

# *Koorie Plants Trail*

*A brief history of the Wurundjeri people  
and their use of plants indigenous to:*

*the Mullum Mullum Creek*

*Prepared for Maroondah City Council  
by  
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## Foreword - project aims

The Koorie Plants Trail project was initiated in May 1998 to introduce Maroondah's residents, and anyone else who is interested, to an aspect of the city's remnant bushland rarely documented and with which few people are familiar. It aims to broaden the understanding within the community of our indigenous vegetation, while imparting information on how plants were used by the pre-European inhabitants of the area in day to day activities.

Some academics suggest that we are now nearing the end of the only century in the history of human kind when there has been a net loss of knowledge. This loss is the sad result of the dispossession or assimilation into 'western' society of indigenous peoples throughout the world. During their more than 40,000 year (perhaps more than 100,000 year) occupation of Australia, at least 2,000 generations of Aborigines have refined their use of the country's flora to an amazing degree. Everyone can potentially benefit from this accumulated knowledge, but only if it is perpetuated.

It is also important to provide people who have a limited interest in bushland or conservation with another way of evaluating remnant vegetation. Although '*Sites of Biological Significance in Maroondah*' (Lorimer et al 1997) gives an excellent account of the vegetation types and conservation values of our indigenous plants, some people find the concept of conservation for the sake of conservation difficult to grasp. The inclusion of Koorie<sup>1</sup> Plants Trails in bushland reserves or linear reserves such as creeks and bicycle or multi-purpose tracks may give those who normally spare little thought for indigenous vegetation a way of relating to it and understanding its worth.

Initiatives such as the Koorie Plants Trails could help attract new user groups to Maroondah's bushland reserves and provide students and teachers with a way of incorporating Koorie studies into their curricula. Visitors will be able to look at plants from a Koorie perspective, thus gaining a glimpse into the history of a culture which is all but lost to modern Melburnians.

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<sup>1</sup> 'Aborigines of Victoria and New South Wales have for many years preferred to describe themselves as Koories, a word from the language of the northern coastal tribes of New South Wales.' Gott & Conran 1991. In fact, local Wurundjeri prefer to be called Aborigines, since Koorie or Koori is, as described above, a word from a word from the vocabulary of tribes from northern NSW. There is no such word in the Wurundjeri language.

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# 1. Introduction: Who were the original inhabitants of Maroondah?

Prior to European settlement, Australia supported a population of hundreds of thousands or perhaps even one million Aborigines. They occupied almost all parts of the country, from Tasmania to Cape York in the east and much of western and central Australia. There were many different clans, with different languages, cultures and plant uses. Some plants were used by some groups but not by others. As a result, research into this project has been very specifically directed towards determining which plants were used by the local clan, the Wurundjeri-willam<sup>2</sup>, and to what use each was put.

## 1.1 Land Ownership and Tribal Organisation

Throughout Australia, areas of land were 'owned' by kinship groups, or tribes, who had lived within their territories since the Dreaming. All group members knew the precise boundaries of their land, although it appears that boundaries changed over time and they were to some degree social in nature, rather than fixed lines on a map<sup>3</sup>.

There were about 38 tribes in Victoria<sup>4</sup>. These were separate language groups and each group had a number of clans of localised patrilineal descent<sup>5</sup>. Clans were not separate 'tribes' in that they were not autonomous groups, and they spoke different but related languages. They were often relatively small, having only up to 100 members, and marriages often took place between members of different clans. These kinship ties helped to link the clans of the Kulin confederacy (see map on page 3), 'Kulin' meaning man or people, and their territory extended over the area within a 150 kilometre radius of Melbourne.

The Woiworung tribe or language group was composed of the Wurundjeri-balluk, Wurundjeri-willam, Marin-balluk, Kurung-jang-balluk and Gunung-willam-balluk clans and occupied the Yarra and Maribyrnong watersheds, within the area bounded by the Dividing Ranges from Mt Baw Baw westward to Mt William and Mt Macedon in the north, the Werribee River in the west, the Mordialloc River to the south and the Dandenong Ranges past Warburton in the east. These clans all spoke urrung languages, which were closely related, and shared common beliefs concerning figures from the Dreaming<sup>6</sup>.

The first census of Kulin clans, completed in 1839, concluded that the Woiworung tribe numbered about 124 men, women and children. By this stage, the Koories had been in contact with Europeans for many years. As early as 1804, 11 Sydney-based ships were engaged in the Bass Strait sealing trade and others were involved in whaling<sup>7</sup>. Through these contacts, Koories contracted diseases such as smallpox and influenza, to which they had no resistance, so the population was probably already somewhat depleted before John Batman, Melbourne's founder, attempted to 'buy' 600,000 acres of land from the local clans on June 8<sup>th</sup> 1835. The British rejection of Batman's land purchase was not, as often stated, an affirmation of *terra nullius*, but based on the Crown's exclusive right to extinguish native title. Native title was clearly recognised at that time<sup>8</sup>.

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<sup>2</sup> Presland 1994

<sup>3</sup> Presland 1994

<sup>4</sup> Zola & Gott 1992

<sup>5</sup> Sickert unpublished

<sup>6</sup> Presland 1994

<sup>7</sup> Day 1997

<sup>8</sup> Reynolds 1992

In 1835 there were about 150,000 Aborigines in Victoria, including at least 6,000 Kulin<sup>9</sup>. The population of Woiworung and Bunurong dropped from 207 to 28 during the twenty seven years following the foundation of Melbourne<sup>10</sup>.

Mount William (near Lancefield), an archaeological site of National significance, was within the territory of the Wurundjeri-willam (see Mt William brochure, which explains quarrying techniques and trade although wrongly attributing the site to Wurundjeri-balluk ownership). The tough local diorite, or 'greenstone', a volcanic rock, was made into axe heads or axe head blanks and traded for possum skin cloaks and a variety of other goods. Victorian greenstone axe heads have been found as far afield as Adelaide and Broken Hill.

## 1.2 Other Allegiances and Contacts

The groups which used the clan lands on a daily basis were referred to as bands. These bands, usually consisting of one or two families plus any visitors, moved across well defined territories, leading a generally nomadic existence, although they did make periodic stops. Remarkably, it appears that, despite their often wide dispersal, members of each clan always knew where other bands belonging to their clan were located at any point in time. Groups could use land outside of their normal territories if they were closely related to members of another clan through marriage or by seeking formal permission to visit and use the land temporarily.

As well as having tribal, clan and group allegiances, the Kulin nation was divided into two units or 'moieties'. All members of one clan belonged to the same moiety, which was, like clan membership, inherited from the father at birth and kept for life. Marriage partners had to be sought from clans of the other moiety. During large gatherings of clans, for ceremonies or to share an abundance of food, moiety membership was considered more important than local allegiances.

The Wurundjeri apparently had regular contact with tribes or clans of neighbouring territories, the Bunurong and Taungurong and even possibly the Wathaurung of the Geelong area, but regarded the Kurnai of Gippsland as 'wild men' and 'no good'<sup>11</sup>. Among the Kulin people, all groups spoke related languages, but the Kurnai had a completely different set of languages. It appears there was little or no trade between the Kulin and Kurnai, since the Mount William stone axes so widely traded among the Kulin were rarely found in Kurnai territory. Historical records indicate that the two groups were mutually hostile.

This information establishes the social and geographical position of the Wurundjeri-willam, Maroondah's original inhabitants, and suggests that knowledge of plant use and propagules (seeds, tubers, rhizomes etc.) of useful species might have been exchanged among the member tribes of the Kulin nation.

### KEY

----- Tribal boundary  
..... Clan boundary

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<sup>9</sup> Ian Hunter pers. com.

<sup>10</sup> Presland 1994

<sup>11</sup> Sickert unpublished

## **WOIWORUNG CLANS**

1. Wurundjeri-balluk
2. Wurundjeri-willam
3. Marin-bulluk
4. Kurung-jang-balluk
5. Gunung-millam-balluk

## **BUNURONG CLANS**

1. Yalukit-willam
2. Ngaruk-willam
3. Mayone-bulluk
4. Burinyung-balluk
5. Yallok-bulluk
6. Yowengerra

Map after: Presland (1994)

### **Map 1**

It should be noted that the Jajowrong (Djadja Wurrung), considered by modern historians to be a tribe of the Kulin nation were, in fact a separate group<sup>12</sup>.

The Kurnai are also frequently referred to as Gurnai.

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<sup>12</sup> Ian Hunter pers. com.

## 2. Koorie Resource Management

### 2.1 Hunter-gatherers or Land Managers?

Although Aborigines are often portrayed as hunter-gatherers, they did manage the land to some extent in order to promote the growth of food plants<sup>13</sup>. Their main management tool was fire, specifically timed to clear dense growth which would crowd out important herbaceous, tuber-producing plants and to produce a layer of ash which acted as fertiliser for those plants. Fire was also used to encourage fresh, green regrowth of grasses, which attracted prey animals such as kangaroos and wallabies.

It is even speculated that fires were carefully set in semi-circles or horse-shoe patterns as a means of herding animals towards hunters, but the issue of just how extensively fire was used by Koories as a tool for managing and changing their environment is still a matter of great contention.

The digging of edible tubers loosened soil and incorporated organic matter in the form of leaf litter. This 'cultivation' may be compared with modern practices of soil preparation for crop planting. Where clumps of tubers were dug up, some were replanted to ensure the availability of food during future visits. The thinning of tubers allowed those remaining to thrive due to reduced competition.

Tubers and seeds were also carried to camps, traded between clans and occasionally replanted some distance from where they were dug, so the range over which desirable species were distributed may have been increased, although the differences in growing conditions, for instance between the mountains and plains, would dictate which plants could be successfully grown in each area.

Koen<sup>14</sup> states in the introduction to his book that, 'Their (the Aborigines') method of supporting their population was based on the concept of 'sustainable development', the ability to regenerate resources so they would be available for future generations'. It is more likely that the reverse is true. The concept of sustainable development is based on the way indigenous people managed their land, although this view was not expressed by early European colonists. Presbyterian clergyman J. D. Lang, addressing a meeting of the Moreton Bay Friends of the Aborigines in 1856 asserted that the British had done nothing wrong in dispossessing the Aborigines. 'God in making the earth never intended it should be occupied by men so incapable of appreciating its resources as the Aborigines of Australia.', he said<sup>15</sup>.

### 2.2 Plants as a Resource

In Victoria alone, it is thought that Koories made use of up to 700 different plant species<sup>16</sup> for food, shelter, implements, medicines, ceremonial adornment and many other purposes. The uses to which plants were put are as diverse as the plants themselves, and many plants provided more than one useful material.

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<sup>13</sup> Gott & Conran 1991

<sup>14</sup> Koen J. 1995

<sup>15</sup> Day 1997

<sup>16</sup> Gott 1993



Strict rules governed the harvesting of plants and food. Plants, animals and people were (and still are, among Aborigines still living in their traditional manner) linked through religious beliefs from the Dreaming, when fruits and foods were created by the Ancestral Spirits. Foods were gathered according to precise seasonal indicators, which may have been of critical importance in some cases, since some food items were at the very least inedible, and in a few cases toxic, when not perfectly ripe for harvesting.

Some tuberous plants were dug and the bottom half to two thirds of the tuber removed for eating, while the rest of the plant was replanted. Several species, including the Geraniums, are known to survive this treatment, which would ensure future availability of plants thus utilised.

## 2.3 Seasons

Changing seasons were one of the strongest influences on how Koories lived. The Wurundjeri spent the summer months on the banks of the Yarra and its tributaries, but as winter approached, they would move to higher land near the Dandenongs, where there was more shelter and fire wood. On route, they might stop and camp at the Bolin Swamp, now Bulleen Park (Melway map 32 B 9-10). Bolin Swamp was a favoured camping spot for hundreds of generations because it provided an abundance of eels in autumn.

The traditional European calendar brought to Australia by the British and still used today predates four seasons of equal length per year. In Australia, the first day of each season was moved from the solstice or equinox to the first day of the month simply for bureaucratic reasons which in no way relate to natural conditions.

In contrast, Aboriginal calendars relate to local sequences of natural events<sup>17</sup>. Tribal calendars differed vastly, depending upon the location of the territories concerned. Obviously, a tribe in the Cape York area would have an entirely different calendar from that used by the Kulin people in south and central Victoria.

While many tribal calendars are still in use in Northern Australia, those once used in the south have largely been lost, along with the people and cultures who developed them over tens of thousands of years. Alan Reid, of the Gould League, has proposed a calendar based on natural events. It is shown on page 6, along with the traditional European calendar in the same format for comparison.

This six season calendar was compiled with the assistance of the Field Naturalists Club of Victoria, the Gould League and Melbourne Parks and Waterways, from a vast amount of natural event data accumulated by many people over a number of years. Since it is based on natural occurrences, such as changed animal behaviour, bursts of flowering or seed production, this calendar is thought to approximate the Koorie calendar for the Melbourne area.

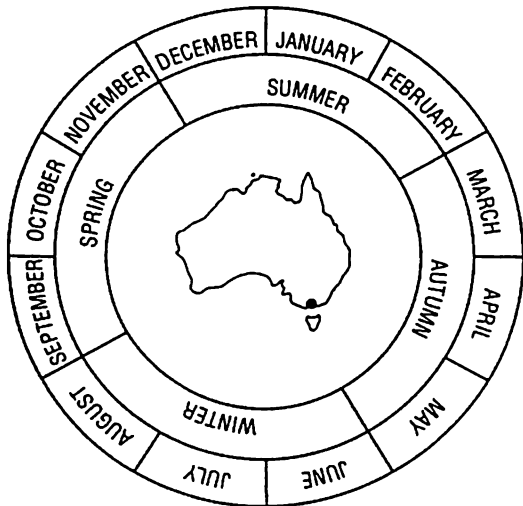
The Koories relied for survival on their profound and intimate knowledge of the land, its flora and fauna, climatic conditions and seasonal changes. It is interesting to note that their management practices were such that even after more than 40,000 years of occupation, the land still provided everything they needed to remain fit and healthy. As Pascoe<sup>18</sup> states, 'Most history books talk about the 'poor' Aborigines but don't pity us, it was a rich life then and still

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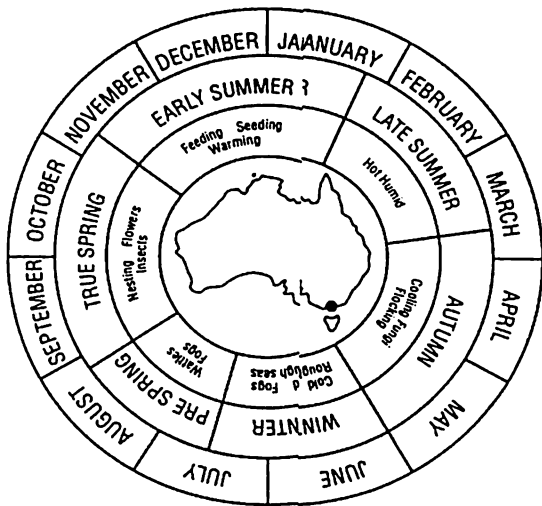
<sup>17</sup> Reid 1995

<sup>18</sup> Pascoe & Harwood 1997

is now, and one day children in school will learn the rudiments of that life style and culture and how it conserved the land for millennia, a skill which the rest of Australia is only now realising it needs’.



Traditional European calendar



Alan Reid's calendar for the Middle Yarra Region of Melbourne showing six seasons

Diagram 1

### 3. Plant Collection and Preparation

The hunter-gatherer lifestyle common to Aborigines throughout Australia was once considered to be a time consuming and unproductive way of life. It was thought that the leading of a nomadic existence, constantly chasing resources, was difficult and demanding. Such beliefs have been proven incorrect by more recent studies of indigenous peoples who still maintain their traditional way of life. It was determined that most such societies can satisfy all their needs easily within the equivalent of a three and a half day working week. It is also considered that hunter-gatherers generally had a better diet, more leisure time, less disease and, in some cases, had higher population densities over large areas than did early agriculturalists<sup>19</sup>.

#### 3.1 Task Allocation

Women were often the major providers of food for their bands because collectable foods such as shellfish, roots and fruit were a more reliable resource than were large animals. Even if animals such as kangaroos, wallabies or emus were plentiful, they were not necessarily easy for the men to catch. Fishing expeditions were sometimes conducted at night, the men holding fire brands close to the surface of the water so the fish, which were attracted to the light, could be speared.

Women planned their gathering forays just as men planned their hunts. They had to know seasonal fruits and vegetables, and they had to know how to locate tubers and bulbs in summer when many seasonal herbs were dormant and had no visible plant parts above ground. Although the basic division of tasks of hunter gatherer societies applied, with men hunting and women gathering, women and children often caught small animals such as kangaroo rats (*Bettongia penicillata*), known as bar-rook or beruke, and other small mammals, which, along with lizards, frogs and grubs supplemented the vegetable diet if the men's hunt was unsuccessful.

#### 3.2 Food Preparation and Cooking

Many of the plants eaten by Koories were eaten fresh and raw, often as they were gathered, or with very little preparation. As a result, there was minimal nutrient loss. Wild vegetable foods are rich in dietary fibre, low in sodium and rich in potassium, magnesium and calcium. The seeds that were eaten are rich in protein and polyunsaturated fats. The carbohydrates in many traditional foods are more slowly digested and absorbed than the carbohydrate in equivalent domesticated plant foods<sup>20</sup>. This may have helped protect Aborigines from developing diabetes, or, conversely, it may at least partially explain why so many Aborigines now suffer from the disease.

No food was processed unnecessarily. Processing was generally only practiced to render a food edible (remove toxins, from Austral Bracken, for example), or to make it more digestible or palatable. Meat, starchy tubers and some seeds were cooked, while other seeds were ground into flour, which was combined with water to make a dough.

Various seed, grain or nut 'breads', as well as some tubers, corms and root vegetables, were baked in hot ashes. It is very important to know which woods are appropriate for such cooking, because some contain toxins or irritants, or may impart unpleasant flavours to the food. Wattle wood is generally safe, and is also fast burning.

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<sup>19</sup> Koen 1995

<sup>20</sup> Zola and Gott 1992

Witchetty grubs ('ver-ring') were briefly rolled in hot ashes, while root vegetables were sometimes placed in a small hollow which was dug under the fire and lined with hot coals. The vegetables were placed in the lined hollow and covered with coals and ash<sup>21</sup>. Goannas may have been cooked in a similar manner.

One method of cooking used for meat or when cooking roots or tubers for several people was the earth oven. A hole of suitable size was dug and a fire lit in it. Stones, or when stones were not available, balls of clay, were placed in the fire. When the fire died down, the ashes and stones or clay balls were removed and the hot pit lined with fresh or damp grass. Sometimes green boughs were used and, occasionally, herbs such as River Mint were added for flavour.

The meat or roots were placed on top of the green material, either directly or, in the case of roots, in a rush basket made especially for the purpose. More grass was placed on top of the food and the hot rocks or clay balls pushed on top of the grass. The oven was then sealed with a layer of loose earth and left for several hours or over night. Since this cooking method steamed rather than roasted the food, it was essential that the oven was initially watched carefully. If any steam started to escape, the hole could be sealed immediately.

A kangaroo might be cooked similarly, the carcass being placed on green boughs, then covered with a sheet of bark before the oven was sealed with earth.

Small prey items, such as fish, yabbies or mussels would often be coated with moist clay to stop them drying out while cooking in the earth oven. They usually only took about twenty minutes to cook, while large animals took many hours, although cooking time was sometimes dictated by the hunger of the hunters.

Occasionally, food was not eaten immediately. Possums or Kangaroo Rats were eviscerated and dried slowly over a fire. The meat could then be kept for a short time, either for eating while travelling or when visiting an area where prey animals were less abundant.

Acacia gum was collected, rolled into balls and carried for consumption while travelling or for making sweet drinks whenever desired.

### 3.3 Food Plant Availability

The most consistent year round source of nourishment were the roots and tubers of orchids, lilies (including Bulbine Lilies, Milkmaids, Grass Lilies and Chocolate Lilies), Yam Daisies, Bracken and water plants such as Cumbungi and Water Ribbons. Yam Daisies, or Myrnong (*Microseris lanceolata*) available during spring, summer and autumn, were probably one of the most relied upon staple foods in Victoria. Gott<sup>22</sup> records the relatively common Nodding Greenhood (*Pterostylis nutans*) at densities of up to 440 plants/m<sup>2</sup>, so collecting a large number of tubers would not have been difficult.

Fruits, like Prickly Currant, Kangaroo Apple, Mistletoe and Native Raspberry, were generally available during summer or autumn, depending on the species, and seed was usually available in late spring and early summer. Cranberry Heath fruit, for example, could be collected in spring and early summer, and Cherry Ballart fruit matures in winter and early spring. Knowing

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<sup>21</sup> Isaacs 1987

<sup>22</sup> Gott 1982

which fruits would be mature when, and in what habitat or aspect the fruit producing plants grew was obviously a very important survival skill.

### 3.4 Koorie Plant Names

Given that there were 35 distinct Koorie languages and as many as 150 dialects spoken in Victoria<sup>23</sup>, it is not surprising that the names of particular plants varied from one area to another. In some areas, particular food plants were of such importance that they had several names<sup>24</sup>, generally to describe the various parts of the plant, such as foliage, young shoots and roots, before or after cooking or other preparation for use.

A considerable effort has been made to establish the local Koorie names for each plant highlighted along the Koorie Plants Trail, but the variation between tribes and the unfortunate fact that much of the local knowledge disappeared, along with the Koories, soon after European settlement makes it difficult or impossible to provide specifically local names for all the plants mentioned. The Koorie names, where provided, are followed by a reference to a tribe or location where that particular name was used.

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<sup>23</sup> Gott 1993

<sup>24</sup> *ibid.*

## 4.0 Koorie Plants of the Mullum Mullum Creek Trail

### 4.1 Mullum Mullum Creek Map showing proposed Trail

This trail would be about 1.3km in length and be accessible from Jeffrey Drive, Jennifer Court and Glencairn Avenue, as well as Oban Road, Maroondah Hwy and the western section of the path along the creek. When funds are available, the trail might be extended as far as Suda Avenue, on the east side of the Ringwood Bypass, or at least to Oliver Street, which would allow access from Mullum Mullum Reserve and Leonard Street.

### 4.2 Koorie Plant Information

*Acacia dealbata* - Silver Wattle (MOY-YAN Wurundjeri)

- The exuded sap or 'gum' was eaten as 'bush chewing gum', dissolved in water with flower nectar for sweet drinks or dissolved in water and drunk to remedy indigestion.
- The gum could also be used as an adhesive to fasten stone axe heads to wooden handles.
- Gum or gum mixed with ash from burnt wattle bark was applied to wounds and sores.
- Seed was roasted and eaten.
- A bark infusion was drunk to relieve indigestion.
- The wood was made into implements such as axe handles.
- Bark was used to make containers, including buckets
- Inner bark fibre used for making coarse string.

*Acacia mearnsii* - Black Wattle (WARRAWORUP Coranderrk)

- The gum was eaten as 'bush chewing gum', dissolved in water with flower nectar for sweet drinks. Balls of gum could be carried around for later use.
- Infusions of the bark were made by soaking it in water and drunk to cure indigestion and headaches.
- Coarse string was made from inner bark fibre.
- Gum was used as an adhesive and even as a sealant for water buckets made from the bark, when mixed with wood ashes or burnt muscle shells.
- Wood was used to make implements such as boomerangs, spears, throwing sticks and shields.
- Bark used for making containers.

*Acacia melanoxylon* - Blackwood (MOOIUNG, MOEANG Coranderrk)

- Pods were picked green and the seeds were extracted so the tasty nut-flavoured seed stalks could be eaten.
- Fishing line was made from the fibre of the inner bark.
- A hot infusion made of the roasted bark was used to bathe rheumatic joints.
- Wood was made into spear-throwers and shields.
- Bark and green twigs bruised or crushed and thrown into ponds or billabongs to drug fish for easy catching.

*Acacia verticillata* - Prickly Moses

- Fibre from the inner bark was used for fishing line.

*Acaena novae-zealandiae* - Bidgee-widgee (MURREYUKE Wurundjeri)

- The leaves were chewed to relieve heartburn and indigestion
- Leaves were even used as a tea substitute by early settlers.

*Arthropodium strictum* - Chocolate Lily

- The numerous, spindle-shaped, non-starchy tubers were roasted and eaten.

*Banksia marginata* - Silver Banksia (WOORIKE Coranderrk)

- Flower heads were soaked in water, in wooden containers called 'tarnuks', to extract the nectar and make sweet drinks, or flower heads could be rubbed between the hands and the nectar licked from the palms. Nectar best extracted very early in the day, before honeyeaters and insects have depleted the supply.
- The dry flower cones were used as strainers.
- Seed cones were used to carry fire while the group moved from one location to another.

*Billardiera scandens* - Common Apple-berry (KARRAWANG, GARAWANG Coranderrk)

- The sausage-shaped berries fall to the ground when ripe and were then gathered and eaten raw.

*Coprosma quadrifida* - Prickly Currant-bush (MORR Coranderrk)

- The small, sweet, currant-like fruit were eaten raw. They ripen from January through March.

*Dianella* spp. - Flax-lilies

- Leaves, particularly of Black-anther Flax-lily, were split in two down the midrib and rolled to form string.
- The fruit of some species was eaten, including those of Black-anther and Pale Flax-lilies, while others are poisonous.

*Eucalyptus* spp.

- The inner bark of stringybarks was made into string and the outer bark used for tinder.
- Wood was used to make spears, shields, clubs and other implements.
- Gum was applied to wounds and sores as an antiseptic.
- Gum mixed with water was consumed to treat diarrhoea.
- Dental cavities were filled with gum to relieve pain.
- Fresh leaves were used in medicinal 'steam baths'.
- Fresh leaves were eaten to treat diarrhoea, but the young leaves some species, such as the Manna Gum, sometimes contain cyanide compounds and are therefore poisonous.

*Eucalyptus obliqua* - Messmate (WANGNARRA Coranderrk)

- The inner bark was made into string for bags and fishing nets.
- The outer bark fibre may have been stuffed into dried Grass-tree flower stalks for tinder.

*Eucalyptus viminalis* - Manna Gum (BINNAP Coranderrk)

- 'Manna', sap exuded from twigs where they have been damaged by insects, was regarded as a delicacy. It would fall to the ground as sugary pellets, but had to be collected quickly, before it was carried off by ants.

- Fresh leaves were laid on fires and used to smoke out fevers.
- Bark was used for shields and containers.
- Wood was used to make flat shields, and burls from the trunk were hollowed out to form water containers called 'Tarnuks'.
- The flowers were considered to have magical properties.

*Exocarpos cupressiformis* - Cherry Ballart (BALLOT Lake Condah)

- The fruit, which grows on a juicy, orange-red stalk was harvested and the stalks eaten. They ripen during winter and early spring.
- Wood was used to make bullroarers, flat shields and spear throwers.
- The sap was applied as a treatment for snake bite.

*Gahnia* spp. - Saw-sedges

- The hard seeds (nuts) were ground for flour.

*Gynatrix pulchella* - Hemp Bush

- The inner bark contains quantities of fine fibre, which was extracted to make string for head bands, waist bands and bags.

*Juncus* spp. (*J. vaginatus* - TOOLIM - Coranderrk: *J. pallidus* -KURUNG BUWITCH - Lake Hindmarsh)

- Stems were used to make coiled mats.

*Juncus gregiflorus* - Green Rush

- Stems were used for basket making.
- The seeds were ground into flour for making damper.

*Lepidosperma elatius* - Tall Sword-sedge

- Leaf bases were used to add a red contrast colour in baskets made from Spiny-headed Mat-rush foliage. The leaves were dried, re-moistened, cut to separate the upper and lower epidermis and the inside tissue scraped out. *Lepidosperma laterale* was used similarly.

*Leptospermum continentale* - Prickly Tea-tree (PUNNUN ? Coranderrk)

- The wood was used to make eel and hunting spears and pegs for stretching kangaroo hides.

*Lomandra longifolia* - Spiny-headed Mat-rush (KARAWUN Wurundjeri)

- Nectar from the flower heads was consumed.
- Leaves were picked, split in two and dried for three or more days. Before use they were soaked in water for 24 hours to make them sufficiently pliable. They were woven to make baskets and into string bags called 'ballang-cowat'.
- Tufts of leaves were pulled from clumps and the white inner leaf bases were chewed. Their taste is similar to that of green peas.

*Melaleuca ericifolia* - Swamp Paperbark

- Sheets of the soft, papery bark were used to wrap babies.
- The wood was used to make digging sticks and spears.
- Strips of the bark may have been used as bandages.
- Pieces of bark were used as fishing floats.



- Young stems, with the attached root forming a knob, were used as clubs.

*Phragmites australis* - Common Reed (TARK, TARK-KORN Gunditjmara, CHARR-AK Jajowerong)

- Leaves were woven into baskets and bags.
- Tall stems were made into spears tipped with wood or bone.
- Stems were cut into pieces and made into necklaces worn by both genders.
- Pieces of stem sharpened at one end were used for skinning animals.
- The rhizomatous roots were eaten. They are not starchy like Cumbungi, are crisp and have a taste rather like bamboo shoots.

*Poa labillardieri* - Common Tussock-grass (?BOWAT Coranderrk)

- Fibre from the leaves and stalks was used as string for baskets and net bags.

*Polyscias sambucifolia* - Elderberry Panax (KOONADIANG ?Coranderrk)

- The succulent, blue fruit was eaten.

*Prostanthera lasianthos* - Victorian Christmas-bush (CORANDERRK Coranderrk)

The Aboriginal reserve Coranderrk, established near Healesville in 1863, was named for this plant.

- Wood was said to have been used as the upright drill for making fire but this information is now thought to be incorrect. It may have been used as the base upon which the drill was spun.

*Pteridium esculentum* - Austral Bracken (MOOLAA - Tjapwurong: MAKKITCH - Gunditjmara)

- Rhizomes, which contain a mucilaginous starch, were roasted in hot ashes and then beaten to a paste with a stone to break up the hard fibre.
- Young, juicy stems were rubbed on insect bites to relieve the itch or sting.

*Rubus parvifolius* - Small-leaf Bramble (EPPAEEP Coranderrk)

- The soft, red fruit was eaten.
- A drink was made by boiling the young leaves in water for relief of 'bad belly'.

*Solanum* spp. (*S. aviculare* and *S. laciniatum*) - Kangaroo Apples (*S. laciniatum* - MOOKITCH, MAYAKITCH Lake Condah)

- The fruit was eaten only when very ripe as it is toxic otherwise. It is quite possible that *S. aviculare* was not eaten at all, because it contains more toxins at almost all stages of development, even when fully ripe, than does *S. laciniatum*. Both were previously placed in the same species, so it is not known if, one or both, were used. The toxic substance present, the alkaloid solasodine, has been extensively studied overseas and used commercially as precursors for the production of steroidal compounds for use in medicine, mainly as contraceptives.

*Stylidium graminifolium* - Grass Trigger-plant (PINNONG Lake Condah)

- The flowers, with their movable columns, were a source of entertainment.

*Triglochin procerum* - Water-ribbons (POL-AN-GO Wathaurung)

- The rhizomatous rootstock of this species produces numerous finger-like tubers. Young tubers are white, while older ones are brown. They were roasted in the ashes, cooked in earth ovens or buried in sand to cook underneath a fire, and taste starchy-sweet.

*Themeda triandra* - Kangaroo Grass (WUULOITCH - Tjapwurong: WUULOT - Gungitjmara)

- Leaf and stem fibre was used for making fishing nets.
- Seeds were ground to make flour.

*Typha* spp. - Cumbungi (POORTEETCH Gunditjmara, Tjapwurong)

- Young leaves and stems were eaten raw.
- Older leaves were used to make baskets.
- The plant is often abundant along waterways, but the rhizomatous roots are hard work to dig up. These rhizomes are rich in a granular, potato-like starch. They were steamed in an earth oven or roasted and the outer layer peeled off. The central, white parts were tied into a knot and chewed until the starch was gone, and the remaining fibre was dried and stored.
- When required, the stored fibre was soaked to soften it, scraped with mussel shells, then rolled on the thigh to make string. This string was very strong and rot resistant.

*Xanthorrhoea minor* - Small Grass-tree (TOOLEMERIN ?Coranderrk)

- The young leaf bases were eaten.
- Flowers provided nectar, which could be added to water to make a sweet drink.
- Dry flower stalks were used as a base upon which a drill was spun for fire making and may have been used for making light spears.
- The sharp-edged leaves were sometimes used as knives for meat.

#### 4.3 Supplementary Planting

Plants which do not occur naturally within the vegetation types present or formerly present should not be planted simply to increase the number of points of interest. Such supernumerary planting would confuse the educational potential of linking the reserve and vegetation type descriptions in *Sites of Biological Significance in Maroondah* with the types of plants visitors will see along the Trail. It would be a pity to unnecessarily devalue the learning experience available.

It is envisaged that all necessary plants would be purchased from local community nurseries to ensure the acquisition of locally sourced material. Local stock is crucial for a number of reasons, not the least being the preservation of the genetic integrity of all indigenous species in Maroondah's bushland reserves (see Recommendations 74 and 75 of *Sites of Biological Significance in Maroondah*). Occasionally, plants from another area look somewhat different from the same species in Maroondah, and if such plants were used to supplement the display of that species at a Trail marker, the variation in appearance could cause some confusion.

## 5.0 Educational Opportunities

Defining Koorie Plants Trails in bushland reserves throughout Maroondah would present many educational opportunities, not only for students at all levels of formal education but also as an avenue for informal education for all members of the community. If brochures, possibly A4 folded into thirds, were available for each Trail, people might be encouraged to explore their local bushland reserves and perhaps visit others a little further from home to gain more information through encountering different plants.

Koorie Plants Trails have been mapped or created in many places around Melbourne, including Blackburn Lake Sanctuary, Monash University, the Royal Botanic Gardens and Galeena Beek, and Wurundjeri clansman Murrundindi, who works at Healesville Sanctuary, may also be invited by schools to introduce Koorie culture and philosophies to students (see attachments for further information). Murrundindi's brother, Ian Hunter, a tireless advocate of reconciliation, endeavours to increase community awareness about the life and history of the Wurundjeri through lectures, demonstrations of traditional skills and visits to schools. Mr Hunter also works with students of all ages at CERES Permaculture and Bush Foods Nursery<sup>25</sup> for two or three days per week.

Members of Blackburn Lake Sanctuary's volunteer organisation lead groups of students around a 'Bush Tucker Walkabout' and provide information and activity sheets (see attachments). The volunteers are also quick to remind visitors that the plants which were once in everyday use by Koories are now scarce and should not be disturbed, and warn that some are toxic without specific preparation. Galeena Beek Cultural Centre's Education Kit is also included among the attachments to this document.

The information about Maroondah's first inhabitants, their 'calendar', their food and how it was prepared and the way the land was managed has been included in this report so it can be supplied to teachers who wish to provide their students with some background facts prior to a class exploration of a Koorie Plants Trail.

This information may also be useful to Friends Groups wishing to lead Koorie Plants walks through their reserves even if a formal Koorie Trail is not established. Much of the material has not been readily accessible to teachers or Friends Groups previously because there are few references available which specifically discuss with local Koories and their use of their immediate environment for survival. Even now, much of the data is either unpublished or published only in esoteric academic journals with limited circulation.

### 5.1 Links to *Sites of Biological Significance in Maroondah* study

The variations in the species of plants present in reserves are a result of there being different types of vegetation in different locations. Manna Gums and Victorian Christmas Bush are found along permanent waterways and Swamp Gums, Blackwoods and Prickly Currants may be found in low, permanently moist areas. Native Raspberries prefer a sheltered spot on an east-facing slope, while Cumbungi, Common Reed and Tall Spike-rush are aquatic species.

Further vegetation variation occurs depending on slope, site aspect or whether the site is at the top of a ridge line. It is therefore possible to link the vegetation types, as defined in *Sites of*

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<sup>25</sup> CERES Permaculture and Bush Foods Nursery, 8 Lee Street, Brunswick, 9387 4403.

*Biological Significance in Maroondah* (Lorimer et al) with the occurrence of various species of plants used by Koories.

## 5.2 Linking Koorie Plants Trails to Curricula

There are many ways in which schools can focus Koorie studies around a visit to a Koorie Plants Trail. Possibilities exist in almost every area of study. A few examples as follow:

### ENGLISH:

- legend telling and reading (see attachment, 'Barak, the Last Chief of the Wurundjeri Tribe'),
- creative writing, eg: a day in the life of a Wurundjeri man, woman or child,
- learning some Koorie words (see Woiworung Words list), or
- spelling - words related to Koorie life.

### SCIENCE

- study plants used by Koories for food, fibre, medicine etc.,
- study Koorie prey animals,
- discuss fire use by Koories, or
- study and draw animal tracks and reproduce the tracks in sand, using your hands.

### HISTORY

- study the Koories of the Melbourne area,
- research early records of European settlement (diaries are a good information source) for references to Koorie activities and food sources (the bibliography of this report provided a good selection of publications),
- find out what happened to the Koories of the Melbourne area after white settlement, or
- arrange an excursion to Galeena Beek to learn about Coranderrk, or to a museum. If an excursion to Galeena Beek cannot be organised, a visit by some of its staff can be arranged.

### ART/CRAFT

- ceremonial face/body painting
- stencilling hands - place hand on paper and blow or spray paint around it to produce an outline: use a straw to suck up paint and blow it around hand, or use a small plastic spray bottle,
- charcoal drawings of birds, fish, mammals, humans....,
- try x-ray art, showing an animal's internal organs,
- bark painting,
- traditional painting using dots of colour,
- weave a mat from plant materials (very fast growing species, such as Common Reed, *Phragmites australis* and Tall Spike-rush, *Eleocharis sphacelata*, or use garden plants),
- make a boomerang using various materials and shapes to see which works best,
- make a bull roarer, or
- make a papier-mache shield.

### COOKERY:

- study ways of food preparation (would we be better off if we minimised processing?) and the ways in which foods were treated to remove toxins, or
- find out about the nutritional values of traditional Koorie foods (could compare them with similar products in our diets).

## MUSIC/DRAMA

- study an animal (perhaps in Science) and imitate its movements,
- create some Koorie-style music, using cardboard postage cylinders as didgeridoos and pieces of wood for clapping sticks (foot stamping and hand clapping also), or
- create dances for the various animals, with accompanying music.

## SPORT

- boomerang throwing,
- spear throwing (use javelin, perhaps with a bag of sand or similar for a target), or
- silent stalking followed by a burst of speed to catch a small animal (small pillow made of rags and dragged, at a safe distance, by a teacher or other students).

## GEOGRAPHY

- locate place names around Melbourne which are of Koorie derivation (eg Yarraville, Yarra River, from the Koorie name for the river, Yarrayarra),
- expand this concept to an Australia wide name hunt (Woomera, Parramatta, Mt Bolangum, Gower, Lake Boort etc... See Tully 1997 for inspiration)
- discover the derivations or meanings of some of the other place names (who was Melbourne named after?, Or Gippsland? Or Batman Avenue?)
- Locate the following place names, of Aboriginal derivation, on a map of Australia:

### Vic:

Geelong - a swampy plain  
 Yarram - plenty of water; waterfalls  
 Warracknabeal - flooded gum trees; large gum trees  
 Traralgon - a heron; a native companion  
 Warrnambool - a place of plenty; a grassy watercourse  
 Dandenong - high  
 Benalla - from *benalta*, musk duck  
 Larrawallup - a place where lizards lie or sleep

### NSW:

Adelong - a plain with a creek running through it  
 Goolwa - elbow  
 Wyong - from *woy*, water and *ong*, a spring or place of a spring or running water; a place where Christmas Bells (*Blandfordia* spp.) grow  
 Bermagui - canoe  
 Toongabbie - near the water  
 Amaroo - a lovely place  
 Walgett - a meeting place of waters; a river crossing; a long water hole  
 Bega - a large camping ground

### Qld:

Allunga - sun  
 Berree - mangrove trees  
 Gerrut - a good place for a camp  
 Lurr - lilies growing on a lagoon

- Eungella - mountain of the mists  
 Ermara - where it is always raining  
 Malgara - lightning  
 Kynnumboon - a place of possums
- SA:
- Aroona - running water, in reference to several springs in the valley  
 Waikerie - wings; anything that flies, because it was a favoured habitat for water birds  
 Malla - a swamp plant  
 Willunga - from willingga, a place of green trees  
 Monarto - the name of an Aboriginal woman who lived in the area  
 Galga - hungry  
 Ceduna - a water hole  
 Callanna - named after a mythological kangaroo which came to this place to drink
- WA:
- Kwinana - a young woman  
 Manjimup - rushes near a waterhole  
 Mannaw - honey  
 Wendo - a white gum tree  
 Wilgarup - red ground  
 Gilgai - a little hole  
 Belaring - a swamp surrounded by tea-tree  
 Carbanup - plenty of turtles in a fresh water swamp
- Tas:
- Mathinna - the name of an Aboriginal girl befriended by the Governor, Sir John Franklin  
 Parattah - ice  
 Waratah - named for the red-flowered tree *Telopea truncata* formerly abundant in the locality
- NT:
- Cooinda - a happy place  
 Kata Tjuta - mountain of many heads  
 Nitmiluk - cicadas  
 Watarraka - umbrella bush (*Acacia ligulata*)  
 Yulara - the place of howling dingoes; to howl

### 5.3 Guided Walks

There are many opportunities for Council to offer guided walks around its (proposed) Koorie Plant Trails, lead by people with an excellent knowledge of local plants and their uses, or even by members of the Wurundjeri. Appropriate occasions could include:

- Festival in the Foothills (February),
- Heritage Week (April),
- Arbor Week (May)
- World Environment Day (June),
- National Threatened Species Day (September),
- Wattle Day (September 1<sup>st</sup>) and

- World Habitat Day (October).

As an example of a similar but somewhat more broadly based tourism venture, 'Koori Tours', operated from the Apollo Bay Tourist Information Centre and Cape Otway Lighthouse, organises two hour walks (Tuesdays and Fridays at 11.00 am) to 'Taste the food, find the middens and experience the magic of the Cape'. Tour cost - \$12.

#### 5.4 Other Opportunities

It may be possible to prepare Koorie information Kits for primary and secondary schools using the information contained in this report (particularly sections 1,2 and 3), along with plant use notes and copies of some of the attachments to this report. Koories from Galeena Beek Living Cultural Centre or Worawa Aboriginal College could be asked to proof read drafts of the kits to ensure accuracy and, if they wish, to contribute any facts or issues they feel should be included. Art work for such a kit might also be supplied by Worawa (although there may be some cost involved) and might depict traditional scenes from Kulin mythology, along with explanatory text, or activities from traditional Kulin life.

The kit could be described, and extracts included, in Council's home page, if Maroondah City Council has, or plans to have, a web site. Information about some of the plants used by the Kulin could also be included, perhaps even with photographs from the CD ROM *Indigenous Plants of Maroondah*, if permission is granted by the author. This would be another innovative and worthy task for a computer-literate work experience student.

Ideally, Koorie Plants Trails should be established in bushland reserves close to schools throughout Maroondah, so students would have the opportunity to visit at least one with a minimum of time spent travelling. Most schools are within walking distance of such a reserve (Croydon Primary School and Yarra Valley Anglican School, for example are not, but both have their own remnant bushland sanctuaries and, with a little assistance, could readily establish their own Trails). Easy access would encourage teachers to make use of the Trails as part of their teaching programs. In this way they may discover just how readily accessible local bushland is and would be inclined to visit it more often. Maroondah's remnant bushland should become far more greatly appreciated as an asset for the teaching of natural sciences and other subjects not necessarily directly related to Kulin plant use.

An interesting teaching method employed by CERES Permaculture and Bush Foods Nursery, where a Koorie Plants Garden has been established, is to have quite a number of photographs of the various plants. They give each student, or pair of students, one of the photos and ask them to find the photographed plant in the garden. Once the students think they have found the correct plant, they wait next to it for a supervisor to check whether their identification is correct. If so, the students write down the method by which they identified their plant, then go to the display board, on which photos and information about all the plants in the garden are featured, and write down what their particular plant was used for.

There is scope for the adaptation of this use of photographs in teaching young people about plants used by Aborigines. It would allow student interaction with Maroondah's bushland and indigenous plants while minimising the potential for damage.

It may be possible to incorporate Koorie Plants Gardens into the landscaping around some Community Houses, both for interest and to serve as a focal point for any courses on Aboriginal culture or indigenous plant cultivation which might be organised by the

Management Committees. The planting of these gardens could be included in a Spring Planting Festival, thus receiving publicity through Greening Australia, and might be part of a whole day of Koorie centred activities. Members of the Wurundjeri may be invited to participate, providing entertainment and education for young and old. Large numbers of people would be able to participate in such plantings because there would not be the risk of causing damage to existing vegetation, as there would be in a bushland reserve.

## 5.5 Constraints

Although it might seem a good idea for Koorie Trail visitors to have an opportunity to sample some 'bush tucker', there is virtually no possibility that this will occur. Unlimited, or even limited, gormandising in our remnant bushland would, without question, lead to the local extinction of the species concerned. Almost all are protected by law. Even local community nurseries which collect propagating material only to grow the plants and return them to their correct habit, thereby increasing population sizes, must have a Department of Natural Resources and Environment collection permit. These local nurseries are not likely to expend precious propagating material and genetic stock growing plants to be eaten.

Many of the species concerned cannot be propagated except in specialised laboratories, and some not even there. For example, of about 218 types of roots used by Victorian Aborigines, some 166 are orchids<sup>26</sup>. Orchids cannot be readily propagated and all species are protected by State law.

Most of the species utilised are understorey plants, and more than 97% of Maroondah's understorey vegetation has been lost through clearing. It was quite sustainable for small bands of Wurundjeri to collect bush food over large areas on a subsistence basis prior to European settlement, but the plants they used are now severely depleted in numbers. Some are regarded as threatened species and some are even rare in a worldwide context. As Mr Ian Marlow says (attachment - 'Natural Heritage' No.2 Winter 1998, p.8), 'The development of the trail is exceptionally difficult because there are very few plants left in existence....'.

Some of the food plants required cooking or other preparation to render them palatable or to remove toxins. It would therefore be sensible to advise Trail users not to pick or consume any of the plants unless they are on a guided walk with a Council approved supervisor. For safety's sake, it would be better for Koorie Plants Trails to remain a feast for the intellect.

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<sup>26</sup> Gott 1982



## 6.0 Costing

### 6.1 Marker Bollards

It is proposed that the points to be highlighted along the Trails be marked with bollards. Each would be cut at a 30-45° angle and have a number routed into the top. It would also be necessary to provide directional arrows on similar bollards at path junctions.

Ideally, the bollards would be low enough to be unobtrusive, but high enough to be visible (see illustration in attachments), but their height may be determined by the Bicycle Path Design Guidelines at 1.1 metres. This height would be rather intrusive, but minimise any risk of accident and minimise Council's potential liability should an accident of any kind occur as a result of the presence of Trail markers.

Barling's Woodworks For You, a local supplier based at 152 Mt Dandenong Road, Croydon, has installed marker bollards similar to those proposed for this project at the Victorian Indigenous Nurseries Co. Op., Yarra Bend Road, Fairfield (see Photograph of sample).

The routing on the markers is computer generated and of very high quality. Currently (early June), Barling's does not have the required equipment to undertake this work, but are expecting to acquire it within a month. The prices below are quoted on the assumption that Barling's would have their equipment operative and not have to contract out the routing and painting.

The markers would be made of 4"x4" cypress pine, which has an expected life, when used as proposed, of about 25 years. The ones made for the V.I.N. Co. Op. are 900 mm high and have three markings routed in and painted. These would cost about \$25 each.

Given the requirements in the Bicycle Path Design Guidelines for 1100 mm high bollards either painted white or fitted with a reflector, it would be necessary for the Koorie Plants Trail markers to be 1600 mm high (so they could be buried to 500 mm). Such bollards would cost about \$32 each without white painting or reflectors. It would be preferable not to paint the bollards, to limit their intrusiveness, so fitting a reflector may be the only alternative. The fitting of reflectors would add a further \$3 to the price of each bollard.

### 6.2 Installation

If the marker bollards were installed by Council staff, the cost would be approximately \$10 each. Installation must be supervised by someone with a very good knowledge of local flora so minimal disturbance is caused to any plants, especially those of particular significance. This necessity may increase the installation cost somewhat, but it is essential to preserve the resource.

If Council takes advantage of 'work for the dole' schemes, planting and installation of trail markers might be an appropriate task for a small crew.

### 6.3 Plants

The local community nurseries sell indigenous stock for between 75¢ and \$1.20 for most species, the price depending mainly on the availability of propagating material and the

difficulty of propagation. This price applies to tubestock only, but it may be necessary to obtain plants in larger containers.

Alternatively, if the Trail is installed west of Oban Road and runs through to the track linking the creek with Maroondah Highway along the western boundary of Kuranga Native Plant Nursery, the nursery could be approached to jointly sponsor the project. Candlebark and CRISP Community Nurseries may also be interested in sponsoring the project. The only problem which might arise in this case is that the indigenous plants stocked by Kuranga may not be of local provenance.

#### 6.4 Trail Signs

It would be desirable for a sign announcing the presence of the Koorie Plants trail to be placed in a highly visible location so reserve users are made aware of this added feature. The sign might be an entirely new one, placed at the commencement of the Trail, or it may be possible to add an extra panel to the existing reserve sign. The cost of this sign would be, to a great degree, dependent on the material and design.

#### 6.5 Summary of costs

Bollards - 1600 mm high, with reflectors @ \$35 x 20 = \$700

Installation of bollards @ \$10 x 20 = \$200

Plants - average @ \$1 x 200 = \$200

Planting of plants, including mulch mats ???????

Information booth for display of map and plant information \$2500

## 7.0 Implementation

### 7.1 Installation of Trail Marker Bollards

It is of critical importance that the installation of Trail markers cause minimal damage to the surrounding plants. If possible, an auger should be used to create a hole no bigger than absolutely necessary to install each marker. No cement should be used because it is extremely alkaline and may have detrimental effects on the adjacent vegetation.

It may be advantageous to spread a sheet of plastic around the spot where each hole is dug so that the soil removed can be placed on the plastic rather than piled on top of surrounding plants. Any soil which was not required for filling in around the bollards could be neatly removed, to a place where it could be spread without smothering any understorey vegetation.

### 7.2 Supplementary Planting

Planting should be conducted in winter, spring (possibly during the Spring Planting Festival) or autumn (Arbor Week) so the plants are able to become established before being subjected to the heat and dryness of summer. Planting during one of the major 'planting festivals' would provide the trail with added publicity, particularly if the planting was advertised through Greening Australia.

It may be possible to involve a local school in the planting, but it is essential that planting be done with extreme care to limit any damage. The school group would have to be small (no more than ten), possibly selected from a VCE Environmental Studies class or from the school's environment group (Ecocare or similar). Friends Group members may well wish to be involved, possibly even supervising school students, or doing the planting themselves. It is essential that only a small number of people participate in the planting, or damage through trampling may result.

The use of Hamilton Planters, rather than mattocks or shovels, is strongly recommended to minimise disturbance during planting. Minimal disturbance is also advisable because obvious new plantings frequently attract vandals.

### 7.3 Production of Trail Brochures

The initial production of an A4 Trail brochure, using information contained in this report, might be an interesting task for a work experience student competent in the use of computers and graphics programs. The information contained in the brochure should include:

- the name of the reserve and its location, including Melway reference,
- a paragraph containing general information about the site (including a contact number for a member of a bushland Friends Group or Committee if they are happy to answer questions),
- a paragraph explaining who the Wurundjeri were (or are),
- a map of the area, showing the Trail and location of the points of interest,
- information about the plants highlighted (their Koorie names, where available, and the uses to which each plant was put),
- a warning about the rarity and possible toxicity of some plant species,
- the names of some reference publications for further information (see bibliography), and

- possibly a couple of line drawings of relevant plants to break up the text and aid identification (Council might commission a local botanical artist, perhaps Ruth Jackson, to undertake such a task).
- If there is room on later editions, the locations of other Koorie Plants Trails or Gardens in Maroondah could be listed (when there are some).

## **8.0 Recommendations**

R1 Council consider the formation of a Koorie Plants Trail within the Mullum Mullum Creek corridor.

R2 Council should develop a number of similar trails and gardens in reserves and around Community Houses, so that as many schools as possible have easy access to at least one trail.

R3 The planting of Koorie Plants Gardens should be conducted as part of a Spring Planting Festival and in conjunction with a Koorie culture day organised by members of the Wurundjeri.

R4 All plants used to supplement existing vegetation along proposed Koorie Plants Trails be of species naturally occurring in the location.

R5 All major signs and any brochures relating to Koorie Plants Trails warn that some species are toxic, while others are now rare, and that no plants should be tasted or damaged in any way.

R6 Council prepare education kits about local Koorie life, language and culture for primary and secondary school levels, to augment the information gained through the exploration of Koorie Plants Trails.

R7 Any marker bollards installed near paths should comply with bicycle path design guidelines.

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