

# VICTORIA'S HERITAGE

## GREATER BENDIGO NATIONAL PARK

### ABORIGINAL HERITAGE

Greater Bendigo National Park is within the lands of the Djada warrung (Jaara Jaara people). Before European settlement the biological resources of their lands supplied all their needs, supplemented by some items traded with other Aboriginal groups. The forests and woodlands provided wood and plants for food and shelter, medicinal purposes, canoes, spears, boomerangs, tools, dishes and other implements.

Fire stick farming is likely to have resulted in the mosaic of vegetation and the relatively open park-like landscape so admired by the European newcomers.

### THE SQUATTERS

From the late 1830s pastoralists (squatters) started to take up the land. Wool was a valuable commodity, but sheep grazing and land clearing set in train lasting changes to the natural ecosystems of the area, as well as displacing the Aboriginal people. Soils were damaged and native grasses over-grazed. The result was increasing run-off and periodical flooding, with topsoil erosion and silting-up of water holes – a scenario common in much of south-eastern Australia.

The end of Aboriginal burning also set in train long-term changes in the structure and composition of the forests.

### GOLD MINING

Gold rushes to Bendigo began in 1852 and continued through the 1860s. Shallow alluvial gold was worked first by panning, cradling and sluicing, and later reef gold was won by sinking open or shallow shafts. Many remnants of the gold rush, including old mullock heaps, mining dams and water races, mine shafts and alluvial diggings, can be seen



Rom Bruce to Ellenborough Mine, looking south along the Chum Line.  
Courtesy of DSE.

in the park and elsewhere in and around Bendigo.

These mining activities created a huge demand for timber, and the surrounding forests were cut to supply mines, boilers and the building trade. Many trees did survive or have regenerated or regrown as coppice growth. However, very few of the original large old ironbarks and other eucalypts remain.



Old Tom Open Cut Mine Whipstick State Park. Courtesy of DSE.

### EUCALYPTUS OIL DISTILLING

An important industry in what is now Greater Bendigo National Park was eucalyptus oil distilling.

Distilling developed from the 1880s as returns

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from the Bendigo gold fields were declining. Oil-rich eucalyptus leaves were plentiful, there was a demand for eucalyptus oil, and little capital outlay was required, making this an attractive business for out-of-work miners. The back-breaking work (outdoors in all weathers) and the risks involved (cutting tools were sharp and hand injuries common) were probably considered little different from the hardships the workers had endured as miners.

Greater Bendigo National Park is rich in multi-stemmed mallee eucalypts such as Green and Blue Mallee which cope well with regular harvesting of their leaves. Like other mallees they have a large underground rootstock which enables new growth to sprout quickly after fire or other damage. Stems were cut one to two metres above ground level (this was called 'snagging'), the area was burned and leaves from the regenerating trees were harvested by hand. Later, as in other areas of Victoria, horse or tractor-drawn rollers were used to clear large areas of mallee scrub.



Campbell's eucy distillery boiler. Courtesy of DSE.

The distilling process, developed by English migrant pharmacist Joseph Bosisto, involved packing leaves into a large metal vat on a raised platform above a tank of water. The tank was sealed and a fire lit beneath it. As the water boiled, steam rose through the leaves, taking the eucalyptus oil with it. The oil was obtained by passing the steam through pipes submerged in cool water (usually a creek).

A well-filled vat could hold up to 100 pounds

(xx kg) of leaves. Research by the School of Forestry at Creswick in 1932 showed that it took 3,732 pounds (xx kg) of leaves to make 74 pounds (xx kg) of oil.

Most distilleries were mobile – large steel tanks transported by horse and dray – and could travel to wherever good leaves were plentiful and there was a reliable water supply, such as a river or creek, close by.

The Bendigo area had a plentiful supply of leaves but a shortage of water. This led to permanent 'eucy factories' being set up in the bush with dams dug to supply water. Most of the park's picnic areas are located on old distillery or homestead sites.

## **RUEDIN'S EUCALYPTUS DISTILLERY, KAMAROOKA**

This distillery site has an almost complete range of features associated with the production of oil here for almost sixty years by the Ruedin family. The distillery is listed on the Victorian Heritage Register [[Link](#)] for its importance in showing the process of oil distillation and for its association with what was probably Australia's first unique pharmaceutical product and export.

On site you can see workmen's quarters, a mallee roller, an old wagon, a crane, vats and dams, a condensing coil, a piece of earthenware pipe, and a Cornish boiler and boiler shed.

The following description draws on Kathryn Evans' *Cultural Landscapes of the Whipstick Public Lands, Bendigo*.

Aime Ruedin selected allotments 10 and 13 of section C, Whirrakee in 1910. In 1917, reports suggest that preparation of a 'eucy' distillery had begun but had been abandoned - there was a six foot vat and derrick (crane) on site.

In May 1917 Aime Ruedin appeared before the Local Land Board and described his property as follows.

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"I have put the following improvements on the block – 38 chains of fencing. 300 acres rolled by Sheeran and Co., clearing 100 acres of black mallee and cultivating silver leaf. House 30ft x 16ft x 10ft, 80 sheets of galvanised iron, excavating dam. I have the following machinery on the ground to establish a eucalyptus distillery: a worm – 20 pounds (value), derrick - 5 pounds, winch - 2 pounds, vat - 15 pounds, portable engine 8hp -75 pounds, saw bench – 10 pounds. I hold a licence for the manufacture of eucalyptus oil, but have not yet started operations."

By November 1917 the distillery was in operation and 300 acres of mallee had been rolled. The house was built of wood and iron and Ruedin had a lease of 44 years.

In the 1930s oil prices plummeted and the Ruedin family hit hard times. The block was suitable for nothing other than oil production and Ruedin was called upon for non-payment of rent. Interest payments were waived on the assurance that he would pay future instalments regularly when due. A grant for the land was finally obtained in 1946 and Ruedins continued to operate the distillery periodically until the 1980s.

## THE DISTILLING PROCESS

Ruedins site contains an almost complete range of plant used in the production of eucalyptus oil, including a water dam, distillation plant (vats and crane, condenser pit, coil and receiver pot, harvesting plant), sheds, workman's house, carts and a mallee roller.

## HARVESTING PLANT

Items on site include a large mallee roller, small rubber-tyred cart and large iron-wheeled wagon.

## DISTILLING PLANT

Wooden derrick (crane) still in position over two brick-lined vats. Both vats are sealed by concrete lids. Between the vats and a large

water dam are the condensing pits with pipes still intact and in situ.

## BOILER SHED

Corrugated iron, timber-framed boiler shed. The Cornish boiler is still set in an intact brick boiler setting. The boiler is there but without its fire door and valves. The shed also contains the foundations for small steam winches used in operating the crane.

At the back of the boiler shed there is a brick chimney stack base and the collapsed iron smoke stack. There is also the body of a portable steam engine and a large dump of boiler ash.

## OTHER BUILDINGS

To the north of the boiler shed is a small iron lean-to and a large four-roomed workman's house.

## KAMAROOKA FOREST CHARCOAL BURNING PITS

Charcoal production was another important forest industry around Bendigo. From 1916 the Noble brothers worked in the Kamarooka forest, now part of Greater Bendigo National Park, producing charcoal for use by a local ice works to line ice chests.

During WWII, as petrol was rationed, charcoal was used to produce gas as a substitute fuel for cars. Charcoal was also needed to produce gas masks and filtering equipment. Box-ironbark forests were favoured for charcoal production, and by mid-1942 there were at least two gangs of twenty men working in the Kamarooka forest. Pits in the ground, and earthen, metal and brick kilns, were used to produce the charcoal.

In Kamarooka forest there are remnants of six charcoal burning kilns of the old steel boiler type. The kilns are 1.65 metres in diameter and 2.1 metres tall.