

# Mining History

## Discovery

In 1872, William Hann led a Government sponsored expedition to determine the nature of the country and the mineral resources in Far North Queensland. On 5th August, Hann and his party reached a large river and named it the Palmer River after the Colonial Secretary of Queensland — Arthur H. Palmer. In his report on the expedition, Hann mentioned gold finds along the Palmer, but considered the finds to be “flattering prospects” only.

James Venture Mulligan and six companions departed from Georgetown on 5th June, 1873 in search of payable gold along the Palmer River. The party arrived at the Palmer on 29th June and prospected the river and its tributaries for the next eight weeks, in which time they found over 3 kg (102 oz) of gold.

## The Rush

Mulligan and his party returned to Georgetown on 3rd September, 1873 to report payable gold on the Palmer. The news of gold on the Palmer soon spread through the colony.

The first party of diggers, under the leadership of Mulligan, left Georgetown bound for the new goldfield and reached the present site of Palmerville on 26th September, 1873.

The Queensland Government reacted to the news of a new northern goldfield by despatching George Dalrymple to investigate possible sea ports to service the Palmer. Cooktown was hastily chosen with the arrival of the steamer “Leichhardt”. Aboard were prospectors and Government officials bound for the Palmer. Almost overnight a tent town sprouted on the banks of the Endeavour River, and within two months Cooktown had grown to be the second busiest port in Queensland. Its primary business was Palmer gold.

Under the leadership of A.C. MacMillan, the Northern Road Engineer, and Howard St. George, the new Gold Commissioner, the first track was blazed from Cooktown to the Palmer. The party reached Palmerville on 14th November, 1873. Within two years, an estimated 9000 people trekked to the Palmer in search of their fortune. Of the 9000 people, 7000 were Chinese.

In 1875 annual gold production peaked at 7780 kg (250 000 ozs).

## Life on the Palmer

The Palmer was aptly described as “the most remote and harshest field worked by early Australian diggers”. In the first few months, supplies had to be carted in to

the new field by the diggers themselves. The need to establish transport routes into the isolated area became apparent. In January, 1874, Sub-Inspector A. Douglas, of the Native Police, established a pack track to the Palmer which became known as the “Hells Gate” track. Frequent attacks by Aborigines on diggers travelling to the Palmer occurred along this track. Other tracks were established over the next three years which helped open the new goldfield to the diggers.

Life for the Aborigines who had hunted and fished the area for generations was disrupted totally. Game was killed or driven away, and once clear waterholes turned muddy. The Aborigines fought back relentlessly attacking the miners with spears. Countless clashes led to retaliatory slaughter. Stories, which were rife of the Aborigines eating their victims, added to the racial tension.

Some of the hardships which the early digger had to overcome, apart from the attacks by Aborigines, were disease, floods, lack of supplies, isolation and the climatic conditions, which ranged from tropical heat to monsoonal rains. Many died of starvation or were shot by ruthless claim-jumpers.

Some struck it rich and were ripe for exploitation upon reaching ‘civilised’ Cooktown. Drunken sprees and enticing prostitutes parted many a prospector from their new-found wealth, forcing them back in search of gold.

As the alluvial gold in the Palmerville area diminished, attention was focused on the “Upper Camp” diggings upstream past the North Palmer River junction. By May 1875, the original settlement at Palmerville was abandoned and Maytown became the new centre of the Palmer.

By 1876 the population of the Palmer had swelled to 1400 Europeans and 17000 Chinese. News of gold on the Hodgkinson River drew many European diggers from the Palmer and this left the way clear for the thousands of Chinese miners to virtually monopolise the Palmer diggings.

## The Chinese Digger

Chinese merchants were quick to establish businesses in Cooktown and on the Palmer. They indented shiploads of coolies from China with promises of easy gold. Each man had to work off his indebtedness to the merchant who brought him out from China before he was free to prospect on his own account.

Generally, the Chinese diggers were quiet and industrious people. They were thorough in their prospecting methods and “made a living” from areas previously mined by European diggers.

Anti-Chinese feelings soon developed and resulted in the formation of an Anti-Chinese League in October, 1877. The League lobbied the Government to restrict Chinese on the goldfields and to impose extra charges and taxes on the Chinese diggers.

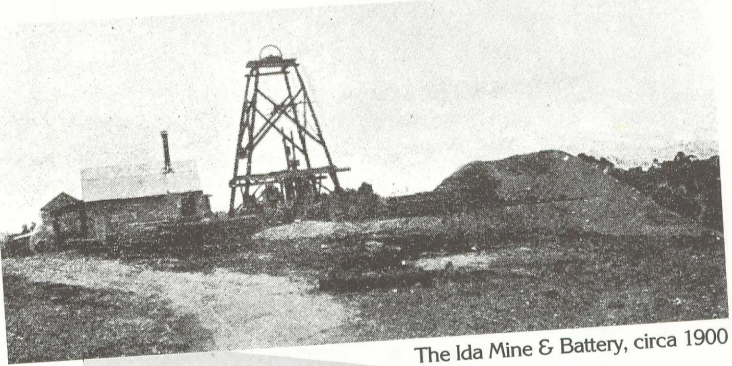
These measures failed to stop the flow of Chinese to the goldfields. Ironically, the Chinese became the major gold producers on the Palmer, despite the fact that they were discouraged from reef mining by the Mining Warden.

## Reefing

After 1875 alluvial mining started to wane and interest moved to the gold rich quartz reefs in the Maytown region.

The first battery was erected on a site near Maytown and became known as the ‘Pioneer Mill’. (In January 1876, the first stone to be crushed at this mill came from the Alliance Reef.) This same mill yielded 466 kg (15 000 ozs) of gold from the Palmer reefs in its first year of operation. Also in 1876, batteries began crushing at the “Ida”, “Queen of the North”, “Louisa”, “Canton” or “Comet” reefs, and at Echotown on the North Palmer River.

Hard rock, isolation, shortage of fuel timber and extreme heat were not the only difficulties the reef miner had to face. One of the greatest handicaps was heavy ground water in the mines. Expensive pumping machinery was necessary to keep water out of the workings.



The Ida Mine & Battery, circa 1900



The Comet Mine & Battery, circa 1900

The planned railway from Cooktown to Maytown, which was to reduce costs and lessen the isolation on the Palmer, reached Laura in 1888. By this time the miners faced financial difficulties and reef mining declined. As a result the railway to Maytown was never completed.

Despite the decline in reefing there were 158 reef mines on the Palmer at the end of 1890. The financial crisis of 1893 was the final blow to reef mining on the Palmer. Some mines operated up to 1896 and others were re-worked during the early 1900’s, but by 1942 all but two reefs were abandoned. Only one small stamper, in a remote part of the Reserve, continued to operate up until 1976.

## Postscript

Once the alluvial gold was worked out and the reef mines encountered financial difficulties in the 1880’s, the Palmer began a rapid decline, with only a few hopeful prospectors continuing after World War I. Maytown was already reverting to bushland when the last residents left in the 1940’s, as were the old mines and machinery scattered through the hills.

In the 1980’s rising gold prices and modern techniques of mining low-grade alluvial deposits re-kindled interest in the Palmer. Time will tell whether the streams will yield further riches, but the old mining sites and other relics will remain to bear silent witness to the spirit and determination of the first mining pioneers.

For further reading:  
P. Bell, Gold, Iron and Steam: The Industrial Archaeology of the Palmer Goldfield, James Cook University, 1987  
N. Kirkman, The Palmer River Goldfield (K. Kennedy, Readings in North Queensland Mining History, Vol 1) James Cook University, 1980.

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# Golden PALMER

## ♦ HERITAGE MAP ♦



Mobile engine, Enterprise Mill



James Venture Mulligan



Queen of the North engine and boilers

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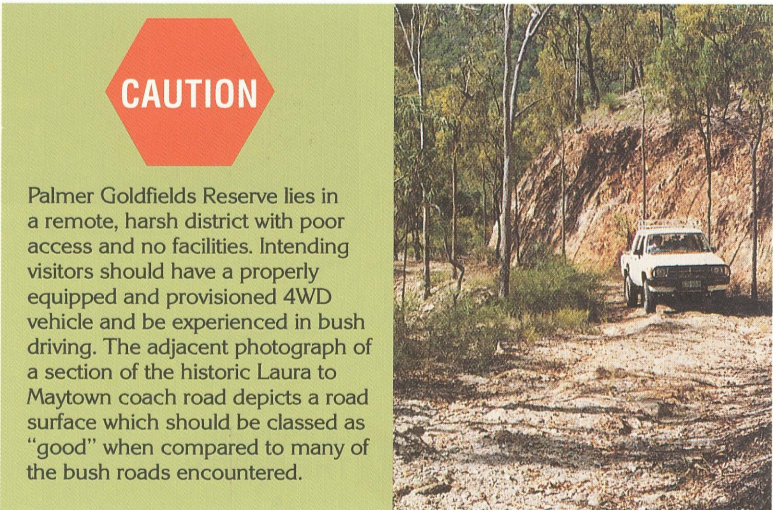
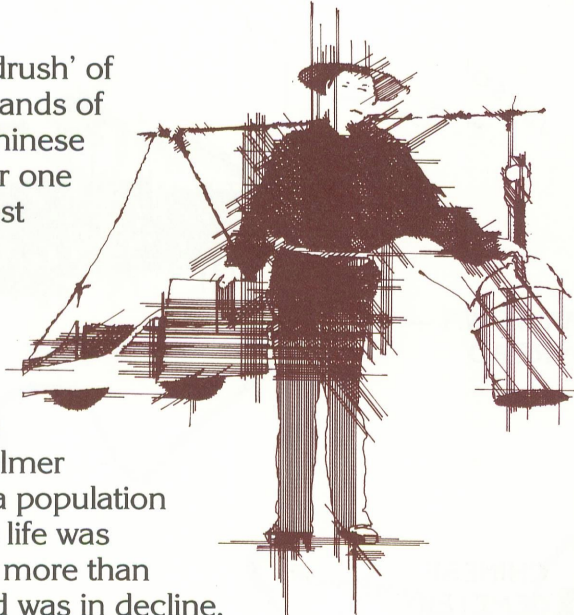
QUEENSLAND NATIONAL PARKS AND WILDLIFE SERVICE

## Welcome to PALMER GOLDFIELDS RESERVE

The ‘Palmer Goldrush’ of 1873 drew thousands of European and Chinese miners to pioneer one of the State’s most rugged, remote, and inhospitable regions. Despite isolation and innumerable hardships, the Palmer grew to support a population of 20,000, but its life was short and in little more than a decade the field was in decline.

Today there are no surviving buildings as evidence of the towns and settlements which developed. History here is revealed mainly by the old mine sites, with their rusting machinery and other relics, which have rested silently in the bush for over 100 years.

This map shows a range of heritage sites, and gives historical information and some important tips for visitors who intend to drive to the area.



Palmer Goldfields Reserve lies in a remote, harsh district with poor access and no facilities. Intending visitors should have a properly equipped and provisioned 4WD vehicle and be experienced in bush driving. The adjacent photograph of a section of the historic Laura to Maytown coach road depicts a road surface which should be classed as “good” when compared to many of the bush roads encountered.

# Site Histories

## 1 OLD MAYTOWN TO LAURA COACH ROAD

The track for this road was originally blazed by Gold Commissioner, Howard St George, and Engineer of Roads, A.C. Macmillan in November 1873, to serve the gold diggers at Palmerville. The most spectacular part is the crossing of Jessop Range which was opened in 1877. This road then crossed the North Palmer River at German Bar and terminated at Maytown. The road over the Conglomerate Range has been devastated over the years, the original route having a steeper descent and a hotel, Filder’s, at the bottom. Preservation of segments of the road is important for the illustration of hand stone packing along the cuttings (sidelings), stone drains, use of hand tool methods, and selection of viable routes through the unyielding conglomerate and sandstone escarpments.

## 5 CHINESE CEMETERY

The Chinese Cemetery is on the south bank of the North Palmer River where the Chinese commenced alluvial mining in 1875. It is a 100 metre square site containing an estimated 25 graves. There are some long mounds as well as some clusters of up to ten graves. Many Chinese died on the North Palmer from “ague” or “foul water”. The cemetery was fenced by the Palmer River Historic Preservation Society in 1986.

## 6 CHINESE ALLUVIAL WORKINGS

Evidence of Chinese alluvial activity is widespread throughout the Reserve.

In the 1870’s the Thompsons Gully and Butchers Creek catchments resounded to the pick and shovel. Thousands of flat and semi-round slate stones were carried by the Chinese and packed together to divert the gullies and creeks to provide water to sluice the gold bearing gravels. There are also Chinese water race systems with races, dams and handstoned walls along the creeks above both the Louisa and Comet mines. The Chinese worked here incessantly from 1876 to the early 1880’s after the Europeans and their companies had abandoned the workings. The creeks are walled by “dry” rock packing without mortar in groups of 30 to 40 rocks per metre and up to two metres high. There are water races cut around the sides of the hills to carry water to dams below. Water was then carried by further races up to 350 metres long to the small ground races below.

## 7 LOUISA MINE AND ENTERPRISE MILL

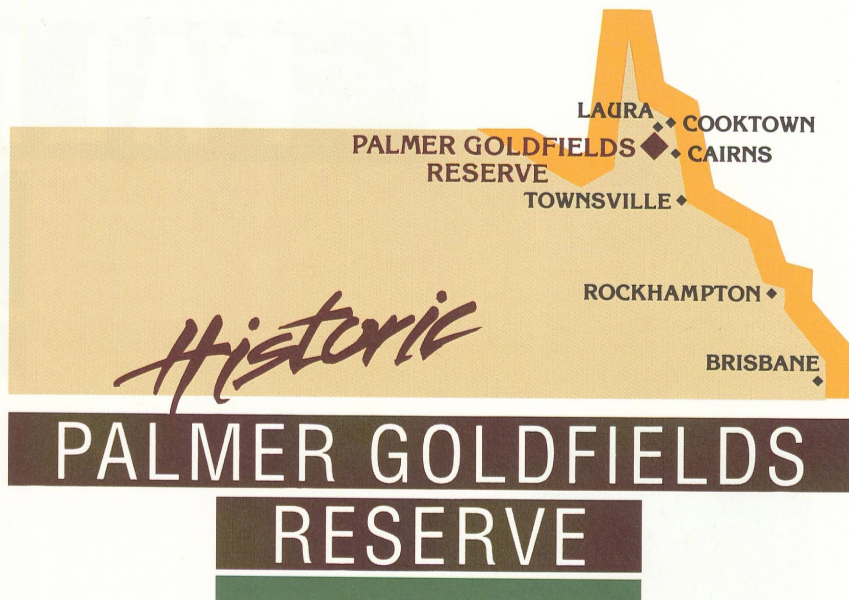
This site illustrates gold mining technology from the 1880’s to the 1940’s.

Apart from the concrete foundations for the headframe and the diesel engine nothing on the mine site is in situ. There is a four metre long Colonial Tangye fire-tube boiler and two Tangye single-acting steam pumps which are probably the only equipment which date from the 1880’s.

Louisa P.C. and No.1 West mines produced gold only between 1876 and 1893, and in 1941. The first mill on the site was the Pioneer Mill, removed as the Duo Juncta, but there is no surviving evidence of it. Brisbane’s Louisa Gold Mining Co Ltd introduced the Tangye pump in 1881. Production decreased as the water and costs rose. The reconstructed company installed a ten-head battery, air compressor and two Tangye pumps in 1883. In 1884 the lease was declared forfeited when the company was bankrupted. The battery was shifted to the Ida mine in 1893. The Palmer Gold Mines Ltd in Cooktown brought a German MAN diesel engine from Wolfgram Camp in 1915 to pump out the water but they abandoned it in 1917. In 1920 Cairns businessman, James Watters, and later the Palmer Development Company pumped the shaft without success. Not even the energetic 1930’s miners could extract ore. However, Charles B. Barnes, took charge in April 1939 and succeeded in beating the water using a Pomona turbine pump and he raised ore. He sunk the shaft to 42 metres and drove east, raised 475 tonnes for 8.98kg (289 ounces) but found the quartz unpayable. He abandoned it in May 1941 and the MAN engine was removed to Ravenswood in 1947.

The Enterprise Mill is 200 metres southwest from the Louisa mine. Although it was the last battery erected on the Palmer Goldfield, in 1941, it illustrates nineteenth century technology. Today it is one of the best preserved crushing mills in North Queensland. Its position on the hill above the mine is puzzling. It consists of ten gravity stamps on an iron frame. Beside it is a mobile water-tube steam engine. There is no evidence of the separation process. Part of this machinery came from Cyril Denman’s Perseverance Mill on Butchers Creek. He brought the frame from the Alexandra, but the origin of the stamps is unknown. When the Louisa closed in 1942 Denman closed the mill and left the Palmer.

The significance of the Louisa site is that, whilst this was the last mine and mill to have crushed quartz, the technology dates from the 1870’s.



# Historic

## PALMER GOLDFIELDS RESERVE

In the early 1980’s the Palmer River Historic Preservation Society drew attention to the wealth of mining heritage remaining in the Palmer region. The present Reserve was proclaimed in 1986 to cover 16200 ha of the Maytown district with the best concentration of important relics. Joint control by the Queensland National Parks and Wildlife Service and the Department of Resource Industries ensures that the bulk of the relics are protected while the gold mining tradition of the area continues.

## Attractions

There are no imposing structures or ornate buildings on the Palmer — the field was too isolated for luxuries — but history is revealed by old mines, rusting machinery, house sites and other excavations. In contrast to other old goldfields which are now modern cities (eg Charters Towers), the remote harsh atmosphere still prevailing today allows visitors to visualise the difficulties and privations faced by the early diggers.

A range of heritage sites can be visited along the roads shown on the map and within 200m of them; most are signposted and are described overleaf.

The Laura road gives panoramic vistas of the “Conglomerate Range” which the diggers had to surmount on their way from Cooktown. The area is attractive for primitive bush camping, and waterholes in the major streams invite swimming, but there are no facilities. In the dry season sites with water may be restricted to a few holes on the Palmer and North Palmer Rivers. One site is shown on the North Palmer downstream of Thompsons Gully. Camping Permits are required from Queensland NPWS offices.

## Access

Access routes are shown overleaf. The Reserve is isolated with no facilities; tracks are rough and travelling times very slow, particularly from Laura. A four wheel drive with an experienced driver is essential. The nearest supplies are at Mount Carbine, the Palmer River Roadhouse on the Cooktown road, Laura, or Chilligoe. Extra fuel is advisable to allow a safety margin for the return. Water, extra rations and spares should also be carried. During the wet season the tracks are often impassable, and the streams subject to flash floods and high water levels.

## Climate

Winter is characterised by dry sunny days with temperatures in the high 20’s, and cool evenings. The summer wet season (Nov — Apr) is hot and humid with storms and monsoonal rains.

## Landscape & Geology

The Maytown district is part of an extensive tract of harsh, rugged country of innumerable ridges and incised creeks. Soils are very shallow and rock outcrops numerous. Ironbark woodland with paperbarks fringing the major streams is characteristic; other plants include Cooktown ironwoods, ghost gums, quinine bush and bloodwoods, with undergrowth of spear grass and kangaroo grass. This landscape is formed on hardened mudstone and greywacke of the Hodgkinson Formation, sediments originally deposited off the edge of the continent 420 — 360 million years ago, but subsequently uplifted and crumpled to steep inclinations by major crustal movements. Fluids squeezed from an enormous thickness of sediment were forced into faults to form the gold-bearing quartz lodes of the district. Although few of these contained abundant gold, erosion of thousands of them over millions of years saw the heavy gold particles accumulate in the creeks downstream.

The northern boundary of the Reserve is the edge of the sandstone plateau known by the old miners as the “Conglomerate Range.” This is capped by much younger, horizontal sandstone and conglomerate, deposited from rivers and shallow seas 200 — 100 million years ago (Dalrymple Sandstone, Gilbert River Formation). Some gravels at the base of these also contain gold, just like the modern streams. Thicker soils on the plateau support stringybark and bloodwood communities, with ironbarks on the slopes.

## Code of Conduct

To protect the Reserve and for your own safety, please :

- keep to the roads and heritage sites shown on the map. Entry along all other tracks is allowed only to mining traffic or holders of special permits.
- do not remove any heritage material. Keep Queensland’s heritage intact on site.
- be alert for old open or collapsed mine shafts and keep clear of modern mining activities. Supervise children closely.
- do not “treasure hunt”. Metal detectors are prohibited, and suction dredges and panning are not allowed without mining title.
- leave domestic pets at home, and protect native animals and vegetation. Firearms are prohibited.
- be careful with fire. July to December may be very dry.
- remove your rubbish. There are no bins or collection service.

## 8 COMET (CANTON) MILL AND KING OF THE RANGES COMPLEX

This imposing complex of the Comet mill, Comet mine shafts, the King of the Ranges mine and windlass, and the Chinese alluvial workings including dams and water races illustrate a range of mining and milling activities. The Comet mill operated from 1885 to 1900.

The huge Cornish boiler manufactured by Langlands of Melbourne, the largest on the Palmer Goldfield, a single cylinder Cochran engine, 3.6 metre diameter flywheel and stamps were relocated from the Cannibal Creek tin mines in 1885. It is thought to have been a public mill treating ores from surrounding mines. Although the stamps have not survived intact, some of the different shaped stamps and the berdan pans lie abandoned outside.

The flywheel and engine were set back in place and the whole covered by a mill shed constructed to the original design in accordance with Burra Charter Conservation principles by the Palmer River Historic Preservation Society in 1987.

The King of the Ranges machinery relics appear to date from Herbert Silk’s re-opening of the mine in 1939. Curiously, the mine’s machinery was not recorded in nineteenth century reports. The workings were shallow between a ridge and Butchers Creek. The winding gear and wheels, ore cart, tram line, rope, lift pump equipment, gear train and pump fulcrum all illustrate the mining practices of a small operation in the war years.

The Chinese alluvial workings represent 1870’s alluvial mining practices. Control of the water by dry-packed flat rocks down deep bedrock gullies and through races and dams predated the installation of heavy machinery above the Comet reef. Remains of alluvial workings are generally rare in Australia and these are some of the best and most easily accessible workings on any goldfield.

## 11 QUEEN OF THE NORTH MINE AND MILL.

The Queen of the North mine and mill site is one of the most compact on the field, with most of the machinery intact and dominated by three large boilers and a stationary engine. The line of the reef is on the brow of a hill, with the mill site only a very short distance away, and the Gregory townsite 100 metres away. The machinery on site dates from the 1870’s which was the peak period for this mine.

The Queen is reputed to have been one of the first reefs taken up on the Palmer Goldfield, being laid off in May 1874. A Cooktown company financed the mine development in 1877 when the Live and Let Live battery started on Gregorys Gully nearby. In the heyday of Queensland National Bank investments, the Queen of the North Gold Mining Company decided to construct a mill beside the Queen, to save cartage costs. It commenced just before Christmas 1877. The machinery comprised two Cornish boilers from Walkers Limited of Maryborough, a horizontal engine, five stamps each 340kg and pumping and winding gear. The mine became the deepest on the Palmer goldfield at 82 metres in 1879 which was its most profitable year. However the field’s isolation, the enormous financial outlay of \$8,000 and the natural tendency to crush the richest ore first, defeated the company. Several attempts were made to revitalize the Queen mine and mill — in 1881 and 1901 — but it was never reworked except by fossickers in the upper levels. Thus the surviving machinery on site, including the huge flywheel and the square dies and slotted screens, illustrates the 1870’s technology.

## 12 ALEXANDRA MINE & MILL

The history of the Alexandra mine typifies both the difficulties and the optimism of the early miners. It was only active in the periods 1876-1880, 1882 and 1897-1898, and only profitable during the first five years when the machinery was simply a horse whip, and ore was hand picked and carted to the Maytown area for crushing. In 1880 the owners had to cease mining because of flooding in the wet season. Boom conditions in the 1880’s and an influx of British capital stimulated an attempt to float a company to reopen the mine in 1885. Machinery was purchased and removed from the Cannibal Creek tin mines but the venture apparently failed.

In 1894, Edwin Field removed machinery from the Louisa and Queen mines, installed steam pumping gear to dewater the mine and erected a battery. However, it took an English company to bring it into production in 1897; even then the men were working up to their waists in water, and more pumps were called for. Only a short production run occurred in 1897-1898, and returns were insufficient to pay costs. It closed finally in 1898.

The significant contribution of Dr. Ruth Kerr, Mining Historian, in providing information for this publication is appreciated.

Mapping Services, Department of Resource Industries  
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