



Canning River Eco Education Centre

Teacher Resource

Canning River Regional Park Self-Guided Trail

Overview

Canning River Regional Park Trail

Touching base with your local place

This self-guided trail traverses seven sites that highlight natural, managed and constructed features within the Canning River Regional Park. Laminated maps, teacher's commentary and a resource bag are provided.

Year Level: Yr 4-6 (Can be adapted to other year levels)

Duration: Approximately 60 minutes

Cost: No cost. A copy of the map, clipboard and a pencil is provided. We recommend students work in pairs. Teacher notes and suggested activities accompany this information pack.

Supervision: This is a self-guided trail. Supervision of the students is the responsibility of the school staff. CREEC Volunteers may be able to guide groups subject to availability.

Excursion Booking and Enquiries:

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Links to Australian Curriculum

SCIENCE

Science and Understanding: Biological Sciences

YEAR 4:

- Living things have life cycles
- Living Things, including plants and animals, depend on each other and the environment to survive

YEAR 5:

- Living things have structural features and adaptations that help them to survive in the environment

YEAR 6:

- The growth and survival of living things are affected by the physical conditions of their environment

GEOGRAPHY

Geographical Knowledge and Understanding

YEAR 4:

- The types of natural vegetation and the significance of vegetation to the environment and to the people
- The importance of the environment to animals and people, and different views on how they can be protected
- The natural resources provided by the environment, and different views on how they could be used sustainably
- The sustainable management of waste from production and consumption

YEAR 5:

- The influence of the environment on the human characteristics of a place

- The impact of bushfires or floods on environments and communities, and how people can respond

YEAR 6:

- The world's cultural diversity, including that of its indigenous people
- The effects that people's connections with, and proximity to, places throughout the world have on shaping their awareness and opinion of those places

SUSTAINABILITY

Organising Ideas to be addressed:

Systems

- The biosphere is a dynamic system providing the conditions that sustain life on Earth
- All life forms, including human life, are connected through ecosystems on which they depend for their wellbeing and survival
- Sustainable patterns of living rely on the interdependence of a healthy social, economic and ecological systems

Futures

- Actions for a sustainable future reflect on values of care, respect and responsibility, and require us to explore and understand environments
- Sustainable futures result from actions designed to preserve and/or restore the quality and uniqueness of environments

ABORIGINAL AND TORRES STRAIT ISLANDER HISTORIES AND CULTURES

Organising Idea to be addressed:

Country/ Place

- Aboriginal and Torres Strait Islander Peoples have unique belief systems and are spiritually connected to the land, sea, sky and waterways

Materials & Supporting Activities

A bag will be provided by CREEC containing:

A Bird Nest: (Stop 2 - Kent St Weir Park)

Ask students to look for places that birds can nest. (e.g. high tree canopy, overhanging river vegetation, tree hollows, riverbank sedges). Show students the Willy Wagtail nest. Willy Wagtails utilise spider webs to bind their nests together. The Nyoongar name for this bird is the *Djitti-Djitti* (based on the sound the bird makes).



Paperbark: (Stop 3 - Kent St Weir Bridge)

Paperbark trees (*Melaleuca raphiophylla*) line the banks of the Canning River. They prefer fresh water habitats so they are more prolific upstream, away from tidal impacts.



A Turtle Shell: (Stop 6 - The Pergola)

Long-necked turtles (*Chelodina colliei*), also known as oblong turtles, are freshwater reptiles that live in the Canning River.



10 Marker Flags: Students can utilise the flags as markers to indicate where dog poo, rubbish or other types of pollutants are found in the Park.



*Students insert their markers in the ground near the pollutant on the way out on their trial walk and pick the marker flags up on their return.

Tongs & Plastic Bag: For potential rubbish collection along the way.



School Activities: Pre Excursion & Post Excursion

PRE EXCURSION

- Have you been to a wetland, (river, swamp) before? What would expect to see at a wetland?
- How do wetlands provide for animals, plants and people?
- How can natural areas be managed to provide for animals, plants and people?
- How do we impact on these places?

POST EXCURSION

- Draw your own mud map of where you travelled today.
- Complete a school litter pick-up. What different types of leaf litter did you find?
- Research the ways that the Nyoongar people have traditionally used the wetlands. e.g fishing traps (hunting), mia mias (shelter), plants (food supply).
- Research some specific problems in Regional Parks across metropolitan areas such as erosion/ feral animals/ fires. Discuss:
 - What is the issue?
 - Can it be managed or prevented?
 - Produce a brochure on this topic to inform others.
- Choose a wetland animal for research. Find out its:
 - Name
 - Features
 - Diet
 - Habitat
 - Threats
 - Conservation Status

Trail Explanation

There are 7 stops along this self-guided trail. These stops relate to the trail map on page 11. Please note this is a return trail (i.e. out and back- not a loop trail) that is completed at Stop 7.

STOP 1 - ABORIGINAL ARTWORK

The artwork is located directly outside the CREEC building. Students stand around the circular edge of the artwork for viewing and discussion.

- The artwork was illustrated by the highly acknowledged Nyoongar artist, the late Shane Pickett.
- Represents the Waugal spirit as it moves through the landscape, creating the river during the Dreaming Time.
- Nyoongar creation stories depict the connection between all living things.
- The artwork also features the native bulrush in the area.



Move onto the grassed area near the Weir bridge.

Stop 2 - KENT ST WEIR PARK

- Observe bridge/weir, birdlife, BBQ area, playground
- Q: *How is this space used?*
Q: *What is natural and what is man-made?*
- Q: *In what ways have people changed this space?*
- Discuss how the Canning River has changed since European settlement.
Q: *Which features would not have been here 200 years ago?* (e.g. bridge, car park, BBQ, lawn)
Q: *What would have been here?* (e.g. larger, wider river, more riverbank vegetation and wildlife)
- Discuss specific human behaviours that impact on wetlands. E.g. feeding ducks, fishing, walking the dog (dog poo) etc.



Move on to the Weir Bridge.

STOP 3 - KENT ST WEIR BRIDGE

- The Canning River has a weir built across it to stop the salt water travelling upstream, making it unsuitable for irrigating fruit and vegetable crops when people first came to live in this area. The weir now helps maintain flora and fauna upstream

that require fresh water for survival. Upstream of the weir the water is fresh. Downstream from the weir the water is brackish/saline.

*The weir is a low wall that is located underneath the bridge.

Continue across the bridge, taking note of the iconic paperbarks that line the wooden boardwalk. Quiet walkers may see the Purple Swamp Hen (on the right hand side) who likes to hide in this sheltered habitat whilst searching for aquatic macro-invertebrates (water bugs).



Stop at the end of the board walk at the large tree.

STOP 4 - BAT BOXES

- At the end of the boardwalk there is a large flooded gum on the right hand side. Bat boxes are located in this tree.
- Very small bats, known as microbats, live in the Canning River Regional Park. They are native to this area and typically nest in the hollows of mature trees. The installation of artificial bat boxes provides critical habitat for bats to roost and breed in when mature trees are absent. Microbats are nocturnal mammals that come out at dawn and dusk to feed on invertebrates, including mosquitoes. They are an important part of wetland ecosystems.



Continue along the sealed path.

- FLOODED GUM (*Eucalyptus rudis*)
- This wetland gum tree provides valuable hollows which can be used by native animals.
- This particular tree displays signage that outlines the presence of European honey bees that reside in the hollows of these large wetland gum trees. These feral bees occupy tree hollows to the exclusion of native bees and birds.



Continue along the sealed path. Stop at the Samphire Flats sign on the right hand side.

STOP 5 - SAMPHIRE FLATS

The Beaded Samphire (*Sarcocornia quinqueflora*) occurs in marshland areas that are intermittently flooded by tides and are specially adapted to saline environments. This edible plant can be used in cooking to add saltiness. It was also traditionally utilised as bush tucker food by the Nyoongar people. Several species of wading birds including egrets, ibis and spoonbills occupy the flats, using their beaks to sift through standing water in search of aquatic invertebrates to eat.



Directly across from the Samphire Flats sign there is a boardwalk on the left hand side of the sealed path. Follow the boardwalk to the riverside pergola.

STOP 6 - RIVERSIDE PERGOLA

Q: Can you see any turtles, frogs or birds?

- Long-necked Turtles (*Chelodina colliei*), also known as Oblong Turtles, are freshwater reptiles that live in the Canning River.
- They represent a top order predator in the aquatic food web, feeding on fish, molluscs and invertebrates. The mature female turtles come out of the water during the Summer months looking for suitable sandy soils to dig nests to lay their eggs.

Note the sedges that line the river banks.

- *Q: How do sedges help to keep the river healthy?* Sedges take up some nutrients and add oxygen back into the water. In addition, their roots systems assist with managing riverbank erosion.

Several frog species inhabit this area, including the motorbike frog and splendid tree frog.

Q: Can you hear any frog calls?

- Frogs are easier to identify by their calls as they are difficult to spot. All frog species have their own individual call. Motorbike frogs are on display in the CREEC Foyer.

Return back to the main path, then turn left to continue south along the sealed path.

The sealed path diverges to the left (at blue sign/park bench). Follow the sealed path to the left.

- **Stop in middle of footpath - from here you can view houses in the adjoining suburb of Ferndale.**

- Q: *What impacts do the houses have so close to the wetlands?*
- i.e. Loss of habitat through clearing, impacts of roads on animal movement, plant disturbance through human movement, fires, litter (cigarette butts, packaging makes its way into the river via drains). Dog poo also creates a problem when it gets washed into the river. Dog poo contains phosphates that helps promote algal growth.

Continue along sealed path until you arrive at a small bridge.

STOP 7 - LITORIA STREAM

(waterway under small bridge)

- This stream runs into the Canning River. This stream represents a micro-habitat, although it still functions as a drain from the urban catchment.
- This stream is part of an on-going re-vegetation project, which commenced in 1997 by local environmental group, the Canning River Regional Park Volunteers (CRRPV).
- The aim of this project has been to return this drainage system into a living ecosystem that supports local plant and animal species. Since this work was commenced, aquatic macro-invertebrates and birds have been recorded in and around the stream, including the Spotted Crake.



This is the final stop on this self-guided trail. Turn around and return to CREEC way that you came.

ON THE WAY BACK:

- Look for evidence of bush fire. Paperbark trees on the boardwalk prior to the Weir bridge are blackened, as well as parts of the boardwalk itself.
- Q: *What are some of the impacts of fire on the bush?* Loss of plant species, loss of habitat, loss of animals, large deposits of ash and plant debris can be deposited in the river (adds to nutrient load).
- Collect any marker flags you used along the trail on the way out.
- Do a quick litter pickup. Rubbish can be sorted into the correct bins at CREEC upon your return.
- If time permits, students can draw an aspect of the wetlands.

WELL DONE! You have completed the Canning River Self – Guided Trail. We hope you enjoyed your walk and will share some of the important reasons for protecting natural areas with your family and friends.

self guided river trail



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