

## Greening Bathurst's Scenic and Natural History Tour 3 in the Bathurst Region



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## Welcome to Greening Bathurst's Scenic and Natural History<sup>1</sup> Tour 3 of the Bathurst Region.

This tour traverses a small part of Wiradjuri Country that, before European settlement, had been managed by Wiradjuri for around 22,000 years (the Holocene). This tour is mainly within the city limits.

This tour and other planned tours will allow you to understand the Bathurst landscape better, enjoy its scenery, and become familiar with aspects of the ecology, geomorphology, hydrology, geology and human history of this ancient land.

This 18-site tour (including eight sites on the Mount Panorama/Wahluu Boardwalk) covers a distance of about 50 km (**Figure 2**). It will take around 3- 5 hours to complete depending on how long you choose to stay at each site, or approximately 2 hours if you adopt a 'whistle-stop tour' approach!

Period <sup>□</sup>	Epoch <sup>□</sup>	Age <sup>1</sup> <sub>□</sub>
Quaternary <sup>□</sup>	Recent <sup>□</sup>	0.01 <sup>□</sup>
	Pleistocene <sup>□</sup>	1.8 <sup>□</sup>
Tertiary <sup>□</sup>	Pliocene <sup>□</sup>	5.3 <sup>□</sup>
	Miocene <sup>□</sup>	23.5 <sup>□</sup>
	Oligocene <sup>□</sup>	36.7 <sup>□</sup>
	Eocene <sup>□</sup>	58.0 <sup>□</sup>
	Palaeocene <sup>□</sup>	66.4 <sup>□</sup>
Cretaceous <sup>□</sup>	□	144 <sup>□</sup>
Jurassic <sup>□</sup>	□	213 <sup>□</sup>
Triassic <sup>□</sup>	□	248 <sup>□</sup>
Permian <sup>□</sup>	□	286 <sup>□</sup>
Carboniferous <sup>□</sup>	□	354 <sup>□</sup>
Devonian <sup>□</sup>	□	410 <sup>□</sup>
Silurian <sup>□</sup>	□	434 <sup>□</sup>
Ordovician <sup>□</sup>	□	490 <sup>□</sup>
Cambrian <sup>□</sup>	□	545 <sup>□</sup>

<sup>1</sup> Age: Millions of Years Ago (Ma)<sup>□</sup>

**Figure 1: Geological time periods.**

You will travel through 'deep -time' from the present (Anthropocene<sup>2</sup>), view ancient volcanic flows (19 Ma - million years ago) and stand on an old bed of the Macquarie/Wambool River. You will spend most of the time on landscapes, soils and sediments derived from the Bathurst granite (310 Ma). Refer also to the geological period times (**Figure 1**).

Good mobile phone coverage is available throughout the route. Remember to take a first aid kit with you, food and water and please heed safety warnings provided in the notes below.

You can purchase morning tea or lunch at various locations in Bathurst.

These tour notes have been prepared in good faith. However, the onus for safely navigating the route is entirely in the hands of the car driver and passengers who choose to traverse the suggested route. Neither Greening Bathurst nor Bathurst Regional Council accept any responsibility for any adverse outcomes suffered as a result of participating in this tour.

The tour traverses only public roads/tracks and public spaces. This guide does not provide permission to trespass onto private land or climb over fences onto private areas, however enticing that possibility. Please be mindful and view sites safely from a publicly owned

<sup>1</sup> Natural History in the 18<sup>th</sup> and 19<sup>th</sup> centuries was the observation of nature in all its forms including geology, flora and fauna and astronomy. It was often synonymous with museum and personal collections of natural objects e.g. butterfly collections. Outstanding Natural Historians such as Charles Darwin were also scientists, men and women who sought to see patterns and processes at work in nature rather than just objects in a collection. These were the first professional scientists.

<sup>2</sup> Anthropocene-the recent geological period when humankind has had the power and capacity to significantly impact global systems.

property or safe roadsides. Tours 1-3 are like pieces of a jigsaw; each contributing to a better understanding of the Natural History of Bathurst and can be undertaken in any order.

## Useful Apps

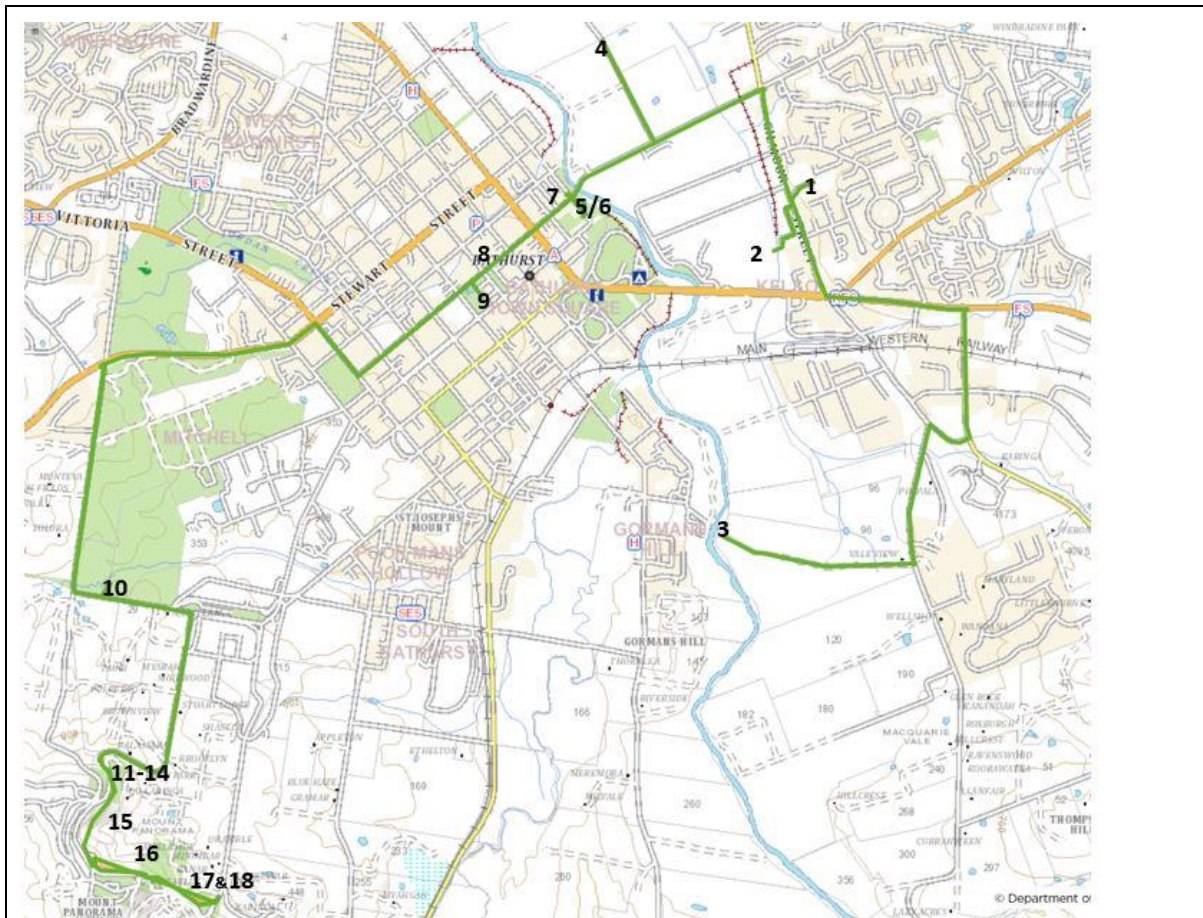
**Bird Identification** A pair of binoculars and a bird ID book would also be helpful to have on hand. Alternatively, download onto your phone from the App Store: “Michael & Stewart Guide to Birds of Australia” @ \$29.99, or the ‘lite’ version with only 59 listed species: “The Michael Morcombe eGuide to the Birds of Australia” for free.

**Geoscientific data** If you have an iPad/laptop you might like to download for free the package ‘MinView’ from

<https://minview.geoscience.nsw.gov.au> (version 2).

It is also possible to download MinView to an iPhone, laptop or iPad so that no Wi-Fi or mobile reception is required for use once downloaded. One can also access base maps, aerial photography and satellite imagery within MinView. These interactive geology maps display a range of information. Touch the screen to reveal the name, description, age, lithology and environment of formation of the underlying rock type.

**Eucalyptus identification** The ‘Euclid’ App was produced by CSIRO and enables users with little botanical training to readily identify Eucalypts, including species from the recently split-off Corymbia genus. The App also includes those species in the Angophora genus. The App uses readily observable characteristic of each tree species and can be downloaded from either GooglePlay or Apple App Store for around \$20 for iPad or mobile.



**Figure 2: Approximate geographic location of sites on Scenic and Natural History Tour 3. The distance between Site 1 (Holy Trinity Church) and the Boardwalk Lookout on Mount Panorama/Wahluu is about 8 km.**

## Site 1: View of Bathurst Plains from Holy Trinity Church Grounds

**Northings:** 6300010; **Eastings:** 742060; **Elevation:** 670 m: 71-85 Gilmour Street Bathurst.

### Directions

From the Great Western Highway, turn into Gilmore Street, travel north about 750 m and turn right into the Holy Trinity church grounds. Use the parking lot and walk across to the front of the church entrance to take in the panoramic view looking west.

### Site Description

Holy Trinity Anglican church (**Figure 3**) was dedicated in 1835, the first Christian place of worship west of the Great Dividing Range. It was then part of the Diocese of Calcutta. The rectory was built later and designed by Edmund Blackett. The cemetery dates from the 1820s. Charles Darwin visited Bathurst soon after the church was finished and noted. *There is a hideous little red brick church standing by itself on a hill* – Darwin is entitled to his opinion. Take time to read some of the historic headstones that date from 1830.

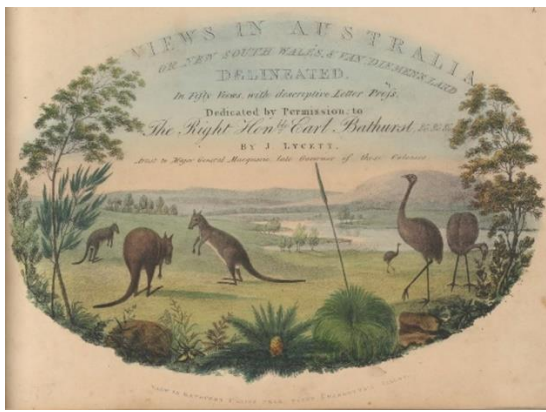


**Figure 3: Holy Trinity Church, Kelso, consecrated in 1835.**

In 1820 Kelso was established on the eastern side (referred to as 'right' bank in colonial times) of the Macquarie/Wambool River, separating it from the fledgling township of Bathurst. Flat-bottomed punts were the only means of crossing the river. But we are at this site mainly to take in the expansive view across the now farmed floodplains through to Mount Panorama/Wahluu 8 km to the southwest and the much smaller Queen Charlotte Vale<sup>3</sup> Creek.

The Macquarie River is at 655 m. The Macquarie River through Bathurst drops about 1m every kilometre of the river reach. The long-diverted Queen Charlotte Vale Creek now enters the Macquarie River near the railway bridge, about 600 m south of its one-time confluence. The colonial convict artist Joseph Lycett captured the pristine beauty of that small river valley in the 1820s (**Figure 4**), illustrating one of the series of Bald Hills that included Mount Panorama/Wahluu on the right-hand side of his painting. The floodplains were treeless because they were too wet for trees to grow. The Bald Hills were treeless in their higher sections, likely kept so by Wiradjuri burning, indicating that the Bald Hills were of great cultural/spiritual significance to the Wiradjuri people. The floodplains continue south about 9.25 km to the junction of the Fish and Campbells Rivers and downstream for a further 9 km to the vicinity of Abercrombie House. These were part of the fabled Bathurst Plains that captivated the hearts and minds of early European explorers and settlers. We now recognise that the farmed river flats in 1815 were treeless plains and wetlands, long since drained to increase the European concept of agricultural productivity.

<sup>3</sup> Vale refers to a small valley, usually feeding into a larger valley.



**Figure 4 Joseph Lycett, a colonial convict artist captures the spirit of Queen Charlotte Vale Creek c 1820**

East of Holy Trinity Church is the undulating Bathurst granite country, now graced by the suburb of Kelso. Immediately west of the Macquarie/Wambool River is an ascending series of river terraces on which the city is built. The terraces were once part of the floodplains of the ancient Macquarie River as, over millions of years, it slowly and surely cut its way down through the granite country to form the impressive Macquarie River Valley. These landscapes in 1815 were dominated by very open woodlands, now identified as the critically endangered Yellow Box-Blakely's Red Gum Grassy Woodlands (Box-Gum Grassy Woodlands).

The mean distance between woodland trees in 1815 was likely of the order of 40-50 m. The headwaters of this river valley commence at around 1200 m and in winter allow icy air to flow through Bathurst from the Great Dividing Range. Take time to try and identify various components of the built environment and associated infrastructure that stretches out before you in this impressive landscape panorama.

## Site 2: Raglan Creek Floodplains and Flood Levee

**Northings:** 6299633; **Eastings:** 741834; **Elevation:** 675 m.

### Directions

From Holy Trinity Church, turn left onto Gilmore Street and immediately right into Dorman Place, following the road through to the southern end of the sporting complex where you can park your car. Walk over the levee bank and cross the bridge spanning what remains of a very much changed and tamed Raglan Creek and associated floodplains and wetlands.

### Site Description



**Figure 5: The northern half of John Oxley's map (1815) of William Cox's road built-in 1814/15, from the Nepean River through to the Bathurst Plains.**

Raglan Creek is now a very much modified and contained remnant of a previously expansive wetland system, significantly changed from 1815 via drainage systems associated with extensive built infrastructure and European farming practices. The creek rises via several tributaries in the Raglan area further east of the city. A cross-section of the layers deposited in the river basin since the end of the ice age around 15,000 – 20,000 years ago is provided in **Figure 7** below. Multiple flow lines were once present throughout the floodplain/treeless plains fed by numerous tributaries, including Raglan Creek.

The extent of these treeless plains is illustrated in **Figure 5**. This illustration is part of John Oxley's map of Coxs Road (the red line) coming into the newly proclaimed Bathurst settlement (the red dot). The bluish line represents the Macquarie River. The greenish tinged areas demonstrate the extent of the fabled Bathurst Plains. These were the wetland/floodplains running from the junction of the Fish and Campbells Rivers through to Abercrombie House downstream of Bathurst. The various components of the Bathurst Plains were named by George Evans in 1813. This particular map (**Figure 5**) is the first European inland map of Australia and was discovered by local historian Dr Robin MacLachlan before the Bathurst bicentenary celebration in 2015. Presumably, Oxley and Evans did the surveying and chaining work to map the Bathurst wetlands/plains.

The area of wetlands/floodplains is about 160 km<sup>2</sup>. Meanders (**Figure 6**) and lagoons (**Figure 7**) were once a common feature of the plains, the level of water within a lagoon directly related to the height of the water table within the floodplains. One of the few remaining lagoons, which lies in an old river paleochannel<sup>4</sup>, is located on the western bank of the Macquarie River halfway between the Eglington Bridge and Apex Park, off the Ophir Road. However, it will soon disappear as a proposed development will destroy it.



**Figure 6: Raglan Creek on the Bathurst floodplain illustrating the meanders of an ancient creek. Photo – Chris Marshall.**

Under high flows, a significant portion of the flow along Raglan Creek is now diverted to the Macquarie River to prevent flooding the Great Western Highway near the Bunning's turnoff. The floodplains in this section of Bathurst between the Great Western Highway and Hereford Street are dominated by mostly playing fields. Bathurst Regional Council has also had a long-term policy of removing houses and preventing further housing subdivisions on the floodplain. At this point, we can also see the flood levy running on the eastern boundary of Raglan Creek at a height that will prevent flooding in response to a one in a hundred-year flood event. These extensive floodplains once attracted thousands of wetland birds of numerous species, including the now rarely seen Magpie Goose and Brolga.

<sup>4</sup> A paleo channel is a remnant of an inactive stream channel that has been filled by younger sediments.



**Figure 7: Three lagoons formed by breaking away from the stream meander. Photo – Chris Marshall.**

Once Bulrushes/Cumbungi (*Typha* spp.), the Common Reed (*Phragmites australis*), sedges, and rushes dominated these wetlands but are now primarily confined to the bed and banks of the Raglan Creek and the Macquarie/Wambool River. Wiradjuri used the stems and leaves of Cumbungi and reeds for weaving and rope making. Many parts of both plants were edible, and the tubers made into flour - Cumbungi needing special treatment to remove toxins. Unfortunately, Australian farmers have never learned to value these high protein plants instead treating them as weeds to be eradicated.

### Site 3: Bathurst's 1890s Groundwater Supply Tunnel

Northings: 6297595; Eastings 741368; Elevation 681 m.

#### Directions



**Figure 8: Shaft B (tunnel air shaft) east side of Macquarie River weir**

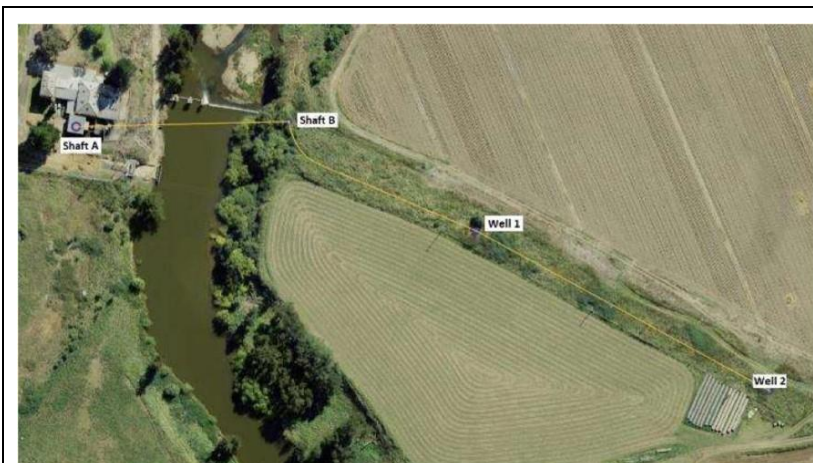
Return to the Great Western Highway, turning right at the roundabout onto O'Connell Road/Littlebourne Street, travel approximately 950 m to the junction with Lee Street, turning right and then hard left onto White Rock Road. Continue around 750 m before turning right at the hedged house "Vale View" onto an all-weather dirt track. This easement is owned by the Bathurst Regional Council. The route will take you about 1.4 km across the farmed floodplains between existing sheds, to the Macquarie River, directly opposite the Water Treatment Works. Bathurst's water supply is extracted from the river at this location. Park your car about 50 m from the river and then walk the remainder of the track turning right near the river when a brick tower, Shaft B, (Figure 8) will come into view. You will also see the weir wall across the river that dams the water for extraction.



## Site Description

This extraordinary piece of industrial archaeology<sup>5</sup> has recently been brought to our attention by the sleuthing work of Norman Wise<sup>6</sup> (**Figures 9 & 10**), a geotechnical and water engineer and also a member of Greening Bathurst. It is perhaps one of the two most significant discoveries in Bathurst's recent history (See **Figure 5** for the other). The tunnel is located under the Macquarie River floodplain, opposite the Bathurst Regional Council's water filtration plant at Gorman's Hill. **Figure 10** shows the weir and Shaft B, the cylindrical brick tower you are looking at. This tower is an air shaft that extends down to the tunnel in the granite bedrock. The tunnel's location is illustrated in the cross-section (**Figure 9**) by the solid dark blue and dotted lines and lies about 20 m underground. The tunnel runs under the river in line with Shaft A and Shaft B and extends some 300 m further to the east. The tunnel was excavated through solid granite and is brick-lined. It is 2 m high and 1.5 m wide.

The tunnel was constructed from 1889-1913, is nearly 480 m in length and extends halfway across the floodplain you have just driven over. It includes five deep shafts/wells. Holes drilled in the tunnel's roof up into the gravel aquifer allowed groundwater to drain into the tunnel. The tunnel acted as a groundwater infiltration gallery that delivered water to Shaft A (19 m deep) on the western bank of the Macquarie River in the old Bathurst water filtration plant. The water was pumped to the surface via Shaft A (See photograph 1 in **Figure 9** above).



**Figure 10: Aerial view of the Bathurst Water Tunnel location showing the sites of Shafts A & B and Wells 1 & 2. Photo: Norman Wise.**

The Bathurst town water supply was once wholly dependent on groundwater from the tunnel whenever the Macquarie River stopped flowing, which was very frequent at that time. The tunnel supplied between 1-3.6 ML per day, dependent on the river flow and height. The Bathurst Council tunnel scheme appears to have operated as a source of town water until the 1950s,

when flows in the Macquarie River became more regular due to more reliable rainfall at the time and the completion of the Chifley Dam in 1956. This system operated for many years until the 1980s and supplemented raw water supplies from Winburndale Dam for parks and gardens. The pump in the raw water Shaft A ceased to be used after 2004.

<sup>5</sup> The discipline of studying past industrial sites and infrastructure

<sup>6</sup> Wise, N. (2021) History of the Bathurst Regional Council's Historic Old Tunnel Water Supply system. Unpublished report.

### Bathurst Water Filtration Plant - Geological Cross-section Along Old Groundwater Infiltration Wells & Tunnel

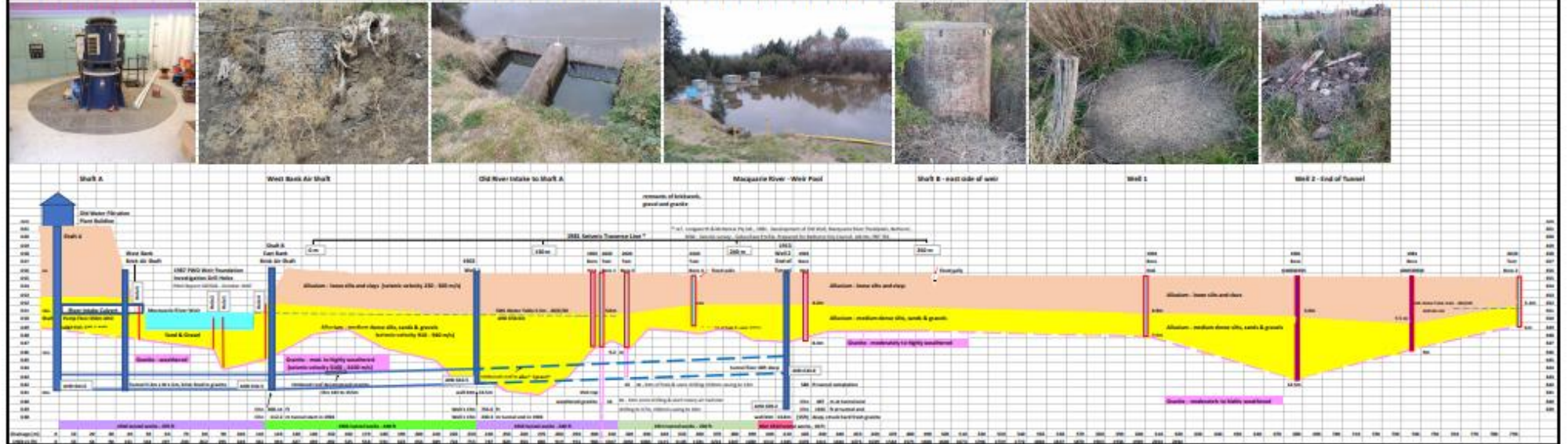


Figure 9: Cross-section of the Bathurst Water Tunnel showing Shafts A & B, and Wells 1 and 2, and associated photos. Drawing – Norman Wise

**Figure 9** above shows a geological cross-section across the Macquarie floodplain. The underlying granite bedrock (pink line) profile is 310 Ma. The yellow cross-section represents the sand and gravels washed into the Bathurst basin during the last ice age that today contains the groundwater. At that time, there was little vegetation to prevent massive sheet and rill erosion. Whilst there was no ice or glaciation, temperatures were low and the climate at the time is best described as periglacial. From 15,000 – 10,000 years ago there was gradual warming of the climate and the development of more vegetation cover across the landscape. The light brown cross-section represents the silts and clays (finer grained alluviums) deposited in the river valley since the ice age over the past 10,000 years. During this time the floodplain was probably characterised by a slow moving, meandering river flow that produced a series of wetlands, billabongs and lagoons. In this period, eucalypt woodlands and forests became the dominant vegetation group in the catchment as the climate warmed. The cross-section demonstrates three different river forms for the Macquarie/Wambool over time: the complexly braided<sup>7</sup>, coarse sedimented ice age river; the meandering, and fine soiled post ice aged river; and the incised single channel of the modern river. The Macquarie River today is in effect two rivers, a visible surface river and an underground river within the deep gravel layer that the tunnel drained in the past.

The cross-section also helps us understand why the Bathurst Plains were treeless - referring predominantly to floodplains that periodically became water-saturated. These conditions did not allow trees to grow. Spare a thought for the council workers who constructed the underground tunnel in solid granite. They were working with steam-operated jackhammers in confined spaces and very unsafe conditions, liable to rockfall as well as being burnt by steam if hoses to the jackhammers burst. These workers likely died of dust-initiated lung diseases and suffered hearing loss. At best, they were lucky to progress the tunnel more than 0.5 m/day.

#### **Site 4: Old Brick Pit Wetland**

**Northings:** 6301167; **Eastings:** 740613; **Elevation:** 677 m.

#### **Directions**

Return to the Great Western Highway. Turn left towards Bathurst and then right at Gilmour Street. Travel north about 1.5 km to the intersection with Hereford Street, turn left, travel about 0.84 km, and then turn right along Edgells Lane. Travel along the lane about 800 m until you come to the three interpretation signs on the right-hand side of the road.

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<sup>7</sup> Braided river is a network of small channels separated by temporary islands as the river channels wandered across the floodplain.

## Site Description



**Figure 11: Interpretation signs at Old Brick Pit Wetland.**

The floodplain (**Figure 11**) has been farmed for around 200 years. At this location, we are midway between Raglan Creek, now confined to a constructed channel at the eastern edge of the floodplain and the Macquarie River. Gilmour Street and its northern extension, the Eleven Mile Drive, more or less defines the boundary of a one in a 100-year flood and the eastern edge of the Macquarie River floodplain.

Immediately in front of the Interpretation signs are the remains of the old brick pit (c the 1970s). Clays were extracted, shaped into bricks and then fired. Much older brick pits are located on Stephens and Church Lanes, their clays producing the red sand-stock brick so prevalent in early colonial brick buildings in Bathurst. The pit effectively acts as a lagoon, enabling an observer to determine where the water table level is under conditions when the floodplain is saturated.

Whilst the pit can be partly filled by rainfall, it relies mainly on recharge held within the floodplain. The floodplain requires a one in fifty-year flood for the brick pit to contain water for lengthy periods. Under the very changed circumstances in 2021, the pit is now an ephemeral wetland, a human-made lagoon. However, when filled with water and the surrounding areas are waterlogged, this area becomes a haven for many waterbirds, some even breeding. About 100 bird species have been identified near this location under optimal conditions, the majority birds of wetlands.

Stop and think about the relationship between this site and Sites 2 and 3. Site 4 is a continuation of the Bathurst floodplains/wetlands but now in a much-degraded condition. The once wet meadowlands, swamps and lagoons were drained and subsumed as agricultural land. The cross-section of the floodplain illustrated in **Figure 8** also applies to this section of the floodplain, but likely with different dimensions.

## Site 5: Flag Staff – Bicentennial River Park

**Northings:** 6299955; **Eastings:** 740449; **Elevation:** 686 m.

### Directions

Return to Hereford Street, turning right, crossing the low-level bridge that spans the Wambool River. Immediately turn left at the roundabout into Stanley Street, travel about 150 m and turn right into the parking area opposite the Flag Staff – located within the Bicentennial River Park. Walk across to the Flag Staff constructed in 2015 to celebrate the proclamation of Bathurst in May 1815 by Governor Lachlan Macquarie. Take time to read the plaques and to reflect on the Wiradjuri symbols.

### Site Description



**Figure 12: John Lewin's 1815 'Watercolour of the Bathurst Plains' showing Governor Macquarie's Bengal Tent and the Flag Staff.**

Imagine that it is May 1815. The colonial artist/naturalist John Lewin looks southwest from the other side of the Macquarie (the eastern bank) and sketches the painting illustrated in **Figure 12**. The low hills and foot-slopes of the Mount Panorama/Wahluu complex are visible on the horizon. The light breeze appears to be coming from the north.

Macquarie's entourage is camped on the river terrace in the heart of the undulating treeless Bathurst Plains. In the forefront is the edge of what may have been a minor flood channel or possibly a lagoon. About 1 or 2 km back can be seen a band of trees on higher ground. The tops of River She-oak are just visible, suggesting that they are about 15m tall and more-or-less continuous in this portion of the river and yet to reach their potential height of 35 m. They may well have been growth checked because they tend to grow close together. The name She-oak (in colonial time Shee Oaks) came about because of the characteristic sound produced when wind passes through the branches and foliage. It is also a tree species that fix nitrogen in a symbiotic relationship with *Frankia* spp. bacteria, allowing the species to grow on poor sandy soils. The Flag Staff is positioned on the first of several ancient river terraces that extend up the slope through the central business district of Bathurst. Terraces are evidence of the ongoing process of the Macquarie/Wambool River eroding its way down into the Bathurst Granite over millions of years.

## Site 6: Pillars of Bathurst:

**Northings:** 6300057; **Eastings:** 740532; **Elevation:** 658 m.

### Directions

Walk along the path east of the Flag Staff towards the low-level bridge until you come to the memorial known as the 'Pillars of Bathurst' (**Figure 13**).

## Site Description

**Figure 13** illustrates a section of The Pillars Memorial Walk. The 'Pillars' were established in 2015 as part of the celebration of the settlement of Bathurst's bicentenary, Australia's oldest inland European settlement.



**Figure 13: Pillars of Bathurst, Bicentennial Park**

The 'Pillars' memorialise deceased Bathurst citizens who have made a significant contribution to the settlement and or eventually its current status as a city. The pillars are from the demolished Royal Hotel, its façade still standing opposite Kings Parade fronting William Street, now a cherished part of the city's history. At this site, we celebrate the lives of three 'pillars of Bathurst': Windradyne, Percy Gresser and Keith Ingram.

**Windradyne (Figure 14)** (c1800 -1829) was a Wiradjuri leader who, by his action, declared war on behalf of his people on the representatives of the British Empire, leading a guerrilla engagement against what he saw as unwanted invaders. Tensions began to flare when Governor Brisbane accelerated European settlement in the Bathurst region.



**Figure 14: John Lewin's watercolour of a Bathurst Wiradjuri man thought to be a portrait of Windradyne**

The Wiradjuri lost access to their traditional campsites, hunting grounds, water sources, and sacred sites, and settlers began to take over all available water frontages. **Figure 14**, painted by John Lewin, is thought to be Windradyne. Windradyne led several reprisal expeditions near Mudgee, Millah Murrrah, Bathurst and Kelso. The death of many Europeans prompted Governor Brisbane to declare martial law on 14th August 1824. Great Britain was now officially at war with the Wiradjuri. Significant numbers of Wiradjuri women and children were killed in the subsequent military and settler reprisals. Governor Brisbane repealed martial law on 11th December 1824. To help seal a peaceful outcome, Windradyne attended a peace gathering together with 130 of his warriors with Governor Brisbane in Parramatta at the annual meeting with First Nation people.

Windradyne wore a straw hat with the label 'Peace'. Windradyne received a pardon from Governor Brisbane and was eventually killed in a skirmish on the Bathurst Plains in 1829. He was buried at 'Bruceedale', owned by the Suttor family at Peel. Windradyne, along with other Wiradjuri people, realised that the superiority of British arms could not be overcome, so they agreed on this peaceful settlement. The inevitable outcome was that the Wiradjuri would become fringe dwellers in their own Country.

**Percy Gresser** (1892-1969) was a Bathurst Shearer and amateur historian/anthropologist who spent much of his life researching Aboriginal culture and history across western NSW and collecting Aboriginal artefacts (**Figure 15**). He retired to Bathurst City around 1953 and

befriended local Wiradjuri man Ian McCartney, a Bathurst living legend. Gresser collected and recorded more than 6000 Aboriginal stone axes, spearheads and other implements.



**Figure 15: Percy Gresser, photo courtesy of Ian McCartney**

This marvellous collection was gifted to the Australian Museum in 1963 rather than the Bathurst Historical Society. Gresser also documented the sites and stories of early Wiradjuri massacres in the war of resistance led by Windradyne. Gresser's history of the Aboriginal uprising was co-written by T. Salisbury as *Windradyne of the Wiradjuri-martial law at Bathurst in 1824*. It was published after his death in 1971. Gresser's intimate engagement with the landscape ensured the 20,000-year Aboriginal history remained front and centre in his mind. He too had observed that over the Bathurst region, ploughing or water erosion had revealed that practically every low ridge adjacent to a creek or a spring was a former Wiradjuri campsite. However, Gresser saw the Bathurst Historical Society's museum as a folk museum and could not house his anthropological collection.

In 1962 he published his brief history-The Aborigines of the Bathurst District - in a series of articles in the Western Times. He appears to be the first European Bathurstian to understand and write about the beginnings of Wiradjuri dispossession and their complex culture, indiscernible to most Europeans. Gresser understood that the decline of the local Wiradjuri population was the breaking of their close association with the landscape, hunger, disease and demoralisation. Gresser's history was overall well-received in Bathurst at the time, but this hopeful understanding soon gave way again to assumed European cultural superiority.

**Keith Ingram** OAM BA BEc JP (1912-2002) was an educator, school inspector and gifted botanist (**Figure 16**).



**Figure 16: Keith Ingram**

He was born in Kempsey. His first sojourn in Bathurst was as an infantry instructor during the Second World War. He was a teacher in Mudgee from 1949-1953, a district Inspector at Forbes (1955-57) and then in Bathurst (1958-1963), all three appointments allowing Keith to pursue his particular interest in the flora of the Bathurst Region. He was Patron of the Bathurst Field Naturalists (BFN), whose membership included two living Bathurstians, Darrell Taylor and Wiradjuri man Ian McCartney. Percy Gresser was the publicity officer of the BFN at that time.

Ingram's 70,000 pieces, private collection of native flora species, now held by the Royal Botanic Gardens, Sydney, is one of the largest private collections in Australia and includes a significant number of flowering plants of the Bathurst Region. His collection included specimens from all states but mainly from NSW. As a direct result of his endeavours and quiet lobbying behind the scenes, the Munghorn Nature Reserve (Mudgee), Winburndale Nature Reserve (near Bathurst) and the Hat Head National Park (Crescent Head to Smokey Cape on

the mid-north Coast) have been protected for future generations to enjoy. During his time in Bathurst, he prepared (undated) an extensive preliminary list of the Bathurst region's flora and introductory notes. In the introduction, he helpfully outlines the colonialists and later contributors to our knowledge of the Bathurst flora, including George Evans, Charles Fraser, Alan Cunningham, John Lewin, Charles Throsby, John Oxley, the Rev Dr Woolls, Ernst Betche, W. J. Clunies Ross, William Blakely, J. C. Wiburd<sup>8</sup>, E. F. Constable, J. H. Maiden and K. Mair. Ingram also cites many locals, including J. L. Bormann (Perthville), W Forsyth (Sunny Corner), and R. H. Cambage. While Keith Ingram only lived in the Bathurst region for about a decade, he contributed significantly to understanding its flora. Along with Clunies-Ross, he was one of the first naturalists to explore flowering plants relation with the underlying geology.

### Site 7: Cunningham's Apricot Tree and 'Old Government House'

**Northings:** 6300036; **Eastings:** 740331; **Elevation:** 685 m.

#### Directions

Walk 150 m west of the Pillars of Bathurst along Stanley Street to visit 'Old Government House'.

#### Site Description

'Old Government house' (**Figure 17**), together with 'Cunningham's apricot tree' photographed as leafless in a Bathurst winter, are both examples of how myth and legend are part and parcel of Bathurst's history. Old Government House was likely built in the 1820s and possibly used as a schoolhouse.



**Figure 17: 'Old Government House'**

It was never utilised by Macquarie or any of his successors as a 'Government House'. Like many of Bathurst's early buildings, it is made of fired red brick (sandstock), the clay clot first rolled in sand and then placed in a mould for firing in a kiln. The roof was thatched using local reeds or shingles, hand-cut from local River She-oak. The clay likely came from the nearby floodplains, evidenced by several visible pits near Stephens and Church Lanes dating back to colonial times.

Unfortunately, only limited reed beds and River She-oaks were available in colonial Bathurst. Suitable timber for building infrastructure was also scarce since only grassland or lightly timbered landscapes were located near Bathurst. Hence the tendency to build with sandstock brick.

However, a significant amount of timber was needed to fuel the inefficient kilns. Bathurst was experiencing shortages in some vital building resources early on, forcing locals to cut and cart wood from as far away as Yetholme or Caloola, a day's return trip for an ox or horse cart.

<sup>8</sup> Wiburd was born in Bathurst in 1867, becoming Superintendent of the Jenolan Caves in 1903, and was an authority on limestone caves.



Botanist Allan Cunningham was born in the United Kingdom. He was in touch with the botanist Robert Brown<sup>9</sup> at Kew Gardens and Sir Joseph Banks<sup>10</sup>, who supported all things to do with natural history. Cunningham arrived in Sydney in 1816 and joined John Oxley's expedition to the Lachlan and Macquarie Rivers, collecting about 450 plant species en route. In September 1822, Cunningham went on another journey across the Blue Mountains, returning to Parramatta in January 1823, collecting nearly 100 plants. These species were described in the *Geographic Memoirs of New South Wales* (Field, B. 1825). The local River She-oak (*Casuarina cunninghamiana*) is named in honour of Cunningham. Both Allan Cunningham and his brother Richard had a habit of distributing the seeds of fruit trees, including the apricot tree, during their various expeditions. Local folklore identifies the apricot tree as being planted by Cunningham. However, there is no evidence to support this contention. Myth or not, it makes for an exciting but embellished story.

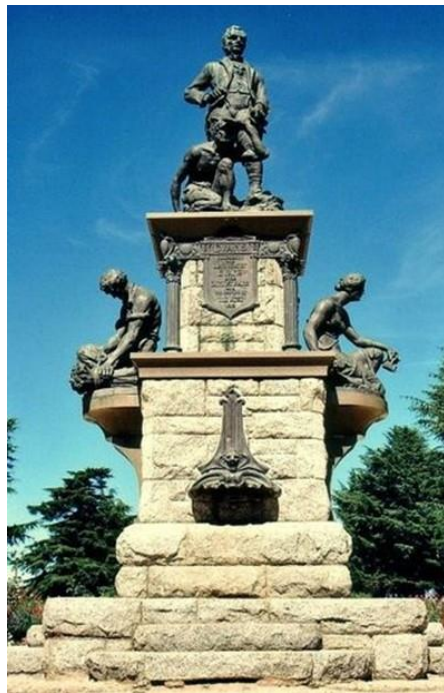
### Site 8: George Evans' Statue, Kings Parade

**Northings:** 6299513; **Eastings:** 739766; **Elevation** 695 m.

#### Directions

Either walk or drive about 800 m from 'Old Government House' via Stanley Street, turn right onto George Street to reach Kings Parade at the corner of George and Church Streets. Evan's statue is adjacent to George Street (**Figure 18**).

#### Site Description



**Figure 18: Statue of George Evans in Kings Parade.**

Surveyor George Evans, the Government man, was appointed by Macquarie to 'confirm and extend' the discoveries of Blaxland, Lawson and Wentworth, the free enterprise men who were the first Europeans to cross the Blue Mountains in 1813. Macquarie and Blaxland had a very uneasy relationship. Evans was accompanied in 1813 by five men, including James Byrne (Burns), acting as a guide, a position which he also held in the 1813 Blaxland expedition. Byrne was a 'forester', a bushman, hunter and likely confidant of Aboriginal people. He was very knowledgeable about the lower Blue Mountains area, absorbing Aboriginal bushcraft and knowhow – an unacknowledged debt, courtesy of Byrne, to the Evans and Blaxland expeditions. Evan's party reached the Bathurst Plains 21 days after crossing Emu Ford.

<sup>9</sup> Robert Brown was the botanist on board '*Investigator*', Matthew Flinders' ship that circumnavigated Australia between December 1801 – May 1802.

<sup>10</sup> Sir Joseph Banks was the naturalist on Captain James Cook's voyage to eastern Australia (1768-1771) and subsequently influenced who were the scientists and naturalists who came to Australia, including Allan Cunningham and Bathurst's own George Sutton.

Evans had a penchant for naming locations with European names, utterly ignorant of Aboriginal people's Dreaming routes and Songlines full of meaning and geographical insight. He named plains, rivers and high points, including the inconspicuous Mount Blaxland and Lawsons and Wentworths sugar loave hills. He unashamedly called the conspicuous granite hill west of the Fish River Evans Peak (Crown).

The Evan's monument, with its sandstone base rather than granite, stands proudly in Kings Parade. It was designed by W. Dryden and sculptured in bronze by Gilbert Doble. The foundation stone was laid in 1913 during the centenary celebrations of Evans' 1813 expedition to the Bathurst Plains. However, the memorial was not unveiled until November 1920. Evans and the three crossing explorers are linked together in an enclosed frieze. Evans stands tall, accompanied by a kneeling Aboriginal man, both looking towards the western horizon. The front inscription reads 'Commemorating the discovery of the Bathurst Plains and the opening of the West 1813'. But, of course, the plains had been in Wiradjuri hands since time immemorial, and the Wiradjuri Nation already occupied the 'west'. Is the kneeling Aborigine a Wiradjuri man? Is it a symbol of subjugation, or perhaps a sign of co-operation, albeit on European terms? Maybe the Aboriginal man is acting as a guide for Evans? If so, this is a 19th-century re-imagining, as the only contact that Evans records in his journal are with some Aboriginal women and children near Mount Pleasant. In his diary, Evans records that it needs a 'clever person to describe this country properly'. He appears tongue-tied in seeking appropriate adjectives to describe what he sees – *'I never saw anything equal to it' and 'the best grass I have seen in any part of New South Wales'*.

Some call for such colonial statues to be demolished. Perhaps a better solution would be to leave it as is but add another descriptor, agreed to by Wiradjuri Elders, providing their perspective on this statue. What do you think?

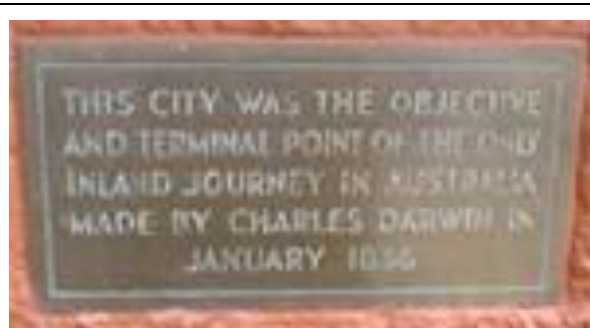
### Site 9: Charles Darwin Plaque - Machattie Park

**Northings** 62999314; **Eastings** 739737; **Elevation:** 677 m.

#### Directions

Darwin's plaque is located approximately 200 m southwest from Evan's statue behind the imposing Court House building. The plaque is positioned on the outside wall of the Fernery. It is much less imposing than the monument built by Lithgow Council in 2008 at Lake Wallace.

#### Site Description



**Figure 19: Charles Darwin's plaque in Machattie Park.**

Darwin, at 27 years of age, arrived in Bathurst on Thursday 21st January 1836. He came via Mitchell's new line of road through the O'Connell Plains to Kelso. He returned to Sydney via the relatively new Lockyers Road (Muttons Falls Road). The plaque records his visit to Bathurst in an understated manner (**Figure 19**). The plaque was unveiled by Mrs W E Glasson from Gamboola in Molong on the 13<sup>th</sup> November 1949.

Having been away from home so long, constantly seasick and now homesick, it is not surprising that Darwin's enthusiasm for sightseeing was waning. The Bathurst Plains did not appeal to Darwin as they did Evans (1813) and Macquarie (1815). The plains were likely sliding through an ecological threshold and changing state, from a super productive landscape to one degraded and less productive. Darwin's time in Bathurst coincided with a drought and a Sirocco-like<sup>11</sup> wind that brought dust clouds to join the plain's degrading condition. Drought was all-pervading, and the Macquarie River was reduced to a 'chain of ponds'.

A few years later, Darwin's observations were confirmed by one Louisa Meredith. She was arguably Australia's first female environmentalist. Visiting Bathurst in October 1839, some three years later, Louisa wrote, "*Look...still nothing green could I discern....behold a wide extent of brown earth with occasional flurries of dust passing across it: and this was all that remained of the so-vaunted Bathurst Plains! Every blade of grass and every green herb had disappeared...a desert had usurped their place...it was very dreary*"<sup>12</sup>. Louisa appears to be the first naturalist in Australia to recognise that land degradation, unchecked, eventually leads to desertification.

Both Darwin and Meredith were observers of the significant land degradation occurring under the new European management regime, less than 25 years after the proclamation and barely 20 years since farming and grazing commenced in earnest.

The birth of Charles Darwin's *The Origin of Species* in 1859 ended a long pregnancy, one that was partly nurtured by his Australian experience. In hindsight, Darwin views Australia (and hopefully even Bathurst) as a remarkable and creditable place that he saw as his 'adopted country'.

## **Site 10: Hawthornden Creek Erosion Gully**

**Northings:** 6297270; **Eastings:** 736995; **Elevation:** 756 m.

### **Directions**

From Machattie Park, drive to Stewart Street (The Great Western Highway) and continue to the Mid Western Highway; travel about 1.6 km, turning left at Boundary Road. Continue along Boundary Road, turning left at Hinton Road immediately after crossing the small bridge over Hawthornden Creek. Continue on about 250 m until you come to a locked gate on the left-hand side of the road and park your car. Climb through the fence into Boundary Road Reserve and follow the track northeast for about 100 m until you come to the deep Gully-Hawthornden Creek. For safety reasons, stay around 5 m back from the creek line, as the 'canyon' edge may be undermined and give way.

### **Site Description**

You are within the Boundary Road Reserve administered by the Bathurst Regional Council and managed by a Local Land Care Group. Since European settlement in 1815, this area has degraded significantly. However, the Reserve hosts a remnant of the critically endangered Yellow Box-Blakely's Red Gum Box Grassy Woodland. The understory is very mixed with many native herbs and grasses associated with invasive introduced weeds. The trees are mostly regrowth and age from saplings to around eighty years.

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<sup>11</sup> Warm humid wind probably coming from the northwest.

<sup>12</sup> Meredith appears to be the first person in Australia to recognise that land degradation leads eventually to desertification.



**Figure 20: The canyon-like gully of Hawthornden Creek, about 10 m deep.**

The gully is a human-made folly that previously was a series of swampy meadows (**Figure 20**). The formation of the gully likely dates back to the close of the Federation Drought (c 1900). The area was probably over-grazed by domestic stock and rabbits. When the heavy rains came with the break of drought, the easily erodible soils of the confined floodplain were washed away, leaving the gully formation in place. It is possible that the gully formation may have also been triggered by miners seeking alluvial gold by digging channels and sinking shafts in the valley fills in the area. A range of wetland plants is located along the base of the gully. The gully now has a canyon-like formation up to 12 m deep in places. The exposed gully sides here give an insight into the climate and geomorphic changes since the peak of the last ice age some 20,000 years ago. Most of the profile is made up of varying grades, of course, cobbles and gravels hinting at the high energy and eroding catchment conditions at that time.

Above this is a change to more refined clays and loams, indicating a moderating climate and more stable catchment conditions. The upper layers of these soils are stained distinctly grey and black due to the prolific organic matter accumulated from the swampy meadow conditions that prevailed from about 8,000 years ago. You can also see a layer of coarse sand topping these dark soils representing the first flush of post-European settlement erosion that preceded the catastrophic gullying now evident. Some self-repair of the gully is occurring, mainly due to the in-stream rock structures installed by Bathurst Regional Council to address ongoing erosion. However, localised erosion and gully widening are still occurring due to running water and frost heave<sup>13</sup> forces. Both Yellow Box and Ribbon/Manna Gum trees are growing within the gully formation but not on the gully floor where it is too wet. The age of these trees ranges from saplings to 80-100-year-old trees, suggesting they germinated soon after the end of the Federation drought. Such degraded landscapes can be repaired but are usually costly and requires decades to recover fully.

### Site 11: Mount Panorama Boardwalk

**Northings:** 6296049; **Eastings:** 737190; **Elevation:** 821 m – at the entrance to the boardwalk on the western side of the racetrack, 880 m at the Lookout (Site 16) and 806 m at the tour exit point located at the Light Car Club (Site 18) on the eastern side of the boardwalk.

The path runs around the southernmost section of the racetrack and is about 1.8 km in length (**Figure 21**).

<sup>13</sup> Frost heave occurs when damp or wet soils expand under freezing conditions due to ice formation. Subsequent rain can then wash away the expanded soils if they have not already partially or wholly collapsed.

## Directions

The boardwalk, which at times deviates from the racetrack, is in parts unsuitable for wheelchairs and people with walking sticks/disabilities as there are some quite steep sections to be negotiated. There is no safe parking to access the western or eastern entrances to the boardwalk. The distance from the junction of the racetrack with Hinton Road/Pit Straight to the west entrance is about 1.3km. One could either get a taxi or a friend to drop you there and arrange to collect you at the eastern exit adjacent to the Bathurst Car Club. Alternatively, park your car near the Pit area and walk to either entrance point of the boardwalk in a walking lap of the race circuit. The time to complete a walking lap of the race circuit and the boardwalk will vary from about 1.5 – 2.5 hours, depending on one's fitness. The time required to walk the length of the boardwalk will range from 30 - 60 minutes. The track rises steeply to Site 12 and descends steeply at the eastern exit (Site 18).



Figure 21: Approximate location of Sites 11-18 along the Mount Panorama Boardwalk (Bwlk) outlined in this figure as a black line. Base map source: Earthstar Geographics.

### **General Comments on the Woodland**

The Boardwalk tracks through a critically endangered Box-Gum Grassy Woodland (tree cover shown in **Figure 21**). The dominant tree species are Yellow Box, Blakely's Red Gum and some scattered Ribbon Gum (*E. viminalis*). The density of woodland varies markedly across Mount Panorama/Wahluu. The trees present are substantially regrowth, mainly in the age range from saplings to 80 years. There are also two understory wattle species present. The understory varies from being dominated by twenty or so introduced weed species to mixed scattered stands of native grasses, herbs and shrubs. As you ascend the track, there is one Kurrajong tree (*Brachychiton populneus*) near the edge of the racetrack - about twenty years old. Many of the eucalyptus trees support varying numbers of the native mistletoe parasite, in small numbers vital to the health of the woodland, but in large numbers on any one tree can lead to its death.

Mount Panorama/Wahluu is a series of hills known from colonial times as the Bald Hills. These were very likely kept treeless in the upper sections by Wiradjuri burning practices, likely to signify a culturally special place or even a sacred site for the Wiradjuri. The regrowth of woodland across the top of the mountain appears to have gained momentum since the 1930s, once overgrazing by sheep and cattle ceased or land uses changed. The woodland varies from denser remnant patches interspersed with open areas with no trees or scattered tree cover.

### **Site 12: Mature Blakely's Red Gum**

At the top of the steep incline, as the track nears the fence around the old quarry site, one comes to a relatively mature Blakely's Red Gum, with a base circumference around 5-6 m. The author estimates this tree to be around 200- 250 years old and possibly a young tree at the time of settlement. Unfortunately, there are very few trees of this age across the remnant woodland, or indeed within the Bathurst LGA.

### **Site 13: Disused Basalt Quarry**

Immediately adjacent to the old Red Gum is the fenced-out area of a now disused basalt quarry. The basalt deposit was formed by a lava flow from multiple volcano vents in the Abercrombie area, south of Bathurst, that erupted about 19 million years ago. Lava flowed into the Macquarie River Valley and its tributaries, causing them to change course.

The depth of basalt in this quarry is at least 15 m. The age of the granite batholith underneath the basalt is 310 Ma. The basalt cap on this string of low hills has prevented them from being eroded as quickly as the surrounding granite country. Basalt derives from a surface volcanic flow and is a finely crystalline hard rock resistant to erosion. Granite forms deep within the earth as a molten upwelling and is generally coarsely crystalline, making it more susceptible to weathering. Millions of years before the lava flow, geologists estimate that this location was covered by at least 5 km of varying geological layers. Mostly water but also wind gradually eroded these layers over millions of years. Such is the power of deep time, water, and wind to slowly and surely reshape landscapes.

### **Site 14: Ancient Macquarie Riverbed**

About 150 m north of the Red Gum, the road embankment has been cut away to create the racetrack, in the section known as *The Cutting*. This embankment can only be viewed safely by driving past in a car on the road below. There can be seen the bed of the ancient Macquarie River, characterised by a sequence of washed riverbed stones. The current elevation of the Macquarie River is approximately 170 m below this point. It has taken the river about 19 million years to cut down through the granite Batholith to its present position!

That's around a metre every 100,000 years! Contrast this erosion rate with soil losses on the granite country in the order of 50-100 cm in 200 years of European farming.

### Site 15: Fauna you may see

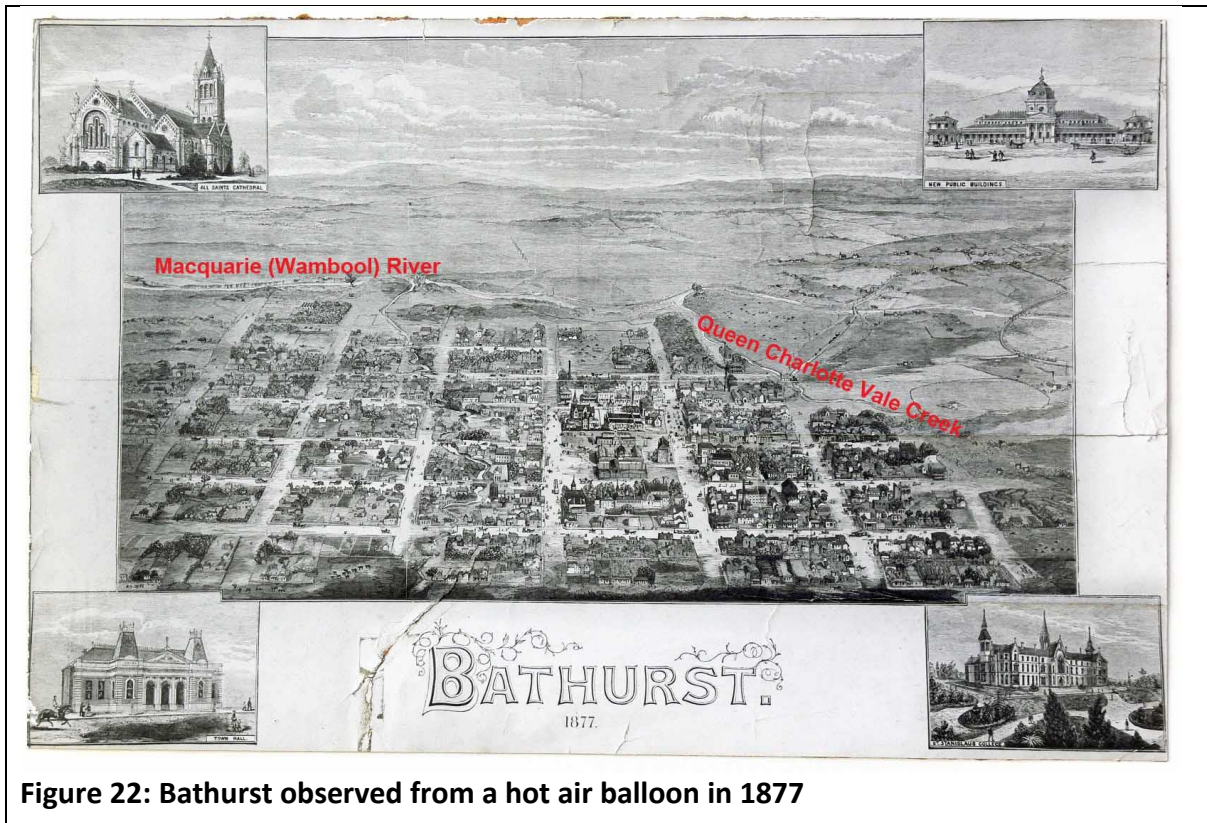
From this point on, you walk through this remnant woodland, keep an eye out on the footpath, particularly under overhanging trees, for brush-tailed possum droppings. If it has been a little muddy, you may also see the footprints of foxes, dogs and cats. It is also likely that you could come across 30-40 species of bush birds and, on a sunny day, a range of small lizard species. Below the fence that separates the walking track from neighbouring private land, you may also come across four macropod species: the Grey Kangaroo, the Red-necked Wallaby, the Wallaroo and the Swamp Wallaby.

### Site 16: Boardwalk Lookout

About halfway along the track, you will come to the boardwalk lookout that provides panoramic views over Bathurst. Locate the following;

- Winburndale Escarpment to the east at around 1100 m;
- Sydney Road and its entry point into the eastern escarpment;
- Railway bridge crossing the Macquarie/Wambool River;
- Junction of the Fish and Campbells Rivers where the Macquarie River commences;
- Oberon Plateau to the east;
- River flats commencing at the junction of the Fish and Campbells Rivers and continuing a further 10 km downstream of Bathurst;
- Holy Trinity Church;
- Flag Staff; and
- The suburb of Kelso on the eastern bank of the Macquarie – in colonial time the 'right' bank. This area was thought to be an extensive, treeless grassland in 1815.

**Figure 22** below allows you to compare the view of Bathurst in 2021 at Site 16 with one provided for us in 1877, nearly 140 years ago. First, a sketch of the city was taken from a hot air balloon, then a wood engraving made by the artist Albert Cook, which was then used to create a limited print series. Of the four buildings sketched on each corner of the print, only the Bathurst Court House and St Stanislaus' College remain standing. **Figure 22** shows the location of the Macquarie/Wambool River and Queen Charlotte Vale Creek. Take time to compare the current view of the city (population around 40,000) with its 1877 (3,000) population. There is one significant difference between the Macquarie River in 1877 and in 2021– what is it? How do you account for any differences? What other observations of the natural environment are worth noting?



**Figure 22: Bathurst observed from a hot air balloon in 1877**

### **Site 17: An Example of a Well-Preserved Woodland Understorey**

Tucked away near the racetrack wall, just before the track steeply descends to the exit point (Site 18) of the boardwalk adjacent to the Bathurst Car Club, is a small high-quality (but not pristine) understorey remnant typical of the grassy box woodlands. Invasive weeds are present, but Kangaroo Grass is dominant along with many herbs and small plants, including clumps of Flax Lilly, Bluebell, a few clumps of Wallaby and Snowgrass. There are some regenerating wattles, Indigo and Bush Pea, a few Yam Daisies and at least one orchid species. Yam daisy tubers were part of the staple diet of the Wiradjuri. They grew profusely on the Bathurst floodplains but began to be replaced by the staple diet of Europeans - potato tubers. It was Wiradjuri people innocently helping themselves to potatoes on or near the floodplain that helped initiate the 1820s Bathurst War.

**Site 18: Exit from the boardwalk on the eastern side, adjacent to the Light Car Club building, to complete this tour.**



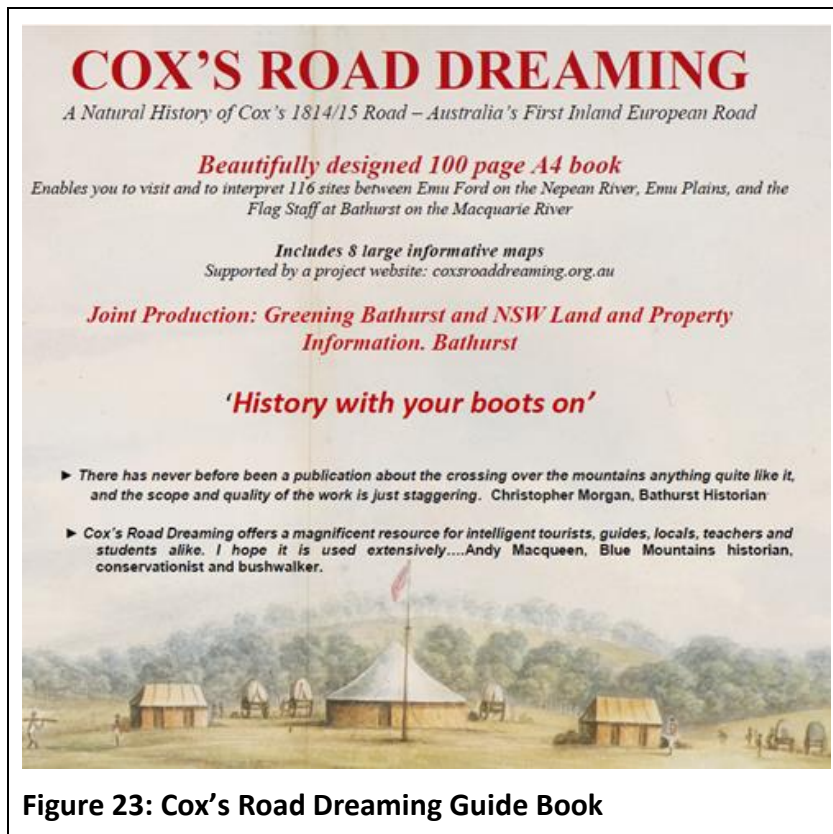
## Acknowledgements

I want to thank many of my scientific colleagues, who, over the years, have helped me better understand the Bathurst Landscape. These include Chris Marshall, Dr David McKenzie, Col Bembrick, Wyn Jones, Dr Johannes Bauer, Dr Barbara Mactaggart, Dr Peter Wilson, Dr Colin Bower, Dr Richard (Dick) Medd, Professor Warren Somerville AM and the late Ernst Holland. Hydrologist and engineer Norman Wise and I have enjoyed many long conversations about water security in Bathurst. I am indebted to him for sharing his rediscovery of the extraordinary-bricked tunnels bored through granite where Bathurst drew its water for nearly 40 years. He also allowed me to use Figures 7 and 8 in this publication. I have also enjoyed and learnt much from talking with two farming friends, Peter Andrews and Paul Newell from Canowindra. In the 1970s, Peter Andrews first brought to my attention the importance of swampy meadow formations in the landscape and their almost universal loss across the tablelands of New South Wales. Peter's insistence that understanding the processes of swampy meadow formation and destruction were at the very heart of landscape restoration has been vindicated. Two Wiradjuri men have become close personal friends, Ian McArtney and Gavin Waters, and through discussions and fieldwork significantly increased my understanding of the flora and fauna and landscapes of the Bathurst Region. I remain indebted to the late John Bland, an extraordinary naturalist from Yetholme and a member of the Bathurst Field Naturalist's Society, now defunct. He mentored me when I arrived in Bathurst in 1972. The late Bathurst historian Theo Barker encouraged me in the 1970s to integrate my ecological understanding with human history. That only became possible after I retired from Charles Sturt University nearly 30 years later! I have also enjoyed enduring friendships with many regional artists who capture the landscape in ways that scientists cannot. I thank Graham Lupp for pointing me to Albert Cook's 1877 aerial sketch of Bathurst, the last figure used in this tour.

Photos as acknowledged in the text or taken by David Goldney, a few non-copyright from the WWW. Images of historical paintings are from the Mitchell Library collection and gratefully acknowledged.

## Additional Natural History and Scenic Tours of the Bathurst District

1. **'Australian Fossil and Mineral Museum'** -make sure you visit this world-famous museum in Howick Street.
2. **Cox's Road Dreaming Guide Book**- Goldney, D.C. (2015) Cox's Road Dreaming Guide Book. A Natural History of Cox's 1814/15 Road – Australia's First Inland European Road. Land and Property Information, Bathurst.  
  
This book (**Figure 23**) can be purchased in Bathurst at Books Plus (\$30) in Howick Street diagonally opposite the Post Office. Pages 10-35 enables a self-guided tour of 30 sites along the *original* line of Cox's Road (1814/1815) between Bathurst and the Fish River Crossing.
3. **Scenic and Natural History Tour 1** - Goldney, D.C (2021) Greening Bathurst's Scenic and Natural History Tour 1 of the Bathurst Region. BRC. 30 p booklet. Available Bathurst Tourist Centre.
4. **Scenic and Natural History Tour 2** - Goldney, D.C (2021) Greening Bathurst's Natural History and Scenic Tour 2 of the Bathurst Region. BRC. 30 p booklet. Available Bathurst Tourist Centre.



**Figure 23: Cox's Road Dreaming Guide Book**

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