Royal Botanic Gardens Melbourne
Education Service

Wominjeka **Welcome**

Aboriginal Resource Trail

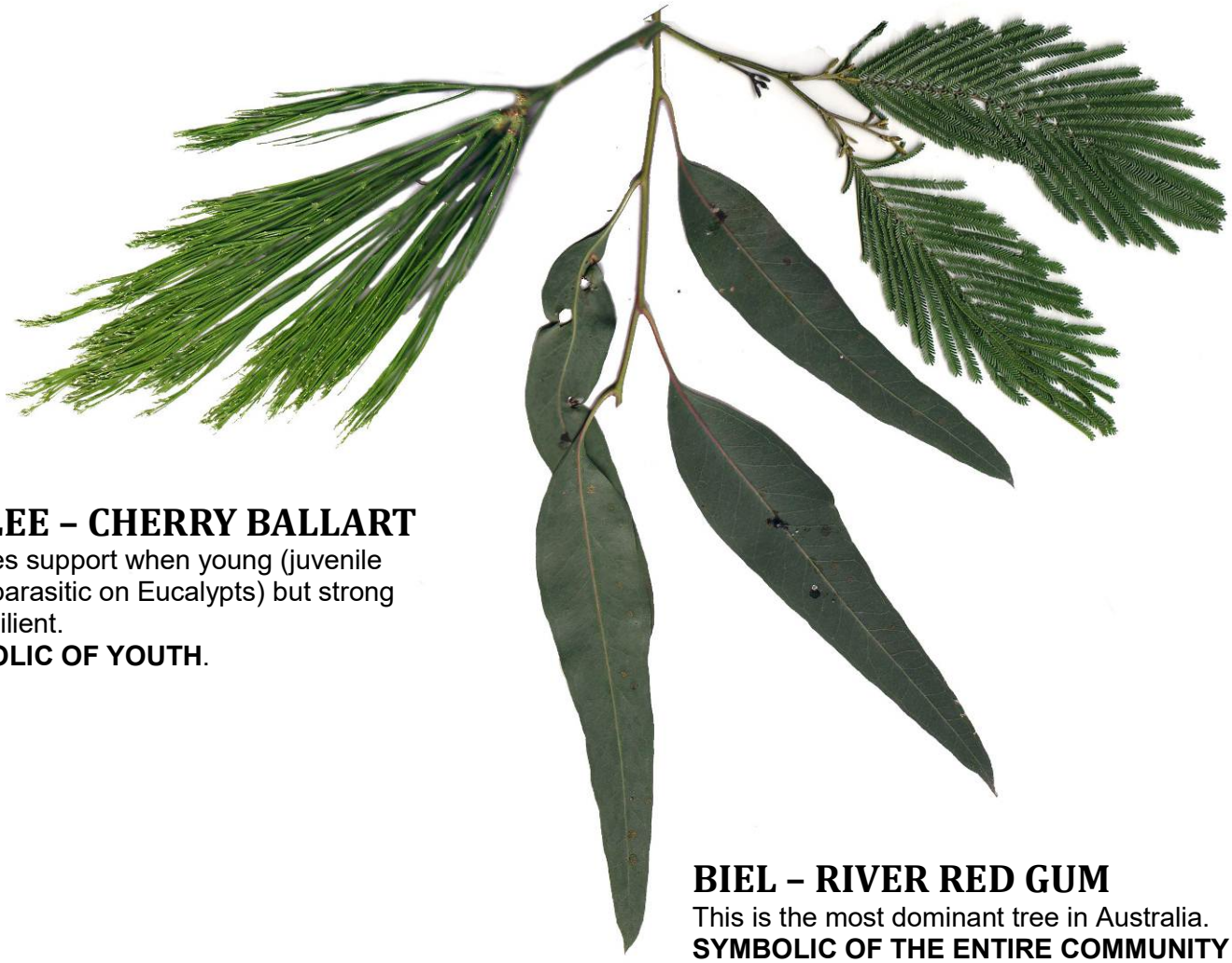
Royal Botanic Gardens Melbourne

Table of Contents

Tanderrum Ceremony

Traditional Wurundjeri "welcome to country"ceremony

MUYAN – WATTLE
Vital to local clans, every part of the plant was used (seed, bark, wood, gum).
SYMBOLIC OF ELDERS



BALLEE – CHERRY BALLART

Requires support when young (juvenile plants parasitic on Eucalypts) but strong and resilient.
SYMBOLIC OF YOUTH.

BIEL – RIVER RED GUM

This is the most dominant tree in Australia.
SYMBOLIC OF THE ENTIRE COMMUNITY AND OFFERS RESPECTIVE ACCESS TO THE LAND AND ITS RESOURCES.

A Tanderrum ceremony traditionally welcomed visitors to country. The leaves of the wattle, cherry ballart and river red gum were burnt on a fire and the smoke was not only cleansing but was used to send prayers to Bunjil.
Schools participating in the Aboriginal Resource Trail are given a traditional welcome by an Aboriginal Guide.

PEOPLE PLANTS PLACE

Introduction

The Aboriginal Resources Trail (ART) is designed to give students a greater understanding and respect for Aboriginal culture, particularly of the local Victorian communities.

The Royal Botanic Gardens Melbourne has more than 100 species of plants used by Aboriginal people. In this program students explore the Gardens learning how some of these plants were used for food, medicine, tools, making fire and spiritual significance. Activities include viewing Aboriginal artefacts, making ochre paintings and using plant fibre to make string.
They will learn about sustainable land use by Aboriginal people.

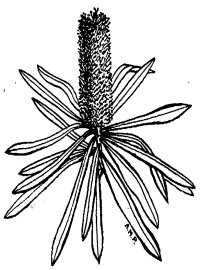
The Aboriginal Resource Trail can be presented with a primary school or secondary school focus. There is also an Early Childhood Program called 'You and Me,Murrawee'. The ART program can be adapted for older students such as VCE Outdoor and Environmental Studies. All levels participate in a Welcome to Country ceremony but the teaching focus changes to suit the level of understanding of the students and the educational needs and skill level at each age.

The topic of Aboriginal culture can provide a rich context for approaching a number of the Domains of the Victorian Essential Learning Standards and AusVELS. Apart from closely matching Standards statements in Humanities Domains, there is excellent scope to include this context in the Domains of 'Physical, Personal and Social Learning' as well as 'Interdisciplinary Learning' Strands. Indigenous Education is a key part of the whole of the National Curriculum. For more information please follow the link to the VELS statements.

Primary ART program VELS Program Guide (MS Word - 68 kb)
Secondary ART Program Aboriginal Resource Trail VELS (MS Word - 72 kb)

AusVELS

The program has been designed to easily fit into an Enquiry-based, integrated curriculum that takes students through the following stages:
Tuning in - getting students interested in the topic.
Preparing to find out - students develop learning skills that include; deciding what they need to know; making predictions, and working out how to find information. During this stage teachers have the opportunity to find out what the students know, (essential for program development and effective evaluation)
Finding out - students find out new information about the topic.
Sorting out - Processing new information.



Drawing conclusions - students develop attitudes about issues related to the topic.
Taking action - personal or class action based on new information and attitudes.

The Royal Botanic Gardens education experience is best suited to be used as a 'finding out' activity, however it can also be used as a 'tuning in' activity. For more information regarding this approach read ***Integrating Naturally. Units of work for Environmental Education,*** Kath Murdoch, Dellastra Pty. Ltd,. 1992.

Background

The Royal Botanic Gardens Melbourne (RBGM) rests on land that for countless generations was a traditional and highly significant camping and meeting place for the local custodians of the area – the Boonwurrung and Woiwurrung of the Kulin people.

These people had, and still have, an intimate relationship and deep connection with the land – how its seasons worked, its plants grew and its animals behaved. After thousands of years of Aboriginal interaction, the country still yielded a leisured and healthy lifestyle for the clans. Theirs was not a nomadic hand to mouth existence, but rather an observant, effective and economic strategy for sustaining their needs and their environment. Skills were learned by observation, imitation, real-life practice and from the oral tradition.The daily needs and the needs of future generations were synonymous. They knew about environmental sustainability.There were defined clan territories and favoured places. The land now occupied by Royal Botanic Gardens Melbourne was one such place.

Animals and tubers were the primary foodstuffs of the people. By the Yarra River, *Birrarung* (River of Mists) they caught eels in weirs of stone and woven funnels. Mussels, fish and tortoise were harvested. Ducks were caught using returning boomerangs (*wonguims)* in Birrarung billabongs. Kangaroo and emu were stalked and hunted. See Trevor's story onpage 8.

"Native encampment on the banks of the YarraRiver"
J Cotton, La Trobe Collectio, State Library of Victoria

Tubers (underground plant storage organs, available all year) were numerous in the area, their abundance promoted by the firestick farming practiced by the clans. Roots included numerous lilies, orchids, geranium, clematis and bracken. The yam daisy (*murnong)* was the most important of these. Aquatic plants such as bulrush (cumbungi) and water ribbons provided more starchy roots. The local suburb name Toorak comes from the Woiwurrung word *Turruk* meaning 'water surrounded by reeds', or 'swamp with reeds'. Whereas the first Europeans called these areas swamps, today we call them wetlands.
The firestick farming burns most likely occurred in late summer and early autumn before the rains. It was controlled and mosaic in pattern. Firing the country in patches kept the denser vegetation from shading out the important lilies and murnong, and promoted the new tender grass for grazing kangaroos, that other important resource of the clans. Women worked these patches of land with their digging sticks (*kannan*) as they dug for murnong, thinning out the clumps, aerating the soil, and replacing root pieces much like gardeners do today with irises and daffodils.

Kangaroo had many uses – food, bone utensils, teeth for necklaces, tail tendon for sewing, skin for clothing. Possums were pulled from tree hollows and clubbed. Their skins were then crafted into warm and waterproofed cloaks decorated in the clan motifs. All the Woiwurrung and Boonwurrung people wore possum skin cloaks.

Seasonal fruits were collected. Kangaroo apple, coprosma, native raspberry and appleberry being placed into woven bags (*bilang*) and wooden dishes (*tarnuks*) to be shared back at camp. Greens included native spinach and pigface. Wattle gum was a favoured addition to the diet, as was banksia nectar and manna, the white sugary secretion from the lerps that live on eucalypts.

Fibre plants included carex, cumbungi and lomandra to process and weave into bags, eel traps (*arrabine*) and belts. The hard straight wood of austral mulberry and the soft shafts of grass tree flower spikes were essential for firemaking. Teatree, , river mint and gum tree resin were some of their medicines. Plant resins mixed with shell and charcoal were their glues.

On the Aboriginal Resource Trail students will meet many of these plants and more. All are extensively listed in these notes for further reference – including plants from the local Yarra river habitat together with the plantings from other regions of the east coast of Australia. In fact, the RBGM is a very multicultural botanic setting, with the sweeping English lawns just one element.

The site of the RBGM was an important place for clan gatherings. After European settlement there was a mission established by Central Lake. The displacement and loss of the local Aboriginal people is part of the focus of the secondary ART program. The changing landscape reflected their changing lifestyle and the replacement of indigenous plants with European specimens mirrored the diminished local Aboriginal community.

Contrast: the sweeping lawns of the Royal Botanic Gardens where the 'well-to-do' promenade in their best clothes and a group of Aboriginal people look over the growing Melbourne city from the shade of a gum tree.

Images from the RBG Melbourne Education collection.

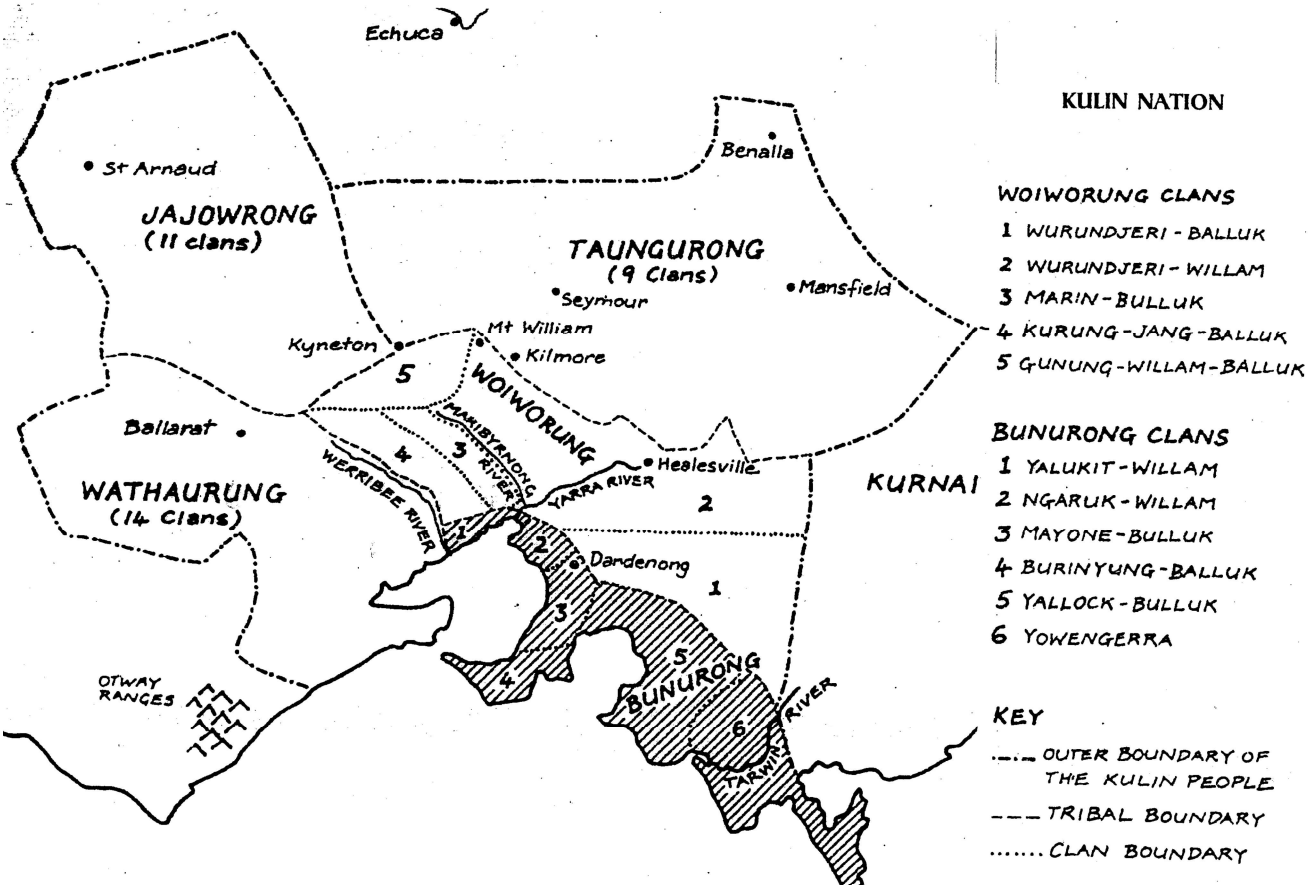
PEOPLE
KULIN

"They knew what to do, the old people. They lived with nature all the time. They knew when the seasons was coming, and where to get the different sorts of food for the different seasons. They knew all about things. That's how they survived, they knew nature"
Uncle Banjo Clarke (quoted in Gott and Zola, 1996, p.19)

We see the RBGM today as a place of beautiful vistas and secluded spaces; a place where people meet plants on a grand scale. It has also been the focal point for the meeting of two completely separate cultures.

During the 19th century, Aboriginal people gathered to meet and camp as families or larger community groups under the shade of the river red gums of the RBGM. They were often referred to by the early settlers as the 'two Melbourne tribes' – the 'Coastal tribe' and the 'YarraYarra' tribe. However, Aboriginal society at that time was poorly understood.

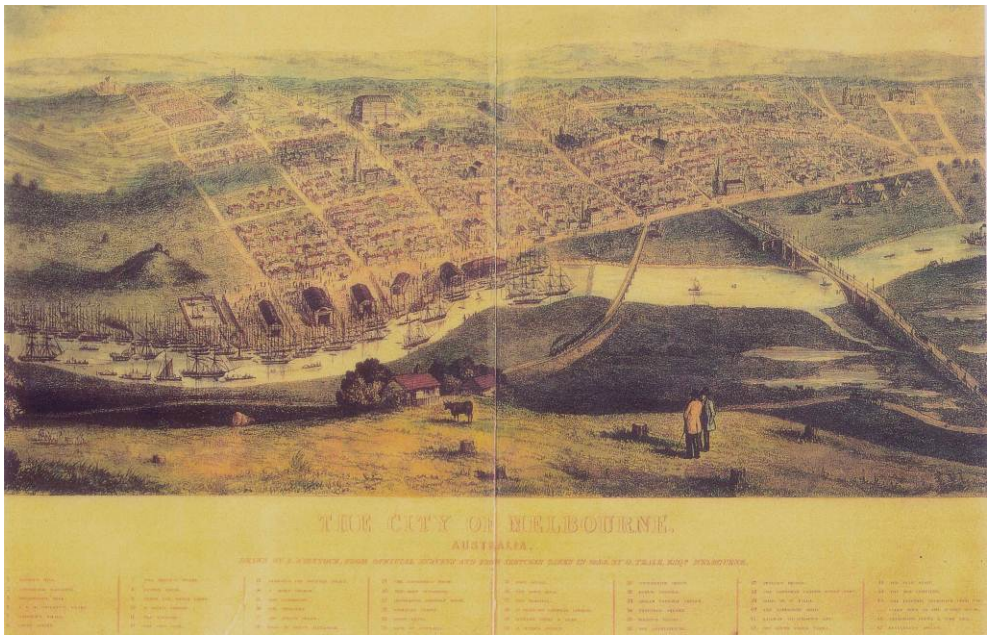
The basic unit of Aboriginal society was the land owning group, the clan. Clans had the responsibility of maintaining the ecological health of the land. These clans were affiliated with other clans who shared the same '*wurrung*' or language. The wurrungs in the Melbourne area were



Gary Presland*Aboriginal Melbourne*

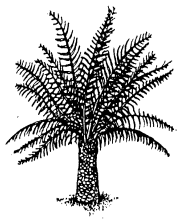
called Woiwurrung and the Boon wurrung. Today we know the 6 clans of the Boon wurrung were the coastal tribe, and the 5 clans of the Woiwurrung, the YarraYarra tribe. The *Wurundjeri* clan of the Woiwurrung occupied the Yarra Valley (see map). Within these groupings was also the *Bunjil* and *Waa* moiety, where every individual was either born Bunjil (wedge tail eagle) or Waa (little raven). The distinctive calls of the little ravens can still be heard here. Waa lives on. Bunjil and Waa were the symbols of being Kulin, the people of this country. Their descendents still live in the Melbourne area, with a strong community centred in Healesville, in the Yarra Valley.
The first attempt by the English to settle this region of New Holland was in 1803 at Sorrento on the Mornington Peninsula. This was quickly abandoned and it was not until thirty years later when John Batman arrived in 1835 at Port Phillip Bay that Kulin life changed dramatically forever. From 1837 – 39 a short-lived Anglican mission occupied part of the RBGM under the direction of Rev. George Langhorne. A plaque by Gate H commemorates this. Aboriginal names associated with this mission include Wurrundjeri elder and artist William Barak, Derrimut and Tullamarine. William Buckley (the escaped convict from that earlier Sorrento settlement who spent those intervening 30 years with local clans) was briefly employed here as an interpreter.

By 1837 the British Government had developed a policy for 'dealing' with indigenous people throughout the Colonies. To avoid the mistakes that had occurred with the Aboriginal people in Tasmanian in the 1820s, a scheme was proposed to 'civilise' the Aborigines of Victoria. The Anglican clergyman, Rev. George Langhorne was appointed to set up the first Mission Station and Aboriginal reserve in Victoria on 895 acres of what is now part of the Royal Botanic Gardens.



The site was chosen in part because of its diversity and richness in flora and fauna. Langhorne was sceptical of adult Aborigines staying in one place and accepting 'an artificial mode of living', but undertook to do his best. Although this was one of the first positive steps taken in Victoria towards the Aboriginal people it was made with little or no understanding of the Aboriginal culture and limited Government support.

Despite all the best intentions of George Langhorne, in March 1839 the Mission was abandoned. The significance of the RBGM to the new settlers of Melbourne continued with the setting aside of this site – described as 'a veritable Garden of Eden' – by Superintendent Latrobe in 1846. By 1850 this was the place to gather when the Separation from a Sydney administration occurred – the founding of the colony of Victoria. A plaque by the Separation Tree, between A Gate and the lakeside tearooms, acknowledges this event.



The two great characters in the transformation of the site from bushland to botanic garden were Baron Ferdinand Von Mueller and William Guilfoyle in the period 1853 – 1909, and included in this period were the straightening of the Yarra and creation of the RBG lake system.

Today the Royal Botanic Gardens is the most visited spot in Victoria not unlike all those years ago.

The painting above and the photo on left show the changing landscape. The swamp in the right is converted to a lake system in the Gardens, enlarged when the Yarra was straightened in 1901.
Images from the RBG Melbourne

Trevor Gallagher's Story

I am white, I am black. I am Gunditjmara. I am a product of a time long gone in this country when only black people lived here, then the white people came and tried hard to take my identity and my culture. For a long time I was white and not black because my world was predominately white and I was ashamed of who I was but now thanks to understanding Australia I am no longer ashamed and my world is both white and black.

The Aboriginal Resource Trail lets me be Aboriginal, it enables me to communicate to people in a way that I have never done before. It lets me talk to strangers at the start of the program and at the end we are no longer strangers. It lets me show the Gardens in a way that they would not have seen before and it makes me feel good that I have made other people feel good.

The Education team at the Gardens have taught me a lot since I arrived in 2006.They are dedicated and very professional in what they do. I enjoy working with Public Programs.

My people, the Gunditjmara, are from the Western District of Victoria. (See map p6)
I lived as part of an Aboriginal community until I was about 9 years old. "Policy was when I was that age, fair skinned people were not allowed to live on the mission. We of course went with mum and moved from town to town, struggling all the while and there wasn't a day go by that we kids didn't have to go next door and ask for a cup of sugar." Why the shame? "When I was a little boy racism was prolific and I was called Abo and I didn't care for that term too much - there was a stigma attached to anything Aboriginal. We were told that we were not too high in society and when it's told to you often enough you tend to believe it. I am fine now and very proud that I am able to bring some joy to the kids here at the Gardens."

My memories of:
Catching eels
I remember it vividly. At the time we were living on the Aboriginal mission called Framlingham and Mum would often take me and my brothers down to the creek and take the eel trap with us and we were so excited when we knew that we were going to eat that night.

Catching ducks
Some thought that the returning boomerang was just for entertainment and games. Not so: it was also used as an effective tool to catch one of my favourite foods, wild duck. The elders would strategically place the children around a wetlands area, give each child a hollow reed from the local vegetation, the reed or hollow tube like straw would act like a

snorkel and this would enable the child to stay under the water for long periods at a time. The elders would then throw their boomerangs over the ducks making sure that it would fly over their heads, the ducks would think it was an eagle of some sort and head for shore and guess who's there waiting for them? The kids of course, they would grab the duck from beneath the water and very quickly wring the ducks neck so the duck doesn't become stressed.

Hunting emu

The methods of hunting emu differed throughout the cultures. One that I like is the way they do it up the top end of Australia, the Aboriginal people would know what the emu favored as food and wait up or near its food sauce and then when it came near they would jump on it and straddle it and ride it like a horse and then swing from its neck and kill it. The people of the Kulin Nations would use a tool that looks like a didgeridoo, but it was only 12 inches long and it was hollow and what this little hunting tool did was to mimic the bird or make the same sound as the emu would make and this would draw the bird close to the hunter so we were able to wait in ambush for the bird.

Bush medicine

Well as a little boy the whole bush was my backyard so to speak and my siblings and me would always be playing in the bush, and I was the one that always got bit by bull ants, so to cut a long story short my mum used all her skills from the bush to make sure that I did not suffer. She always used the bracken.

My thoughts on people and place

The key message Aboriginal people can give us for the future is, "Don't be too materialistic and remember we have to look after our land, after all it's for all the grandchildren in the future."

My thoughts on the1967 referendum. "It didn't mean much to me (unless you were an activist) back then I was too young. I didn't even know what a referendum was but now I can see how it has paved a path for all Australians to follow."

Gaining equality in Australia. "I do believe that Aboriginal people have to make their own equality, by this I mean my children will grow up knowing that they have to work and live like their dear old dad and provide for their own family. At this place in time someAboriginal people, are unable to provide for their own families. They rely on the white man's welfare payments because their method of once being able to support their family went when the white people bought Melbourne from the Aboriginals for the price of a song, and by that I mean my people's way of life for the last 50,000 years was taken from them in a day (200 years ago)."

Activity

Information and ideas for teachers to complement the Aboriginal Resources Trail at the Royal Botanic Gardens

Questions to investigate at school before their visit to the Royal Botanic Gardens Melbourne

What do your students already know and what can they gather through further research?

These activities are designed to-

- Find out what students already know about Australian Aboriginal people.
- Initiate group discussion on topics related to Australian Aboriginal people.

As a class brainstorm a list of words relating to the topic of Aboriginal Studies.
Some questions to get the ball rolling may be:
What was Australia like before Europeans arrived?
Where did Aboriginal people get their food and other resources?
What other resources would they have needed?
What work did the men, women, and children do?

The class could also brainstorm the sort of things their household buys each week and consider how Aboriginal people obtained such items if they used them at all.

Make a list of 10 things you use each week at home or school.
For each, describe what it is made of, where those substances come from (natural or man-made fibres, factory produced or home-madeetc), where it was obtained and what the Aboriginal equivalentcould be.

PLANTS

In meeting these plants, students are also encountering sustainable resource management. How do people modify their environment to make the best use of what it has to offer, while at the same time maintaining the integrity of the land?

We may ask our students that 60,000-year question: What were the first Australians doing that enabled the land to be continually renewed and productive?

MURNONG

"The land is open and available in its present state, for the purposes of civilised man. We traversed it in two directions with heavy carts, meeting no other obstruction than the softness of the rich soil; and in returning, over flowery plains and green hills, fanned by the breezes of early spring. I named the region Australia Felix".
Major Thomas Mitchell 1836

Victoria's park-like landscape, recorded in approving tones by European explorers, was created by Aboriginal 'firestick farmers'. Fire was their tool to maintain open grassy woodlands.

The Yam Daisy *Microserislanceolata*is a small dandelion-like plant, which was a staple for Aboriginal people in South Eastern Australia. Known as murnong, it was abundant prior to European colonisation of the Port Phillip district in 1835. Aboriginal women and children dug up the potato-like tubers using digging sticks. Broken pieces of murnong were put back into the holes to ensure propagation of further plants.
The washed tubers were put into specially constructed rush baskets and roasted in the coals of a fire. Available all year from nature's pantry, it was sweetest in spring.
Today murnong is rare having been replaced by introduced weeds such as flatweed*Hypochoerisradicata*. Sheep were known to dig up and entirely eat the tubers of murnong as well as the leaves. Their sharp hooves damaged the ground and prevented their regrowth. By 1838 there were 310,000 sheep in the colony of Port Phillip, shipped in from Tasmania and overland from New South Wales. Today at the RBGM murnong has been replanted on Long Island and at O Gate in the Grassy Woodland. Look for the nodding green buds on tall stems that open into yellow daisies.

Questions to investigate at school
As a preliminary activity, ask students to keep a record of food eaten by them over a week and list food items in categories – plant source, animal source.
Ask the students to categorise this list into what part of the plant is used such as roots, stem, leaves, fruit, seeds etc.
Students can then make a list of the plant foods they believe the Aboriginal people of Australia would have eaten before European contact. This list can be reviewed after a visit to the Gardens.
Murnong was a staple of the local people's diet. What is a staple food?
Name some from your diet. What fills you up?
Where is murnong now? Why has it gone?
How did the removal of murnong by sheep differ from that of the local people?
How did the people harvest it? Whose job was it to harvest?
Weed patches such as flatweed have been called 'white man's footsteps'. What might be meant by this?

Who would have noticed the disappearance of murnong from the land –British settlers or the local people?
What would you do if your staple was no longer there to be eaten? (starve, accept hand-outs)
Students could prepare a news script or newspaper article from the perspective of Aboriginal people who are struggling to find their staple food.
About the same time, in another part of the world, another group of people lost their staple too. This is called The Irish Famine. What was the staple?
(Where did potato growing originate? The potato is actually from indigenous American cultures, brought to Europe by Sir Francis Drake.
Ask students to prepare a past and present menu.
Where do we – you and people like Archie Roach - get their food from today?
Is it chargrilled wallaby with baked murnong, or roast lamb and potatoes?!
Today there is an increasing demand for meat such as kangaroo because it is low in fat. What health benefits would there be in eating kangaroo in preference to pork or lamb?
Debate the pros and cons of kangaroo harvesting and farming.

Activities to try at school
Roots - what roots do you eat?
Bring a variety of tubers such as yams, sweet potatoes to school to roast or eat raw. Investigate their nutritional value and methods for growing. Grow them at school.
Seed grinding – make flour from acacia seed or birdseed. What tools and techniques are needed for this?
Update the list your class made of plants that the Australian Aboriginal people used for food. Categorise these into what part of the plant is used. Eg Roots, stems, leaves, fruit, seeds etc. Students can choose some plants from the list and describe the process of preparation before the food can be eaten.
Choose some plants describe the process of preparation before they can be eaten.
Eg the seed from wheat is collected and ground into flour, mixed with water and yeast and then baked in the oven to make bread.
Bread making – make damper on an open fire
Propagating – eg potato eyes /like Aboriginal women did with murnong
Role-play- Rev Langhorne/Protector Thomas/Chief Protector Robinson and issue of food supplies on reserves and missions. Develop a script.
Compose a poem/song/painting about the disappearance of the plants:
Murnong
Forgotten song
Whispering back
Words along
That hungry track

Discuss –what would you prefer your 'footsteps' over the land to be?

Video '*Women of the Sun Pt 1: Alinta the Flame',* and ask students to identify and record the different seasonal land uses of the clan. Form research teams of 4 members with each member given a specific task e.g. one member records food gathering techniques, another the approaches to hunting animals, a third food preparation methods and a fourth food taboos. Students can consider similarities and differences to food eaten by themselves and indigenous people of past eras. Issues such as availability of food and the contemporary notions of a 'balanced diet' could be explored.
DVD*First Australians, Episode 3 "Freedom for Our Lifetime" Victoria (1860-1890)* SBS 2008
Suitable for secondary students, this program shows how Coranderrk reservation was set up and the conflict between the Aboriginal 'settlers' and the Aboriginal Protection Board. It raises many issues and should provoke interesting questions and avenues for further research from students.

Research recipes using traditional foods.
How easy is it to buy traditional ingredients today?
Make a list of places in Melbourne which sell traditional ingredients.
Prepare a class feast using traditional ingredients.

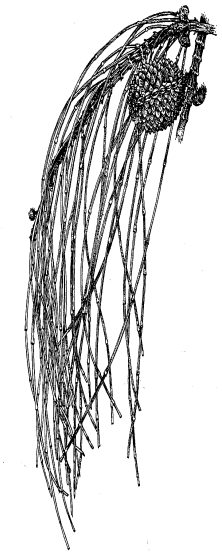
Compare the food values in a typical Aboriginal meal, a meal considered healthy today and a 'junk food' meal. Which contains the most fat, complex carbohydrate, sugar, cholesterol and vitamins? Which is best for healthy teeth? Which would be most sustaining on camp when you are doing lots of exercise?

Reference: *Tukka Real Australian Food* Jean-Paul Bruneteau New Holland Publishers (Australia) Pty Ltd 2000

STORY PLANTS

PLANTS

" When the wattle blooms again……"
Barak



Plants were many things to the people, not just food. Plants have symbolism, and were used ceremonially. Today modern Koori people continue this tradition in ceremonies such as 'Tanderrum', 'Smoking Ceremony' and 'Welcome to Country'. The 2000 Sydney Olympic Games contained Aboriginal ceremony.
Tanderrum is a ceremony opening the bush to a visiting group. In traditional times, visitors were presented to the Elders by an interim group, one known by all parties. Eucalypt leaves were used to indicate that the visitors were free to partake of the land during their stay. Water was shared from a tarnuk, sipped through a reed straw. This same reed was used for making spears, when broken it symbolised that no harm would come to you during your stay.

The modern adaptation of the tanderrum welcomes many cultures to this land and asks all to respect the gifts it has to offer. Wurundjeri elder Joy Murphy Wandin began her Australia Day 2003 talks by saying -
WominjekaWurundjeriBallukyearmennkoondeebik
Welcome to the land of Wurundjeri people

In a Smoking Ceremony, leaves of three plants may be used – Cherry Ballart (*ballee*), River Red Gum (*biel*) and Silver Wattle (*muyan*). The cherry ballart is a plant that requires support when young but has strong resilient wood. The cherry ballart symbolises youth. The wattle was vital to local clans, every part being used: seeds, bark, wood and gum. It represented the elders. The red gum is the most widespread eucalypt in Australia and is symbolic of the entire community and the community's access to the land and its resources. As you walk through this smoke, you are also walked through and protected by a physical merge of the old and the new. Smoke cleanses the visitor, and was a ritual to discourage bad intent. These plants – Cherry Ballart, Wattle and Gum are shown at the front of this resource.

John Batman arrived at the Yarra River in 1835 intending to exchange goods for land with the Wurundjeri. In return for blankets, knives, tomahawks, and flour he attempted to buy 230,000 hectares or about half their traditional land. There has been a lot of controversy about the legitimacy and authenticity of the documents associated with the transaction. It has been suggested that in agreeing to the deed that elders of the Wurundjeri group were following their custom of Tanderrum - the exchange of gifts for the temporary use of land and its resources. Settlers soon arrived with large flocks of sheep, claiming huge areas of the native grassland prepared by the Aboriginal people for grazing by the indigenous animals. Today there are less than 1% of native grasslands remaining in Victoria.

At least 26,000 years ago, a young woman from another area of South-Eastern Australia died at Lake Mungo in NSW. *Mungo Lady* as she is usually known today, appears to have been cremated and buried by her family on the south side

of the lake. We can only guess at the exact circumstances of her death and burial, the fact that a special cremation took place suggests that she was a member of a community as concerned with rituals and beliefs as Australians today. *Lady Mungo's* burial is the world's oldest known ritual cremation and burial, her lands now being protected under World Heritage status. Pink coloured ochre had been scattered over her grave at the time of burying. As this ochre did not occur there naturally, it must have been brought in from a place more than 100 kilometres away.

Ceremony to the people was just as important as the hunting and gathering and fishing.

On Oak Lawn at the RBG there was an enormous tree planted by Lady Loch, wife of the Governor of Victoria in 1889. When the Lochs arrived from England to take up their ceremonial vice regal posts in the 1880's at nearby Government House, they requested to see a corroboree (*gayip*inWoiwurrung). "Show us some local culture and ceremony", they asked. This became known as the 'corroboree dispute'. But by this period, the Board for Protection of Aborigines was opposed to this form of cultural expression. The Loch's had to settle for one of Barak's drawings of a corroboree instead.
(See p 23)

Questions to investigate at school

- What are ceremonies?
- What's a celebration?
- Where do they take place?
- Can you name a few?
  (Church/ sports events/ welcomes/ birthdays/ anniversaries/ funerals)
- What is meant by the term Elder?
- What is ochre and where can it be found?
- How do we use plants as symbols? Does your school have a plant emblem?
- How do we include plants in our ceremonies and customs?
  (Giving flowers, decorating Christmas trees, offering olive branches etc)
- If you welcomed people to your school what plants would you use? Why?
- What do you want the plants to represent? How would you use these plants?
- If welcoming is a way of sharing, what would you offer your guests?
- How does this raise awareness about the importance of plants in our lives?

Activities to try at school

(Illustration from You and Me, Murrawee, by Kerri Hashmi, illustrated by Felicity Marshall)

Find a dreaming story from the Aboriginal language group of your area. These stories are designed to be heard, so the teacher can read to the class or record it on tape.

An excellent resource for this, or similar activities is Dust Echoes; a series of 12 animated dreamtime stories from Arnhemland, with teaching notes. These can be found at http://www.abc.net.au/dustechoes/

Discuss what the story was about. Did it tell how a feature or animal was created? Was there a moral in the story? When discussing the story the teacher should be prepared to accept different interpretations, as there is no right or wrong answer to the issues raised in the story.

Discuss some rules that are important to the class and have students make up a story to explain why that rule is important.

Students may like to do an artistic representation of the story. Examples may include a 2D pictorial or a 3D clay and found object sculpture.

How important are plants in these stories (also animals, and the natural world)?

Eucalypts – most schools have one - find a leaf and crush it, smell it. Collect lots of eucalypt leaves, and line the wet area of your classroom with them. When you walk on the leaves, the oils will be released, making the room smell of the bush.

Timeline – using a 40m builders/athletics tape students can stand along imagining each metre a thousand years, with students playing role of the pyramids / Captain Cook/volcanoes etc along this tape.

Let the class choose something to represent the passing of time in Australia such as Bunjil's flight, the rainbow serpent, an eel or a digging stick, and create a visual timeline. They create the timeline to fit along a wall in the classroom and each student or group of students is responsible for researching and representing the events in a particular time frame and adding them to the timeline. It would be interesting to compare events in Australia with key events in the world.

To encourage students to think about how information was passed from one generation to the next try this activity:

You will need 4 pieces of fruit e.g. apple, pear, banana and an orange, a vegetable knife and a cutting board. Get the students to sit in a circle with the teacher. Place the fruit in front of the student on the right of the teacher. Get the class to imagine that these are fruit that nobody has tasted before so they do not know whether they are good or bad to eat. Whisper the instructions of how to prepare the food to the student on the left of the teacher. They then whisper it to the person on their left and so on until it has passed all the way around the group to the student with the fruit.
An example of the message may be "You can eat the banana, but it must be peeled and mashed to get rid of the poison, the pear is OK to eat but the apple is poisonous, the orange is good to eat but it must be peeled and cut into four pieces." The last student then prepares the food for eating, and you will see if the information has travelled around intact. The complexity of this activity may be modified to suit the age level.
As a class, discuss what would happen if someone passed on the wrong information.
Ask students to imagine they are a person in one generation. The person who gave them the message was their mother or father and the person they gave it to was their son or daughter.
Discuss where all the information is stored and what happens to it if an older person dies before passing their knowledge on.
What are some other methods of passing information from one person to another, without writing it down, or by telling someone by word of mouth? Examples may include artwork, dance, story or song. Working in groups the students can try one of these methods to pass on the message about food preparation to the class or a message of their own choosing.
Ask students to list things their parents tell them frequently.

To explore contemporary views of Aboriginal Australians, the best strategy is to invite Aboriginal speakers to the school to give a personal account of their culture. This allows students an opportunity to ask questions directly. The teacher could approach the local co-operative and speak to the Cultural Officer. The Cultural Officer may be able to come to the school to give a presentation or may know of any Elders of the Community who would be willing to share their experiences with the students.

As a class activity, create a 'Then and Now' mural or collage. Using the school library, media sources, artwork, construct a large mural or collage demonstrating the differences and similarities between traditional and contemporary Aboriginal Culture.

When looking at Aboriginal art it is important to acknowledge the differences in style from different parts of Australia. Not only styles but also materials varied, depending on what was available in the environment. We often think of dot painting when we think of Aboriginal art but these are Central Desert art, not typical of all Aboriginal art. The cross hatching style of Victorian art is significantly different from Northern Territory art.

Let no one say the past is dead
The past is all about us and within…….
Deep chair and electric radiator
Are but since yesterday
But a thousand thousand campfires in the forest
Are in my blood

'The Past' by OodgerooNoonuccal

TECHNOLOGY

PLANTS

"It's a wonguim and people call it a boomerang, but it's really a wonguim. They're beautiful. They are made with wood and a special oil to smooth 'em up. Uncle Ronnie made 'em with a cuttin' axe rock. He puts his name on them with a burning pen. Uncle is WambaWamba."
Marbee and Ngarra, 5-year-old twins 2001

The local people had appropriate technology to suit their environment and lifestyle. Light portable and multifunctional possessions included: boomerang, digging sticks, spear-thrower, woven bags, and wooden carrying dishes.
There are many types of boomerangs (wonguims) for fighting, hunting, play, fire, ceremonial, music, tourists.
Tarnuks had many uses including carrying babies, winnowing seeds, preparing food in, to eat food, or carry water.

Questions to investigate at school
What is a wonguim?
How is it made?
What is a tarnuk?
How is it made?
What other tools were used and what materials were they made of?
How and where did indigenous people obtain the materials to make their tools?
Find pictures and stories of unusual tools to share.

The notion of men's business/women's business was very strong in traditional society. What chores are considered men's/women's work in your home? How are decisions made?
Research how traditional roles have changed with time. Do you think these roles have changed more in western or Aboriginal society? Consider parliaments, Prime Ministers, Aboriginal Elders, church leaders and working mums.

Activities to try at school

Type boomerang into a www search engine, and see what comes back!

Try making a wonguim from thick card, and decorate with paints and glued on seeds. Turn these into a class mobile. Find pictures of different styles and compare their uses. Is there a pattern in their structure and function?

Compare the design of airfoils and boomerangs. What do you notice? What does this tell you about the technical ability of Aboriginal people?

Tarnuks had many different uses.

List all the uses and make a list of all the utensils in your home that meets these needs (bowl, spade, cradle etc)

Fibres

Both men and women made string. It was then used to weave fishing nets, bags, eel traps, baskets and clothing.

Find as many uses for fibres and string as you can.

How many colours could be made using natural materials?

How long doesit take to make a string bag or basket? How much would you pay for a genuine artefact? Do you think it is value for money?

What plants are used in different parts of Australia?

Challenge: use the string each class member made during the Aboriginal Resource Trail to weave into a bag or net at school. Add to it by collecting lomandra leaves to continue making more string. Try dyeing the fibres before weaving them. How many colours can you produce? Students could make a sculpture of Bunjil's nest using found materials and handmade string.

Aunty Dot Peters' Story

I grew up in Healesville.My Grandparents came to Coranderrk with their parents and my mum was born on Coranderrk along with my sister Beryl. One brother was born there too.

My Grandmother was a terrific person who died at 104. [She said things like] "It's going to rain today". How do you know that Gran? "Because I can touch the mountains."

[Growing up] we never really heard much about Aboriginals. With our Grandparents, when they were put on the reserves they weren't allowed to speak their language and they weren't allowed to have anything to do with their culture. And Mum being born there she would have less to do with it and me being born outside of Coranderrk even less. I'm still learning myself now at nearly 82.

[My childhood memories are of]

The eel trap used in the Aboriginal Resource Trail programs was made by Dorothy Peters.

the happiness that we had, fishing with our Granny in the Badger Creek and learning to swim in the little Badger Creek out at Coranderrk. I remember my Grandmother and Grandparents teaching me respect for each other, respect for the things around us and the belief in the creator. I learnt that at five years old and it's been with me all my life and that's what's given me my strength. I remember Granny saying to me once that as I go through life someone is going to tell me off or insult me but I'm not the one to worry because I'm not the one with the problem.

None of us own the land; we all belong to the land.It astounds me that Aboriginal people can say our land goes there andWurundjeri land ends there … we would have to walk with our Aboriginal people to know where the boundaries are. You do a crime against Mother Nature and you pay for it.

Aunty Dot Peters with a portrait of her father

I go to schools. A lot of our young people are not interested in learning [to make] the baskets because things today are instant. When I go to schools I show them how to make a bracelet and show them the coiling methods and talk about Aboriginal issues. I have been involved in reconciliation. There is more understanding now on both sides.I have written one [dreaming story] about Bunjil the eagle and Badger Creek.Lilydale High School asked students from Worawa College and the high school to write their version of the stories and now the copyright and the book is theirs.

We need to be teaching our young people to live in the two worlds. We've got a great country and we all need to work together to make sure it stays that way. A lot of our young people have got non-Aboriginal partners and their culture needs to be thought of as well. I say to the children you might have more than one culture in your family. Find out about your grandparents. They have to live in the two worlds. With the committees I'm on I can see the difference from when we first started off; we felt as if we were getting nowhere. I've been involved in reconciliation for over 40 years and I can see the difference in the last few years. It's amazing the number of people that don't know much about Aboriginal culture.

Dad died as a prisoner of war on the Burma railroad. He was only in his 40s. The recognition of Indigenous Veterans started with a commemoration service at the Healesville Returned Servicemen's League. It [recognition of Indigenous veterans] went all over Australia. It's snowballed from me just asking our local HealesvilleRSL, which is wonderful.I say to children 'if it comes from your heart you pursue something. If you approach the right people (you don't attack people, you approach them) it's surprising what you can do in life.'

I think they [non-Aboriginal people] should know that Aboriginal culture is respect, caring and sharing. There were a few families in Healesville and there was respect on all sides. The grocer, Frank Endacott helped our family when Dad died. Frank was a member of the Bread and Cheese Club who got together to preserve the Aboriginal Cemetery at Coranderrk.

I have been very, very happy in Healesville. I never experienced any racism, or anything like that and I am still friendly with people I went to school with. In some places people in a shop had to wait until the white people were served and things like that, but that never happened in Healesville.

It is changing, education coming into things, quite a few Aboriginal people working in different areas and organisations.

[It's] still surprising what people don't know, I'm still learning.

Dorothy Peters was honoured in 2012 when she was placed on the Victorian Indigenous Honour Roll, the first indigenous honour roll in Australia.For further information on Dorothy Peter's extensive work in reconciliation, and please refer to the links below.

http://www.dpcd.vic.gov.au/indigenous/leadership/victorian-indigenous-honour-roll/victorian-indigenous-honour-roll-biographies/dorothy-peters

http://www.dhs.vic.gov.au/for-business-and-community/community-involvement/women-in-the-community/women-as-leaders/2011-honour-roll-of-women?SQ_DESIGN_NAME=print

http://www.dva.gov.au/BENEFITSANDSERVICES/IND/Pages/ice.aspx

http://crdunn.blogspot.com/2011/03/aunty-dot-honoured.html

http://www.premier.vic.gov.au/media-centre/media-releases/from-the-minister-for-aboriginal-affairs.html

http://www.starnewsgroup.com.au/mail/mountain-views/208/story/79543.html

http://www.theage.com.au/articles/2003/12/20/1071868697215.html

http://www.theage.com.au/news/national/aboriginal-flag-raised-in-memory-of-war-service/2006/05/31/1148956416872.html

PLACE

BIRRARUNG

"...the Yarra is my father's country, there's no mountains for me on the Murray….." Barak 1876

The RBGM we see today of sweeping lawns down to lakes was once banksia, sheoak and eucalypt woodland growing along the wetlands of Birrarung.
It was indeed described by Latrobe as a veritable Garden of Eden in 1846.
It was here where clan groups of 15-20 people walked, men hunting, women gathering. It was good catering around here. This place was also managed by fire to favour open woodland with murnong and grass. Murnong for the people, grass for the 'roos.
Much is said of how indigenous people hunted and gathered. Much more could be said of how they sustainably managed their country for 100's of human generations. Modern Australia is still catching up on this knowledge.

Questions to investigate at school
Students in small groups make lists of questions about how the Aboriginal people made use of the environment in which they lived. Review this list after your visit.
Can 'reading' natural events identify the seasons in a local area? Discuss this with students and invite them to draw/photograph examples for inclusion in their workbooks.
Using the Middle Yarra calendar for Melbourne from *Banksias and Bilbies*ask students:
Can you recognise any seasons in this 'new' calendar?
What season are you in now?
Do you agree with the author's point that school resumes in the hottest part of the year?
Given the fact that Christmas is a fixed date, could you devise a school term program that had the summer holidays taking place in the actual summer for Victoria?
Would this be preferable?

Based on their experience and collection of data, and on their own observations of seasons in their suburb or town, invite students to design a new seasonal calendar for the region. Suggest they include the long school holidays in the most appropriate time of the year.
In groups, plan menus using the traditional foods of different seasons. Compare the results for each season. Is the same food eaten the whole year? Could the Aboriginal people stay in the same place all year? Each group should present their findings as PowerPoint, mobile, collage or poster presentation or other appropriate format.
"All life is sacred" – how is this value recognised in traditional hunting techniques?

Why is a water source, such as Birrarung, so important?
Read the story about the Yarra as told by Barak (p.23). Find more stories and newspaper articles today. What attitudes do we have towards the Yarra?
What's a Garden of Eden supposed to be?
What do the terms biodiversity and sustainability mean?
Why is environmental sustainability important?
How is this place – the RBGM - cared for today?
What is an eel? Have you or someone you know eaten eels? How can they be caught?

Activities to try at school

Places today:
Do you have a special place?
Where is this favourite place?
How did it become special?
How do you maintain connections with that place?
How do you feel when you spend time there?
Ask class members to share places they have formed connections with.

Places past:
Organise an excursion to a natural location accessible to your school such as a river, coastal area, national park or local reserve.

Imagine this area 200 years ago:
- What attraction might this area have had for Koorie people?
- How would families have sheltered from the elements?
- Is there a suitable spot for a family group to camp?
- Would this be a good spot to host a family gathering?
- What foods would have been gathered?
- Would suitable plants be available for weaving baskets and nets?
- Provide students with a map of the area and have them label it based on the previous questions: identify and list mammals, birds, lizards, shellfish, fish that may have been found and made use of.
- How long might the group have stayed and where would they go next?

What was here before?
Individual students can undertake a research project to find out which indigenous plants and animals inhabited the area in which they live before 1835. Which Aboriginal language group lived in the area? What are some words from the language? Are any of the words used as place names? Information could be sought from local councils, libraries, indigenous nurseries, Aboriginal Advancement League, Local Aboriginal Educational Consultative Groups (LAECG), Council for Aboriginal Reconciliation, Australian Institute of Aboriginal and Torres Strait Islander Studies (AIATSIS), Koorie Heritage Trust and local historical groups.

What is here now?
The Aboriginal people had intricate and refined systems of land management and conservation based on a deep respect for the land. A visit to the Gardens can provide a basis for a comparative study of the local plant communities. Using the Aboriginal people's appreciation of the environment as an example, students could organise Environmental Action Teams to undertake projects. Students can look at-

- Remnant indigenous vegetation
- **Positive and negative effect of humans on the area**
- How harmful effects can be minimised
- Action that people can take to improve the environment
- Action may be tailored to suit students' needs. Here are a few-
  - ✓ Recycling/Rubbish management/Rubbish free lunches
  - ✓ Reducing paper waste/Reducing energy use
  - ✓ Community clean up days
  - ✓ Composting at school and at home
  - ✓ Presenting projects to other classes
  - ✓ Joining an environment group
  - ✓ Articles in school newsletters and local papers
  - ✓ Writing to local, state and federal politicians regarding environmental issues
  - ✓ Develop or improve an indigenous garden within the school grounds or in the local community
  - ✓ Participating in local revegetation and environment projects
  - ✓ Develop an indigenous garden containing plants with food, fibre and medicinal value

Make a collage or 3D picture to compare an Aboriginal camp with the tents and simple huts of early Melbourne. Change the scene, as Melbourne developed to show the growth of city buildings and the dispossession of the indigenous people. Using a digital camera and tripod, photograph the changes happening to the scene. Students could use an editing program to develop a stop motion animation. They could record a narration of the scene, or add an appropriate soundtrack.

Create a crossword or other word game using Aboriginal words. (There is a glossary at the end of this kit).

What is a mission, why was one started?
What was the impact of the mission on the grounds of what is now the Royal Botanic Gardens?
What belief system was being introduced?
Find out where else in Victoria mission stations and reserves were established by the government?
Coranderrk near Healesville was where Barak lived his later years. See the Coranderrk story below.

Activities to try at school

- Research some early characters of Melbourne: Batman, Barak, Buckley, Derrimut, Tullamarine, Latrobe, Wonga, and Truganini (Tasmania)
- Ask students to use the map of Aboriginal Melbourne clan groups (see p.6) to overlay a current map of Melbourne.
- What clan land is the RBGM on? Where is your school on this map?
- Are there Aboriginal suburb and street names in your area? You now know what Toorak means how many more names can you find?
- Read the stories of Trevor and Aunty Dot Peters
- What have they to say today? After reading and discussing these, students should write a response that articulates the connections between the writers' ideas and values and their own.
- Write a reply to the authors, what would they like to ask them?
- Students could record their impressions of the Aboriginal Resource Trail through painting, writing a story or poem, drawing a map of the trail they followed or describing key things that they learned and use traditional symbols or local Aboriginal words.

- Using information from the visit to the Gardens, research and reference to the contrasting pictures on page 5, create a role-play depicting an Aboriginal family arriving at the mission and having to change their way of life to fit the rules of speaking English, wearing European clothes, eating English food, converting to Christianity etc. How would they feel? Why would they have gone to the mission? What would happen to them if they left – was there anywhere to go where they could still live traditionally?

Langhorne's Missiononly lasted two years so where did the people go? The land around Melbourne was all settled and the surrounding districts were farmed. The Aboriginal people had nowhere to go, no access to food or water and they were facing starvation. Prior to white settlement Victoria was the most densely populated area in Australia.

In the 1860smany Aboriginal people moved to Coranderrk to establish a place where they could be independent and be able to live as a functioning community. At this time the indigenous population in Victoria had shrunk from 60,000 to 2000 people. Simon Wonga, Wurundjeri leader, had appealed to the Aboriginal Protection Board for a land grant for his people to use. Wonga had formed a friendship with John Green, a Christian Pastor, who believed in the right of the indigenous people to independence. When the board made no decision, Wonga and Green led the Wurundjeri people to Coranderrk and claimed the land on the Yarra banks as their own. The settlement worked so well that word spread among other clans and the headmen brought their people to Coranderrk too. The land was cleared, huts were built, food crops were produced and the people had enough income to buy clothes, tools and horses. Eventually the Aboriginal Protection Board allowed their use of the land.

Other reserves were established, such as Lake Tyers and Framlingham but the people had to convert to Christianity before they could live on a reserve. Coranderrk was unique in being governed by a council made up of all the adults, rather than by a white manager. The Reverend Green believed that the people should make their own decisions and worked with them to enable them to achieve this. This caused unrest on other stations.In 1872 Coranderrk was prosperous and the women sold baskets and eggs for fashion books and dresses.

The Aboriginal Protection Board invested in hop plantations at Coranderrk, assuring residents that the profits would be used to build a new hospital. However, an overseer was appointed who took over the plantation and paid wages to white workers only while the resident indigenous people worked but were given no wages. The entire hops plantation was then sold and the Aboriginal Protection Board kept the profit. As all their efforts had been focused on growing the hops, other farming on Coranderrk was failing.The Protection Board used this as an excuse to try to get rid of Coranderrk but Barak took the cause to Parliament. A resulting Royal Commission declared the station must be maintained.

Anne Bon, a rich landholder in the district became involved and when the Board again nearly succeeded in closing the station down, wrote to the Premier in support of the residents. Twenty-two men from Coranderrk walked to Melbourne (60km) and Anne Bon introduced them to the Premier. They asked him to do away with the protection board, provoking another inquiry. Meanwhile Barak's wife fell ill and died and his son, David, also fell ill. The 14 year old boy died alone in hospital in Melbourne as his father was not allowed in to see him.

An 1881 inquiry found Coranderrk should have a more sensitive management style.
The Aboriginal Protection Board's practices included:

- Food rationing which led to starvation for indigenous people
- Land redistribution which dispossessed indigenous people making them landless and unable to hunt for or grow food, causing starvation

Aboriginal people viewed the protection board as their main enemy.
In 1886:

- The board declared that Coranderrk and other reserves should be sold.

- The half-caste act was passed, ruling that any person under the age of 34 with any white ancestry was exiled from the missions or reserves, as they were not considered to be Aborigines. Only full bloods could remain. YortaYorta man, Dr Wayne Atkinson, describes this act as having 'genocidal intentions'. It halved the Aboriginal population and the budget of the board. The exiles were forced into white communities where they were not wanted. Children were told not to admit having black blood or were not told of their ancestry so they'd fit in better.

Barak, in desperation, wrote to the Argus "we should be free like the white population" and walked to Melbourne again to petition parliament.The Premier gazetted the land as a permanent reservation but the children had been driven away because of the half-caste act and Coranderrk was populated with a few old people. Barak's paintings are a memory and dreaming about his people pre white invasion. They are a statement of his culture as it was. Barak said, "When the wattles bloom again I shall leave this land" and in 1903 he died, a sad old man.
Coranderrk was sold in 1948 and the Wurundjeri community bought it back 50 years later.
William Barak is celebrated in the National Gallery of Victoria, Ian Potter Gallery.

This story is summarised from *First Australians, Episode 3 "Freedom for Our Lifetime" Victoria (1860-1890)* SBS 2008

For Further information, go to: http://www.ngv.vic.gov.au/explore/ngv-collection/william-barak

This painting by William Barak is available as a poster. Copies are part of the RBGM Education collection.

HOW THE YARRA RIVER WAS FORMED.
As told by Barak

One day two boys were playing in the bush, throwing their toy spears at whatever bird they saw. After a while they tired of this game, and sighting an old wattle tree went up it in the hope of finding some wattle gum, of which they were very fond.
They saw some gum on a bough fairly high up, and one of the boys climbed the tree and reached it. He began to throw the gum down to the other boy, who was waiting for it underneath the tree. But when the lumps of gum reached the ground they disappeared, and the boy who had remained below could not find them. At last he noticed a hole, and thinking that the gum may have rolled down it, he poked the end of his little spear in it.
As soon as he did this a deep growling voice was heard, and the ground seemed to shake. An old man, who had been sleeping underground with his mouth open, suddenly made his appearance. He picked up the frightened boy, and shuffled off, dragging his feet, because he was old and the boy was heavy to carry.
As the old man huddled along he made a furrow, which deepened into a gutter, then into a creek, and lastly became the Yarra River. All this time the little boy was crying with fright. At last Bunjil heard him. He put sharp stones in the path of the old man, over which he fell, and cut himself to pieces. The boy ran off to his home.
Just before the old man died, Bunjil appeared, and said to him; ‘let this be a lesson to all old men. They must be good to little children.’

From ‘When the wattle blooms again.The life and times of William Barak. Last chief of the YarraYarra Tribe’ Shirley W.Wiencke 1988

Barak was angurungaeta, or headman, of his clan.
Today, Wurundjeri Elder Joy Murphy Wandin describes William Barak as a gentle man who had a gift with people. He was a diplomat, once walking from Coranderrk, outside Healesville, to Government House to deliver a letter of protest.
A picture of Barak can be seen in the new Australian Gallery at Federation Square, as can one of his paintings, of men in possum skin cloaks.

Women'sBusiness

Aboriginal women dedicated much of their time to family and domestic responsibilities, in particular collecting and gathering food. Women were educators, instilling in their children the knowledge of how to locate, gather, and prepare food, and which foods to avoid due to poisons, or cultural associations. The food collected by women such as seeds, fruit, roots, small game and shellfish provided a regular diet for aboriginal families on a daily basis. Women possessed a detailed knowledge of their local environment, knowing which plants held medicinal properties, how to use them, and where to find them. An Aboriginal woman's toolkit usually comprised of items which she used every day, many of which were multifunctional, and could be adapted to any situation.

Kannan (ganan): Digging Stick

Ganans were an essential part of women's toolkits. Saplings of any hard wood were collected, shaped, then one or both ends were hardened in the fire. They were sometimes used as fighting sticks, but usually used in combination with a tarnuk, to dig up tubers such as murnong. Digging sticks helped to aerate the earth.

Bilang Bilang: Dilly Bag

Bilang Bilangs were used to carry collected foods such as berries and tubers, and personal belongings. They were worn over the neck, or often placed over the head and secured behind the ears, in order to keep hands free. Plant fibres such as lomandra or cumbungi were used.

Eel Trap

This beautiful eel trap was made by Dorothy Peters from Healesville. Woven from plants such as lomandra or cumbungi, these traps had a wide opening at one end, and a narrow hole at the other. Women would place the trap in the river, weighed down with stones, with a piece of bait at the narrow end. Eels were caught when they swam in, but couldn't turn around or swim backwards to escape.

Tarnuk, Coolamon: Wooden Bowl

Tarnuks are a multipurpose wooden vessel, used for collecting foods such as fruits, nuts, and small game, and for carrying water. They can also used for cradling small babies. Usually crafted from hard woods such as the timber from the manna gum. This tarnuk was mended by Trevor with tree resin and ash.

Grinding Stone

Grinding stones were used for many purposes, including pulping roots and tubers, and crushing small animals to make them easier for small children and the elderly to digest. Pounding some foods on a grinding stone and washing in water could also help to remove toxins from poisonous plants. Leaves and bark were crushed to make medicines. Large grinding stones were used to mill seeds in drier areas, however this was not so common in Victoria. Soft rocks and clay (ochre) were crushed to make pigments. Large grinding stones were not usually carried, but left in camp, ready for the next visit.

Royal Botanic Gardens Melbourne

Men's Business

In Aboriginal society, it was customary for men to hunt larger game, while women collected plant foods and smaller animals. Their technologies were complex, well organised, and sustainable. Like the women, the men's tools were often multifunctional, and used not only for hunting, but also for ceremonial practices

Killer Boomerang

The killer boomerang is a non-returning boomerang, characterised by its long tapering edges and hefty weight. It can be aimed and thrown with great force to bring down large game, such as kangaroo or emu. They were often used in ceremony, and for making music. While non-returning boomerangs were used for hunting, returning boomerangs, with symmetrical curved shapes, were generally used for leisure, or sometimes to act as a decoy to bring down birds of prey.

Boondi Stick:

Clubs were used as a weapon for hunting game, and fighting. They differed in design and shape. The timber from which they weremanufactured depended on what resources werelocally available, however they were generally crafted from hard, heavy timber

Fire

The importance of fire as a tool shouldn't be underestimated. Aside from the obvious uses of cooking and providing warmth, fire was used to manage the land, clearing understory in forest areas and maintaining grasslands. Fronts of fire were used to drive game to waiting hunters. It played an important role in manufacturing tools, for example hardening wooden spear points or digging sticks, heating resins, and preparing plant fibres for string making. Fire had an important role in many religious ceremonies practised across indigenous Australia, for example the Tanderrum Ceremony.

One method of making fire was the fire drill. It consisted of two thin rods of suitable wood. One is called the hearth stick; the other the drill. *Xanthorroeaaustralis* (grass tree) made an excellent hearth stick, while the Austral Mulberry and the Victorian Christmas Bush were suitable for a drill. The drill is rotated rapidly between the hands while being pressed into a small socket of the hearth stick. The hearth stick usually rests on a pad of tinder, for example, paper bark. As the drill is rotated it produces a fine dust. Heat from the friction between the drill and the hearth ignites this powder, which falls onto the paper bark and sets it smouldering. Stringy bark is placed on top, and the tinder is gently blown upon until a flame is produced.

Woomera: Spear Thrower

The woomera could be described as the equivalent of a swiss army knife, because it has many purposes. It is a spear thrower, which acts as an lever to allow men to throw spears at greater speeds and distances. Most woomeras had a peg or socket on one end to engage the butt of the spear. The curved body could be used as a mixing bowl to prepare ochres. A sharp stone was often attached, which functioned as a knife. The town of Woomera in South Australia was named after this Aboriginal invention.

Emu Caller

This hunting tool imitates the call of an emu, when hit at one end with the flat of the hand. It was used to attract emus away from their nest, so the men could sneak in and steal their eggs, or take the life of the bird. Emu callers were traditionally used by the Bundjalung people, of East Coast NSW

Aboriginal Resource Trail Plants

Some of the indigenous plants present on the RBG site, were:

Drooping Sheoak – *Allocasuarinaverticillata* Black Sheoak –*Allocasuarinalittoralis*
Sweet Prickly Box – *Bursariaspinosa* Coast Banksia – *Banksiaintegrifolia*
Swamp Paperbark –*Melaleucaericifolia* Blackwood (Wattle) - *Acacia melanoxylon*
Native Raspberry –*Rubusparvifolius* Kangaroo Grass –*Themedatriandra*
Murnong, Yam Daisy –*Microserislanceolata*Chocolate Lily –*Arthropodiumstrictum*
Blunt-leaf Tea-tree - *Leptospermum obovatum*River Mint - *Menthaaustralis*

The following notes outline many of the plants, and their traditional uses found in the gardens.

Long Island Walk

This ancient bank of the original Birrarung (Yarra River) forms an island in the billabong landscape now a part of the lake system at the Royal Botanic Gardens. This area is all that remains of the original south bank of the Yarra River, before the course of the river was relocated to the north of the present day Gardens in the late 1800's. Before Melbourne was settled in 1835 this area was inhabited by the Boonwurrung and Woiworung people. The lagoon and river provided abundant fish, animals and plants. The indigenous people had the sort of diet that is recommended today – fruit and vegies, fish and lean meat. Highly significant as traditional food gathering grounds, many links to the original occupants can be experienced here. Indigenous fauna has returned since the island has been revegetated with plants indigenous to the Lower Yarra habitat. The following plants and animals are of significance to indigenous people.

Swamp Paperbark -*Melaleuca ericifolia*
Nectar from the flowers is an important food source for local birds and insects.
The tree has whitish papery bark that peels off in strips. Aborigines used bark from mature trees for rugs, bandaging and thatching. Oil from the leaves was used to treat coughs and colds (smell), and stems were used for spears and digging sticks. (Melaleucas were referred to as “tea-tree” by the early settlers and tea was made from the leaves)

Kangaroo Grass –*Themedatriandra*
A perennial grass forming dense masses, this is one of Australia’s most widespread grasses. The grass here has been grown from seeds from remnant vegetation found on the old Observatory site by the main entrance to the RBG, so gives us a real connection between past and present.
In summer, Aborigines would gather seeds and grind them into flour which, when mixed with water, was cooked to make damper. Dense clusters of shiny bright brown spikelets form on wiry stems which were used to make twine for fishing nets. Tussocks recover vigorously after fire and this grass was a staple food of kangaroos on the basalt plains.

Hop Goodenia -*Goodenia ovata*
An infusion of leaves and twigs has been shown to have possible anti-diabetic properties. Aboriginal mothers gave an infusion of the leaves to their babies to make them go to sleep.

Sticky Hop Bush –*Dodonaeaviscosa*
Papery red seed capsules were used by European settlers as "hops" in beer making. The Aborigines used parts of the plant as a local anaesthetic, chewed the leaves to relieve tooth-ache and bound them on their skin to treat stings. Apparently boiled root juice was applied to sore ears.

Bulrush, Cumbungi, Narrow-leafed Cumbungi –*Typhadomingensis*
A staple food source for indigenous people throughout South-Eastern Australia. The floury rhizomes were steamed in earth ovens or roasted in fires, the edible portions consumed, then the tough fibres that remained were scraped with mussel shells and made into twine. The women rolled the moistened fibres on their knees to form long continuous strands. These were then woven together to make stronger 2 or 3 ply string. Young succulent leaf bases were also eaten, giving a pea like flavour. If the water was murky or polluted, it became tainted and inedible. Leaves were used by the local people to make eel traps and baskets and more recently for chair caning.

Blackwood - *Acacia melanoxylon*
Fibre was used for fishing lines. Leaves were used for dyeing material. Bark was heated and then infused in water for bathing joints afflicted with rheumatism. Bark also has good tanning properties. The hard wood was fashioned into clubs, spear throwers, boomerangs, and shields, and more recently, fine furniture.

Small-leafed Clematis - *Clematis microphylla*
'TAARUUK'Gunditjmara.
The tubers were roasted and then kneaded into dough. The leaves, when crushed, were used as an inhalant for headaches. Root fibers were used for making string.
Note: these plants are on the Australian National Botanic Gardens list as poisonous both internally and externally.

Yam Daisy –*Microserislanceolata*
‘MURNONG’Wurundjeri
This small Grassy Woodland plant looks insignificant, but it was extremely important to the indigenous people – its tubers (round, or like a carrot) were probably the most relied-upon staple food for the Aborigines of Victoria. The plant was mentioned frequently in the early European accounts of Victorian Koori diet. Tubers are edible cooked or raw. When raw, they taste crisp and bland. They were mostly cooked in rush baskets in ground ovens overnight; cooked this way they produce a sweet syrup and are very good to eat. Yam daisies were once abundant on grassy

plains, up as far as the snow line.A settler in 1840 described “millions of murnong or yam all over the plain”, but it can now only be found in small isolated patches. What happened to it?

When sheep were introduced, they dug up the tubers with their noses and trampled and hardened the soil so that it no longer allowed regrowth. After 1859 the rabbit added to the depredations of the stock.

Running Postman–*Kennediaprostrata*
Aboriginal people sucked the sweet nectar from flowers, and also used the stems as a twine.

Water Ribbons -*Triglochinprocerum*
Aboriginal people gathered the sweet underground tubers, which were eaten raw.

River mint -*Menthaaustralis*
POANG-GURK - “bad smell” Tjapwurong
River mint grows throughout the state along the edges of streams and rivers. The leaves have a spearmint aroma and flavour. Leaves were crushed in the hands and the vapour inhaled for colds and coughs. Also used to abate stomach cramps, and as a food flavouring. Sometimes it was used as a lining in earth ovens to add flavour to the food. White to purple flowers appear in spring and summer.

Burgan, Kanuka (NZ) - *Kunzeaericoides*
Kangaroo spears, fighting sticks, waddies and fighting boomerangs were made from the wood.

Kangaroo Apple - *Solanum lanciniatum***,**
New Zealand Nightshade - *Poroporo*
A tall shrub with leaves that resemble a kangaroo paw in shape. The flowers are purple, and the fruits change from a yellow-green to dull orange when ripe. The fruits of many species of Kangaroo Apple were an important food for Aboriginal people, but must be eaten when they are completely ripe. The fruit would sometimes be placed in sand to ripen before being eaten.
Additional information: The fruit is poisonous when it is not ripe due to the alkaloid solanine. In the Soviet Union, Kangaroo Apples are farmed for this alkaloid, which is extracted from the leaves, to produce oral contraceptives and anabolic steroids. This plant belongs to the same genus as the potato, tomato, and eggplant.

Bulbine Lily –*Bulbinebulbosa*
PIKE -Coranderrk
The tubers of the Bulbine Lily are one of the sweetest lily roots and were eaten all year round (probably after being cooked first).In Spring a spike of yellow star like flowers appears.

Chocolate lily –*Dichopogonstrictus*
The chocolate lily grows abundantly around Melbourne. Each plant produces a small bunch of tasty tubers, which were roasted before being eaten. The small purple flowers have a strong chocolate smell.

Pale Vanilla Lily–*Arthropodiummilleflorum*(and Lilies generally)
This Lily, and most other native members of the lily family, produce white, bittersweet tubers on their roots which were dug up by Aboriginal women and used as a staple food. Tubers are edible raw or roasted. The plant has a strong scent of vanilla, especially on warm days.

Pale Flax Lily - *Dianella longifolia*
Edible berries when ripe. Fruit have a sweet flavour, which becomes nutty once seeds are chewed. Leaf fibres were used to make strong string and baskets.

Prickly Currant Bush - *Coprosma quadrifida*
MORR - Coranderrk
The Prickly Currant Bush grows in the tall forests over much of Victoria. From January to March it produces many small, sweet, currant-like fruits with a thin layer of flesh around a seed almost as large as the fruit itself.

Austral Indigo –*Indigopheraaustralis*
In Spring the plant produces beautiful mauve pea-shaped flowers. It gets its name from the strong blue dye the Aboriginal people extracted from the flowers. The roots were crushed and placed in water as a fish poison.

Black She-oak –*Allocasuarinalittoralis*
WAYETUCK - Wurundjeri
An important wood for making boomerangs and other implements such as shields and clubs. A boomerang made out of wood from the Drooping She-oak has been found in South Australia and dated at 10,000 years before present. The young shoots and cones were sometimes eaten, and could be chewed to relieve thirst. The mat of fallen needle-like foliage under she-oaks was considered a safe place to leave children as snakes are said to avoid these areas. The Black She-oak was one of the first trees to be harvested by the Europeans as the wood burns easily and was in great demand for bakers' ovens.

Blackwood - *Acacia melanoxylon*
BURN-NA-LOOK - Wurundjeri
The hard wood was fashioned into shields and spear-throwers. The bark was heated and then infused in water for bathing joints afflicted with rheumatism. Positioned around the back of the promontory.Flowers from July - October. Flowers are cream coloured balls.

Grass Tree - *Xanthorrhoea australi.*
BOWAT, BAGGUP - Wurundjeri
Copious amounts of nectar can be harvested from the numerous flowers in the flower stalk. Seeds were crushed to make flour. Soft white leaf bases (containing 5% sugar) were eaten and have a sweet nutty taste. Trunk resin used to attach spearheads to shafts, etc. Edible grubs found near the base. Fire could be made by rubbing the dried flower stalk with a piece of hard timber, igniting the fine wood dust inside. Flower spikes were also used as a spear shaft.

Prickly Paperbark - *Melaleuca styphelioides*
BUNU - Lake Hindmarsh
The thick soft bark was used for roofing, blankets, rain capes, bandages, plates, caulking for canoes, rafts to take material across rivers, slings to carry babies, and padded rings to carry loads on heads. Leaves crushed and sniffed for colds and headaches. An infusion of the leaves was used as a wash for skin irritations.

Casuarina - *Casuarina cunninghamiana*
ANGANY - Ngan'gikurunggurr (Daly River, Top End of Northern Territory)
The timber is very good firewood that will burn all night. As the wood is very strong it was also used for making digging sticks.

Cabbage Palm–*Livistonaaustralis.*
Twine made from the leaf fibres was used to make bags, baskets, fishing lines and nets. Baskets made from leaves. The growing heart of the crown was eaten, though this will kill the plant.

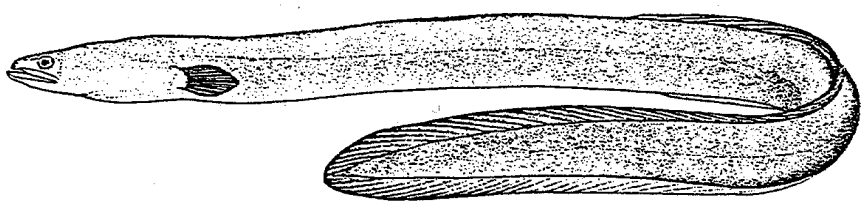
Additional Information: Palm tree grows to 30m tall. Flowers Aug-Sept. It is the only native palm that occurs naturally in Victoria.

Soft Tree Fern–*Dicksoniaantarctica.*
The upper part of the trunk was split open and the soft pithy tissue which is rich starch, eaten either raw or cooked.

Additional Information - Dicksoniaceae - Early witnesses describe the core as a turnip-like substance as thick as a man's arm, tasting variously bitter, sweet, astringent or "like a bad turnip". Removal of the core kills the fern.Crowns are a favourite campsite for possums. The sap of the young fronds was placed onto insect bites to relieve the itchiness and pain.

Silver Wattle - *Acacia dealbata*
MUYAN - Wurundjeri
WARRARAK -Djadja wurrung
This wattle likes living near river banks. The Wurundjeri people hold great symbolism for the wattle. The seasonal changes in a plant's development are read as indicators. When the wattle flowers fall it is time to fish for eels. Wattle blossoms will coat the slow moving Yarra at this time. Eels feed on a particular grub that lives in the wattle flowers. This feeding is part of the eels preparing for the autumn migrations, and a good time to catch a well fed eel! The wattle is also used to symbolise Elders, and is one of the plants used in tanderrum ceremonies. It is a plant where every part is used - blossoms, gum, seed, bark and wood. Wood was used to make stone axe handles. Gum was dissolved in water to make a mild sweet drink and also mixed with ash for use as resin.
http://www.worldwidewattle.com/schools.php

Short-finned eel - *Anguilla australis*
Caught, using traps woven from bulrushes, or poked from sunken logs using lawyer vine stems, and eaten. In fresh water, men would muddy shallow water and feel for eels with their feet. Hand nets used in salt water. Spears sometimes used. Tortoises in the lake were also caught and eaten.
Additional Information - Anguillidae - For pains in the joints fresh skins of eels were wrapped around the area, flesh side inwards. (The same cure was very common in Scotland for a sprained wrist.). Eels are nocturnal fish. Females grow to around 1m in length, weighing approx 3kg. The females prefer freshwater, the males live in the sea. When the eels reach sexual maturity (10-20 years for females, 8-12 years for males) they migrate distances of up to 3000km to the Coral Sea where they spawn. It is believed the females die after spawning. The females can release more than 2 million eggs which float in the currents down the east coast of Australia. The eggs hatch into glass eels which migrate down the coast and into the estuaries. The glass eels that migrate up the rivers into the lakes and swamps develop into females, the ones remaining around the estuaries develop into males. Short finned eels migrate from the RBG from late summer to autumn. If an eels water supply is drying up it may travel up to 1.5km over land to find another source.



Possums and birds eggs
Different species of possums and birds nest in hollow trees of many species, such as the Red Flowering Gum - *Corymbiaficifolia*, and the River Red Gum – *Eucalyptus camaldulensis*. If the tree needed to be climbed the men usually did it. Birds' eggs were usually eaten raw. Possums, which sleep during the day were caught, killed, gutted, skinned and cooked in coals before being eaten. The skins were sewn together to make cloaks or rugs.

Fruit bats or grey-headed flying fox
A greatly appreciated food source for Aborigines and some pioneers.Usually roasted whole in coals, only the wings being removed first.Skin not eaten. The flesh has an excellent flavour resembling chicken.

Ducks
Ducks have also long been an important food source for Aboriginal people. They were caught in a variety of ways, often speared or brought down with boomerangs as they fed.

Katherine Parker describes in detail the way ducks were caught by the Ualayai people of the Barwon River Wetlands in the 1890s:
"Ducks were trapped, too, by making bough breaks across the shallow part of the creek, with a net across the deep part from break to break. A couple of the men would go up stream to hunt the ducks down, and some would stay each side of the net armed with pieces of bark. The hunters up stream frightened the ducks off the water, and sent them flying downstream to the trap. Should they seem flying too high as if to pass, the men would throw pieces of bark high in the air, imitating, as they did so, the cry of hawks. Down the ducks would fly, turning back; some of the men would whistle like ducks, others would throw the bark again, giving the hawk's cry, which would frighten the birds, making them double back into the net, where they were quickly despatched by those waiting."
Ducks can also be caught by stealth, which involves a swimmer grabbing the ducks feet and pulling them under the water. (http://www.irnnsw.org.au/pdf/IRN_Barwon_Wetlands_report.pdf)
Note See also Trevor's story for more methods of hunting duck.

Common Long-necked Turtle: *Chelodinalongicollis*
Turtles were caught and eaten. Eggs were collected from the edges of rivers and wetlands during spring.

Australian Rainforest Walk

Australian rainforest plants provide a wealth of resources for medicine, food, tools, fibre and fire-making. This walk showcases a range of Australian forest species, originating from Tasmania all the way to Queensland.

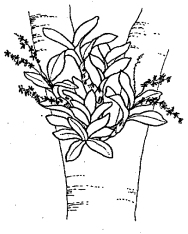
Austral Bracken – *Pteridiumesculentum*
During winter, the cadigal (the stem) is chewed or ground between two stones (mortar and pestle) to make a sticky insect repellant. Young tightly curled fronds could be eaten raw or roasted and have a nutty walnut flavour but older fronds contain toxins and were avoided.
The underground stems (rhizomes) were eaten after roasting to remove toxins and were sometimes beaten into a paste before being placed into hot ashes. These were an important food source, available all year round. The stems of the young fronds would be used to relieve insect bites and stings by crushing and rubbing the sap on the affected area. This also provided relief from stinging nettle irritation.

Black Bean or Morton Bay Chestnut – *Castanospermumaustrale.*
The large brown, chestnut-like seeds received elaborate treatment before being eaten. One method was to slice them thinly with a shell, place in a bag in running water for about 10 days, pound into flour, make into cakes, bake and eat. It is said that they tasted like ship's biscuits.
Additional Information - Fabaceae - A promising anti-cancer compound has been derived from the seeds and plants are being grown in USA for further testing. The dark brown well figured wood known as Black Bean is a valuable furniture timber. It is a very poor conductor of electricity and before synthetics, was used for electrical switchboards.

Wilga or Sheep Bush–*Geijeraparviflora.*
The aromatic leaves were chewed to relieve toothache, and an infusion of leaves was used to treat internal and external pain.
Additional Information - Rutaceae - Leaves were baked, powdered and smoked in hollow tubes in conjunction with other narcotic plants to induce drowsiness and drunkenness. Some groups only smoked after a successful hunt.

Queensland Kauri or Kauri Pine–*Agathisrobusta.*
The gum exuded from damaged bark of this and other conifers was used to fix spearheads to shafts, etc.
Additional Information - Araucariaceae - Tree to 50m; The valuable creamy white to pale brown softwood, has a very even texture and was used for cabinet making, floorings and because it has no smell, butter boxes.

Downy Leaf Rasp Pod, Cudgerie or Silver Ash –*Flindersiaschottiana*
The rasp-like back of the woody valves of the fruiting bodies were used as rasps to prepare food for cooking.

King or Rock Orchid–*Dendrobiumspeciosum.*

The swollen stems or pseudobulbs were beaten to a pulp, spread on hot stones, cooked, and eaten. The viscous sap from stems used as fixative for ochre for rock and body paintings. Strongly fragrant flowers.
Additional Information - King Orchids are the largest of the Dendrobiums with psuedobulbs commonly growing to 50cm or more, and numbering in excess of 50.

Austral Mulberry–*Hedycaryaangustifolia*
The hard upright shoots taken from the base of this plant were used as fire drills. A dry piece of stem about 1cm in diameter was drilled by hand into a softwood, usually the flower stalk of the Grass Tree, to produce a smoldering dust. The dust was poured onto some dry grass or bark and gently blown to start a fire.
Additional Information - The hard wood was so highly prized it was traded over a hundred kilometers from the Yarra area up to groups along the Murray River.

Foam Bark–*Jagera pseudorhus*
Bark was used to poison fish in both fresh and salt water. Bark scraped from the trunk and cooked in ground ovens, was eaten.
Additional Information - Sapindaceae -The bark contains toxic saponins. The saponin interferes with the up-take of oxygen over the gill, leaving the flesh edible.

Plum or Brown Pine–*Podocarpuselatus.*
The succulent, bittersweet basal appendage of the seed was eaten raw. The centre has a strong resin taste and is best avoided.
Additional Information - Podocarpaceae It would be incorrect to call this a fruit since it was not derived from a flower, but from a primitive cone. The seeds ripens from March to July.

Smooth Barked Apple - *Angophora costata.*
Aborigines used the dark red kino exuded from the bark, which is rich in tannins, to make a drink to treat diarrhoea.

Bird Catching Plant –*Pisoniaumbellifera.*
The sticky fruit were arranged in a ring on the ground and seeds were placed in the middle to attract birds. Small birds were often caught and eaten when the sticky fruit stuck to their feathers preventing them from flying. A favourite roosting place for seabirds.
Additional Information - Nyctaginaceae - Seed pods are at their stickiest from April to June. The sticky coating probably assists the plant with seed dispersal by attaching to birds and other animals.

Giant Stinging Tree –*Dendrochnide excelsa*
The acidic fruit was eaten and the fibrous root bark was chewed until the fibres were sufficiently separated to be twisted into cord, which was used to make fishing lines and nets. The chewed bark was used also as a mop for extracting honey from native bees' nests. Inner green bark was beaten to make a rough cloth and an infusion of bark was used to treat mange in dogs and rheumatism, which was also treated by flogging the affected area with bark.
Additional Information - Urticaceae - Leaves and young stems are covered with hollow, stiff, siliceous needles with a bulb containing an intensely irritating and virulent toxin. Even dead leaves

sting. Constituents are acetylcholine, histamine and hydroxytryptamine. From the early days of settlement this tree has been much feared by men and women who had to work in rainforests, and even today it is a serious problem to forestry workers. The affects of the plant can be felt years after contact if the area is immersed in cold water. Surprisingly, like nettles, stinging tree leaves could be used as an emergency vegetable when cooked in boiling water.

Queensland Spear Lily–*Doryanthes palmeri*
Roots were pounded between stones and baked in ashes or on hot rocks. Crushed ants sometimes added as flavouring. Flower stems, which grow can grow to 5m high, were cut when they were about 50cm high and as thick as a man's arm, soaked in water, roasted, and eaten like giant asparagus. String was made from the leaves.

Sandpaper Fig –*Ficus coronata*
The rough silica-impregnated hairs on the leaves are abrasive and leaves were used like sandpaper to smooth wooden weapons and tools. The milky exudate was used to treat wounds and the palatable fruit was eaten after removal of the hairy skin.
Additional Information – Moraceae - One of the sweetest of the native figs. The figs do not ripen well in the Melbourne climate. Fully ripe fruits are about 2.5cm long and purple-black in colour. Distribution: QLD, NSW, VIC, NT.

Bangalow or Piccabeen Palm–*Archontophoenixcunninghamiana*
The Aborigines removed the old leaves at the apex to use the growing bud and new sheath. This killed the palm. Bud and sheath were eaten either raw or cooked. Large leaves and sheathing base were used as rain capes and large sheathing bases were used to give children rides along forest paths. Large scoops were made from these bases. Carrying vessels made by tying both ends and running skewers through them, a large stick between each end as a carrying handle. Other species were also used for these purposes.

Birds Nest or Crows Nest Fern –*Aspleniumnidus.*
An infusion of fronds were used by Aboriginal women to ease labour pains. A lotion obtained by pounding fronds in water was used to cool a fever

Oak and Princes Lawns

The following plants can be easily found in the areas of Oak and Princess Lawns. The Indigenous plants mixed with the rolling green lawns and typically European trees provide a juxtaposition of the old and new.

Spiny-headed Mat Rush: *Lomandralongifolia*
This is a grassy woodland perennial which forms dense tussocks. Small flowers appear from September to December. An infusion of flowers was used as a morning pick-me-up by Aboriginal people. The soft white base of the new shoots (which tasted like peas) were also eaten. The strap-like leaves were softened by drawing through hot ashes, before being split into strips and woven into baskets, bags, mats, bands, and eel traps. Leaves were also used as bandages for sores and abscesses, reputedly to lessen the pain.

Saw Banksia –*Banksiaserrata*
The greenish yellow flower heads contain much nectar and the Aborigines, who had few sweet foods in their diet, soaked the flower heads in water in a coolamon and drank the sweet fluid. They sometimes ran their hands down the flower heads and licked the nectar from their hands. About 70 other species were used similarly.

CoastBanksia –*Banksiaintegrifolia*
Aborigines obtained the copious nectar from this and about 70 other species by sucking the flower heads and then licking them - or by steeping the flower heads in water in a coolamon over night to obtain a sweet drink. There were few sweet foods available to them. Eating too much nectar results in a headache. The fruiting bodies were used as hair brushes.
Additional Information - Proteaceae - Early settlers used the nectar as a syrup for sore throats and colds and used the porous fruiting bodies as a base for candles by impregnating them with fat. The timber is reddish and decorative, and was once used for bullock yokes, and the natural bends were sought after for boat knees.

Rough Shell Qld Nut - *Macadamia tetraphylla*
An important food for Aborigines eaten raw or roasted(about 70% mainly mono-unsaturated).
Additional Information - Proteaceae - Now rare in their original area owing to agricultural clearing, and that native bees are more efficient pollinators than are the feral European bees, however, widely cultivated in Australia and Hawaii. Trees can bear nuts for at least a century. Initially cultivated into a multi-million dollar industry earlier this century by the Americans in Hawaii. Cultivation in Australia started in 1963

Moreton Bay Fig –*Ficus macrophylla*
Tasty figs can be eaten and the exudate, (a milky latex), is used to treat small wounds. Durable fibres from the root bark used in the fabrication of scoop fishing nets and dilly bags. The inner bark forms a loose fabric if taken off carefully.

Bunya Pine - *Araucaria bidwillii*
The large egg-shaped seeds contained in the large glossy-green female cones to 30x20cm were a favourite food and individual trees were apparently owned by families. Each year in March, the female cones ripen at the top of the tree. Every 3 years, there is a heavy crop and tribes for about 200 miles around would be invited to the feast. They would forget their tribal and intertribal differences, and the young men of the owning families would climb the trees by means of a vine around them and the trunk of the tree. They would pick one cone to check ripeness and then knock the remainder to the ground, where the women would collect the seeds. They were carried to the open plains, shared and a feast occurred. Some were buried and later dug, cooked and eaten. When raw, the seed is starchy and delicious, with a texture like waxy boiled potatoes. When cooked, they taste like a combination between roast chestnuts and roast potatoes.

River Red Gum - *Eucalyptus camaldulensis*
BE-AL – Wathaurong and Kulin
PEEAL – DjabWurrun
TA'ART - Gunditjmara
The small seeds were eaten, probably in poor seasons. Manna, an insect secretion forming a flaky crust on the leaves, was favoured by adults and children. It is on record that 23 kg of manna have been collected in a single day. Of the 5 or so species producing manna, the Manna Gum - Eucalyptus viminalis was the most abundant. Wood was used for making utensils; coolamons, digging sticks and bowls. In spring and summer, large sections of bark were carefully removed and shaped to make canoes, shields and carrying utensils. The canoes had holes stopped with clay and were used on Victorian rivers. River red gums with the bark removed form a scar, and the tree becomes a scar tree. Eucalyptus leaves were also used medicinally in steam baths. A powerful anti-septic is made by boiling the inner bark. The liquid is used for skin irritations and sores. Tree hollows provided homes for many nesting birds and marsupials – a good place for hunting, or collecting eggs.

Burrawang or Zamia Palm–*Lepidozamia peroffskyana*

The seeds of most cycads were eaten after elaborate treatment. The female fruit of this species resembles a large pineapple and contains many large orange-red seeds. One method of treatment was: bake seeds in ashes for some time, cut in half, soak in water for 6 - 8 days, then eat. A second was: roast seeds, pound into flour, put in bag in running water for 2-3 weeks, then eat. A third was: soak seeds for some days, place in a hole lined with rushes, cover with sand and leaves of a grass tree for 2-3 weeks before eating.

Additional Information - Zamiaceae - One of the cycads, living fossils, remnants of a large group which formed a substantial part of earth's vegetation over 200 million years ago. Wind pollinated, separate male and female plants. Seeds contain a high proportion of starch and the nitrogenous glycoside, macrozamia.
During the first visit by Captain Cook to Australia it was noted that the Aborigines had some seeds at their camp, and some members of the expedition cooked and ate some of the seeds. He noted in his diary "They were very busy, both above and below."

Hoop Pine or Colonial Pine - *Araucaria cunninghamii*
The resin exuded from the damaged bark was warmed in the hands and used to caulk holes and leaks in canoes and also to join shafts to heads of weapons and implements.
Additional Information - Araucariaceae - Tree to 50m; Early settlers prepared a solution of resin in alcohol and 20-30 drops were given to treat kidney complaints, 3-4 doses were said to be sufficient for a cure. The excellent timber was the most extensively used of all native pines, and very few large stands remain in Australia.

RESOURCES

Web Sites

www.koorieheritagetrust.comThe Koorie Heritage Trust works in partnership with the Royal Botanic Gardens Melbourne to provide cultural educational programs.

http://museumvictoria.com.au/bunjilaka/Bunjilaka, at the Melbourne Museum, contains excellent displays and information depicting Aboriginal history and culture.

http://home.vicnet.net.au/~nrgp/index.htmlNillumbik Reconciliation Group has produced a resource kit. See the website for a preview and how to order.

www.ngv.vic.gov.auVisit the Ian Potter Gallery to see the Indigenous collections. Compare Western desert art with Victorian art. See William Barak's story.

http://www.ngv.vic.gov.au/collection/stories/melbourne/land-of-the-wurundjeri2/title

http://www.ngv.vic.gov.au/explore/ngv-collection/william-barak

www.yarrahealing.melb.catholic.edu.au
Fantastic site for teachers and students, with a site map linking information on the Kulin Nation – the 5 Aboriginal language groups of Port Phillip; identifies key resources already in schools, and includes important understandings
Also a CD *Meet the Eastern Kulin: The Aboriginal People of Central Victoria*, Teacher Resource Book and CD, Hawker Brownlow Education 2001

www.loreoftheland.com.au
Stories and discovery tours for students to explore, designed to encourage all to live in harmony with each other and the land. Also a CD

A wide variety of information on Aboriginal Australia eg coloured language map
www.dreamtime.net.au/indigenous/timeline.cfm
A site prepared for the Australian Museum with timelines

http://www.abc.net.au/indigenous/education/default.htm
Indigenous news, education, and resources

http://www.bom.gov.au/iwk/index.shtml
Indigenous weather knowledge and seasonal calendars from some Aboriginal societies

http://www.abc.net.au/missionvoices/
Stories from elders about life on the missions

Books

Banksias and Bilbies : Seasons of Australia, Ian Reid, Gould League. 1995

Aboriginal Artists of the 19th Century, Andrew Sayers, Oxford University Press 1996

Meerreeng-An, Here is my Country, Koorie Heritage Trust, 2010

Koorie Plants Koorie People: Traditional Aboriginal Food, Fibre and Healing Plants of Victoria, Gott, Beth & Zola, N. 1996 Koorie Heritage Trust, Melbourne

The Melbourne Dreaming: A Guide to Aboriginal Places of Melbourne, Eidelson, Meyer 1997, Aboriginal Studies Press, Canberra

*Aboriginal Melbourne,*Presland, Gary. 1994, Penguin, Ringwood

Tukka, Real Australian Food, Jean-Paul Bruneteau, New Holland Publishers, 2000

The Yarra, A Natural Treasure, David and Cam Beardsell, Royal Society of Victoria, 1999

Victorian Koori Plants, Beth Gott and John Conran, Yangennanock Women's Group, Hamilton, VIC, 1991

The Last Cry, Mick Woiwod,

When the Wattles Bloom Again, Shirley W Wiencke, Woori Yallock, VIC, 1984

Maybe Tomorrow, Boori (Monty) Pryor with Meme McDonald, Penguin Books, 1998

The People of BudjBim, Gunditjmara People, with GibWettenhall, Em Press, 2010

You Me and Murrawee, Kerri Hashmi, Penguin Books Australia, 1999

In Your Dreams, Sally Morgan and Bronwyn Bancroft, Sandcastle Books, 1997

Njunjul The Sun, Boori (Monty) Pryor and Meme McDonald, Allen and Unwin, 2002

The Binnabinna Man, Boori (Monty) Pryor and Meme McDonald, Allen and Unwin, 1999

The Master Race, Bruce Pascoe, from Across Country, Stories from Aboriginal Australia, ABC Books, 1998

Going Home, Stories, Archie Weller, Allen and Unwin, 1990

That Deadman Dance, Kim Scott, Picador, 2010

True Country, Kim Scott, Freemantle Arts Centre Press, 1993

Legacy, Larissa Behrendt, University of Queensland Press, 2009

Home, Larissa Behrendt, University of Queensland Press, 2004

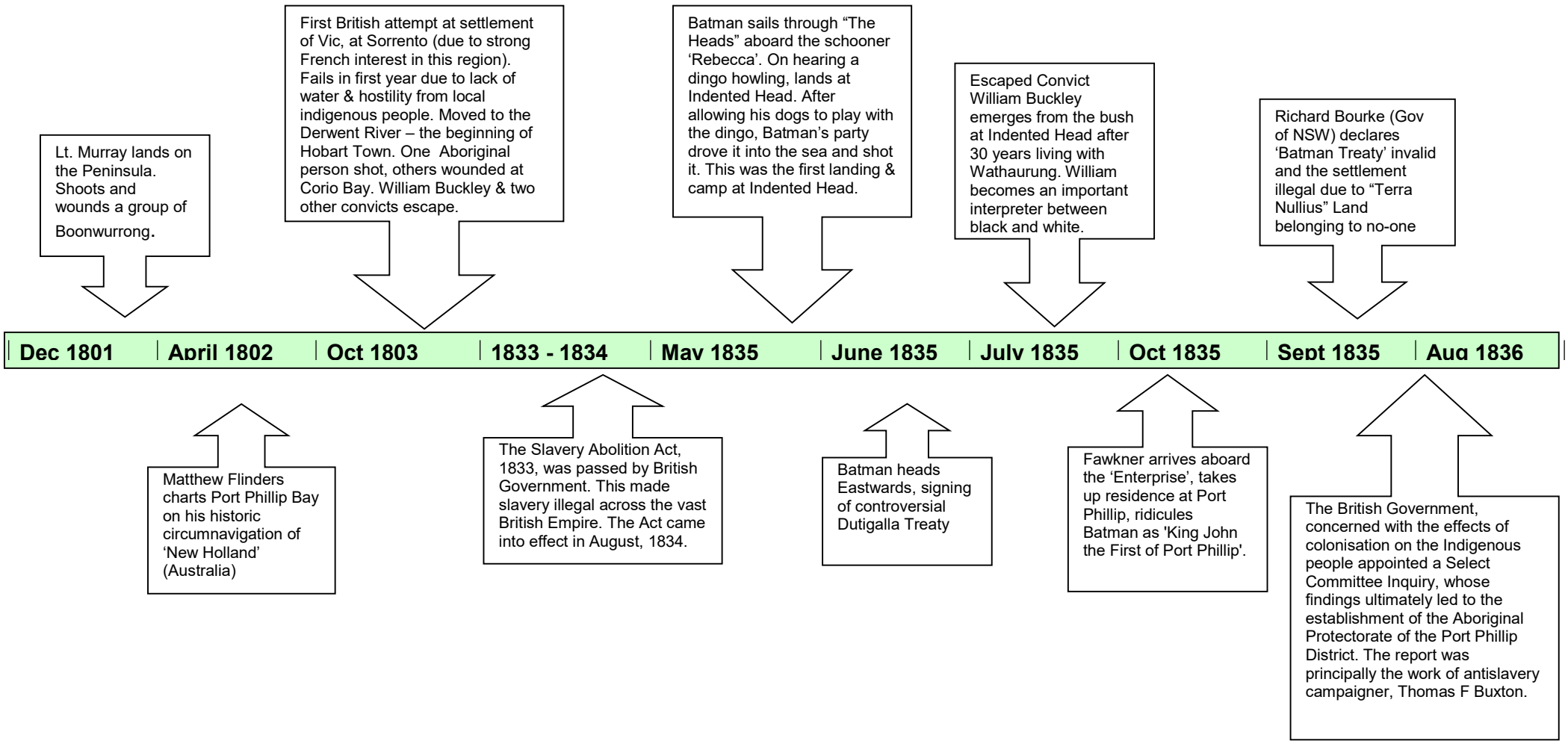
Story about Feeling, Bill Neidjie, Magabala Books, 1996

Video and DVD

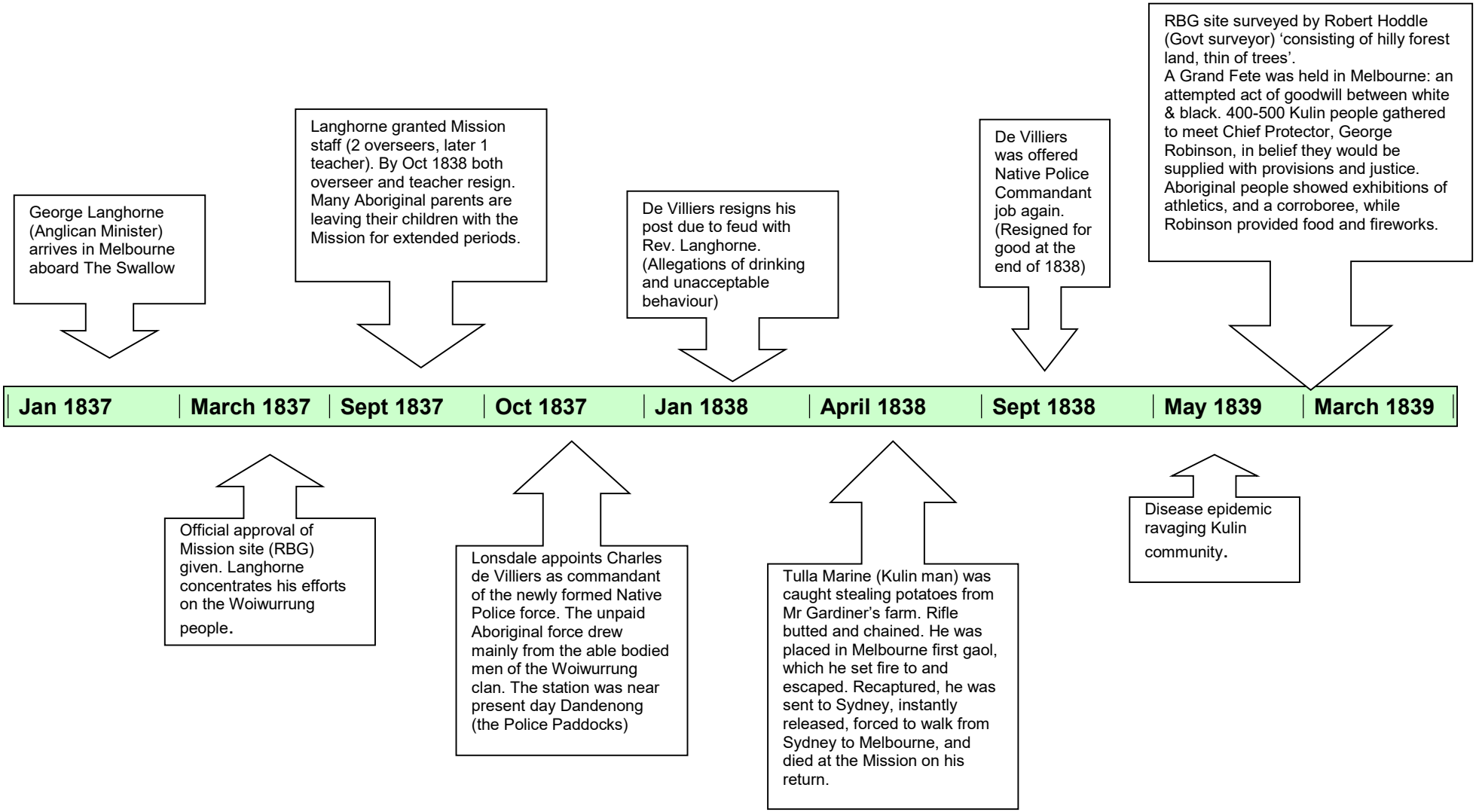
Women of the Sun Pt 1'Alinta the Flame', Ronin Films, Canberra 1991

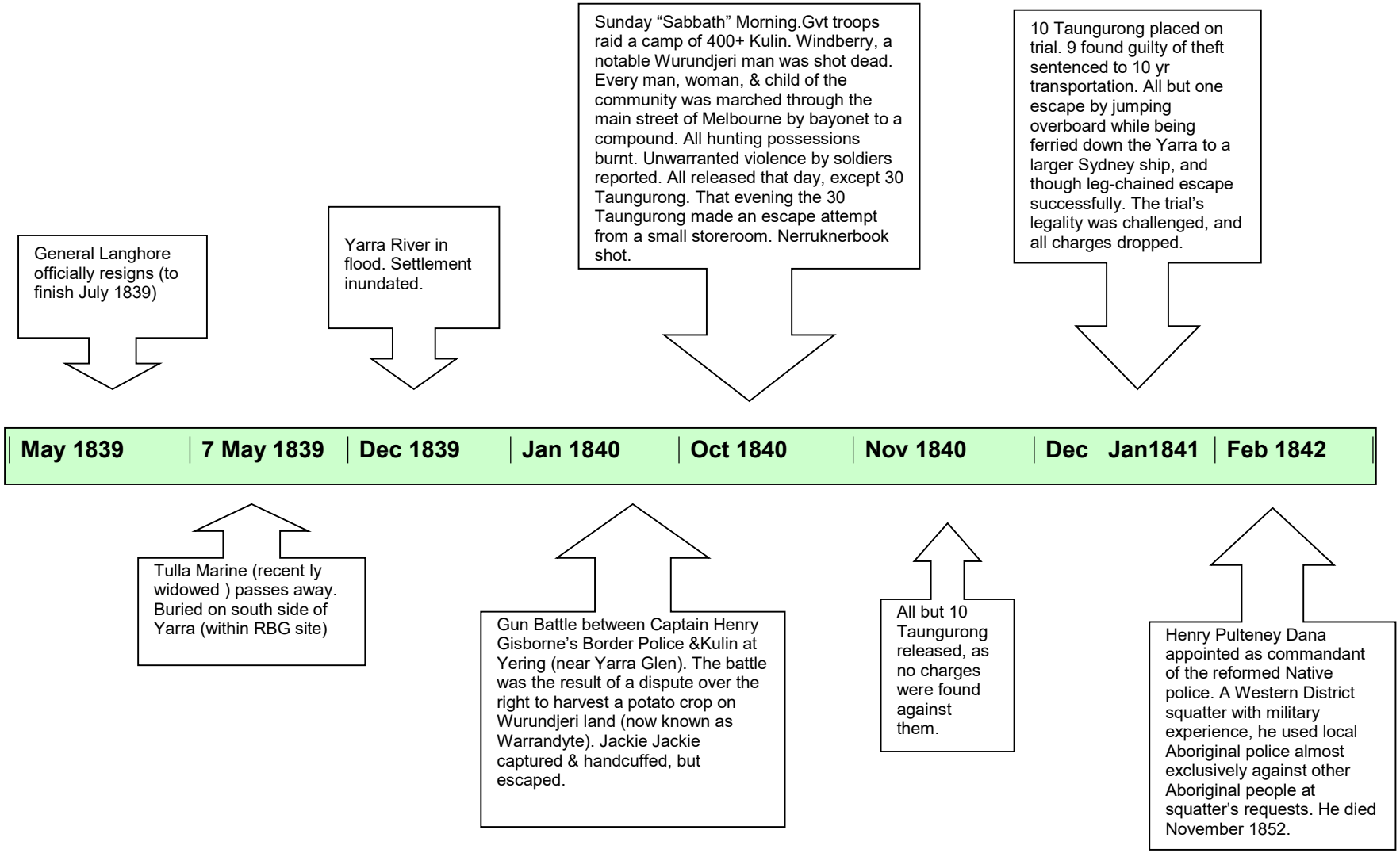
First Australians, Episode 3 "Freedom for Our Lifetime" Victoria (1860-1890) SBS 2008

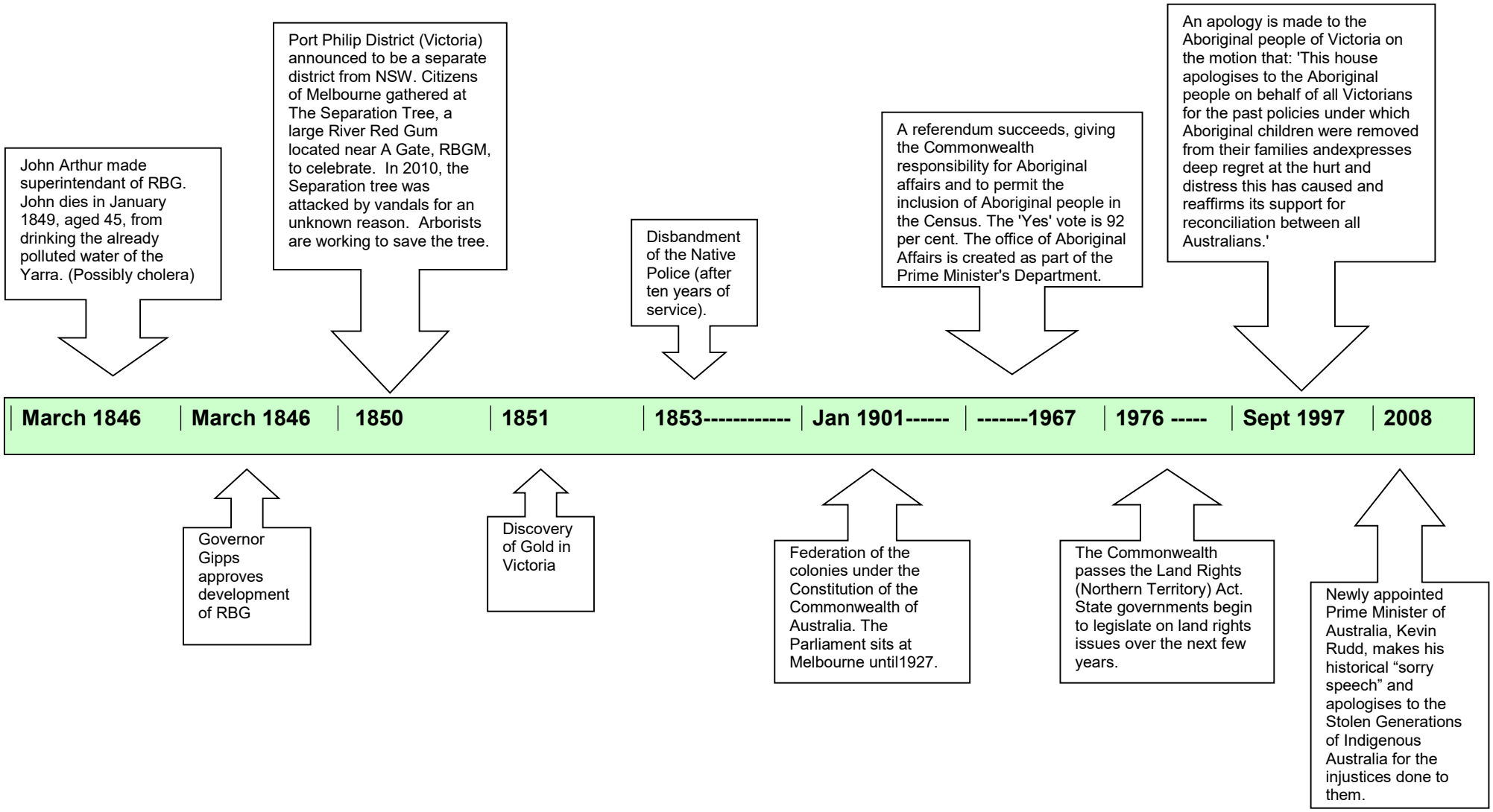
Timeline: Early Port Phillip, Victoria



*This timeline shows the early history of Melbourne, with reference to the Royal Botanic Gardens. Many gaps exist in this timeline, such as the catastrophic fall in the Aboriginal population. It serves as purely an indicative snapshot of the dramatic, rapid and tragic series of events, which marked and marred the first contacts between the two civilizations.


George Langhorne (Anglican Minister) arrives in Melbourne aboard The Swallow
Langhorne granted Mission staff (2 overseers, later 1 teacher). By Oct 1838 both overseer and teacher resign. Many Aboriginal parents are leaving their children with the Mission for extended periods.
De Villiers resigns his post due to feud with Rev. Langhorne. (Allegations of drinking and unacceptable behaviour)
De Villiers was offered Native Police Commandant job again. (Resigned for good at the end of 1838)
RBG site surveyed by Robert Hoddle (Govt surveyor) 'consisting of hilly forest land, thin of trees'.
A Grand Fete was held in Melbourne: an attempted act of goodwill between white & black. 400-500 Kulin people gathered to meet Chief Protector, George Robinson, in belief they would be supplied with provisions and justice. Aboriginal people showed exhibitions of athletics, and a corroboree, while Robinson provided food and fireworks.
Jan 1837
March 1837
Sept 1837
Oct 1837
Jan 1838
April 1838
Sept 1838
May 1839
March 1839
Official approval of Mission site (RBG) given. Langhorne concentrates his efforts on the Woiwurrung people.
Lonsdale appoints Charles de Villiers as commandant of the newly formed Native Police force. The unpaid Aboriginal force drew mainly from the able bodied men of the Woiwurrung clan. The station was near present day Dandenong (the Police Paddocks)
Tulla Marine (Kulin man) was caught stealing potatoes from Mr Gardiner's farm. Rifle butted and chained. He was placed in Melbourne first gaol, which he set fire to and escaped. Recaptured, he was sent to Sydney, instantly released, forced to walk from Sydney to Melbourne, and died at the Mission on his return.
Disease epidemic ravaging Kulin community.


General Langhore officially resigns (to finish July 1839)
Yarra River in flood. Settlement inundated.
Sunday “Sabbath” Morning.Gvt troops raid a camp of 400+ Kulin. Windberry, a notable Wurundjeri man was shot dead. Every man, woman, & child of the community was marched through the main street of Melbourne by bayonet to a compound. All hunting possessions burnt. Unwarranted violence by soldiers reported. All released that day, except 30 Taungurong. That evening the 30 Taungurong made an escape attempt from a small storeroom. Nerruknerbook shot.
10 Taungurong placed on trial. 9 found guilty of theft sentenced to 10 yr transportation. All but one escape by jumping overboard while being ferried down the Yarra to a larger Sydney ship, and though leg-chained escape successfully. The trial’s legality was challenged, and all charges dropped.
May 1839
7 May 1839
Dec 1839
Jan 1840
Oct 1840
Nov 1840
Dec Jan1841
Feb 1842
Tulla Marine (recent ly widowed) passes away. Buried on south side of Yarra (within RBG site)
Gun Battle between Captain Henry Gisborne’s Border Police &Kulin at Yering (near Yarra Glen). The battle was the result of a dispute over the right to harvest a potato crop on Wurundjeri land (now known as Warrandyte). Jackie Jackie captured & handcuffed, but escaped.
All but 10 Taungurong released, as no charges were found against them.
Henry Pulteney Dana appointed as commandant of the reformed Native police. A Western District squatter with military experience, he used local Aboriginal police almost exclusively against other Aboriginal people at squatter’s requests. He died November 1852.


John Arthur made superintendant of RBG. John dies in January 1849, aged 45, from drinking the already polluted water of the Yarra. (Possibly cholera)
Port Philip District (Victoria) announced to be a separate district from NSW. Citizens of Melbourne gathered at The Separation Tree, a large River Red Gum located near A Gate, RBGM, to celebrate. In 2010, the Separation tree was attacked by vandals for an unknown reason. Arborists are working to save the tree.
Disbandment of the Native Police (after ten years of service).
A referendum succeeds, giving the Commonwealth responsibility for Aboriginal affairs and to permit the inclusion of Aboriginal people in the Census. The 'Yes' vote is 92 per cent. The office of Aboriginal Affairs is created as part of the Prime Minister's Department.
An apology is made to the Aboriginal people of Victoria on the motion that: 'This house apologises to the Aboriginal people on behalf of all Victorians for the past policies under which Aboriginal children were removed from their families andexpresses deep regret at the hurt and distress this has caused and reaffirms its support for reconciliation between all Australians.'
March 1846
March 1846
1850
1851
1853----------
Jan 1901------
-------1967
1976 -----
Sept 1997
2008
Governor Gipps approves development of RBG
Discovery of Gold in Victoria
Federation of the colonies under the Constitution of the Commonwealth of Australia. The Parliament sits at Melbourne until1927.
The Commonwealth passes the Land Rights (Northern Territory) Act. State governments begin to legislate on land rights issues over the next few years.
Newly appointed Prime Minister of Australia, Kevin Rudd, makes his historical “sorry speech” and apologises to the Stolen Generations of Indigenous Australia for the injustices done to them.

Early Melbourne Statistics

YEAR	Colonists	Sheep	Cattle	Horses
OCT 1835 (1)	200	25,500	100	57
Late 1837 (1)	1,000	~	~	~
Census 1838 (2)	2,278	700,000	500,000	2,000
1841 (1)	20,000	~	~	~
Sept 1851 (3)	80,000 (Melb.23,000)	6,647,557	483,202	2,916

(1) 'Aborigines in Colonial Victoria' M.F Christe 1979 p.29
(2) 'Bushland to Botanic' RBG Guides 1996 p.6
(3) 'The Life and Adventures of William Buckley' J. Morgan 1852 (re. 1996)
p.161-170 "Statistics of the Province of Victoria 1851'
Additional census data 1851 re. Acres under cultivation 51,536
Victoria pop. 80,000* (Melb.23,000, Geelong 8,000+*), NSW 192,000 (Sydney 44,000), Sth Aust. 68,000 (Adelaide 15,000), Tas. 68,000 (Hobart 20,000)
•~ Due to Gold rush population explosion i.e. Jan1852 arrival of 6,209 to the port of Melb. In one month alone! (p.177)

ABORIGINAL POPULATION (Early Melbourne)

Years	1836-37	1839-42	1852	1863
Wauthaurang	375	118	31	15
Jajowurrung	~	300	142	38
Woiworung& Boonwurrung	350	207	59	33
Taungerong	~	600	~	95
TOTAL		**1225**		**181**

#4 stats from Museum Vic Human Journeys~ gallery of life storyline

Even with early census approximations at best b/w 15+years of 1842 to 1863
By 1863 <u>80%-85%</u> of the original population ceased to exist.
Out of an original family of 10 ~ 8 would die in the "Melbourne area".

Data collated by Dean Stewart 2003

KULIN WURRUNG
Aboriginal words of the Melbourne Area

Aboriginal Culture was an **oral** tradition. Handed down from Elders to community, parent to child, it is still an essential part of Aboriginal culture today.Consider the vast tracts of traditional language now lost, or at various stages of deterioration, of the **350+** known indigenous languages spoken within Australia. Only a handful are still used as a first language ~ (not mentioning the diverse localised dialects that make up these regional languages, equalling in excess of 500 dialects). This, more than most exemplifies the immensity of the cultural disintegration, and dislocation in the face of European contact. It is truly a great loss.
Today, however, those parts of traditional language that have survived the massive changes of the last 2 centuries are being protected; rejuvenated. A resurrection of Aboriginal language is happening.Beloware a few words in the local **Kulin** tongue that could/should be incorporated into your Aboriginal classes/talks. You can be an active part in ensuring a reversal of the past local cultural erosion, by speaking & passing on traditional words, long believed forgotten in this part of the world. It is now our responsibility to ensuring thecontinuity of oral tradition.

Important note:
As a consequence of the two centuries of European impact and the fact that traditionally no formally written Aboriginal language existed, the spelling, pronunciation and origins of words vary markedly today. The words you see here being really 19th Century Anglo-Saxon interpretations* of a millennia-old oral form of Cultural communication ~ All researched and re-interpreted, again in the late 20th Century by professional linguists, professors etc. Subsequently these words can only be considered as a 'best representation' we have today. It should be stressed that the few words shown here are not the only way, due to the many variables already mentioned.

The local Kulin translations that follow come from the well-respected book:
"The Handbook of Australian Language" Vol. 4 RMW Dixon & Barry J. Blake 1991

Hints:
- Pick just a few relevant words and slowly add as appropriate.
- English word is first, followed by the most commonly used local Kulin word in **bold**.
- (---) refers to similar traditional spelling of same thing.
- The capitals **T**,**W**,**B** = 3 main Aboriginal communities from the Melbourne area where the word translation was commonly recorded
  T = Taungurong (Thagungwurrung), W = Woiwurrung, B = Boonwurrung
- Lower case letter refers to the historian:

h = Hercus, t = Thomas, William (in Brough Smyth)

KULIN WURRUNG
Language ~ **Wurru (ng)** (wurrung)TWB (also see mouth/lips)

Tools / Equipment
Hut ~ **wilim**WB (see camp)
Boomerang* ~ **wonguim** (wanguim) * Boomerang is a Qld term for similar tool.
Woomera* (spear-thrower) ~ **garrik** TWB marriwan (h) *Central Aust term
Message Stick ~ **mungu**
Wood/Reed Spear* ~ **djirra** traditionally many different spears with diff. names.
Fighting spear ~ **guyan**
Shield ~ **gayaam** WB
Axe ~ **ngarruk**

Canoe ~ **gurrong** TWB
Fire drill ~ **djiel-warrk*** TW *same name given to local tree Austral Mulberry
Digging Stick ~ **kannan**(ganan)
Dilly Bag ~ bilangbilang
Basket ~ **binak**
Wooden bowl (small)/Coolamon* ~ **tarnuk** (darnuk WB)* coolamon is a Qld term.
String ~ **wugel-wugel**Wt

THE ELEMENTS

Fire ~ **wiin** TWB
Moon ~ **mirnian**
Star ~ **djurt**
Wind ~ **murnmut** WB
Sea ~ **warrin** WB
Country/place/ground ~ **biik** TWB
Tree ~ **darrang** TWB
Sun ~ **ngawan** WB
Water ~ **baan** TWB
Lake ~ **bollok** (buluk)
Leaf ~ **djerrang** TW
Smoke ~ **burt** TWB
Grass ~ **buath** or **banum** TWB
Wood/stick ~ **galk** TWB

THE PEOPLE

Kulin (gulin) ~ name given to the Federation of the 5 communities that make up the Melbourne & Port Phillip district (totalling several million acres),being the Boonwurrung, Woiwurrung, Taungurong, Wathaurung, Djajawurrung.

God/the Creator ~ **Bundjil** (also see eagle)
Aboriginal man ~ **kulin** (gulin)
Aboriginal woman **~bagurrk*** (badjurr) * gurruk ~ blood
Chief/Leader ~ **ngurungaeta** (**arweet** B)
Father ~ **maman**
Mother ~ **baba**
Baby (child) ~ **bubup**
Young man ~ **yan-yan**
Young woman ~ **murnmundik** WB
Doctor/healer/shaman ~ **wirrirrap**
White man ~ **ngamudji**
Spirit/soul ~ **murrup**

Head ~ **gawang**
Eye ~ **mirring**
Mouth ~**wurrung**(also see language)
Hand ~ **marnang** (marnong)
Foot ~ **djinang**
Track/footmark ~ **barring**

ANIMALS

All Kulin had an incredibly close affiliation with the entire natural world, but animals held a special place. They feature prominently in all aspects of Kulin existence physically, socially, astronomically, ceremonially and spiritually.

Raven (Crow) ~ **Waa** (wang)
Bird ~ **guyip–guyip** TWB
Emu ~ **barraimal** TWB
Swan (black) ~ **gunuwarra**
Black Duck ~ **dulum** (toolim)
White Cockatoo ~ **ngayuk** WB
Willy-Wag tail ~ **djirridjirri**
Lyre Bird ~ **bulen-bulen*** origin of Bulleen
Magpie ~ **barrawarn** (barrwang)
Kookaburra ~ **gurruggurrung** TW

Brolga ~ **gurruk** TWB
Egg ~ **dirrandirr** TWB
Wombat ~ **warin**
Platypus ~ **dulaiwurrung*** *proud lips
Echidna ~ **gawarn**
Possum ~ **walert**
Eagle Wedge –Tail (Eaglehawk) ~ **Bundjil** (also see God/Creator)
Bandicoot ~ **bung**
Wallaby ~ **wimbi**
Kangaroo ~ **kuyim** WB (Marram) TW
Dingo (dog) ~ **wirringgan*** TWB *origin of Warrigal
Koala ~ **gurrborra**
Snake* ~ **kaan** WB *different snakes had different names
Tortoise ~ **bundabun**
Fish ~ **duat** TW
Eel ~ **yuk**
Yabbie ~ **duyang** WB

Other good sources of local Aboriginal language

VACAL (Victorian Aboriginal Corporation of Aboriginal Language)
238 High St. Northcote (ph) 9486 7860