HISTORICAL TREES OF GROWLERS CREEK GROVE

Growlers Creek Grove is dominated by nine magnificent trees that stand in a stately line, overlooking the confluence of the Morses and Growlers Creek valleys. A number of the trees have trunks with a circumference of around 4 metres and canopies with a diameter of over 25 metres. Their boughs have spread to such extents that, despite generous planting distances, the canopies of all nine trees have coalesced to form one continuous canopy



that stretches for well over 100 metres. Their bark has a beautiful retiform (net-



shaped) pattern with deep furrows running spirally in both directions up the trunk. In a good year, a single tree can produce over a ¼ of a tonne of nuts despite being hindered by encroaching neighbours. It is evident that these trees were propagated from nuts, as they all differ in growth habits and fruiting characteristics to a degree that suggests that they have never been grafted.

We believe the trees were planted in c.1874 and hence are around 140 years old.

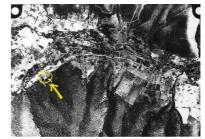
Factual findings combined with careful interpretation of the available circumstantial material provides a reliable account of the history of the oldest trees in our grove. The following is the result of our research into their history and age.

HISTORICAL PHOTOGRAPH

WHEN WAS THE PHOTOGRAPH TAKEN?

The trees appear in an aerial photograph dated c.1920. Dating the photograph as accurately as possible helped determine the age of the trees.

The photograph shows no pine plantations on the sides of the valley and no evidence of harvesting or clearing in preparation for planting. Pine plantations in



Wandiligong first appeared just south of Dougherty's bridge in 1917. Extensive plantings took place during the depression and by 1934 the pines went all the way to Deamon Ridge on the East side of the valley. Harvesting began in 1932, and the 1939 bush fires destroyed or damaged large parts of the plantations.

Remnants of what would have been Wises 'Golden Cross' Hotel can be seen in the photograph on the South side of the junction of Morses Creek and Williams Roads. The hotel was removed some time prior to 1912, and following its realignment in the 1960's Morses Creek road passed through the site. Though no complete building seems to be present, a definite right angle framed by vegetation suggests the recent existence of walls or fences.

There is no evidence in the photograph of the buildings and infrastructure that was constructed at the Williams United mine after 1934.

"The use of aerial photography rapidly matured during WW1, as reconnaissance aircraft were outfitted with cameras to record enemy movements and defences." 4 It is possible that, on returning from Europe, an entrepreneurial WW1 reconnaissance pilot continued to apply the skills acquired during the war.

We believe the photo was taken in the early afternoon sometime between the months of December c.1919 and April c.1920.

DATING THE TREES

The photograph clearly shows eight trees in a near perfect line above the steep hill at the rear of our grove with a ninth smaller tree offset between the third and fourth trees from the right. There is possibly a tenth tree on the far right (north) that is no longer alive. The diameter of the canopies can be scaled from the distance between the end trees and other landmarks using a surveyors plan. The largest of the canopies is



estimated to be about 16 metres in diameter. The canopy size suggests that the trees were in the vicinity of at least 45 to 50 years old at the time the photograph was taken. This would indicate that the trees were planted around 1870 to 1875.

Also clearly visible in the photograph is the lower section of our grove planted out formally on what is approximately a 7 x 7 metre planting grid. The position of these trees aligns perfectly with three remaining large trees that still exist there today. The size of the canopies suggests the trees were approximately 5 to 10 years old and were probably planted between 1910 and 1915. These trees are European / Asian hybrids with a very upright growth habit and a single central leader. Also, the smallest of the nine trees at the rear of our grove has a canopy in the photograph only slightly larger than the lower trees and a growth habit that differs from the other older trees nearby. This tree produces a very early crop, from mid to late March. We believe that it was grafted or replanted around the time the lower trees were planted in c.1913.

THE GROWTH OBSERVED ON PRUNINGS

A dead branch, extending from a major bough of one of the largest trees, approximately 4 metres from the ground, was removed in January 2014. The branch had lost all of its bark exposing greyed-off inner wood, indicating it had died probably 20 to 30 years ago.

The diameter of the branch at the collar, where there was still living bark, was approximately 250mm, a very small branch compared to others on the tree which reach a diameter of 500-600mm at the collar.



RELATIVE DIAMETER OF OFFCUT

DIAMETER OF DIAMETER OF OF OFFCUT

LARGER
BOUGHS

250mm
500mm
1200mm

Dendrochronology, or tree-ring dating, is the scientific method of dating based on the analysis of patterns of tree rings⁴. The offcut was cleaned with a planer and then sanded. Using a magnified digital image the growth rings that could then be easily counted, totalled 92.



The thickness of the growth rings was then measured and scaled, excluding the first two years, and the last two decades when the branch's health was in decline. The growth rate was then compared to average annual rainfall for Bright⁹ over the growing seasons, May to April, for the years 1882 to 2013.

Correlation was tested on the assumption that the branch could have started growing at any time during the 39 year period from 1883 to 1922 (i.e. 1922 plus 92 years = 2014). A standout correlation (96% higher than any other) is observed when the

initial growth of the branch is aligned with the rainfall from 1894; and growth terminating in 1986.

A straight forward test confirms this result. The ten year rolling average rainfall excluding the highest and lowest values has been calculated for every ten year period from 1891 to 2005. This shows that the ten years ending in 1945 were the driest on record for Bright. If this branch began growing in 1894 then the period from 1936 to 1945 corresponds with growth years 43 (i.e. 1936 *less* 1893) to 52. A simple casual observation of the growth rings shows that, over this exact period, the branch grew less on an annual basis than at any other time in its life except after year 70, when it began to die.

We can be almost certain that the branch removed began growing in 1894.

These old trees were propagated from seed and will have taken many years, and a reasonable degree of nurturing, to reach a height of 4 metres. It is apparent that the branch was an insignificant young shoot coming off another larger branch, probably not emerging until the tree was around 20 years old. This suggests a planting date of c.1874.

A PLAUSIBLE HISTORY OF THE PLANTING OF THE TREES

Growlers Creek Grove is at the end of Williams Road in Wandiligong on the East side of Growlers Creek. By at least the early 1870's numerous houses had been built on the flat beneath the hill where the old trees of our grove were planted, probably with the authority of a miner's right that "entitled the miner to 20 perches (500m²) of land on which to erect a dwelling." Among them were the homes of Hannibal and Margaret Orchard and John and Catherine Brennan. The two men operated the Cornish United Mine with Charles Meuleman who lived just over the creek on Growlers Creek road¹¹¹. Other



nearby homes were those of John and Eliza Symes and possibly Thomas and Catherine Robinson. The hill is now part of Growlers Creek Grove, but remained public land until 1945 when a crown grant was purchased by Charles Williams (Son of George and Mary) for 10 pounds 10 shillings.

These nine grand trees were planted high off the valley floor on steep, well drained soil. They have broad spreading boughs with rounded dense crowns, erect catkins (male flowers) and other characteristics that strongly indicate they are of European, probably Italian origin (Castanea Sativa / Vesca / Vulgaris).

ITALIANS AND CHESTNUTS

A young Italian immigrant would have known that chestnut trees grow well on steep elevated ground. They would have also been naturally inclined to plant the trees on public land to replicate the *castagneti* (chestnut woods) that fill entire valleys in Northern Italy, where chestnuts have been culturally and economically significant to whole communities for centuries.

The same young Italian immigrant would be aware that chestnuts planted as seedlings can take up to twenty years to produce a meaningful crop. So for an itinerant miner trying his luck in the goldfields, there would be little point in planting and caring for a single tree, much less a row of nine. The planter of these trees would almost certainly have been someone intent on settling permanently rather than just passing through.

Given the early presence of Italian immigrants in the area, it is very likely that one of these sought to recreate a culture of chestnuts in their new home by planting the trees that dominate our grove.

THE FIRST ITALIANS

Battista De Piazza

The first gold to draw diggers to the Upper Ovens district was found on the Buckland River in 1853. "The earliest presence of Italians" in North East Victoria "was brought about by the discovery of gold at Jamieson in 1854". "Battista De Piazza came to Victoria in 1863 aboard the S.M. Vittorio" "from the Ticino in the far North of Italy." He "walked from Melbourne to Wandiligong (then Growlers Creek) where he worked in the gold mines" at a time when "a fairly fast trip from the city to Growlers Creek in ... a wagon ... took 14 days."

He "married Catherine O'Brien at St. Joseph's, Beechworth in 1870"² and then settled in the area. "His great contribution was that he planted a large number of chestnut trees" near Beechworth. He "was also instrumental in setting-up the Myrtleford Butter Factory Co-operative Company in 1903."¹

"He died of pneumonia at the age of 66 in 1909."2

Charles (Carlos) Lardi

Charles Lardi was born in 1831 in Poshiavo in the Bernina region of Switzerland, close to the Northern Italian border and less than 100km east of the Ticino. He married "Mary Tully in 1862 ... and they had 12 children" He applied for a crown

lease in 1865 over 20 acres of land in Growlers Creek situated south of the Royal Hotel near Taylors Bridge.

Charles "first began in gold mining but moved to fruit growing," managing "a wine and spirit licence as well as the general store." This store was purchased from Phil Orchard in 1870, the brother of Hannibal Orchard of Williams Road. It is possible that his range of produce or 'fruit growing' would have at some stage included chestnuts. "Foreign chestnuts" were readily

APPLICATIONS FOR LIUENSES TO OCCUPY CROWN LANDS,
UNDER THE 42ND SECTION OF THE LAND ACT, 1805.

I HEREBY give notice that I have, this day, made application, under the 42nd section of the Land Act, for a Lease of Twenty Acres of Land, on the east side of Morse's Creek, nearly opposite Taylors, and about one mile south of the Royal Hotel, Growler's Creek.

CHARLES LARDI.

Growler's Creek, June 8th, 1865.
568 1094

Ovens and Murray Advertiser (Thursday 15 June 1865, page 1)

available for purchase from at least 1851, "... large quantities ... being imported ... from abroad, comprising entire cargoes ..., the produce of the Channel Islands, France and Spain." 10

In c.1881 Charles purchased a drapery store from Antonio Masciorini which continued to be run by the Lardi family until "about 1910 when business declined"¹², at which point it was consolidated into the general store. Charles died in 1912 aged 81, and in "about 1918 the business was sold to Tom Williams"¹², son of George and Mary Williams who resided in Growlers Creek Road until around 1915.

Antonio Masciorini

"One of the earliest Italian settlers in the Bright area was Antonio Masciorini who came to Australia in 1859" from Lavetezzo, also in the Ticino, an Italian Geographic Region in Switzerland. He was born in July 1841 and left the Ticino at the age of 17, five years after Austria imposed an economic blockade on the area. "He first worked on the Gabo Island Lighthouse and later as a miner in Bendigo."



Sometime before July 1866 in Growlers Creek Antonio "Masciorini first opened a \dots tobacconist's business in a little

shop adjoining the Alpine Hotel". ³ He also dabbled in the hiring out of billiard tables owned by the licensee of the Alpine, Alexander Cathcart, to hotel patrons.

"In 1867 he purchased" "Manton's Drapery Store" located on the East side of the junction of Morses Creek and Williams Roads and next to the Bakery ran by Robert Tobias. "A photograph shows ... the name A. Masheoreny" on the store, obviously in an attempt to have his surname pronounced correctly.

Antonio married Emma Gray (nee Miller) on the 5th of January 1869. She was a young widow with a 2 year old daughter, Evalina, who was then raised by Antonio and Emma. A son, Alfred Ernest was born on 1st of February 1870, but died at 6 weeks from a "bowel" condition.

MARRIAGES. MARRIAGES. MARRIAGES. Marriorsy-Gray. By the Rev. W. Corbet Howard, at Beechworth, Antonie Masheoreny, to Euma, widow of the late Robert Gray, of Edinburgh, Soutland, and eldest daughter of Emanuel Miller, Esq., of Richmond, N.S.W.

The Argus (Melbourne, Vic.: 1848 - 1957), Tuesday 5 January 1869, page 4 The drapery store was advertised for sale in The Argus newspaper on the 23rd of April 1881 and was sold to Charles Lardi presumably sometime shortly thereafter. Antonio relocated to Bright where he settled permanently, opening a new drapery store. After the premature death of

of Wandiligong, Storekeeper.

TENDERS will shortly be invited for the ASSETS in this retate, consisting of valuable freehold and brick built store, stock-in-trade, horses, waggons, &c., ick built store, and block debta.

Full particulars in future issue.

EUROYD, DANBY, and GILMOUR,

Trade Assign The Argus (Melboume, Vic. : 1848 - 1957), Saturday 23 April 1881, page 7

Emma in 1891, he married Francis (Fanny) Edwards in 1892. Fanny gave birth to a son, Albert Francis, in 1893. Antonio died in 1908 from 'peritonitis'.

WHO PLANTED THE TREES?

Battista De Piazza, Charles Lardi and Antonio Masciorini almost certainly lived in 'Growlers Creek' (Wandiligong) simultaneously for at least a few years in the late 1860's. They were of similar age, Charles born in 1831, Antonio in 1841 and Battista in 1843. The two youngest men came from the Ticino region, where chestnuts had been a central part of food culture for thousands of years. In fact, this region (Insubria) was the only "centre of chestnut cultivation that existed in Europe during the Roman period."8 It is almost certain that the three men would have at least been acquaintances, if not very good friends that shared a common language and heritage from which they were now very isolated.

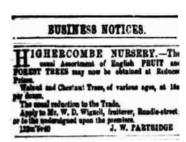
Antonio was married in Beechworth in 1869, and Battista in Beechworth in 1870. Battista is remembered for the planting of chestnuts around the Beechworth area where he chose to settle. Charles Lardi was busy managing his store and, had he been inclined to plant chestnut trees, would have done so on his crown lease of 20 acres.

The drapery store run by Antonio between 1867 and c.1881 was located on the East side of the junction of Morses Creek and Williams Roads, less than 500 metres walk from the chestnut trees planted high on our block. This location was, in fact, the closest to his drapery store that was very suitable for chestnuts and not privately owned or leased.

Antonio had obviously decided to settle in Growlers Creek when he purchased the drapery store. His marriage 2 years later to Emma would have reinforced his permanence in the valley. This is underlined by the fact that at least until 1987, the drapery store was still being operated in Bright by his grandson John Masciorini, who died in Bright in 2000. In contrast, the latest records in the Bright Cemetery for those families that were living nearby in the 1870's, are 1899 for Orchards, 1911 for Brennans, 1918 for Robinsons and 1905 for the Symes.

However, the decline of gold mining by the mid 1870's had impacted negatively on local prosperity and the level of population, and would have, without doubt, been an influential factor in his decision to relocate to Bright in c.1881. It would be likely therefore, that a decision by him to plant and tend to young chestnuts would have been made prior to the mid 1870's rather than after.

Chestnut trees were available at least in the major cities of the colony from nurseries that began advertising them for sale as early as 1860, grafted varieties from 1865. It seems that around this time, there were great expectations for the future of chestnuts trees in the colonies. An article in the Irrewarra Mercury of Wollongong in 1864 observed "in what great estimation the … chestnut is held in Europe" and asks "why should it not hold a similar place here, in a country so adapted for it." The Australasian in 1865



South Australian Register (Adelaide, SA : 1839 - 1900), Friday 11 May 1860, page 1

concluded that "next to the platanus (plane tree), the sweet chestnut may be considered the finest deciduous tree we have". By the 1870's however, nurseries seem to have ceased advertising chestnut trees for sale, perhaps due to the realisation that the suitability of conditions was, in fact, very limited. The shallow soils, low rainfall and warm winters would have resulted in a poor success rate for plantings, poor crops and many disappointed customers. North East Victoria, and in particular, the upper Ovens Valley was the main exception.

Chestnut seedlings, though more likely nuts, would have easily been sourced by Antonio through an acquaintance with Battista De Piazza in Beechworth or possibly nearby from Lardi's store. The planting of them, on the side of a steep valley on public land, would have been less likely motivated by the promise of financial reward than a nostalgic and culinary desire to replicate the chestnut forests of his childhood in Northern Italy. An enduring emotional attachment to the land of his birth is evidenced by the fact that his grave is marked by a white marble monument upon which sits a cross that was made in Italy.

It is not hard to imagine the young Italian storekeeper closing his shop and taking an evening summer stroll along police paddock walk to water and tend to the seedlings that he'd planted the previous winter.

Hannibal Orchard, 1 year junior to Antonio and with 5 children under the age of 7, probably spent many evenings relaxing after a hard day mining, observing the progress of the trees planted by the Italian 100 metres up the hill from his back door.

THE WILLIAMS FAMILY

Williams Road is named after the Williams family who originally resided on Growlers Creek Road near the Home Reef mine. "George Williams..., with his sister Delia, migrated from England and landed in Sydney from where he made his way to Wandiligong via Beechworth" 12. George married Mary Ann Turner and together they had 10 children in 24 years, the oldest being Charles.

In 1881, 3 years after Charles Williams was born, the population of Wandiligong was 1105⁶. After decades as the source of prosperity, the goldfields were exhausted and families relocated to find work. By 1966 the population had fallen to just 132⁶.

About the year 1879 a slump commenced, and the flood tide of prosperity began to ebb. The good reefs were running out, few fresh ones discovered; so the miners departed to fresh fields, and the outlook was dismal. The shopkeepers and publicans put up their shutters, and the fields were left to individual prospectors and fossickers.¹¹

Charles married Edith Hedge in 1912 and moved into a house on Williams Road next to the old Orchard house. This house was probably built in the mid 1890's by Harry Tobias, a nephew of Robert Tobias who ran the bakery at the junction of Williams and Morses Creek Roads.

Charles and Edith were busy with a growing family during the 1st World War. During these years, as neighbours continued to leave the valley, abandoning their homes and digs, the Williams family gradually took occupation, in some form, of much of the land in Williams Road.

It was around the time of moving into his new home that Charles planted chestnuts on the flat at the foot of the hill in c.1913. In 1945 he obtained ownership of the land on which the chestnut trees were planted and sometime shortly thereafter planted four more trees on the hill immediately in front of the old trees. Charles died in 1964 leaving Edith the sole occupant of their house in Williams Road.

Edith died sometime before 1978 when title to the chestnut block passed to their daughter Mary (Molly) who had married Lewis Charles Reynolds after WWII and settled in Bentleigh East. We made contact with a 90 year old Lewis Reynolds in January 2014. Sadly, Mary had died 12 years earlier, and today there are none of the immediate family of Charles and Edith Williams still living.

Lewis could recall visiting Wandiligong, and many details about the Williams' residence, walnut trees, vegetable patch, apple orchards and, of course, the chestnut trees. He had memories of the old trees on the hill that were "substantial" in size, but

explained that his attention was often focussed on the removal of countless spikes from his fingers from the prickly burrs. Neither he nor Mary had any knowledge of who had planted the trees.

Lewis and Mary's youngest daughter, Alison, recalls being ready for bed, pyjamas on, and her grandad Charles, placing chestnuts in a pot on the fire for a warm roasted treat before bed. Of course the thing was, as with all kids, the biggest nut was the best.



THE TREES TODAY AND THEIR NUTS

The old trees today dominate Growlers Creek Grove and are all in good condition and produce large crops of nuts. Two of the large trees on the hill were grafted sometime in the early 1980's. They were regrafted in 2011 to the commercial variety, Bouche de Betizac, first named in 1962, carefully preserving what remained of their original canopies. The most northerly and smallest of the old trees on the hill was grafted to Red Spanish in 2001. We believe the previously mentioned old tree that is slightly offset to have been grafted to a variety very similar to the commercial variety Noxurli in c.1913.

The rest of the old trees, and the three trees lower on the block, remain as 'seedlings' producing nuts as they have done for up to 130 years. Their branches, having never been grafted, reach out from the enormous trunks in search of enough light to bear fruit. Though the crops off some of the old trees lack certain desirable attributes of grafted varieties (mainly size), they are nonetheless very good chestnuts.

The two largest of the old trees and one on the lower ground produce crops that rival some of today's best grafted varieties. These three "heritage varieties" are: Ruby Tuesday, Ticino & Williams and are available for purchase online.

AN ITALIAN'S VISION

A 33 year old Antonio Masciorini is the most likely cultivator of the stand of old trees at Growlers Creek Grove, with the intention of recreating some of the culture and tradition that framed the memories of his childhood in the Ticino in Northern Italy. Charles Williams built on Antonio's vision by planting more chestnut trees both on, and at the foot of the hill between 1913 and 1950.

Our contribution over 17 years has been the grafting of younger trees to commercial varieties, planting many young trees grafted to the same varieties and terracing the steepest parts of the hill to make them more manageable. This work has all been done in accordance with basic organic principles in a manner probably very typical of the way *castagneti italiani* (Italian chestnut woods) have been managed for many centuries. Today, Growlers Creek Grove has matured to become very reminiscent of such woods, perhaps realising the distant dream of a young Italian immigrant who planted his precious nuts on a scrubby hillside in c.1874.

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