of the coal."

HOW IS COAL FORMED?

Coal mined from the Rochfort Plateau was formed from plants that grew on the edge of a peat swamp. The plants decomposed to become peat, which was sandwiched between layers of sand. Under enormous heat and pressure the deeply buried peat changed to bituminous coal.

What Is Bituminous Coal?

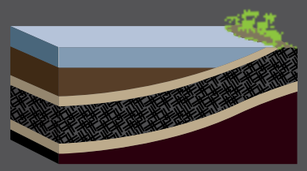
Deep black in colour, bituminous coal is valued for its high heat output when it burns and its low water content. These qualities make it a 'high rank coal'.



The Organic Build-up

(45 million years ago)

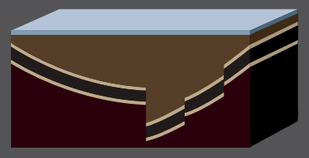
Thick layers of plant matter accumulated in coastal swamps.



The Sinking Landscape

(42-43 million years ago)

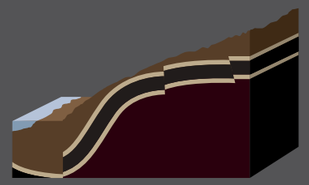
As the land sank, the sea flooded the swamps. Sand and mud covered the peat.



The Coal Formation

(37 Million years ago)

Beneath the sea the peat was changed to coal. The most deeply buried peat produced the best quality coal.



The Upward Bend

(About 2 million years ago)

Underground forces bent the earth's crust and pushed the sea floor above sea level.

The Land Today

Most of the softer mudstone has washed away leaving a weather-resistant cap of sandstone over the coal seams.

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COAL MINING ON THE DENNISTON PLATEAU 1882–2010

PARAMOUNT PRODUCER

By 1882 the Westport Coal Company had a highly efficient operation, doubling their previous year's output to produce a yearly total of 50,000 tons. Output continued to rise, especially once the richer fields of Haast's Coalbrookdale discovery were reached. By 1888 production had risen to 115,942 tons but haulage systems and storage capacity hampered output. Once improved, production and reputation rose. By 1885 Denniston reached the position of being the largest coal producer in New Zealand – 215,770 tons for the year from 257 men at work underground.

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ABOVE Banbury Mine endless chain haulage road. Coal tubs were attached to an overhead endless chain. The haulage system was later upgraded to a ground-level endless rope.

RIGHT The wooden bridge sheds at Burnetts Face – the meeting place of rope roads from Ironbridge and Coalbrookdale mines.

BELOW Coalbrookdale engine shed.

COALTOWN MUSEUM WESTPORT

FRIENDS OF THE HILL MUSEUM

COAL MINING ON THE DENNISTON PLATEAU 1882–2010 *continued*

FROM BOOM TO NATIONALISATION

In 1906, after a new surface haulage system had been installed, production was up to 261,000 tons. The next few years brought a boom as export demand soared. In 1910 Denniston's underground workforce of 446 men produced 348,335 tons, a tenth of it for export. That was a total which would never be bettered.

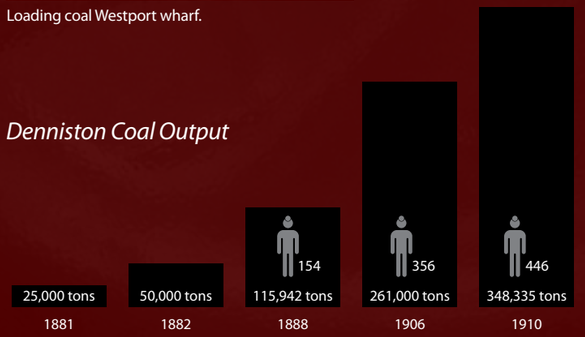
During World War I production was maintained with a reduced workforce. The quality of Westport coal was rated so highly that guns covered Westport's loading wharves. A decade later the Great Depression brought a drop in the demand for coal. Men worked reduced shifts and many had to leave the Hill to find work, precipitating the demise of settlements on the Hill. Production temporarily bounded back during World War II.

FRIENDS OF THE HILL MUSEUM HALE COLLECTION

Loading coal Westport wharf.

In the 1940s a major fire in the Ironbridge Mine caused an immediate shut down, leaving the Whareatea the only Denniston mine in operation. With coal from there having to be hauled an increasing distance to the surface, extraction costs were increasing, forcing the Government to look at ways of controlling prices. In 1948, under a nationalisation programme, the Government passed the Westport Coal Company Act and took over the company's assets.

Denniston Coal Output



STATE COAL MINES

The new boss on the Plateau – State Coal Mines – built a new entrance to the Whareatea Mine, closer to the Brakehead, and constructed an aerial cableway to transport coal. Adjacent to the aerial the Sullivan Mine in 1953 and the Escarpment in 1964 were opened, despite worldwide decreasing demands for coal. As mining became more mechanised it required a smaller workforce, making labour-intensive haulage systems increasingly uneconomic. The Incline closed in 1967 and the aerial a year later.

In 1979 the Escarpment was redeveloped as Denniston's first State hydro mine, pumping coal to bins on the surface. When it neared closure in 1982, hydro methods were applied to pillars left in the Whareatea workings, bringing record outputs. The Sullivan workings spread westward to Rapid Creek where the Sullivan West hydro mine was in full production by 1986.

Restructuring following the transfer of State Coal Mines assets to the state-owned enterprise CoalCorp (later Solid Energy New Zealand Ltd) in 1987 reduced the Denniston workforce from 90 to 15 as Whareatea closed in 1988 and Sullivan West in 1994. Small quantities of coal continue to be trucked off the Hill (2010), extracted by a private company from the Cascade workings. Exploration and the area's potential for further extraction are once again being undertaken by a number of companies.

A shift of Whareatea miners.

100 YEARS OF MINING

For more than 100 years Denniston coal was hewn from different mines scattered across the Plateau. Settlements spread further away from the Brakehead as more miners arrived and mines were opened. The population of the Plateau peaked in 1911, at just over 1400 inhabitants.

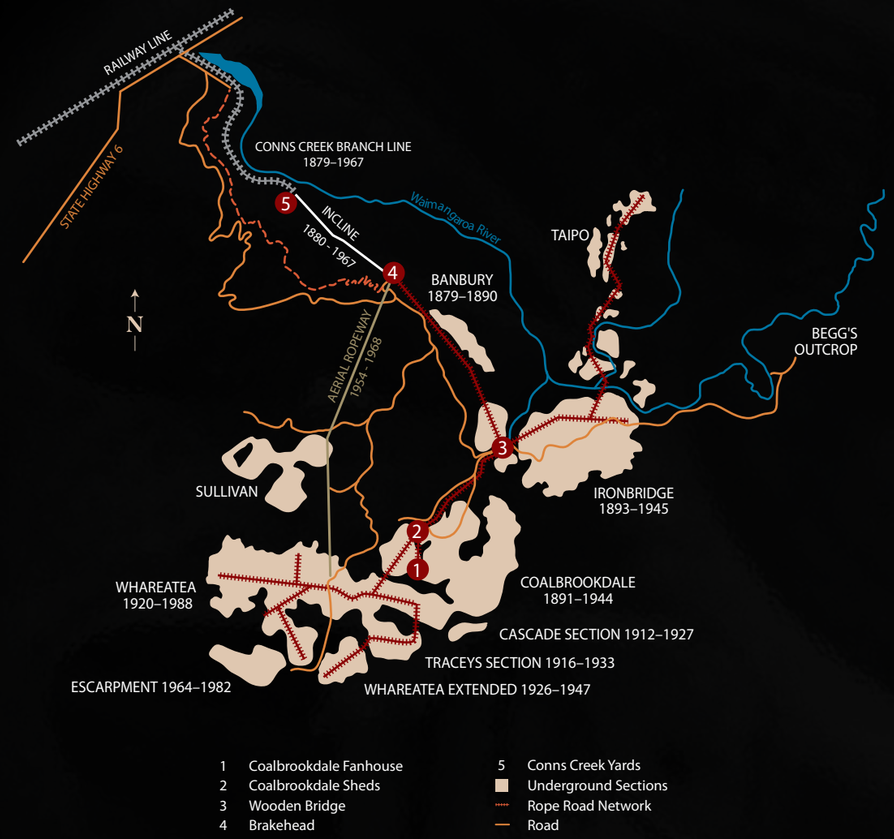
FRIENDS OF THE HILL MUSEUM

FRIENDS OF THE HILL MUSEUM

ABOVE The Camp under snow.
MIDDLE The Camp.
RIGHT Denniston.

FRIENDS OF THE HILL MUSEUM

Mines on the Plateau



MAP BASED ON DRAWING BY J NEIL 1984 IN THE BOOK
"DENNISTON MINERS UNION: A CENTENNIAL HISTORY"

1920s

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WHERE DID THE MINERS COME FROM?

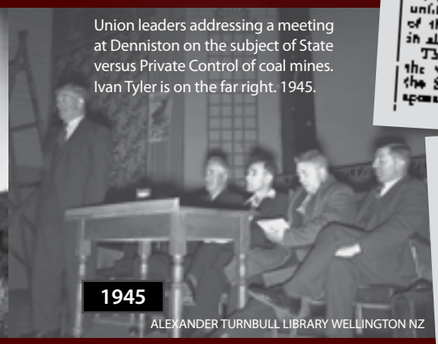
English dialects mingling with foreign accents in mines and bath houses reflected a wide range of origins for Denniston miners. However, most originated in Britain. The Company had hoped to recruit coal hewers from the ranks of New Zealand gold miners but few were prepared to become wage workers. The company had little choice but to recruit labour in the 'old country' from 1883 onward.

Most of those recruited were reasonably accustomed to the kind of climate and poor housing conditions they would encounter up on the bleak hill. A particularly cold winter in 1880 had already caused many miners and their families to leave Denniston – a situation that a company trying to recover its huge capital outlay certainly could not afford. From nearly 100 people in 1883 the total population grew to more than 1500 by the mid-1920s. Even at that time immigrants were still arriving from Britain to provide an adequate workforce. By then the descendants of the earlier immigrant miners were so established in the new country that they dubbed Marshallvale, where many of the 1920s newcomers lived, 'Pommy Town'.

TOP RIGHT A group of miners at Taipo Mine. Left to right: B. Fleming, T. Robertson, R. Webster, B. Hannah, W. Smyth, R. Robertson, J. Hannah & H. Hughes.

RIGHT BOTTOM 1913 Strike meeting at Westport Coal Company office, Brakehead Denniston.

FRIENDS OF THE HILL MUSEUM



1945

Union leaders addressing a meeting at Denniston on the subject of State versus Private Control of coal mines. Ivan Tyler is on the far right. 1945.

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ALEXANDER TURNBULL LIBRARY WELLINGTON NZ

1913

FRIENDS OF THE HILL MUSEUM

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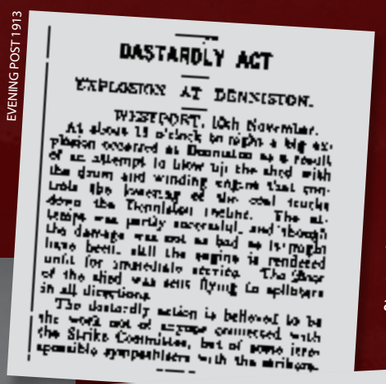
BLOCKING THE UNDESIRABLES

When the Company started recruiting from Britain, it instructed immigration officials to vet them to exclude potential troublemakers, particularly church preachers who they feared would fervently spread the word on two non-conformist doctrines – Methodism and Unionism. On discovering that the 50 colliers bound for Denniston aboard the steamship Opawa with their families included people in precisely that undesirable category, the Company refused to employ them. Miners and their families arrived to find themselves in the desperate situation of having no work. However, the Company needed good colliers, whatever their political or religious persuasions, and these were some of the best there were. The Directors relented.

By September 1884 the Denniston Miners' Mutual Protection Society was formed, with English-born John Lomas as its president and many of the Hill's workers signed up as members. By victimising Lomas and crushing his first union, the Company forced him from the Hill within seven years, only to see him become a national figure after New Zealand elected a Liberal government in 1891.



EVENING POST 1913

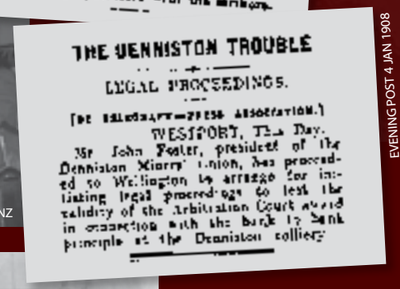
DASTARDLY ACT

EXPLOSION AT DENNISTON.

WESTPORT, 10th November.

At about 12 o'clock on night a big explosion occurred at Denniston as a result of an attempt to blow up the shed with the drum and winding engine that controls the lowering of the coal trucks down the Denniston incline. The attempt was partly successful, and though the damage was not as bad as it might have been, still the engine is rendered unfit for immediate service. The floor of the shed was seen flying in splinters in all directions.

The dastardly action is believed to be the work not of anyone connected with the Strike Committee, but of some irresponsible sympathisers with the strikers.



THE DENNISTON TROUBLE

LEGAL PROCEEDINGS.

[BY TELEGRAPH—PRESS ASSOCIATION.]

WESTPORT, This Day.

Mr John Foster, president of the Denniston Miners' Union, has proceeded to Wellington to arrange for initiating legal proceedings to test the validity of the Arbitration Court award in connection with the Bank 17 Bank principle at the Denniston collieries.

EVENING POST 4 JAN 1908

UNIONISM ESTABLISHED AT DENNISTON

Any hopes the Company had of running its mines using expensive machinery and cheap labour were over. A reduction in pay rates led to a prolonged strike from December 1884. Company tactics that included cutting off supplies via The Incline, evicting workers from company houses and bringing in non-union labour all failed. In June 1885, with winter coal orders mounting and the unionists holding out with financial aid from miners in the Grey Valley and Australia, the mine owners capitulated.

Another stoppage over new terms offered would take the men out for 80 days. Unionists aimed to secure not only better wages but also better working and living conditions for themselves and their families, an early success resulting in an access track up to Denniston, separate from the Incline.

The unionists expanded their organisation to include quarrymen, labourers, railwaymen and watersiders – totalling over 2000 on the West Coast by late 1889. One amalgamated nationwide struggle was the Maritime Strike, for three months of 1890, when free labour was brought in to defeat Unionism. Another national strike was in 1913, in support of Wellington watersiders. Heated debate followed. A new 'more company-friendly' union undermined the strikers, but on joining up and resuming work the 'old' unionists soon took over the new organisation.

THE GREAT 1951 WATERSIDERS DISPUTE

After the nationalisation of Denniston's mines, and the defeat of the Labour government that had brought it about, came the greatest stoppage of all when the union supported the 1951 waterside dispute. Called over the issue of direct bargaining versus arbitration, which had been the basis of major disputes in the past, it cost the Hill's 300 mine workers a total of 26,400 days' work.

DENNISTON COAL-MINERS INDUSTRIAL UNION OF WORKERS.

A wife's plea

Before you depart on this bright summer's day
To argue your head off and drink beer all day.
Please fill the coal buckets, they're at the back door,
For my back is aching from doing this chore.
I've washing and ironing and all things to do,
So it won't hurt you to help with a few.
"Burn more coal" is what they say,
God help me! I've done that all day!

Published in NZ Coal *September 1962. Submitted on behalf of all the wives of union officials by Mrs J. Cotter, Main Road, Denniston.*