

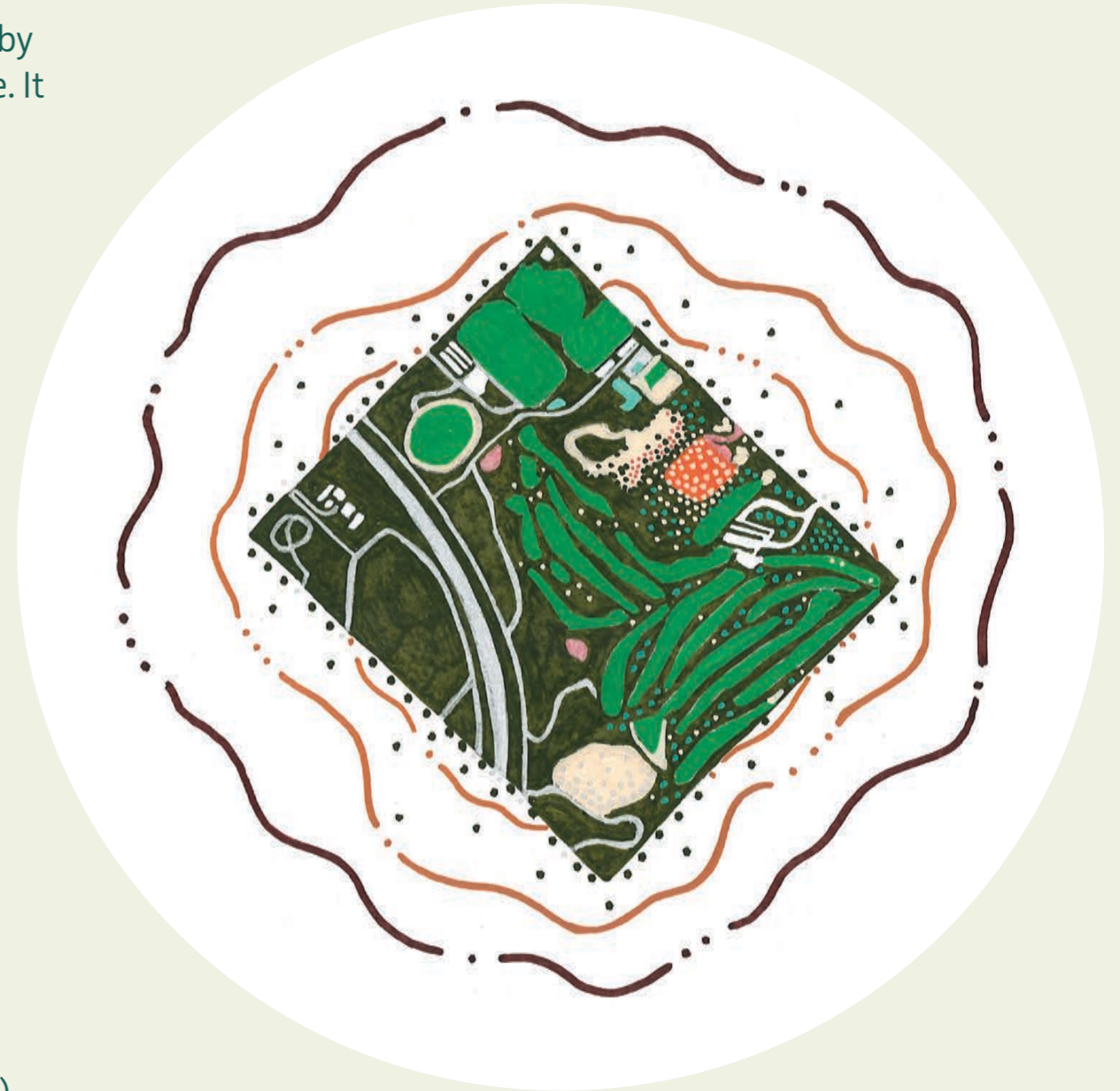
Story of Maamba

A native reserve at Maamba at the foot of the Darling Scarp was established by Premier John Forrest in 1899 in an effort to care for derelict Aboriginal people. It was developed as a small scale agricultural settlement for local Aboriginals. It was in the present-day Forrestfield/Wattle Grove area including what is now Hartfield Park. At the end of 1903, the chief Protector of Aborigines, Henry Prinsep decided to make this Welshpool Reserve a ration depot. Prinsep insisted all Aboriginal people in the metropolitan area should be moved to the reserve, along with a European caretaker. Despite protests Aboriginals from Guildford, Perth, Helena Valley, Gingin, Northam, York, Beverley, Busselton and Pinjarra were moved there.

Daisy Bates visited the area in 1905, pitching her tent and talked with the Aboriginal people over a period of time whilst living there.

Prior to the formation of the reserve, the area had been a place where many Aboriginal tracks crossed in the sandy foothills where travel was easier than in the hills. A "scarred tree" which has now been fenced off in Hartfield Park, is thought to have been used to produce bark which would have been used to create shield and coolamons (dish-shaped utensils used to carry food or even a baby).

Charles Harrington, a 'travelling missionary' arrived in WA in December 1907. At the request of the Chief Protector, Charles Gale, from 1908 to 1909 the Aborigines' Inland Mission took over the running of Welshpool (Maamba) Reserve which had been established by the government in 1902.



LISTEN
ONLINE

Story of Joobaitch

Joobaitch of the kangaroo tribe of Perth, a Wordungmat or dark-type crowman, had been born in Stirling's time, and was the son of Yalgunga who ceded his spring on the banks of the Swan to Lieutenant Irwin. Joobaitch, was, a protege of Bishop Hale and at one time a native trooper.

Joobaitch lived on this site, the site of Maamba, as recorded by Daisy Bates.

Joobaitch passed away near the sacred tree in 1905.



LISTEN
ONLINE

Noongar Seasons

BIRAK DRY & HOT

During Birak, scrubland was burnt to force animals into the open for easier hunting & to encourage new plant growth. Birak is when the Banksias flower & blooms were gathered in the Nyungar Country for their honey. Also known as Season of the Young.

DEC-JAN

BUNURU HOTTEST PART OF THE YEAR

People gathered around the lakes, including those in the Mamba reserve. Food was plentiful with frogs & reptiles in abundance. Zamia seeds were collected at this time & banksia & wattle flowers were gathered for their honey. Also known as Season of Adolescence.

FEB-MAR

DJERAN COOLER WEATHER BEGINS

Scrubland was burnt to ensure food would be plentiful for the next year. Shelters were built in Djeran & skin cloaks (Bhookas) were sewn. At this time of year, root vegetables were plentiful & various root tubers & bulbs were collected. Kangaroos & other animals were kept close as Nyungars burned the land to stimulate new growth of shrubs & grass. Also known as Season of Adulthood.

APR-MAY

MAKURU COLDEST & WETTEST TIME OF THE YEAR

The people of the Swan River Plain moved up towards the shelter of the hills where they would be protected from the South-west winds. Rains replenished the inland water resources & large animals such as kangaroos, emus & possums were hunted for food. Smoldering banksia cones were kept under cloaks to keep warm. This is the growing season, also known as Fertility Season.

JUN-JUL

KAMBARANG LONGER DRY PERIODS

As the weather become warmer in Kambarang, people camped around the lakes, including those in the Mamba Park area and the Swan River. Wetlands foods, including frogs and reptiles were hunted. Birds, such as ducks, swans and wild turkeys were also plentiful. Sweet gums and resins would exude from the bark of Eucalypts. Also known as Season of Birth.

OCT-NOV

DJILBA MIXTURE OF WET DAYS WITH INCREASING NUMBER OF CLEAR, COLD NIGHTS AND PLEASANT WARMER DAYS

During Djilba, root tubers were an important food source. In particular, native yams near the Swan River and sand plains were dug in vast quantities. Large animals, such as kangaroos, emus and possums continued to be hunted. Plants, such as milkmaids, cotton head, myrtle and spear wood would begin to flower. The blossoms of the shrubs were flowering and eaten. The animals were fat and Nyungar were fat. Also known as Season of Conception.

AUG-SEP

Grass Tree

Balgas produce a resin which oozes from their trunks (especially on hot days and after burning). Once crushed and mixed with charcoal and kangaroo droppings, it is heated in a stone pot, to form a resin. The molten resin produced is used like a cement to bind object together, such as stone spearheads onto wooden spear shafts.

In Western Australia, Grass trees (*Xanthorrhoea preissii*) are also known by their noongar name Balga. The Grass Tree is endemic to south-western Australia and are a prominent feature of the jarrah Banksia woodland. Their tall flowering spiked provide a feast of nectar for insects from August to December.



Donkey Orchids & Sun Orchids

Noongar names are no longer known; however, the spider orchid is referred to as Karrar (Kar). When one sees the spider orchids we know that donkey orchids are nearby. These flowers grew in spring Djilba and Kambarang throughout the Nyungar Boodja (Noongar country).

This is also the time that bardie grubs are found near the grass trees. Orchids are highly sought after by Noongars as roots can either be roasted, baked in hot ashes, or pounded into a paste and made into cakes.

Donkey Orchids (Diuris)

Orchids use various methods of pollination. Some orchids emit smells to attract insects, so they can be pollinated. Others use mimicking. The donkey orchid looks similar to the native pea flower species Bacon and Eggs (*Nemcia Capitatum*). This works to attract pollinators even though it produces no nectar or scent. Once fertilised, the donkey orchid produces a non-fleshy fruit containing many tiny seeds. Terrestrial orchid seed is like fine dust and has no stored food source to help with germination. In the bushland orchid seed requires the help of micorrhizal fungi for seedling development, with some species being dependent on the fungus association through their whole life cycle.

Sun Orchids

The Sun Orchids are widespread throughout the south west and usually only open their flowers on warm sunny days. There is great variety in the size and colour of the flowers, ranging from small plants with tiny flowers 1cm across to plants 1 metre in height with 40 or so flowers. The first species begin flowering in June and the last are often still going as late as February.

Heritage Information

In Australia, we have become accustomed to the 'protected' status of orchids. However, in the part, many orchids were considered an important food source. Several early explorers and colonists noted the use of orchids for food.



Banksia

Noongar people drink the honey straight out of the flower cone, (known as Piara) or soak the flower in water to produce a bitter/sweet drink. This beverage can be fresh or fermented to produce Gep, an intoxicating liquor. Once dried the cones can be lit like a cigar & carried from one camp to the next to light fires.

Swamp Banksia The Swamp Banksia (Noongar name Pungara) grows up to 12 metres tall with a gnarled trunk covered with a crumbly grey rough bark, flowering between late summer & late winter. Often partly hidden by foliage, the dainty yet spectacular yellow flower spikes grow up to 200 mm long by 70 mm wide & contain over 1000 individual flowers. The fruiting cones can remain on the trees for many years after shedding its flowers. Listen for the sounds of Karak (Black cockatoo) roosting high in the red gums.

Banksia flowers produce an abundance of honey-like nectar, which is why the early colonists called this plant the Honeysuckle. They also used the nectar of the Banksia for honey & to make sweet drinks. Early 20th century writer, Dame Mary Gilmore, described the use of Banksia drinks in the treatment of the sore throats & colds.

Cyclops Red Eyed Wattle are also known as Cyclops. When the seed pods are green, they can be crushed in your hand with water to create a soap. The Noongar also used the green pods as cream for skin & sunscreen. The red-eyed wattle is an acacia whose seed pods were collected & dried by Noongar people to grind up & make a flour to make damper.

Stringy bark wattle bark is removed from the trees in thin strips and the bark is rubbed to remove the bark string which has many uses, when rubbed with animal fat last a long time, branches used for framing Mia Mias and leaves for roof thatching.



Shingleback Lizard

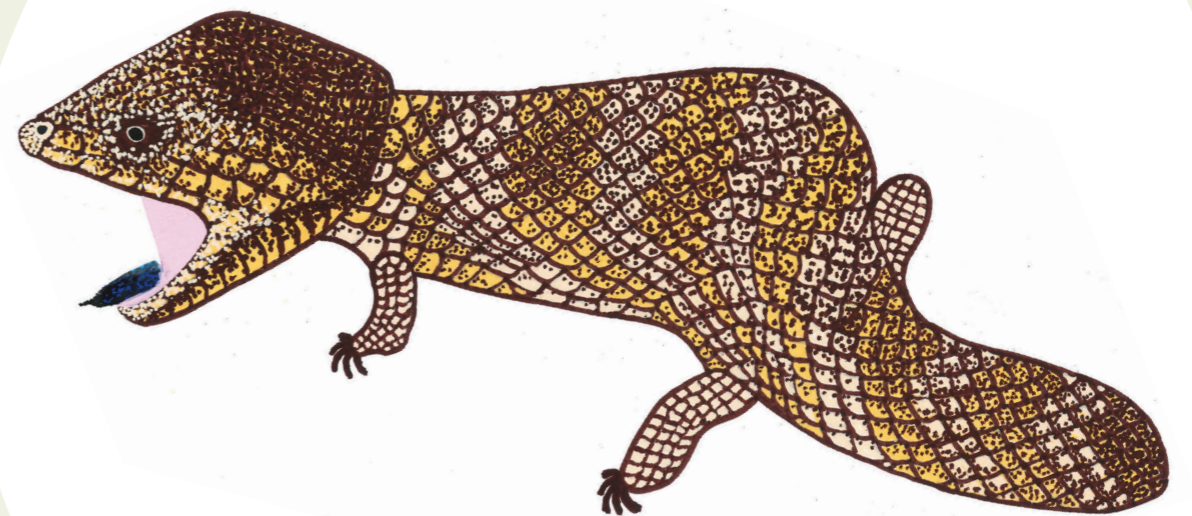
Tiliqua rugosa

Yorn is the animal totem of the Bilya people. They provided a great source of food for the Noongar people.

During Bunuru (Feb-March) they can be seen basking in the sun and feeding on the purple flowers of the prickly snakebush. Yorn eat a wide variety of insects, fruit and flowers. Their strong jaws make an easy meal of snakes, and teeth are large enough to cause a painful bite. When catching them Noongar had to be careful not to get their fingers caught in their mouth because they locked their jaws, they had to be held over a fire tail down to get them to release.

Commonly known as the bobtail, it is easily recognised by its large rough scales, large triangular head, and short bulbous tail. When opening its mouth in response to threat, the dark blue tongue is visible, and the lining of the mouth is bright pink. The display may be enough for a predator to think twice about attacking it. The short-ended tail may be confused with the head and serves as a defence mechanism. Like all lizards, bobtails need the warmth of the surroundings to heat their bodies.

Bobtails pair for life, always breeding in the same place. Females give birth to between one and three live young. At birth the young eat their afterbirth, shedding their skin within a few days of being born. The young stay with their parents for several months before gaining independence. Young Shingleback Lizards are easy prey for suburban dogs and cats, as well as predatory birds like ravens and kookaburras. Keeping dogs on leads give them a chance of survival in bushland.



Zamia

Macrozamia reidleyi

Djiridji were once common in the areas. The plant was an important food source for the local people. The cone breaks apart during February – March allowing the nuts “bayu” of the Zamia to be collected. The Aboriginal people buried bayu and then soaked them for at least a week to leach out all of the poison. After treatment, the pulp encasing the seed is roasted before being eaten or turned into what looks like a pancake.

Poison from Jeeiji was used to stun fish in traps when catching mullet or mulloway on the Swan River. Some animals, having a natural resistance to the toxins, are able to digest them. The emu is known to scarify the seeds during digestion, making the seeds easier to germinate when deposited on the ground. As emus no longer roam through the metro area, it's considered that the raven may be a disposal agent.

Noongar name Djiridji (jeerajee) is a cycad from an ancient lineage of cone-bearing plants, dating back to when dinosaurs roamed the earth. It produces bulky cones, resembling green pineapples. Male and female cones are borne on separate plants. Pollination is by wind and insects. Specialised flat-bodied weevils can move between parts of the cone, feeding on the male cone and then travelling to a female zamia plant carrying pollen grains on its body. Surprisingly the weevil does not feed on the female cones.

The seeds ripen to a deep red but are poisonous untreated. European settlers, being unaware of this, became ill from eating it. Once realised, farmers removed the plants to protect their cattle.

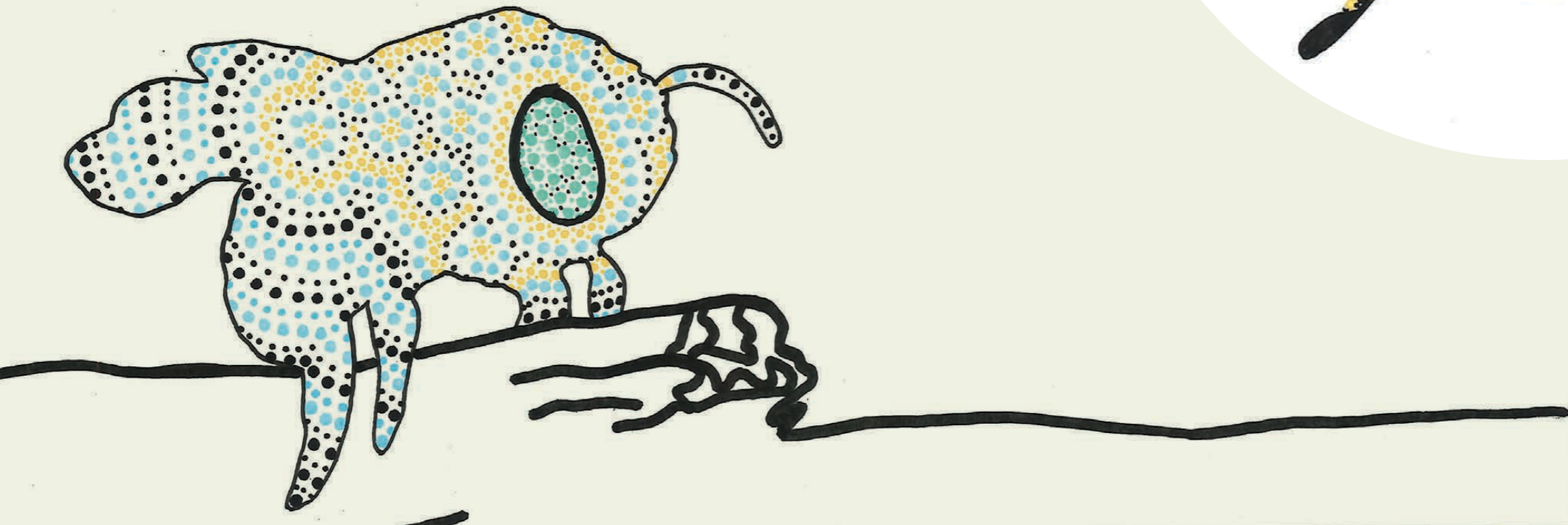


Blue Banded Bees

Amegilla cingulate

Listen to the buzz of the Blue banded bees. Noongar name Ngoowak, one of a number of Australian native bees able to perform a special kind of pollination called Buzz pollination. The beautiful Blue Banded Bee has furry golden thorax and iridescent blue or white stripes on a glossy black abdomen, growing to 11-12 mm.

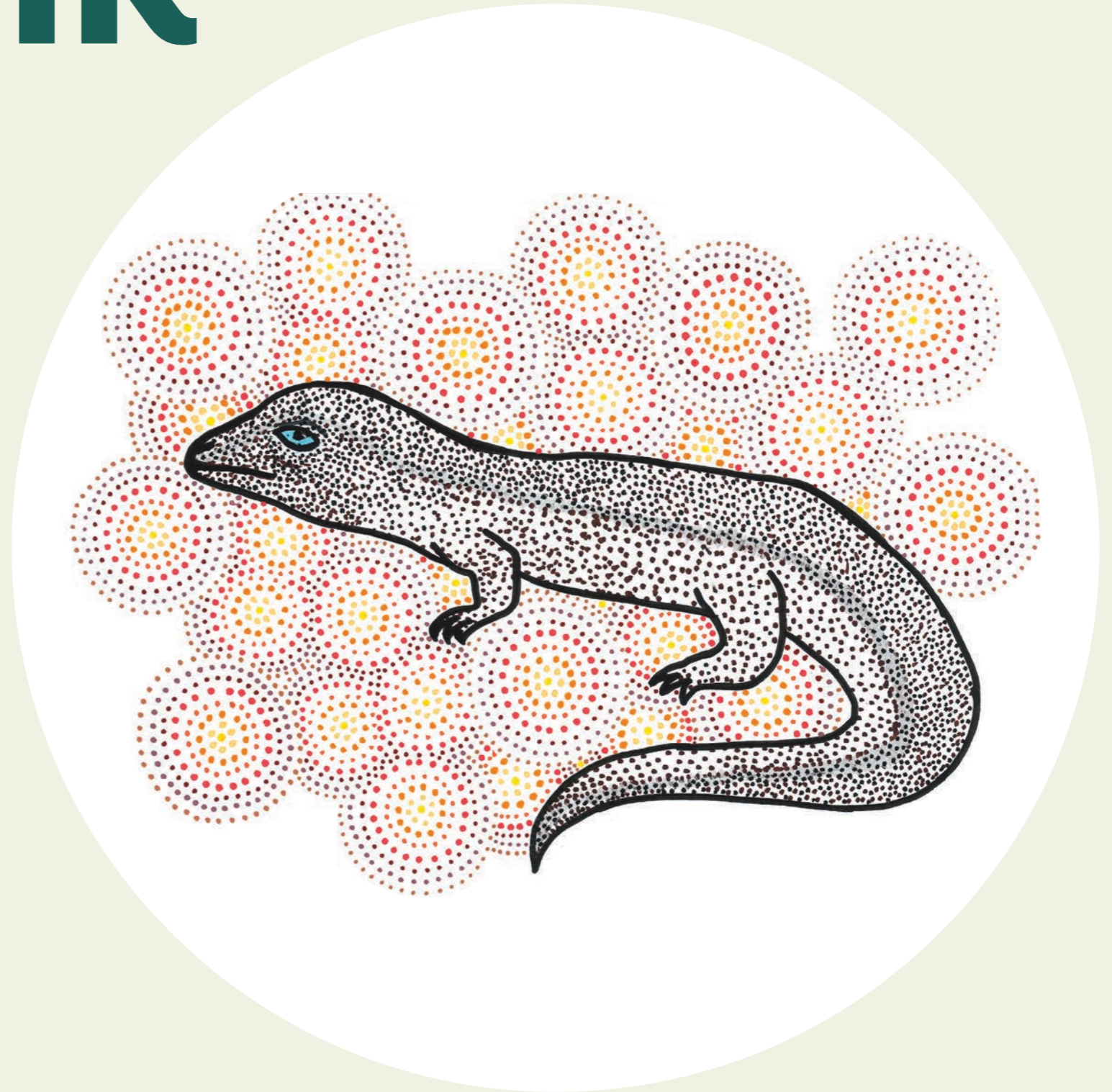
Males have five complete bands and females have four. The species gets its name from the Latin word "cingulum", meaning belt. Blue banded bees have large bulging eyes with multiple lenses and long "tongue" that enables them to extract nectar from trumpet shaped flowers like the Dianella.



King Skink

The Waugul appointed the Noongar people as guardians of the land. The large snakelike creature is believed responsible for the creation of the Swan and Canning Rivers and responsible for the formation of the waterways and contours of the land. Fascinating stories portray the Waugul's lost scales as forests and sites of rock piles as his sacred droppings. It is alleged he still resides deep beneath the underground springs.

Endemic to south-western Australia, King's Skinks are larger, long-lived skinks. Their diet consists of soft vegetation, insects and bird eggs. Being viviparous, they give birth to live young, producing small litters in autumn. Adults protect their young, attacking predatory dugites and tiger snakes. Unusual among reptiles, King's Skinks are highly social with juveniles staying with their parents for several years. Look out for the adults as they bask communally in the sun or scurry into the undergrowth.



Parrot Bush

If the Tunyart (28 parrot) ate the nectar from the flowers, Noongars knew it was safe to eat them too. The pulgart (parrot bush), soap bush and peppermint tree were used by the noongar people after watching the birds. Parrot bush wood was used for message sticks and the spiky leaves were helpful in trapping fish.

Look for the endangered Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) – a large white-tailed black bird living only in south-western Australia. They eat the seeds produced by the Parrot Bush and use large Eucalypt trees such as the Jarrah and Tuart for roosting.

Help us protect the Carnaby's by keeping to dedicated paths in the Bushland. Fauna such as King's skinks and Bobtails also enjoy the shelter of the debris and vegetation around this site. The Reserve is a Bush forever site.



Rainbow Bee-eater

The bee-eater's beauty and character set it apart from other birds (Noongar name Birranga).

An Aboriginal Dreaming story tells how the muted oranges, gauzy greens, powder blues and soft yellows came into being when a rainbow shattered.

Birranga was the traditional totem of an important family group in the Eastern Wheatbelt.

Rainbow bee-eaters arrive in October like a bolt from heaven, folding their wings just before entering the narrow opening into their chosen hole where the next generation are raised. Its shrill whirring call – "prrrrp prrrrp" or "plk" (depending on mood) – is as unique as it's colour scheme.



Nyingarn (Echidna)

Tachyglossus aculeatus

Nyingarn is a spiny mammal who eats lots of termites. The English name is Echidna, from the Ancient Greek monster who was half woman and half snake.

The nyingarn is a type of mammal called a monotreme. These are mammals who lay eggs (noorooks) rather than giving birth to live young, and carry the egg in the skin folds of their underbelly. When the jelly bean size egg hatches, it moves into the backward facing pouch where the joey can suckle the milk that oozes from the milk gland. They grow there for about 6 months.

Echidnas have no teeth and only eat termites, ants and other soil invertebrates. They particularly love beetle larvae. Their strong claws help them break open logs to get to termites that they scoop up with their long tongues, which can reach up to 18cm long when extended.

Nyungars cooked and ate the Nyingarn by digging a hole in the ground and lighting a fire. Once there were lots of hot coals there, they would place it into the bush oven upside down to cook. If placed on its feet the quills would be ejected from the animal with the heat and could cause injury. The flesh is a very high-quality lean meat, which tastes similar to pork.

Echidnas typically breed between July and August.



Quenda (Bandicoot)

Isoodon obesulus fusciventer

Adopted into the local English language are also many Noongar plant and animal names: Marri, Karri, Jarrah, Quenda (Bandicoot), Quokka and Jilgie. Early explorers had no English names for many of the species that occur in the south-west of WA. Much of the biodiversity in Noongar country is not found anywhere else in the world. In this way, names, knowledge and the habitat of south-west plants and animals share an identity with, and are locally understood by Noongar people.

If you see an unusual small dome-shaped mound of dead leaves and twigs in your garden, or have small cone shaped holes in the lawn, you may be lucky to have a local native digger in your backyard. This unique marsupial is known as a Quenda (the local Noongar word).

Quenda is a sub-species of the Southern Brown Bandicoot. Quenda are classified as 'Near Threatened.' They normally live in dense understorey around swamps and banksia and jarrah woodlands. Quenda are common in the Perth Hills as there is still a lot of dense vegetation to provide habitat. The home territory can be up to 6 hectares. Where there is abundant food the home territory may be a lot smaller and overlap with other quenda.

Quenda are medium size, weigh up to 1.5kg and grow to 35cm in length. They are about the same size as a rabbit! Their fur is grey-brown with short spiny blackish hairs and softer paler fur underneath. They have a long pointed nose, black eyes and small round ears. Quenda have long front claws which they used to dig for food such as bugs, tubers, and fungi.



Moodjar (Native Christmas Tree)

Nuytsia floribunda

The Moodjar is a spirit Tree. A sacred tree.

Moodjar (or Muja) is regarded as a protected tree by the Noongar peoples of Southwest Australia, the species is noted as being incorporated into rituals and having a conservation status that forbids their destruction. The plant is venerated by some who learn that it should not be sat beneath or its flowers, leaves or branches touched or taken. The sugary gum is consumed in modest quantities, and children are warned of overindulgence with the story of a monstrous, invulnerable and inescapable nocturnal being who cry of 'Nhervalong' could be heard as it collects the gum on which it subsists.

The Noongar people made use of the species during the season Kambarang, around October to early December, obtaining bark to make shields. The gum that exudes from the wound can be collected later, it is sweet and eaten raw.

Moodjar is well known in Southwest Australia, especially due to the appearance of abundant flowers in summer which is a spectacular display. The flowers produce large amounts of pollen and nectar that is consumed by insects.

The habit of the species is a tree up to 10 metres high, or as a shrub. The rough bark is grey-brown. Flowers are a vivid yellow-orange, appearing between October and January.



Snottygobble

Persoonia longifolia

An interesting tall shrub or small tree commonly called the Snottygobble can be found in our local bush. It stands out amongst the softer grey-green jarrahs & marries because of its bright green foliage.

The snottygobbles of Western Australia grow in jarrah forest, mixed jarrah & karri woodland & are found from Perth to Albany in Western Australia.

They flower in summer & have fruit the size of blueberries which ripens in autumn. The fruit ripens & falls in June to July. When the early settlers saw Noongar eating the berries, they attempted to eat them skin all, but spat them out as the skin is bitter as gaul. Noongar showed them how to squeeze the seed until the flesh was exuded - without the skin they found it to be very tasty.

The upright snottygobble (also known as the long-leaf persoonia) has the Latin name of *Persoonia longifolia* (longu 'long', folium 'leaf'). Its habit is graceful and weeping. The attractive bark of this woodland tree is dark reddish to bronze in colour. The bark consists of many layers which flake off easily. During the flowering season, short sprays of deep yellow to orange flowers appear.

The narrow, slightly curved leaves are 70 to 220mm in length and are light green in colour. The fruits are the shape of a jellybean and hold one to two seeds. The seeds have an outer layer which is green and fleshy (edible). The cambium layer was also used for medicinal purposes.



Djarraly (Jarrah)

Eucalyptus marginata

Commonly known as Jarrah, Djarraly in Noongar language and historically as Swan River Mahogany, this plant is in the myrtle family, Myrtaceae, and is endemic to the south-west of Western Australia.

The jarrah tree usually grows to about 40-50 meters high, with a trunk diameter of three meters. The trunk of the jarrah is long, straight, and has no branches on it. The jarrah tree has rough grayish brown bark with vertical grooves, which sheds in long strips.

Eucalyptus marginata have been used for traditional purposes as well. Some parts of the Jarrah tree were used as a remedy for some illnesses and diseases. Fever, colds, headaches, skin diseases and snakes bites were traditionally cured through the use of Jarrah leaves and bark.

