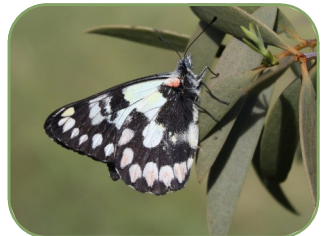
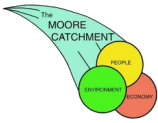


Candy's Bush Reserve Moora

Walk Trail Companion Booklet



Come, Explore Moore



Moore Catchment Council (MCC) is a community driven not-for-profit organisation set up in 1995 to "maintain and improve the health of the Moore River environment by communicating natural resource management and encouraging maximum sustainable use of resources." MCC works at grass roots level, and partners with local groups, community volunteers, local Aboriginals and Shires, to build community capacity in conserving the Moore River catchment against current and impending threats.



The Yued people are the Traditional Custodians of this land. Yued are a dialect group of the Aboriginal Noongar people of south west Western Australia who have been living and caring for country for over 40,000 years. The natural habitat is extremely important to Yued cultural and spiritual beliefs.

Kaya – Wanjoo Yued Boodja
Hello - Welcome to Yued Land

Noonakoort karnya nitja Noongar boodja Noongar kep Yeye benang boordahwan

Have respect for this is our land and waters today, tomorrow and in the future

This booklet is part of a long term initiative to conserve Candy's Bush Reserve as a natural asset for everyone to enjoy. The contents of this booklet have been carefully sourced but no liability is taken for errors. All photos by R Walmsley unless indicated.



This trail links into the town Carnaby's Black Cockatoo walking trail. Go to the Moora Community Resource Centre, Shire Office, or Tourist Information Points for more details.

Moore Catchment Council would like to thank you to the below organisations for their input and financial assistance especially the Western Australian's Natural Resource Management Program which funded this project. Extended thanks to contributors and collators Marie Carter, Ruby Ryder, Fred Mogridge, Charlie & Marge Shaw, Father Bernard, June Headland, Alice Warrell, Colin Headland, Ros Drayton, Fiona Falconer, Vince Candy, Marion Matthews, & Kerkhoff Carnaby's group.



Candy's Bush Reserve walk trail

Distance: 1km (allow 30 mins)

Grade: Easy

Follow marker posts



The walk trail features interpretative signage sharing information on flora and fauna of the reserve.



Remember !! Wear a hat, sun cream and closed shoes. Take plenty of water with you.



Snake warning !! Dugites and other venomous snakes maybe present



Main parking

0 metres 100



— — — = Walk trail

P = Pedestrian gate

Please keep to the designated tracks to allow degraded areas to regenerate, and please take your rubbish home. No motorised vehicles allowed in the reserve.

Welcome to Candy's Bush Reserve

Candy's is an eight hectare Salmon Gum & Wandoo remnant and an important natural asset of Moora.

Please enjoy your stay.

Background

This reserve was once an uncleared area on the edge of Moora, a remnant of the extensive **Salmon** and **Wandoo** forest which covered this region before white settlement started in this area in the 1840's. Of the nearly 1.4 million hectares of the Moore River Catchment, around 76% has been cleared. The more fertile soils associated with eucalypt woodlands were preferentially cleared, and because these woodlands occur predominantly on the valley floors they became more at risk of salinity from rising groundwater. For example, only 7% (14,156 ha) of Medium woodland York Gum and Salmon Gum remains in the Moore River Catchment compared to a pre-European extent of 214,280 ha.

The reserve was an area where **Aboriginal people** used to camp and still did into the 1940's (after the Great Depression of the 1930's) and was known as a "Sweet place to stay." The back of the reserve was a sacred place and is known to the local **Yued** Aboriginal people to be the place where the **last corroboree** was held in this area, possibly in the 1940's. There was a water tank there where the black trackers used to camp and water their horses when they were no longer working at the **Moore River Native Settlement**, Mogumber. The trackers used to assist the Moora police. Ruby Ryder's father was a tracker and also a champion boxer who lived with his family on the Old Reserve (opposite and at the site where the present Speedway track is located).

It became known to the town folk as **Candy's Bush Track** from when the Candy family came to live nearby in the 1950's. The eleven Candy's children made tracks through the bush to ride their push bikes – hence 'Candy's Bush Track'. Many people have fond memories of enjoying spending time there camping and playing as children. In 1947 the Moora Road Board (now the Shire of Moora) sub-divided an area facing Gardiner St into housing blocks; a few were bought but not built on. This area, plus the Crown land behind is what became known as Candy's Bush Track.

In 2005, the **Friends of the Moora Woodlands** was formed and decided to take on the project of conserving this remnant bush area. They decided it should be called the **Candy's Bush Reserve** being unaware that it was called the **New Reserve** by the local Aboriginals - even to the present day. There was a lot of rubbish dumped around the reserve and over a period of time it was cleaned up by volunteers.

In November the same year, the **WA Native Orchid Society** explored and photographed the orchids there, and said they had been coming annually since the early 1990's because of the variety of orchids on the site and said it certainly was worthy of protection. In August 2006, the Shire of Moora responded to the Friends of Moora Woodlands submission, and agreed to support the project in principal. In 2007, a **Land for Wildlife** officer from the then Department of Environment & Conservation, conducted a survey there and was very excited by what she found, and later in the year "**The Great Orchid Hunt**" took place there organised by the **Moore Catchment Council** and a new variety of snail orchid was found. In 2008, a small section of fencing was carried out by Waratah Fencing as a training activity with the permission of the Lands Department, and the Northern Agricultural Catchments Council's support.

For two years the Shire of Moora worked to get a Management Order from the Lands Department that the area be vested as a Reserve and in 2012 it was surveyed. In 2013 there was a **historic meeting** between the Shire of Moora, Yued community, Friends of the Moora Woodlands and Moore Catchment Council, at the reserve agreeing to the care and protection of this beautiful remnant bush area.

Photo: Central Midlands Advocate 27.06.13



Candy's Bush meeting: Marie Carter, Jim Pond, Colin and June Hedland, Charlie Shaw, Evelyne Dawson, Margaret Drayton, Noel Dodd, Marge Shaw, Kim Brewster, Bev Port Luis, Rachel Walmstey and Robert Dawson.

MCC recognises the passing of some people in this photo and hope not to cause any offence for including it

Perimeter fencing was installed and **revegetation** carried out in the winter of 2013 by volunteers from Friends of the Moora Woodlands and Moore Catchment Council using **WA Natural Resource Management Program** funding obtained by Moore Catchment Council. It was a great joy to see this so precious bit of bush, Candy's Bush Reserve finally protected.

Candy's Bush Reserve was also awarded **Land For Wildlife Status** in 2014. A further grant applied for in late 2013 by Moore Catchment Council, through the WA Natural Resource Management Program, has enabled a **walk trail, interpretative signage** and this **booklet** to be produced. Conservation and maintenance works will continue into the future.

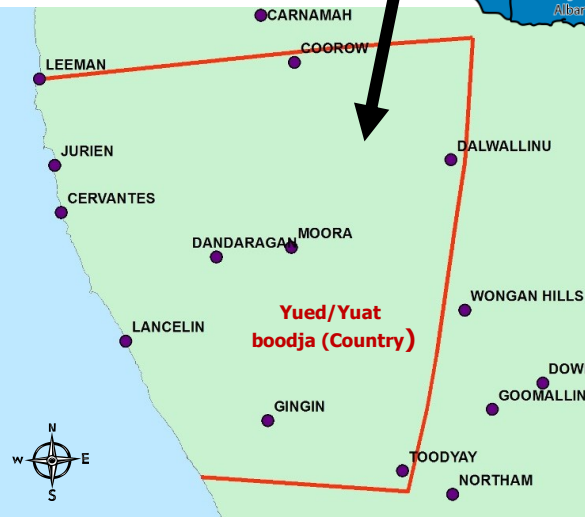
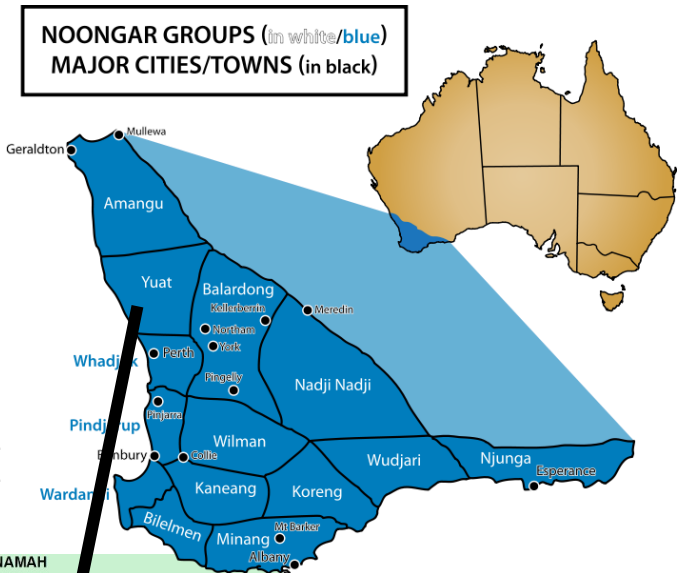
Yued - Traditional Owners of this land

Yued or **Yuat** refers to the Noongar language or dialectal group north of Perth. The word **Noongar** means 'a person of the south-west of Western Australia', or the name for the original inhabitants of the south-west of Western Australia'. While Noongar is identified as a single language, there are several ways of pronouncing it, which is reflected in the spelling: **Noongar, Nyungar, Nyoongar, Nyoongah, Nyungah, Nyugah, Yungar and Noonga**. As the language was purely oral, spellings may differ when it was converted to text. A good guide to the Nyoongar language is the 'Nyoongar Dictionary' by Bernard Rooney.

The Yued region includes the towns of Leeman, Jurien Bay, Cervantes, Two Rocks, Toodyay, Gingin, Calingiri, Dalwallinu, Coorow and Moora. The approximate size of the Yued region is 29,253.825 Sq Km.

There are a number of significant sites in the Yued region. These include caves, some of which are the homes of mythological beings,

NOONGAR GROUPS (in white/blue)
MAJOR CITIES/TOWNS (in black)



ceremonial sites, rock art, paintings and artefacts. This region is well known for the Moore River Native Settlement which was opened in 1918, under the auspices of the Chief Protector of Aborigines, AO Neville, until 1951. It was then taken over by the Methodist Church and became the Mogumber Mission until its closure in 1990. It is now run by the Mogumber Heritage Committee.

Info source: <http://www.noongarculture.org.au/>

Connection to Country

For thousands of years Noongar people have resided on and had cultural connection to the **boodja** – land. Everything in the vast landscape has meaning and purpose. Noongars speak their **own language** and have their own **lore** and **customs**. The lore is characterised by a strong **spiritual connection** to country. This means caring for the natural environment and for places of significance. Noongar lore relates to ceremonies, and to rituals for hunting and gathering when food is abundant and in season. Connection to boodja is passed on through stories, art, song and dance. Noongar **kaartdijin** (knowledge) and understanding of Noongar boodja (country) reflects deep spiritual and physical connection to country and to places of significance.

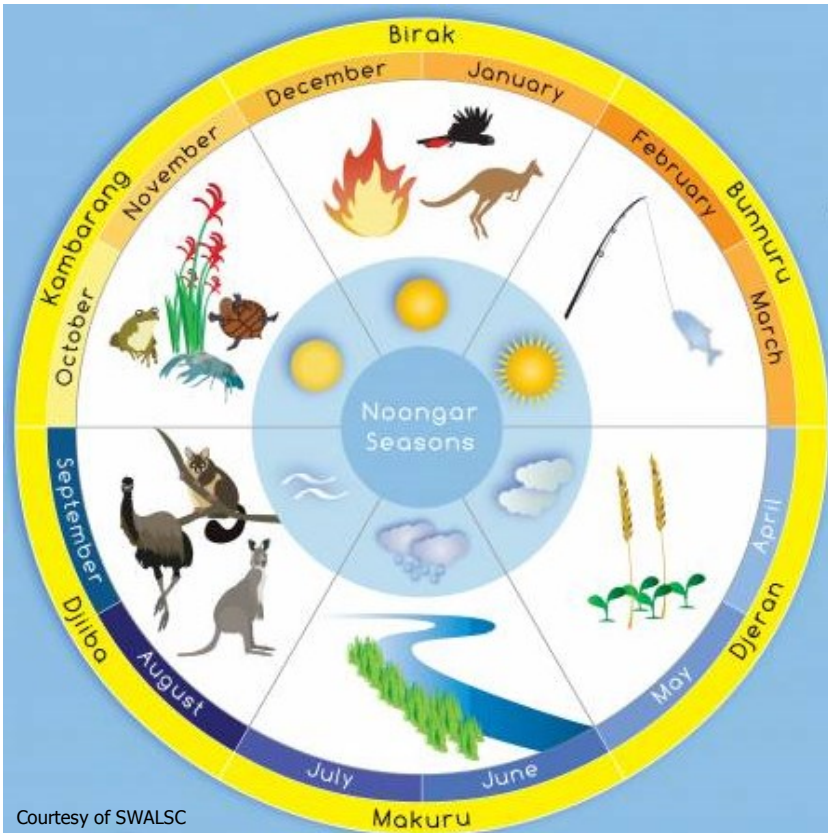
Nyitting – Dreaming

The **Nyitting** or Dreaming means ‘cold,’ ‘cold time’ or ‘ancestral times.’ Noongar people know it as the **Creation time**. It is the time before time when spirits rose from the earth and descended from the sky to create the land forms and all living things. Nyitting stories laid down the lore for social and moral order and established cultural patterns and customs. Noongar Elders have the ability to comprehend the knowledge and to maintain it in an unchanging way. Noongar creation stories can vary from region to region but they are part of the connection between all living things.

Noongar people believe that the **Waugal**, the water serpent who created waterways during the Nyitting (Dreaming), rose up from the earth and began his long journey from the north. He came down through Watheroo and Moora, carving out the bed of the river as he went. On his back he carried fish, water snakes, gilgie, turtles and all the creatures of the river. When the Waugal got to **Warraminga** or Mogumber, he turned sharply west, gouging out deep holes which today are the deepest pools in the river, and what Noongars call “**Mur**” .



Noongar seasons



Birak

December and January, the first summer

Djeran

April and May, autumn

Djilba

August and September, the second rains

Bunuru

February and March, the second summer

Makuru

June and July, the first rains

Kambarang

October and November, wildflower season

Noongar people have traditionally hunted and gathered food according to the six seasons. In Noongar language these are called **Bunuru, Djeran, Makuru, Djilba, Kambarang** and **Birak** and are determined by the weather patterns. The seasons tell us which animal and plant resources are plentiful at those times. Noongar people know when it is the season for harvesting by signs in nature. A hazy summer sky foretells of the salmon running or the blossom on paperbarks brings the mullet fish. Noongar communities have always taken care to assure the survival of animal and plant species. They always leave some honey for the bees to build on. And when the fish travel upstream to lay their eggs, they catch them on their way back down.

Aboriginal art



Bucks Story by Alice Warrell (thanks to the Headland family for allowing it to be used)

This painting by Moora Yued local Alice Warrell depicts the story of the male (buck) **Wetj (Emu)** who looks after the eggs after the female lays them, and then protects the chicks from predators until they are mature. Emus feature prominently in Aboriginal mythology.

Plight of the Carnaby's



Carnaby's Black Cockatoo
nest in one of the nesting logs



If you look up, you can see the two artificial nesting logs that were installed by Wally Kerkhoff in 2013 for Carnaby's Black Cockatoo. These logs replicate a natural hollow in an old Salmon Gum or Wandoo. Both nesting logs have raised healthy chicks and should continue to do so into the future.

Carnaby's face a bleak future if we don't help them. Populations have halved in the last 50 years and some estimates say only 11,000 remain in WA. Continuing to clear Carnaby's habitat, and competition from other birds and bees have all contributed to their demise. Help save them by keeping old Salmon Gums and Wandoo, and planting native forage species such as Hakeas and Banksias.



Department of
Parks and Wildlife



Carnaby's chick in a nesting log



Wally Kerkhoff checks on his nesting logs thanks to the Shire's equipment

Photos: R Walmsley

Can you hear the Black Cockies ?

July through to autumn is the time you'll hear the distinct call of the Carnaby's Black or Short-Billed Cockatoo around here. Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) or **ngoorlak** are rare and endangered in WA.

Moora is an important area for Carnaby's as they come here to breed in the hollows of old Salmon Gums and Wandoo trees. Although no actively used hollows are in Candy's at present, there will be in years to come when the trees age. The reserve contains lots of forage plants for the Carnaby's to eat including the seeds of Proteaceous plants which include Hakeas and Grevilleas.

Wally Kerkhoff and the Kerkhoff Carnaby's Group have, over many years, been helping with the recovery effort by constructing artificial nests out of fallen Salmon Gums and Wandoo trees. These logs create somewhere for Carnaby's to lay their eggs and have demonstrated to be a successful way to help raise the population. Around Moora there are approximately 40 nests with more being erected in Moora and the local surrounding Carnaby's breeding locations in the near future.



Photo: Keith Lightbody

Female & male Carnaby's pair
Male = red eye patch
Female = grey eye patch

Wandoo *Eucalyptus wandoo*

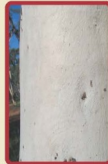


Wandooos can reach 25m in height and are also known as White Gums for their white bark.

They can also be identified by their long dull green/grey leaves.



Historically, Aboriginal people used young wandoo for food. The outer parts of the roots are delicious and juicy. Also the flowers make a mild flavoured honey.



Photos: R Walmsley

Other trees (boorna) and bushes in the reserve



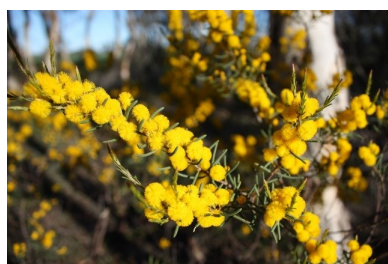
Melaleuca adnata
Fl. Oct-Dec or Jan-Feb



Melaleuca concreta
Fl. Sep to Oct



Hakea commutata
Fl. Sep to Nov



Acacia leptospermoides
Fl. Jun to Sep

Putting the bush back



When you walk around the reserve, you'll notice some bare areas that have been degraded from past vehicle damage. The reserve has prohibited vehicles from entering since 2013 after it was fenced.

Over time, these degraded areas will regenerate themselves naturally but local bush carers are lending a helping hand by planting native seedlings local to the area here. These have included Hakeas, Grevilleas, Eucalypts and Acacias.

Local bush carers have also removed huge amounts of rubbish dumped in the bush. Please watch for broken glass that may still be present.



Rubbish dumped in the reserve



Volunteers building fence



Members of Friends of Moora Woodlands clean up rubbish



Hakea seedling being protected



Photos: R Walmsley

Managing Natural Resources

Natural Resource Management (NRM) is a fancy expression for Landcare and helping to conserve the natural environment.

Natural resources are the land, the water, the soil, the air, and the plants and animals in our natural environment. Natural resources are necessary for our survival and enable us to produce the foods and materials we use in our daily lives. We all have an impact on our natural environment, and so we have a responsibility to manage and protect our natural resources in a sustainable way for the future.

Help conserve this reserve. Please:



- stick to the walk trail
- don't drop any rubbish
- report any vandalism to fence or illegal motorists
- don't disturb any nesting animals or birds
- don't pick any flowers/plants
- don't spread weeds



Bush Foods and Medicine



The WA bush is full of plants which the Noongar people have learned to use for sustenance and medicine. Candy's Bush Reserve has lots of useable plants from trees and bushes to herbs and creepers which include:

- Acacias or wattles are abundant and offer nutritious seeds which are high in protein and can be stored;
- Tjunguri or Fringed lily *Thysanotus patersonii* tubers can be eaten raw or roasted;
- Ruby saltbush *Enchylaena tomentose* has juicy salty red or yellow berries;
- The Maroon bush *Scaevola spinescens* is a native Australian bush, long used by the Aboriginal people for its natural healing properties.



Acacia



Fringed lily



Ruby saltbush



Maroon bush



Photos: R Walmsley

Other bush foods from around the Moora area



Banksias (mangkaj)- sweet nectar of many species can be sucked from the flowers



Nuytsia floribunda (Mooja, Christmas Tree) - Juicy and succulent root suckers can be eaten. Flowers are soaked in water to make a sweet drink

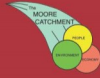


Xanthorrhoea preissi (Balga/Balka) - Gum from flower spikes used to make cakes. Dried leaves used for torches and leaves thatched for huts. Black trunk resin used as a glue. Bardi grubs collected from dying plants



Burchardia umbellata - (Milkmaids) - The crisp juicy tubers (kano) have a pleasant raw potato taste

Carnivorous Plants

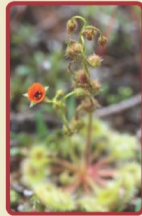


Drosera species are fascinating plants which lure, capture and digest insects for food to supplement their diet. You'll find them in the damper spots around the reserve during autumn and winter.

They all have sticky tentacles which trap their prey. Death occurs within 15 minutes and the insect is absorbed into the plant.



Drosera macrantha
Bridal Rainbow



Drosera glanduligera
Pimpernel Sundew



Drosera macrantha
Bridal Rainbow



Drosera macrophylla
Showy Sundew



Photos: R Walmsley

What's that???

...on an old log

**Preying
mantis egg
case**



**Preying mantis
(Djidal)**

...coming out
the dirt

**Fungus
(yelar)**

(*Podaxis* sp.
"stalked
puffball")



...growing
out of tree

**Fungus
(yelar)**



...on a rock

Lichen



Lichen



Salmon Gum *Eucalyptus salmonophloia*



Salmon Gums are majestic trees which can grow to 30m. The Noongar name for Salmon Gum is Weerluk or Wurak.

Salmon Gums are named after their trunks which turn a salmon colour in the summer months. You can identify Salmon Gums by their glossy leaves and umbrella shaped crown.

Salmon Gums are important breeding trees for Carnaby's Black Cockatoo as they use the hollows of older trees.



Photos: R Walmsley



Native Grasses (djirp)



Windmill Grass
Chloris truncata



Feather Spargrass
Austrostipa elegantissima



Weeds



Soursob
Oxalis pescaprae



Capeweed
Arctotheca calendula

Critters of the bush



The Aussie bush is full of fauna. Some you might see easily and some which do their best to avoid you.

- The Bobtail or blue tongued skink *Tiliqua rugosa* shows off its bright blue tongue as a defence mechanism.
- There are over 60 native butterfly species in South West WA. The Spotted Jezebel breeds on Sandalwood (which occurs in the reserve).
- Ants are prevalent here in the reserve. Although they can give a nasty nip, they have an important job to do aerating the soil and pollinating plants.
- Golden Orb spiders weave the strongest webs in the world and can sometimes catch small birds.



Leaf Curling spider
Phanognatha sp



Meat ant
Iridomyrmex sp



Spotted Jezebel butterfly
Delias aganippe



Bobtail or Blue tongued skink
Tiliqua rugosa



Golden Orb
Nephila edulis



Dugites are a common venomous snake.
Noongar name for Dugite is Doblji



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REGIONAL
DEVELOPMENT



DEPARTMENT OF
REGIONAL
DEVELOPMENT



South West Aboriginal
Land & Sea Council

Photos: R Walmsley

Birds (djiyada) you might see



Grey Butcherbird (worl djaloo (Totem bird))



Wattlebird (dongkarak)



Willy Wagtail (djidi-djidi (devil bird))



Magpie (koolbardi (story teller bird))

Quandong *Santalum acuminatum*



The Quandong is a small hemi parasitic shrub. It obtains its water from other plants using its roots.

It has small golf ball sized fruits which turn red when ripe.



These fruits are also known as the wild peach and are a well known bush food for Aboriginal people historically and today. The fruit makes a tasty snack and can be made into jam, and the nuts are delicious roasted. The fruit is high in vitamin C and nuts a good source of fat.



Photos: R Walmsley

Bush recipes

Australia's early European pastoralists discovered their own unique uses for the Quandong. Away from homesteads for weeks at a time, stockmen would often bake dampers infused with Quandong leaves. When in season - between October and February - many farmers would also take their families out for a Quandong picnic. The peeled fruit was used to make a variety of jams, chutneys and Quandong pies. Such treats were often the only delicacies to be had - especially during drought and depression years when money was short.

Quandong Jam (CWA recipe) Makes 8cups

1kg fresh quandongs
1kg caster sugar
100ml water



Chop up the fruit and combine with sugar and water in a large saucepan and put it over medium heat, stirring constantly as it comes to the boil. Lower the heat so it simmers. Cook until it reaches setting point (45mins ish). Test by dropping a teaspoonful onto a cold saucer. Let it cool, and when you push it with your finger, it should wrinkle. Be careful not to overcook and caramelise the sugar as this will alter the colour and flavour of the jam. Once its ready, pour into sterilised jars and seal. Should keep about a year unopened in the pantry, refrigerate once opened.

Flora (djet) you might see

The vegetation of the Candy's Bush Reserve comprises Wandoo and Salmon Gum Woodland with Melaleuca at the east end. The vegetation is in very good condition; plants are healthy, all vegetation layers are present and there are few weeds. Although Candy's can be enjoyed all year round, winter to spring is arguably the best time to visit when the reserve bursts into bloom. From vibrant wattles and aromatic honeybush to delicate fringed lilies and carpets of yellow and purple daisies, it's a feast of flora. We hope you enjoy your visit.

See if you can spot any of the below on your walk.



Hyalosperma glutinosum subsp. *venustum*
Everlasting daisy
C F = Jul-Oct



Sowerbaea laxiflora
Purple Tassles
R F = Aug-Sep



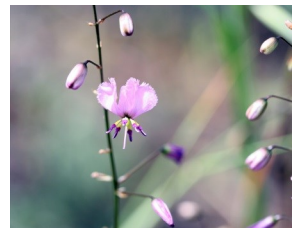
Eremophila lehmanniana
R F = Jul-Nov



Stylidium sp
Triggerplant
R F = July-Sep



Jacksonia restioides
R F = Jul-Sep



Arthropodium dyeri
R F = Aug - Oct



Pterostylis dilatata
Robust Snail Orchid
C F - Jun-Sep



Caladenia exilis subsp
vanleeuwenii
Moora Spider Orchid
VR F - July-Aug



Dianella revoluta
Blueberry Lily
C F - Sep - Nov



Pheladenia deformis
Blue Fairy Orchid
R F = Jul-Aug



Diuris refracta
Donkey Orchid
C F = Jul - Aug



Caladenia longicauda
White Spider Orchid
R F = Aug - Sep



Pterostylis spathulata
Spoon lipped Rufous Greenhood Orchid
R F = Sep - Oct



Thysanotus manglesianus
Fringed Lily
C F = Jul - Oct



Dampiera sp
C F = Jul - Oct



Hakea lissocarpha
Honeybush
C F = Jul - Sep



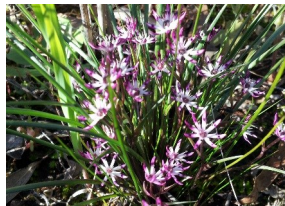
Grevillea huegelii
Comb Grevillea
C F = Sep - Nov



Pterostylis scabra
Green veined Shell Orchid
R F = Jun - Sep



Senna artemisioides subsp. filifolia
Punty Bush
R F = Aug - Oct



Wurmbea tenella
Eight Nancy
VR F = Jun-July

All these flowers were photographed in Candy's Bush reserve

F = flowers in

Occurrence in reserve

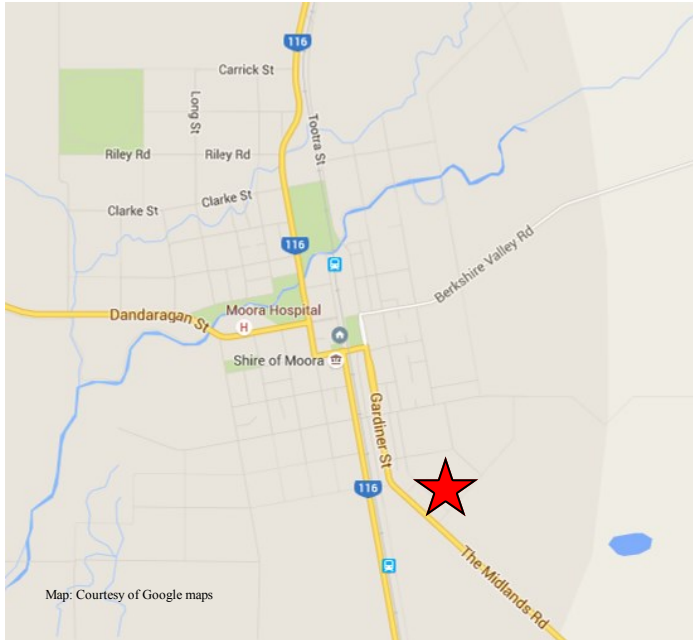
C = common/widespread

R = rare/restricted range

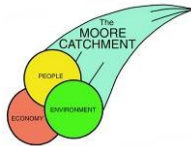
VR = very rare



★ Location of Candy's Bush Reserve
Gardiner Street, Moora, WA 6510



Map: Courtesy of Google maps



**Conservation of Candy's Bush Reserve
through Traditional & ecological
knowledge sharing
2014-2015**

For more information about this project or the
Moore Catchment Council, then please contact:

Moore Catchment Council

1 Padbury Street

PO Box 337

Moora

Western Australia

6510

Phone: 9653 1355

Fax: 9653 1366

E-mail: moorecc@bigpond.com

Web: www.moorecatchment.org.au

Facebook: www.facebook.com/moore.catchmentcouncil