



Traditional Ecological Knowledge of
Forrestdale Lake



Image from the State Library of Western Australia showing a post-colonial Mia Mia

Acknowledgements

Our thanks to the Noongar Elders who participated in this project, in particular Vivienne Hansen for providing the translations and knowledge about the plants and animals of Forrestdale Lake.

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WARNING: This document contains images of people who are deceased.

This document is part of a Traditional Ecological Knowledge project of Forrestdale Lake. This document aims to provide knowledge from Noongar Elders about traditional understanding and use of plants endemic to Forrestdale Lake, and to provide Noongar language translations where possible. This document also highlights the importance of wetlands in Perth and why they are so significant to the Noongar community.

Please Note: Aboriginal people did not have any formalised form of written communication; their knowledge was passed between generations through stories, dance, song, and artwork. The following Noongar translations are provided by Elders Vivienne and Mort Hansen, which is knowledge that was passed down to them from their Elders. These translations may differ to what other Noongars know, Mort and Vivienne hold some traditional knowledge, there are other Noongar elders who hold other information not referenced here.



Australian Government



National Landcare Programme



Perth NRM
Creating a sustainable environment

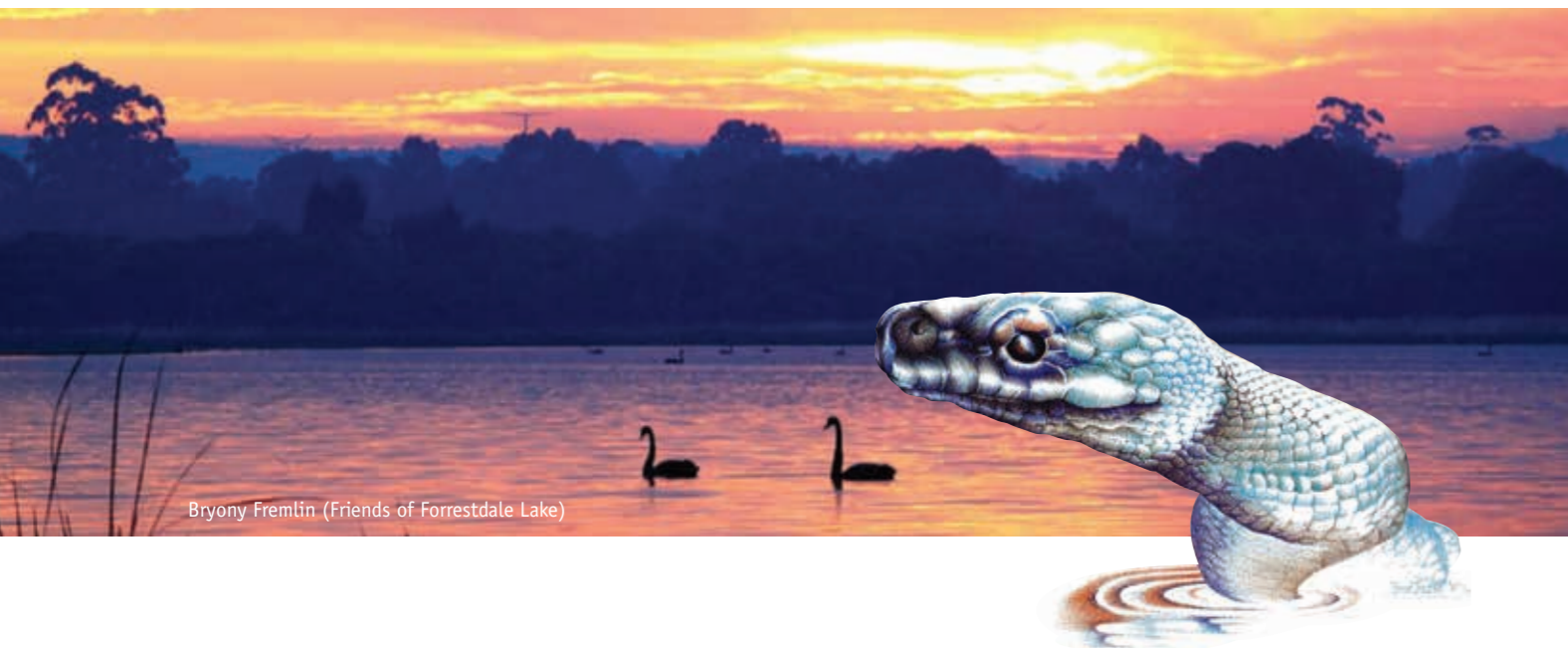
Forrestdale Lake: a Ramsar wetland.

Forrestdale Lake is a declared Ramsar wetland. This means that it is one of the three wetlands in the Perth region that are considered to be of national environmental significance and have been listed on the Ramsar Convention. This is an international convention that has over 169 contracting bodies signed on. The Convention’s mission is “the conservation and wise use of all wetlands through local and national actions and international cooperation, as a contribution towards achieving sustainable development throughout the world.”

The Ramsar Convention protects wetlands of international importance and aims to conserve their ecological value. The Convention protects sites that are representative of rare or unique wetlands, or are important for the conservation of biological diversity.

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Bryony Fremlin (Friends of Forrestdale Lake)

What makes Forrestdale Lake special?

Forrestdale Lake is one of the best remnant examples of seasonal, brackish lakes with fringing sedgeland that were once common in the Swan Coastal Plain bioregion.

The Forrestdale Lake Nature Reserve covers an area of 246 hectares, with the lake body taking up 221 hectares of that area. The lake is shallow (<2m when full) and is circular/oval in shape. What earned Forrestdale Lake its Ramsar classification is that it plays an important role for waterbirds, providing breeding grounds, refuge during drought, and acting as an essential stop-over point for migratory species.

The facts about Forrestdale Lake:

- 76 species of water bird have been recorded at the lake;
- 13 species of lizard and snakes;
- 7 species of frogs;
- 4 species of mammals;
- 252 native plant species;
- 99 introduced species of plants;
- 7 native species are priority species of flora;
- 2 native species of plants are declared rare flora (*Diuis prudiei* and *Drakaea elastic*)

The Noongar people

The Noongar people have occupied the Perth region for at least 40,000 years. Dated archaeological sites provide evidence of occupation extending back at least 38,000 years in the South West of Western Australia.¹

For Noongar people, the stories about their culture and moort (family) is completely intertwined with the stories of their boodja (country). The boodja is where their spirit resides and it is through kinship laws that the rules and responsibilities of caring for the land and the natural environment come. This makes the attachment to boodja a spiritual connection for the Noongar people.

¹ The site of Devils lair has been dated to 38,000 BP from archaeological excavation undertaken there in 1986. [6]

² It is known from archaeological remains and from oral traditional that Noongar people travelled through the landscape

Forrestdale Lake in the past

The lakes, swamps, and wetlands of Perth were more extensive in the past than as we see them today. The wetlands were more connected, some forming chains, and this was an important part of life for the Noongar people.

For Aboriginal people, water bodies such as Forrestdale Lake would have been essential to survival in Western Australia and provided abundant plant and animal resources.

It is known from ethnographic sources and from oral history passed down the generations that Noongar people travelled around the Perth area, not residing in one spot permanently as we do today. Noongar people moved around the landscape spending time on the coast over summer and in the hills during the winter period². Forrestdale Lake, given its position near the coast and down from the hills, would have been frequented during spring when many of the animals were raising their young and the plants flowering or starting to fruit.

“To Indigenous people the management and use of natural resources is enmeshed in cultural practice and the exercise of cultural responsibility. This view merges cultural heritage and natural resource management into a single concept, rather than seeing them as discrete elements to be dealt with separately,”

Mcfarlane 2004.



Image from the State Library of Western Australia showing a pre-colonial Mia Mia in Perth



Forrestdale Lake today

Forrestdale Lake remains important to Noongar people today not only for its association with the Waargle and as a connection to their country, but also as an example of how Noongar people lived, what they relied on to eat, and how they maintained their culture. Today Forrestdale lake is a site recorded on the Department of Aboriginal Affairs register as ID Number 3713 a mythological site with artefact scatter, hunting ground, and camp site.

Balga (Yoorluk)

Scientific Name: *Xanthorrhoea preissii*

Common Name: Grass Tree

Flowering Period: August – December

Noongar Uses: The kadjo (gum/resin from *Xanthorrhoea* sp.) was chewed to relieve diarrhoea and constipation. The boyi (smoke) from the burning kadjo was inhaled to relieve sinusitis. Kadjo from the balga was used as a binding agent. The flower spike was used as a fishing kitj (spear), and the flowers from the spike were infused with water to make a sweet drink. The white material inside the top of the trunk can be squeezed and the milky liquid is drinkable. [2]



Waargle

Forrestdale Lake is associated with the dreaming Waargle (the rainbow serpent). The Waargle created all the rivers, lakes, and watering holes found in Perth and the South West, and the Waargle spirit protects these places even today.

The following quote is about Forrestdale Lake and its association with the Waargle:

“... one of the most important place for the Waargle, the roundness and size indicates it curled itself up and rested there for a while, after the hard work of creating the streams, brooks and rivulets...” Richard Wilkes 1999.

Bibool

Scientific Name: *Melaleuca raphiophylla*

Common Name: Swamp paperbark

Flowering Period: July - December

Noongar Uses: Leaves contained oil used for treating colds and the flexible bark was used as bandages. The oil in the *Melaleuca* is the same as is found in tea tree and has antibacterial and antiseptic qualities. The bark was used to wrap around fish for cooking or wrapping up other food to help preserve it while travelling. [1]



Boodalang (common term for pelican)

Scientific Name: *Pelecanus conspicillatus*

Common Name: Australian Pelican



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Sian Mawson (Friends of Queens Park Bushland)

Borhn (Mardya, Meam)

Scientific Name: *Haemodorum spicatum*

Common Name: Bloodroot or Mardja

Flowering Period: October - January

Noongar Uses: The bulbs can be eaten raw or roasted. The roots and leaf bases were roasted and mixed with clay from termite nests and ingested to stop diarrhoea. The bulb was brewed into a drink to relieve lung congestion. [3]

Bulgalla

Scientific Name: *Banksia menziesii*

Common Name: Firewood Banksia

Flowering Period: February - October

Noongar Uses: The banksia flower spikes were soaked in water to make a sweet refreshing drink. This drink was drunk for coughs and sore throat. [2]



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Cara

Scientific Name: *Burchardia multiflora*

Common Name: Multi-headed Milkmaid

Flowering Period: August - October

Noongar Uses: The roots and tubers of this plant were a plentiful food source for the Noongar people.



Choonya (Booyi)

Scientific Name: *Chelodina oblonga*

Common Name: Long-necked turtle, Oblong Turtle



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Cujong

Scientific Name: *Acacia saligna*

Common Name: Orange Wattle

Flowering Period: July - November

Noongar Uses: The wattle seeds were eaten raw or ground into flour and baked into damper, the seeds are a good source of fat, protein, and carbohydrate. [2]



Dangalang

Scientific Name: *Waitzia suaveolens*

Common Name: Everlasting

Flowering Period: September - January

Noongar Uses: Uses of this plant were not identified.



Gary Tate



Gary Tate

Djiridji (Jeeriji)

Scientific Name: *Macrozamia fraseri*

Common Name: Zamia

Flowering Period: September to October

Noongar Uses: The bayu (pods) contain toxins, they were treated by soaking in running water or burying underground for six months. After treatment the bayu was peeled and eaten. The cotton from the female plant was used as feminine hygiene purposes or as lining for carrying a baby in a yandi (curved dish). [2]



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Dobitj

Scientific Name: *Pseudonaja affinis*

Common Name: Dugite



Dwert

Scientific Name: *Canis lupus dingo*

Common Name: Dingo



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Dwutta (Maynee)

Scientific Name: *Eucalyptus tottiana*

Common Name: Blackbutt or Prickly bark

The leaves of the eucalyptus were used as an antibacterial and were held under the nose to relieve congestion. The leaves can be brewed to produce a steam that eases colds, flu and rheumatic symptoms. The gum of the eucalypts can be eaten to relieve dysentery. [1]



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Gnollark

Scientific Name: *Calyptorhynchus latirostris*

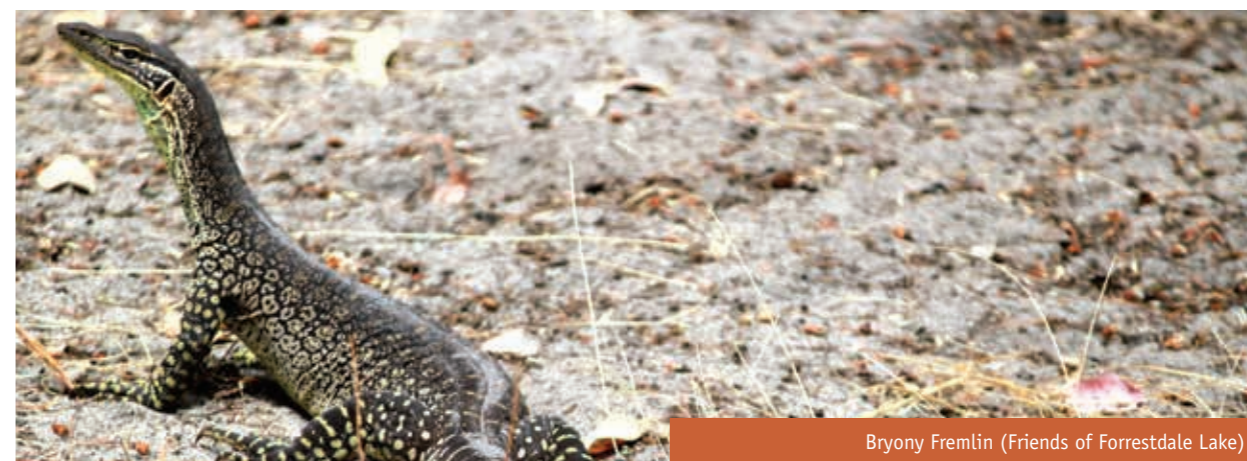
Common Name: Carnaby's Black-cockatoo



Kaarda

Scientific Name: *Varanus gouldii*

Common Name: Gould's Monitor, Racehorse Goanna



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Jarrah

Scientific Name: *Eucalyptus marginata*

Common Name: Jarrah

Flowering Period: June - January

Noongar Uses: The bark of the jarrah was used as roofing for shelters. The crushed leaves were used as an antibacterial poultice for wounds. The smell from the crushed leaves was inhaled to relieve congestion due to colds and flu.

The kino (gum) has anaesthetic qualities and was mixed with water and drunk to relieve diarrhoea and upset stomach. The gum was also ground and mixed as an ointment for sores. [2]



Kabbur (Koorpa)

Scientific Name: *Jacksonia sternbergiana*

Common Name: Stinkwood

Flowering Period: All year

Noongar Uses: The stems of this plant provided strong flexible branches used to build Mia Mia (shelters) and could be made into rope or twine. [2]





Kara

Scientific Name: *Burchardia congesta*

Common Name: Milkmaid

Flowering Period: August - October

Noongar Uses: The roots of this lillie, like other lillies, have thick fleshy roots that store starch and were eaten. They could be eaten raw, steamed, or roasted over coals.

Kodjeninngara

Scientific Name: *Verticordia densiflora*

Common Name: Compacted Feather flower

Flowering Period: September – December

Noongar Uses: The uses of this plant were not identified.



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Sian Mawson (Friends of Queens Park Bushland)



Knulbora (krulbrang)

Scientific Name: *Anigozanthos manglesii*

Common Name: Mangels Kangaroo Paw

Flowering Period: August - November

Noongar Uses: The roots of the kangaroo paw store starch and were eaten. [2]

Komma

Scientific Name: *Patersonia occidentalis*

Common Name: Purple Flag

Flowering Period: August - December

Noongar Uses: The uses of this plant were not identified.



Bryony Fremlin (Friends of Forrestdale Lake)

Koorla

Scientific Name: *Hardenbergia comptoniana*

Common Name: Native Wisteria

Flowering Period: July - October

Noongar Uses: The stems of this plant provided strong flexible branches used to help build Mia Mia (shelters) and could be made into rope or twine. [2]



Koroylbardany

Scientific Name: *Anigozanthos viridi*

Common Name: Green Kangaroo Paw

Flowering Period: August - October

Noongar Uses: The roots of the kangaroo paw stored starch and were eaten.



Bryony Fremlin (Friends of Forrestdale Lake)

Kwell (Kulli, Gulli-Pibbulmun)

Scientific Name: *Allocasuarina fraseriana*

Common Name: Sheoak

Flowering Period: May - October

Noongar Uses: The needles of the sheoaks were used as bedding in Mia Mia (shelter) and covered with a buka (kangaroo skin). Women often gave birth under sheoaks because of the soft needles. Other species of sheoak were used to make implements such as spears, boomerangs, and shields because of the hard bark. The young cones were eaten. Young shoots of the tree were eaten to reduce thirst. [1]



Kwidja (Queearl, Kooya)

Common Name: Frogs



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Maali

Scientific Name: *Cygnus atratus*

Common Name: Black Swan



Mangarel

Scientific Name: *Dinaella revoluta*

Common Name: Blueberry Lilly

Flowering Period: August - December

Noongar Uses: The fruit was eaten both raw and cooked. The roots are processed through pounding and then roasted and eaten. The leaves were used to make sting and cord. The leaves steeped in water were drunk to relieve headaches and the roots steeped and drunk as a remedy for colds. [1]



Mindaleny (generic term for wattles)

Scientific Name: *Acacia pulchella*

Common Name: Prickly Moses

Flowering Period: May - December

Noongar Uses: The wattle seed were eaten raw or ground into flour and baked into damper, the seeds are a good source of fat, protein, and carbohydrate. The wood was used to make kitj (spears) and wannas (digging sticks) and woonda (shields). The bark was stripped rubbed with with yonga (kangaroo) or kaarda (goanna) djirang(fat) and made pliable for tying items together. [2]



Bryony Fremlin (Friends of Forrestdale Lake)

Moitch (Kulurda)

Scientific Name: *Eucalyptus rudis*

Common Name: Flooded Gum

Flowering Period: July - September

Noongar Uses: Manna (a product of a small mite that lives on the leaves) was licked from the leaves, the taste is sweet and could be collected and rolled into a large sweet to suck on. The leaves were crushed and used as a poultice to stop bleeding, mud was sometimes used to hold the poultice on and assist with healing. [2] [4]



Sian Mawson (Friends of Queens Park Bushland)



Sian Mawson (Friends of Queens Park Bushland)

Moodgar

Scientific Name: *Nuytsia floribunda*

Common Name: WA Christmas Tree

Flowering Period: October - January

Noongar Uses: The bark was used for making kits. The gum that exudes from the tree from its wounds was collected, it is sweet and eaten raw. [5]



Bryony Fremlin (Friends of Forrestdale Lake)



Sian Mawson (Friends of Queens Park Bushland)

Mungite (Beera)

Scientific Name: *Banksia grandis*

Common Name: Bull Banksia

Flowering Period: September - December

Noongar Uses: The flower spikes were soaked in water to make a sweet drink, which soothed coughs and sore throats. The cones of the Mungite were used as fuel for fires and wrapped in paper bark to carry the fire when travelling across country. [1]

Moyop

Scientific Name: *Notechis scutatus*

Common Name: Tiger Snake



Sian Mawson (Friends of Queens Park Bushland)

Piara (Biara, Bealwra)

Scientific Name: *Banksia attenuata*

Common Name: Slender Banksia

Flowering Period: October to December or January to February

Noongar Uses: The flower spikes were soaked in water to make a sweet drink, which soothed coughs and sore throats. [1]



Quell

Scientific Name: *Macropus irma*

Common Name: Western Brush Wallaby



Department of Parks and Wildlife



Bryony Fremlin (Friends of Forrestdale Lake)

Quenda

Scientific Name: *Isodon obesulus fusciventer*

Common Name: Quenda



Tjunguri

Scientific Name: *Thysanotus manglesianus*

Common Name: Fringed Lilly

Flowering Period: August - November

Noongar Uses: The roots of this lillie, like other lillies, have thick fleshy roots that store starch and were eaten. They could be eaten raw, steamed, or roasted over coals. The roots were ground into paste and made into cakes or patties. [2]



Weeu

Scientific Name: *Myrmecobius fasciatus*

Common Name: Numbat



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Bryony Fremlin (Friends of Forrestdale Lake)

Wollong

Scientific Name: *Kennedia prostrata*

Common Name: Scarlet Runner (Running Postman)

Flowering Period: April - November

Noongar Uses: The leaves are used to make a tea like refreshing drink and the nectar of the flowers soothed a sore throat. The stems were used to make twine. [1]

Wuargle (Ngarnak, Kuiarch)

Scientific Name: *Baumea articulata*

Common Name: Joint rush

Flowering Period: September - December

Noongar Uses: The roots of many sedges were eaten, the inside of the jointed rush was hollowed out to create a pipe, and used to hunt yerderap (ducks) from under the water. [2]



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Woylie

Scientific Name: *Bettongia ogilbyi*

Common Name: Woylie



Gary Tate



Yangjet

Scientific Name: *Ficinia nodosa*

Common Name: Knobby Club-rush

Flowering Period: September - February

Noongar Uses: The roots of many sedges were eaten and the presence of these sedges indicated to Noongar people the presence of fresh water. They were sometimes used to weave nets for catching djildjit (fish) and yakan (turtles). [2]



Yerderap
(common term for ducks or geese)



Yonga

Scientific Name: *Macropus fuliginosus*
Common Name: Western Grey Kangaroo



Yoorn

Scientific Name: *Tiliqua rugosa*
Common Name: Bobtail, Shingle-back



For Noongar people, the stories about their culture and moort (family) is completely intertwined with the stories of their boodja (country). The boodja is where their spirit resides and it is through kinship laws that the rules and responsibilities of caring for the land and the natural environment come.



Noongar Word List

| Noongar | English |
|----------------|--|
| balga | grass tree |
| Bayu | zamia pods |
| bibool | paperbark |
| boodalang | pelican |
| boodja | country |
| borhn | bloodroot or mardja |
| boyi | smoke |
| buka | kangaroo skin |
| bulgalla | firewood banksia |
| cara | orchids |
| choonya | long necked turtle |
| cujong | orange wattle |
| dangalang | everlasting |
| djirang | fat |
| djiridji | zamia |
| dobitj | dugite |
| dwert | dingo |
| gnollark | carnaby’s black cockatoo |
| jarrah | jarrah |
| kaarda | gould’s goanna |
| kabbur | stinkwood |
| kadjo | gum or resin from xanthorrhoea species |
| kara | milkmaid, spider |
| kino | gum from the jarrah |
| kitj | spear |
| knulbora | mangels kangaroo paw |
| kodjeninngara | compacted feather flower |
| komma | purple flag |
| koorla | native wisteria |
| kooroylbardany | green kangaroo paw |

| Noongar | English |
|-----------|---|
| kooya | frog |
| kwell | sheoak |
| kwidja | frog |
| mangarel | blueberry lilly |
| mia mia | paperbark hut |
| mindaleny | wattles |
| moitch | flooded gum |
| moodar | WA Christmas Tree |
| moort | family |
| moyop | tiger snake |
| mungite | bull banksia |
| piara | slender banksia |
| quell | western brush wallaby |
| quenda | quenda |
| tjunguri | fringed lilly |
| wannas | digging stick |
| warugle | jointed rush |
| waargle | spirit snake that formed the landscape (mythological) |
| weeu | numbat |
| wollong | scarlett runner (or running postman) |
| woonda | shield |
| woylie | woylie |
| yandi | curved dish made of wood used by women |
| yangjet | knobby club rushes |
| yerderap | duck |
| yonga | kangaroo |
| yoorn | bobtail |

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