

Western Local Land Services

Ecological Cultural Knowledge - Paakantyi (Barkindji)

Knowledge shared by the Paakantyi (Barkindji) people



This booklet was the product of an earlier project undertaken by a legacy agency of Western Local Land Services. It has been re-branded in line with Western Local Land Services publication standards and guidelines. Western Local Land Services would like to acknowledge and thank all who contributed their knowledge, time, expertise and financial support to the original project.



Ecological Cultural Knowledge – Paakantyi

Foreword

Western Local Land Services is working to achieve positive natural resource and cultural heritage outcomes in the region and to create greater understanding and knowledge of Aboriginal cultural heritage values within the overall region community.

Western Local Land Services is committed to cooperation with the Aboriginal communities of our region to improve their involvement



Workshop in the Australian Inland Botanic Gardens Woolshed, Buronga, held in September 2005.

in natural resource management, to protect areas of cultural significance and to encourage learning and sharing of ecological cultural knowledge with current and future generations.

Aboriginal people have a cultural, spiritual and social connection to the land and have an important role in environmental management. Western Local Land Services has a strong interest in supporting Aboriginal groups in the collection of information that can accurately, comprehensively and meaningfully define Aboriginal cultural links to the landscape.

Aboriginal people possess special knowledge, rights and interests in relation to the way that natural resources are managed and used. It is important that Aboriginal cultural knowledge of natural resources is only used in accordance with the wishes of the custodian of that information.

The Cultural Biodiversity Strategy: Paakantyi

(Barkindji) Project which led to the development of this booklet was undertaken by the Lower Murray Darling Catchment Management Authority (LMD CMA) in partnership with Barkindji Elders and community members. The purpose of the project was to increase opportunities for Aboriginal people across Western Local Land Services to record and pass on cultural knowledge between generations, through access to biodiversity and places of spiritual, cultural, economic and social significance.

I invite you to read this valuable resource and support Aboriginal communities to regain and strengthen access to their past as a pathway to revitalising their culture.

Magnus Aitken
Chair
Western Local Land Services

Ecological Cultural Knowledge – Paakantyi

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Aboriginal People

Please note that this report may contain photographs and references to some Aboriginal Elders, Traditional Owners and knowledge holders who are now deceased.

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Acknowledgements

Western Local Land Services wishes to acknowledge the Barkindji Elders Council and community members who participated in the Cultural Biodiversity Strategy: Paakantyi (Barkindji) Project which provided the basis for the content of this booklet. Acknowledgement is also extended to the Australian Government's National Landcare Programme for providing funding for this project.

A series of workshops, coordinated by Lower Murray Darling Catchment Management Authority (LMD CMA), were held with Barkindji Elders both indoors and in the field in 2005. Western Local Land Services thanks the following Barkindji people who participated in the workshops: Lottie Williams, Betty Pearce, Ray Lawson, Noel Johnson, Ron Johnson, Roland Smith (Snr), Warren Clark, Doreen Mitchell, Ricky Mitchell, Evelyn Crawford, Elsie Coombs and Kenny Clark. Also in attendance was Alf Kelly (Mutthi Mutthi – a respected Elder).

During the workshops, authors of the original reports, Dr Luise Hercus and Dr Beth Gott worked closely with the Elders and recorded the names of and uses of plants identified during the field trips. Thanks and acknowledgment is extended to the landholders of properties visited during the workshops: Wamberra Station, Old Burtundy Station, Petro Station and the Pooncarie Mission.

Acknowledgement is also extended to other project supporters: Itha-Mari Pty Ltd, Barkindji Biosphere, Australian Inland Botanic Gardens, National Parks and Wildlife Service, Native Vegetation Management Fund and Jumbunna Walkabout Tours.

For a complete list of reference material, please refer to the references section in the back of this booklet.



Participants in workshop held 13-15 September 2005 (L-R): Luise Hercus (ANU), Doreen Mitchell, Betty Pearce, Michael Gilby (LMD CMA), Ray Lawson, Warren Clark, Ricky Mitchell, Noel Hayward (LMD CMA), Lottie Williams, Claire Wilkinson (LMD CMA) and Beth Gott (Monash University).



At the Australian Inland Botanic Gardens in the Gampang Woolshed for the second workshop in September 2005.

Ecological Cultural Knowledge – Paakantyi

Introduction

Western Local Land Services commissioned the production of this booklet as part of a series of Ecological Cultural Knowledge publications recording the oral histories, traditional language and cultural uses of native plant species in the region.

The project worked towards strengthening partnerships with the Paakantyi (Barkindji) community through self-determination and empowerment. This partnership was aimed at achieving positive outcomes for the protection of Aboriginal cultural biodiversity, recognising Aboriginal community consultation and participation as an important factor in developing effective natural resource management policies.

The Cultural Biodiversity Strategy: Paakantyi (Barkindji) Project aimed to undertake a cultural biodiversity mapping project across Western Local Land Services, within the Southern Mallee area, with the assistance of the Traditional Owners and

the broader Paakantyi (Barkindji) community. The project sought to identify Aboriginal people with traditional cultural knowledge of the landscape and those with a genuine interest in natural resource management issues. It also aimed to ensure Aboriginal people have access to biodiversity and places for spiritual, cultural, economic and social purposes.

The project study area encompassed part of the greater Paakantyi (Barkindji) lands. As indicated in the map on page 4, the study area was bordered on two sides by the Murray and Darling Rivers and encompassed an area extending north and east towards the Willandra Creek southwest of Ivanhoe.

This booklet includes Paakantyi (Barkindji) names for plants where they are available. The Paakantyi (Barkindji) word has often been translated to common plant names only and as there can be many common names for the same plant, alignment of the scientific plant name may not be conclusive.

In the original report, plants were categorised according to their traditional use. In this booklet, plants are further categorised according to life form such as trees, small trees, shrubs and so on, in keeping with the suite of these Ecological Cultural Knowledge publications.



*Participants in workshop held 27-28 April 2005
(L-R): Luise Hercus (ANU), John Grima, Lottie Williams, Kenny Clark, Jacinta Cain (LMD CMA), Warren Clark, Betty Pearce, Claire Wilkinson (LMD CMA), Beth Gott (Monash University) and Kerry Hart (LMD CMA).*

Ecological Cultural Knowledge – Paakantyi

The traditional use by Paakantyi (Barkindji) people for each plant was gathered from the Paakantyi (Barkindji) participants in the workshops, and from historical text. Separate workshops for Barkindji men and women were held with the aim of identifying if there were differences in the value placed on plants because of the differences in roles between men and women.

Permission has been granted by the Paakantyi (Barkindji) Elders for publication of this material. The plants included are not intended to be a definitive list, however all plants included in this booklet were agreed by the Paakantyi (Barkindji) participants at the project workshops as culturally significant to the Paakantyi (Barkindji) people.

Western Local Land Services appreciates the opportunity to collaborate with the Paakantyi (Barkindji) people in the production of this valuable educational resource. This booklet will assist Western Local Land Services in protecting the values of culturally significant vegetation in its region.

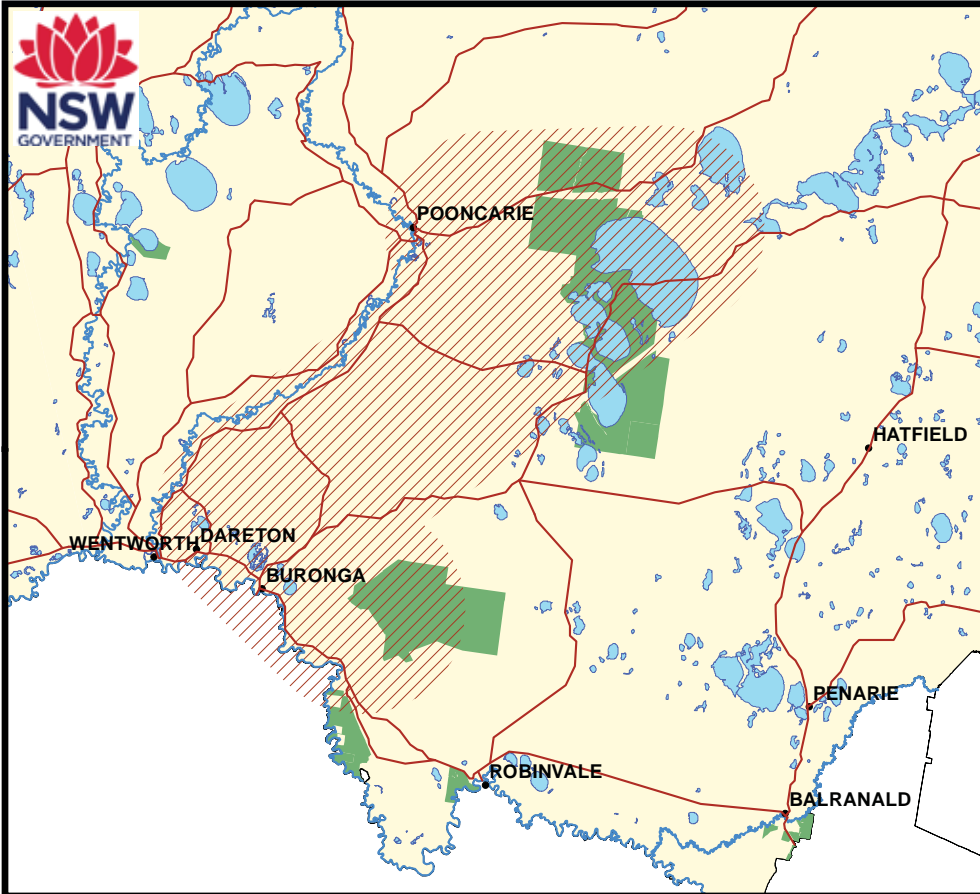


Ricky Mitchell, Lottie Williams, Betty Pearce and Doreen Mitchell during the second workshop in September 2005.



Ron Johnson, Ray Lawson, Ricky Mitchell, Noel Johnson under canoe scar (at the Murray-Darling Junction).

MAP OF CULTURAL STUDY AREA

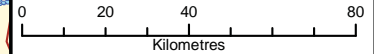


Map of Cultural Study Area: Paakantyi (Barkindji)

Legend

- Main Roads
- Towns
- Major Rivers
- ▨ Study area
- National Parks Estate
- Western LLS Region

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Ecological Cultural Knowledge – Paakantyi

Oral Histories

Paakantyi (Barkindji) People

The people of the Darling River, from Wentworth to Bourke comprised a large group, the Paakantyi (Barkindji), from paaka meaning river + ntyi meaning belonging to. They occupied not just the banks of the Darling River and floodplain, but vast areas on both sides of the river. They consisted of the following groups, who all spoke dialects of the one language, Paakantyi (Barkindji):

- Kurnu – around Bourke;
- PaaRuntyi – from the Paroo and adjacent areas;
- Wanyiwalku – also called Pantyikali ‘the creek people’ from around Mootwingee and to the north;
- Nhawalku – from around Wilcannia;
- Wilyakali – Broken Hill and beyond, including a long way into South Australia;
- Thangkali – also called Parritke, from the scrub’ west of the Darling Anabranh and a long way into South Australia;
- Parrintyi – from the ‘scrub’ east of the Darling River;
- Marawarra – from the lowermost Darling River to Lake Victoria; and

- Paakantyi (Barkindji) – in a narrower sense, i.e. southern Paakantyi (Barkindji), from the Darling River below Wilcannia.

Although the northern dialects were quite different from the southern ones, all of these people spoke basically one language, which was vastly different from the surrounding languages. The people identified as Paakantyi (Barkindji) in the first place, being distinct from their neighbours; and as their group such as Parrintyi or Kurnu only in the second place, when discussing amongst themselves.

The lower Anabranh and the lowermost Darling were occupied by the Marawarra group of Paakantyi (Barkindji) people, and the Lower Darling above Burtundy by the southern Paakantyi (Barkindji) group. Between them, these two groups occupied the better-watered regions and the entire floodplain. The people who occupied the dry scrub on the east side were known as the Parrintyi which means ‘belonging to the dry scrub parri’. Parri was not just a general term for ‘Mallee scrub’, as it was not just a

vegetation term; it was the name of a land-form, the dry scrub-lands away from the river.

The language of the ‘scrub-dwellers’ on the east side of the Darling was practically identical to the southern Paakantyi (Barkindji), while the language of the scrub dwellers on the west side was practically identical with the language of the Marawarra of the lower Anabranh. Therefore in a general view of the Lower Darling, it can be seen as having a central river and floodplain, inhabited by paaka or river people; with parri or dry scrub on both sides inhabited by ‘scrub-dwellers’.



Doreen Mitchell and Betty Pearce

Ecological Cultural Knowledge – Paakantyi

Pooncarie Stories

An area of significance to the southern Paakantyi (Barkindji) is the Pooncarie Reserve, known as the Pooncarie Mission. The following notes are compiled from information from Dr Luise Hercus gathered over many years, as well as information gained from Barkindji Elder Lottie Williams in the course of the April 2005 workshop. Lottie has been living next door to the Pooncarie Mission site for many years.



Remains of the Pooncarie Mission (June 2005)

The Pooncarie Mission property contains a culturally important section of river frontage - the Kathara-katha-katha-thumbi, said to be one of the deepest waterholes in the river. This waterhole is spread right across a bend. The Mission also contains the Ngatyi thumbi (waterhole) in a riverbend a little further upstream, while further upstream out of the Mission grounds is the Karnka thumbi 'yamstick waterhole'. These were habitation sites as well as mythological sites connected with travels of the Ngatyi, the ancestral water snakes. Lottie described how the Kathara-katha-katha-thumbi used to have an island in the middle. It was a favourite Paakantyi (Barkindji) site and a number of people retreated to this area after white occupation.

Approximately 40 Aboriginal people lived in the Pooncarie camp around 1901, and they were allocated an area of 640 acres around the main

campsite. In 1901, the group were joined by descendants of Nanya (Hardy 1976:170). On the whole, relations with non-Aboriginal people were better around the Pooncarie township than elsewhere, largely thanks to Charles Barrit of Mallara (near Pooncarie) and Mrs B.J. Fowler of 'Ringwood' which adjoined the reserve. Mrs Fowler started teaching Sunday school to the camp children. She had some disused huts moved from Wentworth, so that the people there would have better accommodation.

A number of Aboriginal people from the Pooncarie camp died in the 1918-19 influenza epidemic, including two aunts of Lottie Williams. They are buried in the cemetery further away from the school block. Another cemetery closer to the river dates from an earlier period and it is possible that some of the 19th century Pooncarie camp people are buried there.

It was not until 1929 that Mrs Fowler ultimately succeeded in getting a school established. A school building was set up with the help of the Aboriginal Inland Mission, and a missionary, Miss Brown (who used to walk all the way from Mallara) went to teach there. Rene Mitchell (a relative of Lottie Williams), went to school there and was taught by Miss Brown. By the time that Lottie came of school age in the later 1930s, the school had closed down so she went without official schooling until she was about twelve years old.

The Pooncarie Mission School was closed down in 1933 by the Aborigines Protection Board so it had lasted only four years. In 1933, the Protection Board made the decision to move the Ngijympaa people from the Carowra Tank to the Menindee Mission so that the local Menindee Paakantyi (Barkindji) were outnumbered five to one by

people speaking Ngijympaa, a totally different language. At the same time it was decreed that the Pooncarie people should also be moved there. The 'new' Menindee Mission was a most unhappy place, poor accommodation and rampant tuberculosis. The Pooncarie people got homesick. Charles Brodie, (who was non-Aboriginal but was officially married to Lottie's and Rene's mother), managed to bring his family back to Pooncarie straight away. Others left as soon as they were able.

At the Pooncarie Mission in the present time, there is still plenty of evidence of habitation from long ago. Cultural heritage sites have been identified including charcoal from innumerable fires on the riverbank; scarred trees from which pulthuru 'a large carrying dish or a bark canoe' has been cut; and a V-shaped gap typical of fish trap sites in other locations.



Beth Gott with Lottie Williams and Ricky Mitchell

Ecological Cultural Knowledge – Paakantyi

Life form



Trees



Small Trees



Shrubs



Forb / Herb / Fern



Climbers



Reed / Grass

Traditional uses groups



Arts / Craft



Fibre



Fire



Foods



Gums / Resins



Medicinal



Shelter



Tools / Hunting



Water Sources



Other

Descriptions of cultural uses of plants are direct quotes from the Paakantyi (Barkindji) Elders involved in this project and are also sourced from historical text.



Ecological Cultural Knowledge -
Paakantyi
Tree Section





Maapu



Common name: River Cooba
Paakantyi name: Maapu
Scientific name: *Acacia stenophylla*

*The tough pods of River Cooba were roasted in the fire, and the seeds picked out to eat (Mitchell 1848). The seeds may also have been ground. Maapu is the Paakantyi name used for Weeping Wattle or Marpoo, as well as for Sandhill Wattle, so this information could also apply to *Acacia ligulata*.*

Description: Tall drooping, straggly tree to 10m high. Leaves 15-40cm or more long, 3-6mm wide, slightly curved, thick, rigid. Flowers pale-yellow, in globular heads 6-9mm in diameter. Pods 10-20cm long, to 10mm wide, leathery, thick. Flowering occurs mainly during summer-early autumn. The pods look like a string of beads.

Habitat: Occurs on heavy clay soils in river red gum communities along river and creek banks and swamp margins. Also found in mitchell grass, black box, bimbale box, coolibah and belah communities, usually in close proximity to a river or creek channel.

Distribution: Found throughout New South Wales, along rivers and creeks (permanent or ephemeral) in ribbon-like stands.

Pinpa



Common name: Cypress Pine,
White Cypress Pine

Paakantyi name: Pinpa

Scientific name: *Callitris glaucophylla*

Pinpa is the Paakantyi word for pine, resin for glue and *Callitris* trees. Resin was used to cement the kangaroo tail sinews binding the attachment of the head of reed spears (Smyth 1878); fixing flints to weapons. Resin mixed with fat as a salve, was used for teething (Berndt 1940). Wood was used for woomeras, canoe poles and firemaking; and the bark for torches (Mitchell 1848). It was also used

for fish spears because it floats (Bennett 1834). The name and use also applies to *C. gracilis*, Murray Pine and *C. verrucosa*, Mallee Cypress-pine.

Description: Cypress-like trees with globular woody cones with six segments, about 20-25mm in diameter which remain on the tree for several years. Flowering occurs in spring-summer. *Callitris glaucophylla* leaves are aromatic, with bluish-grey foliage appearing jointed and needle-like. The stems exude resin when wounded and the seeds are surrounded by resin in the cone.

Habitat: *Callitris glaucophylla* is found on coarse-textured red and brown earths and occasionally on silty soils associated with streams in the eastern part of New South Wales. Also occurs on shallow soils well up the slopes of hills. Cypress Pine occurs as isolated individuals or in extensive forests.

Distribution: Widely distributed throughout western New South Wales.





Karlku



Common name: Belah, Swamp Oak
Paakantyi name: Karlku
Scientific name: *Casuarina pauper*

The wood was used for spears and the roots possibly for water (Magarey 1895). The wood of stem and root was used for boomerangs, shields, throwing sticks and liangles; the young stems and cones were chewed to relieve thirst. The cones were cooked and eaten, or powdered with unknown tree species for sores and rheumatism. The wood/bark was used for various ailments.

Description: Tree to about 15m high, with slender branchlets about 1 – 2mm thick, striated, jointed. Bark is dark grey, finely fissured in a regular pattern of squares. *Casuarina* trees have needle-like soft stems with the leaves reduced to 9-12 small pointed scales at intervals along the stems. Fruits form an oblong woody cone about 20mm long, with several rows of prominent protruding valves. Flowering usually occurs summer-autumn.

Habitat: Belah is usually found on sandy rises with *Callitris* species. Occurs on sandplains, floodplains and foothills. May be found as individuals or in dense stands.

Distribution: Widespread in the western half of New South Wales.

Kamuru



Common name: River Red Gum
Paakantyi name: Kamuru
Scientific name: *Eucalyptus camaldulensis*

The bark is used for containers and canoes, and the wood for clubs. The bark can be scratched to get a white liquid, which thickens by itself. This was rolled into a ball, sucked, then spat out (Tunbridge 1985). A decoction can be made from the bark for a medicinal drink and body wash (O'Connell et al. 1983). The seeds were ground for food and the

flowers soaked in water for drink; the gum used for burns and diarrhoea, and the leaf on wounds; square pieces of bark were cut for drying possum skins (Krefft 1865).

Description: Medium-sized to large tree, 25-40m high. Bark dark, rough and persistent on the lower trunk, smooth elsewhere. Leaves alternate, 12-22cm long, 8-15mm wide, thin, drooping, green or blue-green. Flowers cream coloured, in clusters of 5-10. Buds 6-10mm long, 4-5mm wide, conical cap. Fruit hemispherical to top-

shaped, 7-8mm wide, with sharply triangular protruding valves.

Habitat: Most extensive on grey heavy clay soils along riverbanks and on floodplains subject to frequent or periodic flooding.

Distribution: The most widely distributed eucalypt in Australia. Can be found throughout western New South Wales along the Murray and Darling Rivers and watercourses.





Kaarima



Common name: Mallee
Paakantyi name: Kaarima
Scientific name: *Eucalyptus*
species

Kaarima means Mallee tree. Yunga is the sap from tree roots. The horizontal roots were dug up, cut into lengths, and drained for the water they held (Cairns 1858). A 'Weeah' Mallee was one whose vigorous growth indicated that it was a good water source and could belong to any of several species. The root bark was roasted and pounded for food

and the root/leaf extract used for colds. The wood was cut for boomerangs and the bark beaten into a fibrous mass and woven into a mat.

Description: Mallee trees in the project area are multi-stemmed from ground level, usually less than 10m in height. Leaves grow at the end of branchlets. Leaves are commonly lanceolate or petiolate, apparently alternate and waxy or glossy green. Flowers have numerous fluffy stamens, generally yellow, cream or white.

Habitat: Found growing in arid or otherwise stressed areas, on red aeolian sands.

Distribution: Occur throughout western New South Wales, growing as communities comprising various species of mallee.

Nhiitaka, Katha



Common name: Wilga
Paakantyi name: Nhiitaka, Katha
Scientific name: *Geijera parviflora*

The bark was steeped in water as a laxative (Kamilaroi Tribe in Curr 1886). An infusion of the leaf was drunk or used as a lotion to alleviate pain, and the chewed leaf used for toothache (Lassak & McCarthy 1983). The leaf was also baked, powdered and smoked to induce drowsiness, possibly combined with Pituri (Webb 1948). The leaf infusion

was also used for bathing to relieve sore muscles or for the skin; used cold for sore eyes and ears; was drunk for blood disorders; hot leaves were used as a poultice on sores and boils; the wood used for spears and boomerangs, and the leaves also burned as an insect repellent and for smoking ceremonies.

Description: Small to medium-sized tree to 9m tall, with a large, often rounded, dense canopy. Leaves strongly aromatic when crushed, alternate, 6-18cm long, 4-7mm wide, shiny and dark-green. Flowers white, small, 3mm wide, with

an unpleasant odour. Fruit globular, 4-5mm wide. Flowering mainly occurs in winter-spring.

Habitat: Grows in inland regions of New South Wales in mixed woodland communities. Usually found in areas with calcareous red clay loams, also on calcareous sandy soils.

Distribution: Widespread throughout western New South Wales, except for the far north-west; very infrequent in the south.





Sugarwood, False Sandalwood (Paakantyi name not identified)



Common name: Sugarwood,
False Sandalwood

Scientific name: *Myoporum
platycarpum*

The wood was burnt in canoes for night fishing and could be used for making woomeras and shields. The resin was used for fastening flints and closing holes.

Description: Tree to about 10m tall, bark rough, fissured and divided into segments. Leaves lance-shaped, 3-6cm long, 4-7mm wide, tipped with a stiff point, fine teeth on both sides near tip, foliage often sticky. Flowers white, in groups of 4-8 at base of leaves, bell-shaped and 4-6 lobed, 6-8mm long, often yellow inside. Fruit an almost dry berry about 6mm long. Flowering occurs late winter-early summer.

Habitat: It is most abundant in mallee and belah-rosewood communities, but also occurs on woodlands on red and red brown earths and brown solonised soils.

Distribution: Widespread over the Western Division of New South Wales particularly in the south.



Ecological Cultural Knowledge -
Paakantyi
Small Tree Section





Malka



Common name: Mulga
Paakantyi name: Malka
Scientific name: *Acacia aneura*

Malka means Mulga tree. As well as the seed, the galls on the plant, known as Mulga Apples, Malka Manu or 'mulga food', were eaten. The wood was also used for boomerangs, digging sticks, spears, spear-ends, clubs and possibly fire drills. The seed was cooked in a wooden dish by mixing with hot

ash, the ash was then blown out and the seed ground and cooked as damper. Isolated pockets of Mulga may have been of immense value.

Description: Small shrub to 8m high, with the branches ascending or horizontal. Leaves variable, 3-7cm long, 1-2.5mm wide, narrow-linear in shape. Flowers bright yellow, in stalked spikes 15-30mm long. Pods 20-35mm long, 5-14mm wide, flat or oblong. Flowering occurs at any time of the year, after suitable rains.

Habitat: Generally grows in clumps, forming an open woodland. Mostly it grows on sandplains, dunes, red earths and on mountain ranges with stony, thin soils.

Distribution: Widespread throughout western New South Wales.

Wilyuru



Common name: Cooba,
Native Willow
Paakantyi name: Wilyuru
Scientific name: *Acacia salicina*

The seed was ground, the leaf used for healing wounds and the wood was used to make boomerangs. The ash was mixed with Pituri and the bark used as fish poison. The bark and sap were used for a red dye and for body paint.

Description: Drooping shrub or tree to 20m tall with willow-like deep green foliage. Leaves linear with one central vein, long and narrow, 4-12cm long, 4-7mm wide, thick, fleshy tapering to both ends and usually finely pointed. Flowers cream to pale yellow, in globular heads, 5-7mm diameter, single or in long groups of 2-10 heads at the base of the leaf. Pods are straight, often ash-coloured, 3-12cm long 6-10cm wide, woody with thick edges, often strongly constricted between seeds. Flowering occurs mostly in summer-autumn.

Habitat: Commonly occurs along waterways, soils ranging from sands to clays.

Distribution: Throughout the Western Division of New South Wales.





Panpa, Thurpa, Thulkuru



Common name: Western Rosewood, Bullock Bush
Paakantyi name: Panpa, Thurpa, Thulkuru
Scientific name: *Alectryon oleifolius*

The red part of the seed is eaten and the wood used for light shields and boomerangs. Possibly only the aril attached to the seed was eaten.

Description: Small tree to 9m high, deeply fissured bark, stiff grey-green leaves, 3.5-14cm long, 6-12mm wide with prominent veins. Flowers are cream, small and inconspicuous. The green 2-3 lobed fruit, about 6mm across, opens to a black seed with a red attachment. Flowering occurs late spring-summer.

Habitat: Most common on sandy soils containing limestone, in association with belah communities.

Distribution: Widespread in semi-arid areas of western New South Wales, west from upper Hunter Valley.

Bell-fruit Tree (Paakantyi name not identified)



Common name: Bell-fruit Tree
Scientific name: *Codonocarpus cotinifolius*

The leaf was chewed for toothache; the root chewed as a narcotic; and an infusion of the root bark used to bathe rheumatic joints (Lassak & McCarthy 1983).

Caution: Care should be taken as this plant can be poisonous.

Description: Tall shrub or small tree to about 10m high with smooth grey-green or sometimes pinkish bark, leaves alternate, greyish-green, lanceolate or almost orbicular, 2-5cm long, on long stalks. Flowers small in racemes at the ends of branchlets or in the leaf axils, usually the male and female flowers on different plants. The fruit are bell-shaped about 10mm long with 30-50 segments around a central column. Flowering occurs in spring-summer.

Habitat: Can be found growing in arid areas, commonly after fire on deep sandy soils.

Distribution: Widespread throughout western New South Wales.





Karpuka



Common name: Sweet Quandong
Paakantyi name: Karpuka
Scientific name: *Santalum acuminatum*

The fruit is eaten raw and can be dried. It was also roasted and eaten when green. The seed can also be eaten or ground up and used as a medicinal cream for scalp sores.

Description: Drooping shrub or small tree to around 5m tall, with narrow, opposite olive-green leaves 5-7cm long, 4-10mm wide, tapering to a curved point. The bark is light-brown and slightly furrowed. Flowers whitish or cream, around 2mm long, in short clusters at the ends of the branchlets. Flowering occurs in spring-summer. The fruit is round, bright red, and walnut sized (2-3cm diameter) with the remains of the flower on top. It ripens in spring. The hard stone inside the fruit is pitted and contains an oily seed with a strong flavour of Oil of Wintergreen.

Habitat: Grows parasitically on the roots of surrounding plants, in a range of woodland communities, on sandy sites to gravelly ridges.

Distribution: Found on and west of the western slopes of the Great Dividing Range in New South Wales.

Matya Manu



Common name: Bitter Quandong
Paakantyi name: Matya Manu
Scientific name: *Santalum murrayanum*

The fruit has a bitter taste but some people could eat the fruit, and were admired (Hercus 1986:225). Baking was said to remove the bitter taste. The seed inside the stone has no strong flavour. For medicine, a stupefying drink was made from the root and bark (Stone 1911).

Description: Similar in appearance to the Sweet Quandong, but some of the leaves are in threes. It is a shrub or small tree to about 4m tall with long pendulous branchlets. Leaves grey or silvery green, linear and lance-shaped, 25-30mm long and up to 3mm wide, tapering to a curved point. Flowers creamish, small in groups at the base of the leaves. Fruit fleshy, red or brownish-red, globular, 2-3cm wide, the stone slightly pitted. Flowering occurs in spring-early summer.

Habitat: Can be found growing parasitically on the roots of surrounding plants. Occurs on sands to sandy loams, and gravelly ridges in many woodland communities.

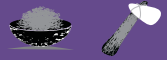
Distribution: Widespread throughout the Western Division of New South Wales.





Ecological Cultural Knowledge -
Paakantyi
Shrub Section

Nhampura, Kapuru



Common name: Small Cooba, Umbrella Wattle
Paakantyi name: Nhampura, Kapuru
Scientific name: *Acacia oswaldii*

A willow-like tree is Nhampura in Southern Paakantyi and Kapuru in Kurnu dialect of Paakantyi. This is probably Acacia oswaldii. The gum is eaten, and the seed is pounded and eaten as a raw paste. The wood was used for clubs and boomerangs.

Description: Often found growing as a large shrub and can grow into a small short-trunked tree, 2-3m high. It has thick many-veined 'leaves' with sharp points. The leaves are slightly curved, usually 30-45mm long, 2-8mm wide, leathery, tips pointed or rounded. Flowers are pale yellow in globular heads 4-5mm in diameter. The pods are 6-15cm long, 7-10mm wide, hard and woody, twisted and coiled. The seeds have a yellow-orange attachment (aril) and flowering occurs in spring.

Habitat: It grows in drier areas on a wide range of soils and in many vegetation types.

Distribution: Very widespread and evenly distributed throughout western New South Wales.





Mukirli



Common name: Wild Orange, Bumbil
Paakantyi name: Mukirli
Scientific name: *Capparis mitchellii*

The fruit pulp was eaten raw. The fruit was collected green and buried in hot sand to ripen whilst protecting it from birds and insects; the seeds were not eaten (Latz 1995). As medicine, the bruised bark was used on sores (Turner 1905); and the flower nectar for colds (Webb 1948).

Description: Small tree or shrub to 6m high with dark rough bark and oval leathery leaves. Small spines at the base of each leaf and round yellow-green fruit born on a long stalk.

Habitat: Occurs in a range of habitats, often in woodlands. Prefers sandy to clay loam soils and is less common on rocky hillsides, although can be found growing apparently exclusively in these areas in the far west. Also occasionally found on clay soils. Most frequently found growing in bumble box and white cypress pine communities.

Distribution: Known to occur across western New South Wales.

Thara



Common name: Narrow-leaf
Hopbush

Paakantyi name: Thara

Scientific name: *Dodonaea viscosa*
subsp. *angustissima*

The plant is used for making a frothy drink and has medicinal uses. The boiled root or juice of the root was used for toothache, cuts & wounds (Webb 1948). The branches were placed in a warm ashpit,

for a patient to lie on them for relief of internal pain (Latz 1995, ssp. mucronata).

Description: Sticky shrub, with narrow, shiny leaves with irregular edges. It is a spreading shrub, usually 1-2m high, occasionally up to 5m, many stemmed. Leaves are 2-8cm long, 1-4mm wide, blunt or pointed, the upper surface glossy green. The fruit capsules have 3-4 reddish green wings to 10mm long and 14mm wide. Flowering occurs mainly in spring-summer.

Habitat: Found predominantly on deep sandy soils, particularly in areas that have been disturbed. Occurs in a wide range of vegetation types.

Distribution: Widespread in western New South Wales.





Pituri (Paakantyi name not identified)



Common name: Pituri
Scientific name: *Duboisia hopwoodii*

Widely traded, this plant contains a strong form of nicotine. Leaves were dried in hot sand, mixed with wood ash to liberate alkaloids, and chewed or absorbed through the skin by placing a wad behind the ear.

Caution: Care should be taken as this plant can be poisonous.

Description: Shrub to about 3m high with long narrow leaves and white, bell-shaped flowers with purple stripes inside. Flowers in clusters at the ends of the branches, which are often slender and drooping. The leaves are 5-10cm long, 4-8mm wide but variable in size and shape. Fruit is a globular black berry about 5mm in diameter. Flowering occurs in late winter-summer, also autumn.

Habitat: Found on sand dunes and in sandy soils, generally in mulga and mallee communities.

Distribution: Occurs across all of New South Wales with the exception of the north and south coasts.

Ruby Saltbush (Paakantyi name not identified)



Common name: Ruby Saltbush
Scientific name: *Enchylaena tomentosa*

The fruit which was eaten raw was easily collected in large numbers by placing the plant on a sheet of bark. The fruit was soaked in water to make a sweet drink.

Description: Low sprawling perennial shrub to about 1m high with short cylindrical, succulent hairy leaves, 6-15mm long. Small flowers occur singly in leaf axils. The fruit is round, flattened, 4-6mm, and bright red but sometimes yellow, with a small black seed. Flowering occurs throughout most of the year, but mainly in spring-early summer.

Habitat: Occurs on a wide variety of soil types in all vegetation communities.

Distribution: Common in western New South Wales.





Kalthika, KuyipaRa, Partiku



Common name: Emu Bush
Paakantyi name: Kalthika (Emu Bush), KuyipaRa (Emu Bush with spotted flowers), Partiku (*Eremophila* species)
Scientific name: *Eremophila* species

There are many different emu bushes in the local area including Eremophila longifolia,

E. bignoniiflora, E. maculata, E. oppositifolia. The first two species are known to have been used for medicine. The leaf was used for sores, colds, eyewash and as a laxative. Kalthika, KuyipaRa are the names for Eremophila maculata.

Description: Shrub with simple leaves and colourful flowers with upper and lower lips, and fruits with a single stone.

Habitat: *Eremophila* grow in a range of different habitats depending on the species, from sandy soils to heavy clay, riverine areas through to sand dunes.

Distribution: *Eremophila* species occur widely across far western New South Wales.

Leafless Cherry, Leafless Ballart (Paakantyi name not identified)



Common name: Leafless Cherry,
Leafless Ballart
Scientific name: *Exocarpos aphyllus*

The succulent fruit stalk was eaten. The fruit on top was eaten, and surrounds a single oily seed which may not have been eaten. A decoction was made and used for sores and colds. A poultice was placed on the chest for 'wasting disease'.

Description: Shrub or small tree with yellowish-green stems. It has no leaves, and is a root parasite on surrounding plants. The fruit is small, red, with dark 'seed' on top.

Habitat: Can be found growing in woodland communities in various habitats.

Distribution: Occurs throughout far western New South Wales.





Kumpinya



Common name: Dillon Bush,
Nitre-bush
Paakantyi: Kumpinya
Scientific name: *Nitraria billardierei*

Kumpinya is the Paakantyi word used for yam, small shrub or Nitre-bush. The fruit is eaten raw and the stone swallowed with the fruit (Eyre 1845). The fruit can be eaten when green (Berndt 1940). The soft white wood was used as a split stem and as a saw to make fire.

Description: Mound-shaped prickly shrub 1-2m in height, with small clustered leaves, branches are often tangled. Leaves alternate, 1-4cm long, thick, flat, smooth, blue-green or green. It has small white flowers in small clusters along the branches. Flowering occurs mainly in spring. The fleshy fruit is dark red, sometimes yellow, oval in shape, 1-2cm long and ripens in midsummer. The stone in the fruit is pointed at one end.

Habitat: Often grows on saline or over-grazed areas, on loamy or clayey soils, in inland districts.

Distribution: The bush is widespread across western New South Wales.

Mallee Rice-flower (Paakantyi name not identified)



Common name: Mallee Rice-flower
Scientific name: *Pimelea microcephala*

The fruit is eaten, but it is recommended not to chew the seed. For medicinal use the bark of roots was infused and drunk for chest complaints, or twisted into cords and tied around the body to relieve pain (Koch 1898). The bark was plaited around the neck to cure colds (Cleland & Johnston 1939). The string

(from stem bark) was also used to bind splints and as a ligature.

Description: Shrub with opposite narrow leaves, each pair at right angles to the one below. The stems are shiny brown and the bark pulls off in long strips. The cream coloured flowers are in clusters and the small, oval orange-red fruit has a dark seed.

Habitat: Can be found growing in open forest and mallee, on sandy soils.

Distribution: Widespread across far western New South Wales.





Ecological Cultural Knowledge -
Paakantyi
Forb / Herb / Fern Section

Tarvine (Paakantyi name not identified)



Common name: Tarvine, Hogweed, Giotcho

Scientific name: *Boerhavia dominii*

The root was cooked in ashes for food, but pounded to break up the fibre. It was roasted, scraped or pounded to free the root from the fibrous inner core, which was then discarded.

Description: Ground creeper with slender stems, often flat on the ground, with pairs of leaves of unequal size. It has small pink flowers and a thick woody root.

Habitat: Occurs in a wide range of plant communities, on a wide range of soils.

Distribution: Common in western New South Wales.





Wanka-parlu, Thakaratha, Tharamul



Common name: Bulbine Lily, Fringe Lily, Early Nancy

Paakantyi name: Wanka-parlu, Thakaratha, Tharamula

Scientific name: *Bulbine bulbosa*, *Thysanotus baueri*, *Wurmbea dioica*

Ngampala is the Paakantyi name for the edible root or tuber of Bulbine Lily. *Tharamula* or *Thakaratha* is the Paakantyi name for Fringe Lily or wild potato with

edible tuber, Thysanotus probably baueri. The tuberous roots of these native lilies were cooked and eaten.

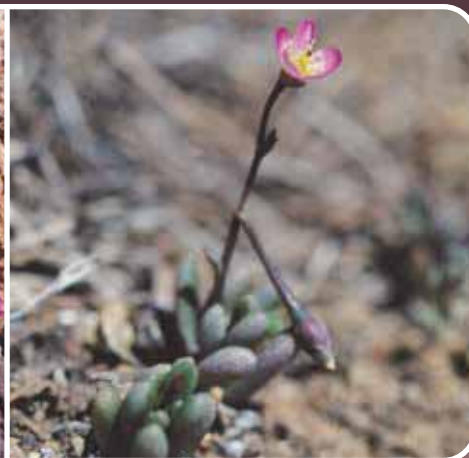
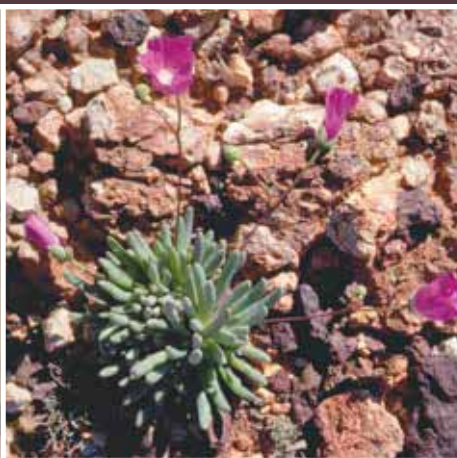
Description: Bulbine Lily leaves to 30cm long, basal and succulent. Flowers with six yellow petals 10-12mm long on short, erect stalks. Fruit globular, about 6mm wide. Fringe Lily leaves basal, 3-5, 6-13cm long and often wither when plant is in flower. Flowers mauve with three broad and three narrow petals all 12-15mm long, the broader petals fringed. Fruit a globular capsule about 4mm wide. Early Nancy has few leaves,

to 10cm long, tapering upwards from the base. Flowers sweetly scented with six petals, creamy-white or with a band of purple towards the base. Fruit a blunt ovoid or oblong, 6-10mm long.

Habitat: Occur in a range of habitats. Bulbine Lily grows mostly on clay soils; Fringe Lily on sandy soils; Early Nancy on a range of soil types.

Distribution: Found throughout western New South Wales.

Ngapila, Kalutyu



Common name: Small Purslane
Paakantyi name: Ngapila, Kalutyu
Scientific name: *Calandrinia eremaea*

Ngapila is the name for Calandrinia species. The leaves and stems were steamed or mixed with baked bark. The seed was ground and cooked. Kalutyu refers to spinach, most likely Calandrinia species and possibly also Tetragonia tetragonoides.

Description: Small plant with succulent cylindrical leaves at the base, and small pink, white or purple flowers on tall (1-2cm) stalks. The leaves are 1-4cm long. An annual plant, grows in winter-spring and sometimes into summer.

Habitat: Occurs on a range of soils and vegetation types, most often on sandy soils.

Distribution: Widespread throughout western New South Wales.





Garland Lily, Wilcannia Lily (Paakantyi name not identified)



Common name: Garland Lily,
Wilcannia Lily

Scientific name: *Calostemma
purpureum*

The bulb was cooked for food.

Description: Type of lily found on floodplains, leaves strap-like, pink or yellow flowers in a cluster at the top of a leafless stem to about 50cm high. Arises from a white bulb with a papery brown coat about 2-4cm in diameter. Often in large patches, flowers late summer.

Habitat: Occurs on floodplains and damp areas of sandstone hills and rocky rises. Prefers clay and clay loam soils.

Distribution: Widespread throughout western New South Wales.

Common Sneezeweed, Old Man Weed (Paakantyi name not identified)



Common name: Common Sneezeweed, Old Man Weed

Scientific name: *Centipeda cunninghamii*

A decoction was drunk for tuberculosis; the plant was used as a lotion for skin infections; and bound around the head for colds (Johnston & Cleland 1943). It was drunk as a tea for general health. The plant is regarded today as a cure-all. Skin creams

*and lotions containing extracts of *Centipeda cunninghamii* are now marketed commercially.*

Description: Small soft plant about 20cm tall, with oblong-wedge shaped toothed, bright-green leaves, 1-3cm long and a characteristic smell. It flowers in green billy-button heads without petals, 4-7cm diameter almost globular and domed on top, flowering occurs in spring-autumn. Seeds club-shaped 1.5-2.5mm long.

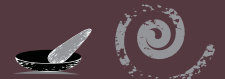
Habitat: Occurs in many vegetation communities and on a wide variety of soil types. Usually found in damp areas subject to flooding, or where water lies for some time, and can be locally very abundant.

Distribution: Widespread throughout the Western Division of New South Wales.





Paalampaltharu



Common name: Darling Lily
Paakantyi name: Paalampaltharu
Scientific name: *Crinum flaccidum*

Although in the past some people have said the bulb can be eaten, it is agreed by the local people to be poisonous. As a medicine, it is cut up with a little sugar and placed on boils. The bulb was also rubbed on skin or used as a body wash.

Caution: Care should be taken as this plant may be poisonous.

Description: Large lily with long green leaves arising from a bulb 7-10cm in diameter. Flowers are large, white or creamy, strongly scented, with six petals extending from a slender tube.

Habitat: Can be found growing near rivers and along sandy floodways.

Distribution: Occurs in various locations throughout western New South Wales.

Spreading Flax-lily (Paakantyi name not identified)



Common name: Spreading Flax-lily
Scientific name: *Dianella revoluta*

The leaf was split into two down the midrib and rolled in the manner of string to make a tie (Gott 1983). The stems were pounded to make a fine fibre and clasped around a flowering spike of Xanthorrhoea to collect nectar (Cleland & Johnston 1939).

Description: Tough long leaves from the base of the plant, with margins rolled under and a deep midrib. The flowers are blue, with six petals with a black and yellow centre. The berries are a purple-blue colour.

Habitat: Grows in woodland and mallee.

Distribution: Can be found in the area, though not widely distributed.





Nhakalu



Common name: Rounded Noon-flower, Round-leaf Pigface

Paakantyi name: Nhakalu

Scientific name: *Disphyma crassifolium*

The leaves of Nhakalu are eaten for greens, water and salt. They may have been eaten raw. The fruit is dry and not eaten.

Description: Perennial forb with prostrate stems. Smooth, more or less cylindrical leaves (or leaves with three flattened but convex faces and rounded angles between) which grow in clusters or opposite pairs on a horizontal creeping stem that roots at the nodes. Leaves often have a reddish or yellowish tinge and are 2-5cm long and 4-6mm thick with a pointed tip. Flowers are pink or purple with numerous linear petals and are about 3cm diameter when open. Flowers close at night and open again in late morning.

Fruit is a red to light brown dehiscent capsule with five membranous flaps which open at the top when ripe. Flowering occurs in spring-summer.

Habitat: In this region, *Disphyma crassifolium* grows on saline soils.

Distribution: Found throughout south western New South Wales.

Pantitya



Common name: Native Hollyhock, Marshmallow

Paakantyi name: Pantitya

Scientific name: *Malva preissiana*

Pantitya was used for string, the stem soaked, baked, bruised with a mallet and scraped with a shell (Beveridge 1883). It was also baked and chewed (Angus 1847); steamed, chewed, washed (Bulmer 1860); soaked, dried, teased out with a wooden hook (Hercus 1993). For emu nets, the

string was very strong (Bulmer 1860). Used as a poultice for boils (Smyth 1878:264); boiled and used as a poultice used for rheumatism (Curr 1886).

Description: Tall plant 1-3m high, leaves 5-lobed or more, flowers pink or white with darker veins and yellow centres. Fruit round, composed of 10-15 flat kidney-shaped fruitlets. Flowering occurs in spring-early summer.

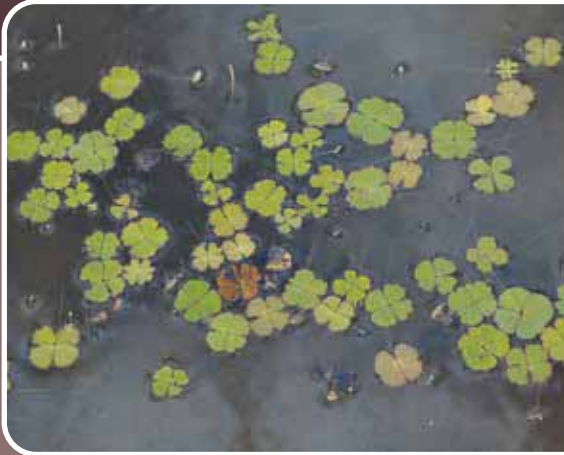
Habitat: Grows on a wide range of soil types. Often found after flooding and in areas where water collects after rain, such as roadsides.

Distribution: Widespread throughout western New South Wales, more common in the south.





Ngartu, Thanduka, Thantaka



Common name: Nardoo
Paakantyi name: Ngartu,
Thanduka, Thantaka
Scientific name: *Marsilea
drummondii*

The spore cases (Nardoo seed) were roasted, ground and carefully winnowed in a bark or wooden dish to separate the hard case from the soft nourishing

spores, which were mixed into dough. The dough was shaped into 50cm long rolls and baked.

Caution: Care should be taken as this plant may be poisonous if not correctly prepared.

Description: Fern which grows in shallow water and has floating leaves like a 4-leaf clover. The 'seeds' are hard cases which contain spores. These form when the water dries up, generally

late spring-autumn. 'Seeds' are 4-9mm long, slightly rounded or pointed at the tip and densely covered in fawn hairs.

Habitat: Can be found in moist areas and around waterholes.

Distribution: Widespread across far western New South Wales.

Burr Medic (Paakantyi name not identified)



Common name: Burr Medic
Scientific name: *Medicago polymorpha*

*Burr Medic is an introduced pasture plant which may now be used in place of the native *Trigonella suavissima*, which it resembles. The whole plant would be eaten raw.*

Description: Exotic species with 3-part leaves, small yellow pea flowers, and a coiled, bristly pod.

Habitat: Can be found in a range of vegetation communities from open grasslands to woodlands, on a range of soil types. Grows prolifically on heavy clays.

Distribution: Burr Medic now grows wild over a wide area.





River Mint (Paakantyi name not identified)



Common name: River Mint
Scientific name: *Mentha australis*

River mint was used in steam baths, an infusion as a blood purifier, and as a pillow for insomnia (Parker 1905). It was also used as a decoction for coughs, colds and stomach complaints (Turner 1905) and to line an earth oven (Curr 1886). Caution should be taken during pregnancy.

Description: Small perennial forb, producing a Pennyroyal smell when crushed. Leaves opposite, lanceolate or ovate-lanceolate, 2-5cm long, 4-5mm wide. Small white or purplish clustered flowers.

Habitat: Grows in damp and periodically flooded areas, often below river red gum, black box, coolibah and river cooba communities.

Distribution: Widespread throughout western New South Wales.

Yuramu



Common name: Yam Daisy,
Murnong
Paakantyi name: Yuramu
Scientific name: *Microseris
lanceolata*

*The root or tubers are eaten raw or cooked in baskets in an earth oven; they then produce a dark, sweet juice. The Paakantyi word Yuramu (yam) may apply to *Microseris lanceolata* or to other tubers.*

Once abundant along the Murray, it is thought to be rapidly disappearing through grazing by livestock and rabbits.

Description: Perennial forb growing to 40cm high. Leaves at the base, flowerheads at the ends of leafless stalks, large with a number of strap-shaped yellow petals. The flower buds of Yam Daisy are bent over before the yellow flowers open in the spring. It bears one to three small milky tubers, new ones each year.

Habitat: Found in the drier riverine forests or in the mallee, on shallow sandy soils, clay loam or heavy clay soils. It tolerates some salinity.

Distribution: Can be found growing in all areas of Western New South Wales, with the exception of the far northwest.





Parnamula, Pirla, Thungara



Common name: Common Pigweed
Paakantyi name: Parnamula, Pirla, Thungara
Scientific name: *Portulaca oleracea*

The stems were eaten fresh or cooked; the leaf and stem taken as a 'blood cleanser'; the plants were stacked in heaps so the seed could be shed and easily collected; the seed was stored in grass cases daubed with mud (Howitt in Smyth: v.2:302).

The seeds were bruised and kneaded into a paste between flat stones, eaten then or baked into a cake. Parnamula, Pirla, Thungara are all names for Portulaca species.

Description: Succulent prostrate annual forb, with thick and often reddish or brownish stems to 30 or 40cm long. Leaves mostly alternate, fleshy, 1-2cm long. Flowers yellow, with 5mm long petals. Fruit capsule 3-6mm long, small black seeds in capsule. Flowering occurs in summer.

Habitat: Grows on a very wide range of soil types and in most vegetation communities.

Distribution: Widespread throughout most of New South Wales.

Kaanpi



Common name: Pigface
Paakantyi name: Kaanpi
Scientific name: *Sarcozona praecox*

The green leaves and fruit of Kaanpi are eaten raw. The fruit has many seeds which are eaten with the fruit. The plant is used as salt. The juice is used for medicine and squeezed into eyes for infection, or rubbed on the skin.

Description: Fleshy plant which grows low to the ground. It has succulent 3-angled leaves opposite, 6-10cm long, 5-8mm wide and bright purple-pink flowers with many thin radiating petals. The flowers are usually in threes at the ends of the branches with 4-28mm long petals. The fruits are reddish, juicy, egg-shaped, 10-20mm long, with many seeds. Flowering occurs in late winter-spring. The plant is salt-tolerant.

Habitat: Grows on heavy or sandy soils and is often found growing in saline areas. It has been found in communities containing bladder saltbush and black bluebush.

Distribution: Recorded at widely scattered locations in the south, west and north of western New South Wales.





Mawi



Common name: Felted Nightshade

Paakantyi name: Mawi (may also apply to other *Solanum* species such as *S. esuriale*)

Scientific name: *Solanum coactiliferum*

The fruit was squeezed, the bitter juice washed off, and fruit cooked before eating (Latz 1995).

Caution: Care should be taken as this plant may be poisonous.

Description: Often bushy forb to 25cm high, grey or silvery-green, with prickles usually on branches. Leaves are stalked, oblong, 1-5cm long, 0.3-1cm wide, often folded, densely downy. Flowers are purple, 20-30mm wide, 4-lobed. Fruit is yellow to yellow-brown and 8-15mm wide. Flowering occurs throughout the year, but mostly in spring-summer.

Habitat: Grows mainly on sandy soils and on sand dunes in arid areas.

Distribution: May be found infrequently throughout far south western New South Wales.

Panyuwanpa, Pulapul, Parlumpa



Common name: Common Sowthistle, Milk Thistle

Paakantyi name: Panyuwanpa, Pulapul, Parlumpa

Scientific name: *Sonchus oleraceus*

Panyuwanpa, which is the name for a large-leaved thistle, was eaten raw as greens, mainly the inside base of the stem. The plant was also eaten raw as a medicine for the blood, and may have been used

*as contraceptive. The milk from the stems was put on warts and sores. The Paakantyi names may also relate to *Tetragonia* or *Picris* species.*

Description: Erect, hairless annual forb with hollow stems, up to 1m tall, exuding milky sap when broken. Leaves thin and soft, dull-green deeply lobed, margins toothed and ending in spines. Flowerheads with numerous unequal yellow petals in clusters on short stalks at end

of stems. Buds conical when grown, 10-12mm long. Seeds about 3mm long and up to 1mm wide, flattened with a tuft of white silky hairs. Flowering occurs mostly in spring.

Habitat: Occurs on most soil types and in most plant communities.

Distribution: An exotic species which is widespread throughout the Western Division of New South Wales.





Parlumpa, Panpurla



Common name: New Zealand Spinach

Paakantyi name: Parlumpa, Panpurla

Scientific name: *Tetragonia tetragonoides*

*The leaf was eaten as a source of greens. Cooking is recommended (to remove the oxalates), but it may have been eaten raw. The Paakantyi names may have also applied to *Sonchus* sp and *Picris* species.*

Description: Low-growing plant with oval succulent glistening leaves, yellow flowers, and hard green fruits.

Habitat: Occurs on heavy-textured soils from red sands to grey cracking clays.

Distribution: It is widespread but scattered in inland salt marshes or saltbush country and on sandy coastal areas in southern Australia.

Puntha



Common name: Cooper or Menindee Clover
Paakantyi name: Puntha
Scientific name: *Trigonella suavis*

Used as an indigestion medicine. Mitchell (1848) used it as a vegetable, and called it Calomba. It was eaten raw (Beveridge 1889). It has been described

*as 'a favourite plant' which was abundant in the spring (Bulmer 1860). Puntha may also refer to *Medicago polymorpha* (Burr Medic) which is an introduced pasture plant now used as food.*

Description: Clover-like plant with soft 3-part leaves on long stalks, whitish flowers.

Habitat: *Trigonella suavis* was abundant in spring on the floodplains, but is thought to be now reduced by grazing.

Distribution: Can be found predominantly in the north and northwest of western New South Wales, extending southerly along the Darling & Murray floodplains.





Ecological Cultural Knowledge -
Paakantyi
Climber Section

Thapi, Nhiilyi, Maathi



Common name: Mistletoe,
Harlequin Mistletoe
Paakantyi name: Thapi, Nhiilyi,
Maathi (Mistletoe berries)
Scientific name: *Amyema* species,
Lysiana exocarpi

Thapi or Nhiilyi is the name for Mistletoe plant and relates to several species. Maathi is the name for the fruit or Mistletoe berries which are eaten raw. The

berries are commonly known as 'snorricobbles' or 'snottygobbles'. As medicine, the leaves were put in a steam-bath or bruised in water and drunk for fevers (Palmer 1884).

Description: Parasitic plants which attach to the branches of many different shrubs and trees. The flowers are usually red. Mistletoes bear fruits which are sweet, mucilaginous and sticky ('snottygobbles') and are spread by birds.

Habitat: Can be found growing parasitically on a range of trees, common in red gum and box communities.

Distribution: There are five species of *Amyema* and one species of *Lysiana* in far south western New South Wales.





Mallee Strangle-vine, Dodder-laurel (Paakantyi name not identified)



Common name: Mallee Strangle-vine, Dodder-laurel
Scientific name: *Cassytha melantha*

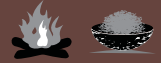
The fruit is eaten raw.

Description: Leafless twining parasite, attached by suckers, often completely covering other plants. The fruit is round, greenish and sticky.

Habitat: May be found growing parasitically on trees and shrubs in mallee communities, and occasionally in belah-rosewood communities.

Distribution: Occurs throughout western New South Wales.

Kakarla (fruit), Ngarnti (root)



Common name: Doubah, Bush Banana, Native Pear
Paakantyi name: Kakarla (fruit), Ngarnti (root)
Scientific name: *Marsdenia australis*

Bush Banana is best known for its pear-shaped fruit with seeds which have fine hairs attached. The fruit was eaten raw or cooked, both when unripe and milky. The young fruit was eaten fresh, the old fruit

roasted; the inner rind and green seed eaten; the hairs were discarded. The vine arises from a thick tuberous root which was also eaten. The root was roasted, scraped or pounded to free it from the fibrous inner core, which was discarded. The hairs on the seeds were used to catch the fire when fire-making.

Description: Strong climber growing on trees, logs and fences, often 2m or more in height. Leaves are opposite and narrow, with a milky sap, 4-10cm long, rather thick, hairy when young. The branches, stems and flower-stalks exude a white

milky sap when broken. Flowers are creamy, sometimes greenish, 8mm long, bell-shaped. Fruit is a thick-walled broad-tapering pod, 4-10cm long, drooping, green-coloured and finely hairy. Flowering occurs in late spring-summer.

Habitat: Variable, most common on sandy soils in mallee, belah-rosewood or mulga communities.

Distribution: Widespread throughout the western half of New South Wales.





Ecological Cultural Knowledge -
Paakantyi
Reed / Grass Section

Barilla



Common name: Marsh Club-rush
Paakanty name: Barilla (Sturt 1849)

Scientific name: *Bolboschoenus medianus*

The hard starchy, below ground, walnut-sized tubers were 'roasted and pounded into a thin cake between stones' (Eyre 1845). The 3-angled seed may also have been used. It is 'very hard and required a lot of jaw juice to get to its kernel' (Bulmer 1860).

Description: Aquatic plant growing in patches on floodplains and requiring regular flooding. A perennial grass-like herb (or sedge) with an underground (rhizome). Leaves 6–8mm wide. Flowerheads brown, with 4–6 branches 2–10cm long, bearing clusters of 1–6 spikelets. Spikelets 1–2cm long. Scales around the flower (bracts) 7mm long, yellow-brown. Bristles no more than two-thirds as long as nut, often shed. Nut flat to convex or three-sided with concave faces, 3–4mm long, 2–2.5mm diameter, shining. Flowering occurs in spring–summer.

Habitat: Grows in swamps and around waterholes. It can grow in dense stands, for example Eyre (1845) described it as 'looking like a field of wheat'.

Distribution: Restricted to permanent waterways and waterholes and nearby areas throughout the Western Division of New South Wales.





Spiny Flat-sedge (Paakantyi name not identified)



Common name: Spiny Flat-sedge
Scientific name: *Cyperus gymnocaulos*

The stems of Spiny Flat-sedge may have been trimmed, dried, moistened before use, and used for baskets & mats; also used for plaiting and making baskets (Cleland 1966). The plant was processed – it was soaked, steamed & scraped to free the fibre and the string used for fishing nets, also mats.

*A different *Cyperus* species was also used as a decoction for sore throat (Latz 1995).*

Description: Densely tufted perennial sedge with stout woody shortly creeping rhizomes. Stems mainly cylindrical, but often triangular near the top, grooved lengthways. Leaves reduced to sheaths, except on juvenile plants. Flowerhead contracted into a dense head or 1-6 globular secondary heads. Spikelets reddish to chestnut-brown, 3-6mm long, 8-20 flowered,

numerous in each head. Fruit a brown or black shining nut, triangular in cross-section. Flowering occurs throughout the year.

Habitat: Grows near water on river banks, lake shores and wetland margins, on sandy to heavy clay soils in river red gum and black box communities.

Distribution: Can be found throughout western New South Wales.

Muthu



Common name: Grasses
Paakantyi name: Muthu, Paapa (grass seed)
Scientific name: various species e.g. *Eragrostis dielsii*

Grasses grew abundantly after rains or flooding and the grass seeds were ground for flour. Button Grass and green Summer Grass seed was husked by milling with pebbles in a hole in the ground (Tindale 1974) and ground into a paste. Cane

Grass was used for thatching. Mallee Love-grass and Woollybutt seeds were ground into a paste. Weeping Love-grass seed was ground and cooked. Native Millett and Pepper Grass seed was ground into flour on stones and cooked; the string was used for dillybags. Warrego Grass and Small Burr-grass seed was ground into flour and cooked. The name Muthu is used for grasses in the Poaceae family and Paapa is the name for grass seed or any edible seed.

Description: Forming a family of plants grouped by their characteristic of veins growing parallel

to the long axis of the leaf, the Poaceae (Grasses) family is the largest group of plants found in western New South Wales.

Habitat: Generally grasses grow in a wide range of soil types, as open grasslands, amongst shrub and tree communities, among sand dunes and in other areas.

Distribution: Grasses can be found growing throughout western New South Wales.



Pulyu-pulyu



Common name: Common Reed
Paakantyi name: Pulyu-pulyu
Scientific name: *Phragmites australis*

Common Reed is most important for spear-shafts, these were traded south (Smyth 1878: 305-6; 2:298). Stems were cut green, stored, and straightened in fire for spears (Palmer 1884). The spears known as pati (reed spear) were tipped with wood or bone. The reed-beds were regularly burnt (Kirby 1894).

Description: Tall bamboo-like grass growing in patches in shallow water, especially where the water is still. It has large fluffy seed heads. Robust perennial grass, 1.5-3m high, spreads by rhizomes. Stems cane-like, rigid, smooth, hairless. Leaves mostly on the stems, flat, 20-60cm long, 10-30mm wide, tough, smooth, hairless. Flowerheads dense, soft, brown to purplish, silvery white at maturity, 15-40cm long, with numerous short branches. Flowering occurs summer-early winter.

Habitat: Grows in wet places especially at the edge of ponds and streams. Usually occurs on heavy clay soils.

Distribution: Occurs mostly in the southern half of western New South Wales.

Maanta



Common name: Water Ribbons
Paakantyi name: Maanta
Scientific name: *Triglochin procera*

*The soft tubers were cooked (Beveridge 1889); tubers roasted in ashes (Smyth 1878:210, Berndt 1940). The leaf and stem base was baked in ovens with meat or fish (Tindale 1974). The Paakantyi name is used for water plants or water weed and may apply to either this plant or other species such as *Babbagia acroptera*.*

Description: Aquatic plant with long ribbon-like leaves which float on the water and a spike of green flowers. Leaves are basal, strap-like, thick and fleshy, sheathed each side at the base, up to 1m long and 35mm wide. The roots descend into the mud from a hard woody rhizome and bear many starchy finger-sized tubers. Flowers are small, greenish, numerous on stalks 1-2mm long in an erect tapering spike to 30cm long, terminating to a cylindrical stem, the whole 50cm or more. Fruits are more or less globular or conical with six fruitlets 4-10cm long, the fruitlets

eventually separate and fall leaving the short stalks on the stem. Flowering occurs in spring-autumn.

Habitat: Occurs in still and slow-flowing water to about 1m deep, also in periodically flooded depressions, but reduced in size.

Distribution: Restricted to permanent waterways and waterholes and nearby areas throughout the Western Division of New South Wales.



Pula



Common name: Porcupine Grass
Paakantyi name: Pula
Scientific name: *Triodia scariosa*

The leaves of Porcupine Grass were beaten out or the tussocks fired to gather the resin. The globules of resin were 'yandied' (winnowed) in a wooden dish (Mathews 1964) and pounded on heated flattened stone, then used for fixing stone flakes (adzies & knives) (Roth 1904).

Description: Dense perennial tussock grass with long and sharp-pointed leaves. It grows to 60cm high and up to 90-120cm wide with rigid flower stems to 90 cm high. Very old tussocks form rings up to 3m in diameter with a dead centre. Resin is formed on the leaf bases. Flowerheads are 10-20cm long, 10-25mm wide, straw coloured when mature. Flowering occurs in spring-early summer.

Habitat: Grows on mallee sands.

Distribution: Found throughout most of New South Wales, but less commonly in the north-west and south-east.

Cumbungi (Paakantyi name not identified)



Common name: Cumbungi, Bulrush
Scientific name: *Typha domingensis*

The underground rhizome (root) was cooked, usually in an earth oven, and the outer layer stripped off. The central part containing a granular, potato-tasting starch and much fibre was twisted into a knot and chewed (Frefft 1865:361). The remaining fibre was spat out, dried, stored, soaked and scraped with a shell to make string, from which large nets,

bags and other items were made. In the spring, the young flower-shoots were also eaten. Cumbungi was probably the most important plant for string. For making baskets, whole leaves or stems of rushes, sedges, reeds and grasses were used.

Description: Robust semi-aquatic perennial reed, to 2m tall or more, with rhizomes to about 20mm wide and stems to 20mm wide. Leaves occur in 2 rows along each stem; the blade flat, tough, 10-25mm wide and 1-2m long. Flower spikes

cylindrical, velvety, brownish, 10-25cm long, 1-2cm wide. When mature, the spike releases tiny fluffy seeds. Flowering occurs in summer.

Habitat: Grows in swamps, margins of lakes and streams, irrigation channels and drains; inhabits fresh or slightly brackish water to 1.5m deep.

Distribution: Widely distributed throughout New South Wales, becoming less frequent in the drier north-west.



Ecological Cultural Knowledge - Paakantyi

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