

HI! I'M PERCY THE PELICAN!

WELCOME to your **Guilderton Nature Adventure!**

I hope you enjoy using this activity booklet and learning lots about our beautiful Moore River estuary, dunes and beaches. There are lots of my friends that you can meet while you are playing and exploring outdoors.

Always remember to

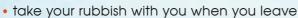












- never feed waterbirds, bush birds, fish, lizards or other wildlife
- keep a good distance from waterbirds and other wildlife
- safely dispose of any fishing line and hooks that you find

• call Wildlife Rescue if you ever see any native animals or birds that are hurt or in danger, phone WILDCARE 9474 9055

WE CAN ALL HELP TO KEED THE WATERWAY SAFE FOR PERCY AND HIS **BUDDIES**



Here's how We can Help!

Conservation projects, run by local volunteers and groups protect the estuary for the future. Please keep to the designated paths and walkways to reduce damage to native flora and fauna habitats. You will be helping to conserve the fragile but beautiful Moore River Estuary for future generations.

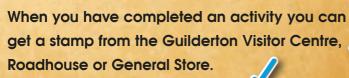
THIS ADVENTURE KIDS NATURE ACTIVITIES BOOKLET BELONGS TO

Name/s:	 	
A 010 /0-		

DISCOVER 20 NATURE ACTIVITIES FOR KIDS!

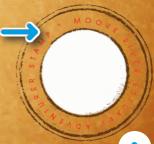
Follow the instructions for each activity and fill in the pages with what you find and learn along the way!

- The Guilderton Visitor Centre, Road House and General Store have brochures and pamphlets to help you complete your adventures.
- We have also suggested some free apps that you can use on a smartphone when out exploring.



If you complete at least 10 activities, you can become a Percy the Pelican's Coastcare Hero and receive a certificate from the Visitors Centre.





1

BEABIRD DETECTIVELY

Day / Date...... Time

Did you know 110 different types of birds have been spotted in the Moore River Estuary. How many can you find?

Put a tick in the circle when you see these birds!

Then write down how many you see!

Photos, pages 5 and 6 courtesy of Gary Tate. Local wildlife photographer.



Australia Pelican
How many?____



Black Swan How many?____



Silver Gull How many?



Pacific Black Duck How many?____



Ospreyl How many?____



Crested Tern
How many?____



Pied Cormorant
How many?____



Photos, pages 4, 5 and 6 courtesy of Gary Tate. Local wildlife photographer

Go for a walk, or find a quiet spot and sit quietly. Use your eyes to look and ears to listen for birds. They may walk, fly, wade or swim.





Check out this great app...

 Morcombe's Birds of Australia (lite)

Note: Binoculars are very handy for this adventure. And a bird identification book or Bird App is useful too.



Pacific Gull
How many?____



Caspian Tern
How many?___



Yellow Billed Spoonbill How many?____



Common Sandpiper How many?____



White Bellied Sea Eagle How many?____



Australasian Darter How many?____

What	other	birds	did y	ou s	see?	List	or	draw	them	below

Top Tip: Head over to Silver Creek to the bird observation areas where there is signage detailing further bird species you might see.





Guilderton has a large population of pelicans using the estuary to play, fish and rest.

.....

What do pelicans eat?.....

What are groups of pelicans called?.....

How long can they fly for?.....

(Hint: read the signs! All answers can be found on the Moore Estuary Lookout sign near the top carpark and at the top of the Cobber Murray staircase).

What other facts can you find out or do you know about Pelicans?



3

MOORE RIVER



Guilderton Estuary or rivermouth is where the Moore River meets the ocean.

Look at the Map...

- 2) How long is the Moore River?
- 3) How many hectares does the Moore River catchment drain?.....

(Hint: read the `Welcome to the Moore River Estuary' sign.)

Draw with a highlighter over the Moore River.



Moore
 Catchment
 Council



What can we do to look after the Moore River?

- How can we keep the plants and animals that live near and in the river healthy?
- So it is healthy for us to enjoy swimming and water activities?

We can...

- •Reduce fertiliser, herbicide, pesticide, insecticide and chemical use
- Limit farm animals access along river
- Get rid of weeds Don't pollute the river All of the above

•	Other	suggestions.	 	

Think spot: Think about how we use the river water – what we put in it and what we take out of it. If we look after the water up the river, the water in the estuary will be more healthy.



TAKE AN ESTUARY WANDER

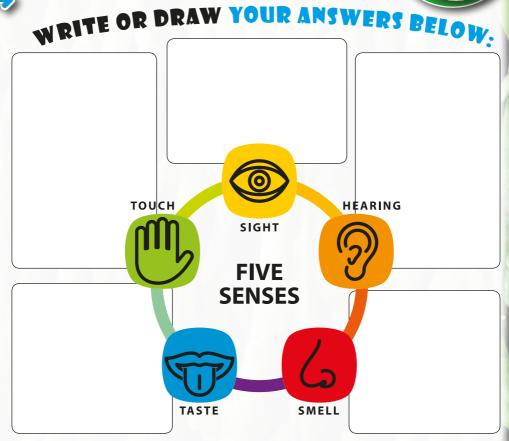
This adventure is all about your **SUPER SENSES!**

LISTEN with your ears, LOOK with your eyes,

SMELL with your nose, **TOUCH** with your hands

and **TASTE** with your tongue!









Have you heard of bush tucker?

Plants such as Quandong (Wogol) and Pigface (Bain) are known as bush tucker.

Note: Only eat bush tucker if accompanied by someone who knows what you can or cannot eat in case you eat something poisonous. Find out more on page 19.

TAKE SOME TEXTURE RUBBINGS

Place this page over different surfaces like bark, leaves and rocks. Use a pencil or crayon to rub over the surface and make a texture rubbings. You many also wish to feel different surfaces and objects you find. Are they rough or smooth?



YY

44

44

44

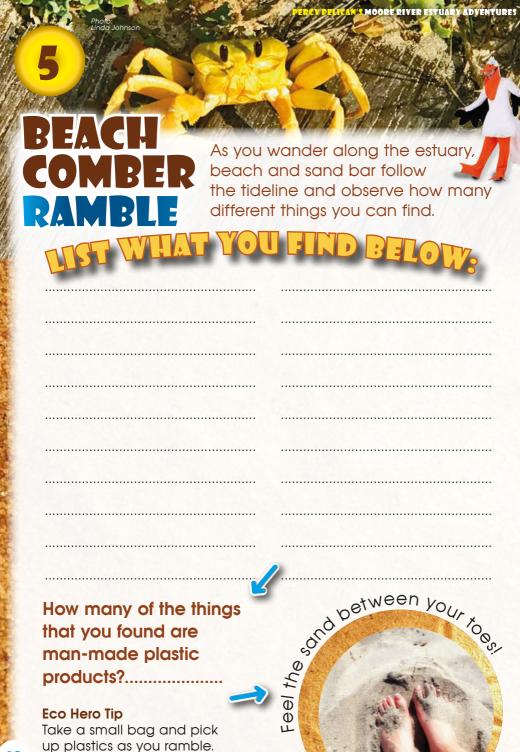
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Top Tip! Silver Creek is a great place to complete this activity.





MARINE DEBRIS!!

- ★ Did you know that every piece of plastic ever made is still here on planet Earth?
- ★ Many animals accidentally eat plastic rubbish thinking it is food, or they become tangled in plastic rubbish like fishing lines, netting and plastic bags.

Photo: Linda Johnson











The Beachcombers Field Guide is an easy to use identification app that describes some of the more common items you may find while beachcombing along the coast of Western Australia's temperate (cooler) waters. The App was developed by the Northern Agricultural Catchments Council Coastal team.

HAVEA ADVENTUR



Photo: Tailor - Perth Fishing Safaris



Guilderton has many great fishing spots in the river and in the ocean where you can catch different types of fish. ALWAYS have an adult with you when you play and explore near water.

Where did you go fishing?

What did you catch?

REMEMBER to take your measuring guide and return any undersize fish back to the water.



Photo: Yellowfin Whiting - Recfishwest



Photo: **Herring -**Perth Fishing Safaris

Photo: Black Bream



Photo: **Tailor**- Perth Fishing
Safaris





G SECRETS: DON'T TE

Fish you might catch in the river: Black bream

What bait to buy? Mealworms are great for catching Black Bream in the river. You can fish in the river from a river bank or jetty.

Fish you might catch in the ocean Herring, Yellowfin Whiting, Tailor and occasional Mulloway.

Note: Fishing in the ocean is more challenging. Like most beach fishing, sunrise and sun set are the best times to catch fish. Always take an adult fishing with you.



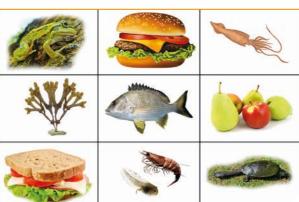


- Never feed waterbirds or other native animals.
- Safely dispose of all your rubbish, bait bags, food wrappers, plastic bags and drink containers.
- Use hooks that rust away easily.
 Avoid using stainless steel hooks.
- Take your fishing line and tackle with you when you leave. Don't leave any behind for animals to become entangled in.
- Call Wildlife Rescue if you see an native animal or bird that has been injured or looks unwell.
 Phone 9474 9055.

CIRCLE THE FOODS THAT PELICANS & WATERBIRDS LIKE TO EAT:

Hint: Pelicans mostly eat fish. But may eat tadpoles, turtles, frogs and crustaceans and occasionally even seagulls and ducklings – they eat up to 9kg of food per day!

Top Tip: Never feed native birds and animals bread and other human food as it can make them very sick and makes the water unhealthy to swim in too!

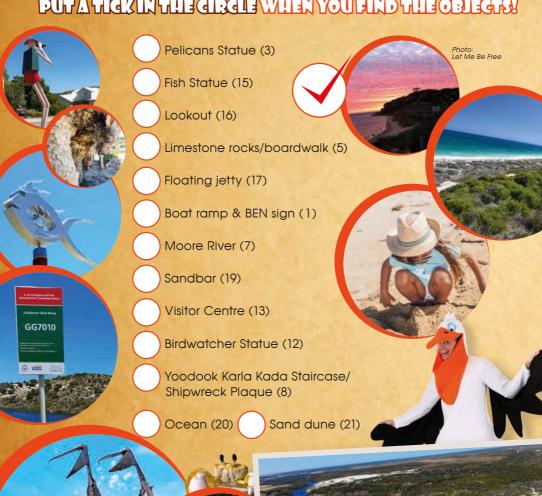


MAPPING ADVENTURE

The location for this mapping activity is the Moore River Estuary Foreshore. Use your navigation skills to find the estuary features located at the CIRCLES marked on the map.

Photo: Linda Johnson

PUT A TICK IN THE CIRCLE WHEN YOU FIND THE OBJECTS!









BOARDWALK LOOKOUT AR

Can you find the Cobber Murray Staircase?

10 THE 10P?
Gazebo Lookout: What can you see from the lookout?

What colour is the ocean

water?....

How many stairs

What colour is the river water?

Is the deep water in the river a different colour to the shallow water? Circle Yes / No Can you see the sand underneath? Circle Yes / No

Bonus Point: What gives the Estuary its colour?

(Hint: answer on Welcome to the Moore River estuary sign on the foreshore)













ABOUT THE SANDBAR

The sandbar opens many times each year, mostly in winter and spring due to heavy rains at Guilderton or up the catchment. In summer when the water flow reduces. the ocean waves build the sandbar up, damming the estuary and turning it into a long freshwater lake. The Moore River Estuary is fragile and breaking the sandbar is illegal because it endangers the plants along the river and the birds, fish, reptiles and insects and other animal life in and around the river.

Is the sandbar open or closed?

Circle the answer Open / Closed

Climb down the stairs from the Lookout to the sandbar - How many stairs down to the beach?

- Find the 'DANGER' sign about the sand bar? (Hint: There's one at the bottom of the stairs near the beach and one near the estuary down from the caravan park.)
- Look at the pictures on the sign. What 3 groups of people is the DANGER for?

1	
2	

Why	is	the	sandbo	ar	important?	

•	What birds can you see on, or near
	the sandbar?



Photos Pages 15 &16: Rachel Walmsley and Kylie Payne

= 1 1 1



SEAWEED IS VERY IMPORTANT

for the ocean as habitat (a home) and as food for many sea dwelling animals. It also helps slow climate change by absorbing (taking away) carbon emissions.

- Have a look along the beach.
- Can you see any seaweed? Circle the answer: Is it Rough or Smooth, as a three dyou can see. Large or Small, Slimy or Dry What colour is it?



FUN SEAWEED FACTS

 It estimated there are 9 times more seaweeds in the ocean than plants on the land

- · Seaweeds reduce pollution
- · Did vou know most of the world's oxygen comes from seaweed and algae? (70%)
- · Seaweeds don't have roots or flowers

What kinds of critters can you find in the seaweed?

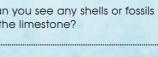
www.kvaroyarctic.com/22-seaweed-facts-to-know-in-2022



e of the limestone Rock. Look at the rocks along the boardwalk trail beneath the lookout. This limestone rock was formed on the bottom of the ocean.

Circle: Is it rough or smooth?

Can you see any shells or fossils in the limestone?



17

UED CULTURE, & FAUN

THE YUED PEOPLE ARE THE TRADITIONAL CUSTODIANS OF THE NOONGAR LAND AROUND GUILDERTON AND THE MOORE RIVER. THE RIVER AND ESTUARY IS VERY IMPORTANT TO THEIR CULTURAL AND SPIRITUAL BELIEFS.



LET'S LEARN A FEW YUED WORDS KAYA WANJOO

YUED BOODJA

IT MEANS "Hello - Welcome to Yued Land"

FIND THE TRADITIONAL CUSTODIANS OF THE LAND SIGN ON THE RIVER ESTUARY FORESHORE.

Circle 3 things you learned from the sign about what the Yued people did, and still do.



List 2 interesting things you have learned.

Possible answers:

- Living and caring for country for 40,000 years,
- Skilful at fishing, camping and hunting on the river.
- Animals hunted included kangaroos, emu, wallabies, birds, turtles, fish, crustaceans, goannas, snakes and possums. Animal eggs were also collected.

WHICH OF THESE ANIMALS HAVE YOU FOUND IN GUILDERTON?



6HOST CRAB - KARIL Photo: Linda Johnson



PACIFIC BLACK DUCK EGGS Photo: Kylie Payne







ECHIDNA - NYINGARN Photo: Kylie Payne



KANGAROO - YONGKA Photo: Gary Tate



SEA LION- MANYINA





DUGITE - DOOKATJ CAUTION! VENOMOUS

Photo: Michael Shanhun

11

FLORA & BUSH TUCKER

When walking around Guilderton's walk trails, estuary, dunes, bushland and parks, you will notice lots of different plants. Some of these plants (djet) are important to the Noongar Yued people as traditional bush tucker and medicine plants.



The Noongar Yued people hunted and gathered food by the seasons.

ABORIGINAL SEASONS

BIRAK - DECEMBER AND JANUARY
BUNURU - FEBRUARY AND MARCH
DJERAN - APRIL AND MAY
MAKURU - JUNE AND JULY

DJILBA - AUGUST AND SEPTEMBER Walms
KAMBARANG - OCTOBER AND NOVEMBER

The seasons told the Noongar Yued people what foods were plentiful and ready to pick and eat by the weather they were feeling eg. hot and dry, cold and raining etc..



- Tick which of these plants you can find...
- Can you say the Noongar name for this plant?
- Find out the how the Yued people used the plants.

Caution: Do not prepare bush tucker food without having been shown by Indigenous or experienced persons.
Some bush tucker if eaten in large quantities, or not prepared correctly can cause illness.

Coastal Pigface/Bain. The fruit and leaves are edible. Juice from the leaves can be used to treat stings, scalds and burns.

Banksia / Poolgarla

The flowers make a sweet drink, and the nectar can be sucked directly from the flower

One-sided Bottle Brush / Kwowdjard Flowers are sucked for their nectar • Flowers can also be made into a sweet drink when soaked in water.



Red-eyed Wattle / Wilyawa
Seeds can be ground into flour
and mixed with water and
cooked as bread • Green seed

pods release a sticky juice (when crushed), when mixed with water makes sunscreen, insect repellent and a treatment for eczema

Melaleuca / Moonah - The young leaves were crushed and inhaled to treat headaches and colds. • The bark was used to wrap food for cooking.

Quandong / Dumbari - Bright red fruits can be eaten raw or made into pies and jams • the kernel which looks like a brain can be cracked open to find the nut which can be roasted and eaten

Source: SERCUL https:// www.sercul.org.au/wpcontent/uploads/2022/02/ BushTuckerPlantFactSheets.pdf

Check out the Northern Agricultural Catchment Council Coastal Plant Pocket Guide App

- You can see which plants are native and which are weeds,
- flower colour, aboriginal usage,
- where the plant grows
- whether it's a tree shrub, groundcover, climber or grass.





www.nacc.com.au/its-finally-appening/ Scroll down to download app

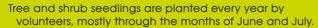
Top Tip: explore Guilderton's flora and fauna further

 Discover Dune Flora on the Djena Koorl-iny North Guilderton coastal walk trail with interpretative signage. Start at north groyne car park.



BE AN ECO HERO!

PARTICIPATE IN A TREE PLANTING EVENT



- Find out where the planting days are in your local area and get involved.
- Plant a native seedling or two in your own garden
 Find out which plants grow naturally in your area by
 visiting your local native plant nursery or enquire at your
 local landcare group.



- Tuart is a Eucalyptus tree which grows near the coast.
 It can grow to 40m tall in the south but the trees are a lot smaller around Guilderton. It has grey bark and light coloured wood.
- Noongar people considered old Tuart trees as family. They
 often camped beside large Tuart trees and valued Tuart
 woodlands as grounds for hunting and gathering.
 They used bark from the trees to make weapons and tools.

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Hug a tree today

Why are trees important?



- See if you can find some 'groves' of Tuart trees around town. (Groves are groups of trees.)

Look under the Tuart tree, can you find its gum nuts? Describe and draw them.

- Can you find a leaf under the tree? Crush it.

 What does it smell like?.....
- Feel the bark or do a bark rubbing of the tree. Do not remove bark as the bark is like its skin. This protects the tree from damage and disease.
- What does it feel like?
- Is it rough or smooth?.....
- Hug a tree today (!) (tick in the "Hug a Tree" circle)

Draw a Tuart tree and label the parts.

PARTS OF A TUART TREE: UNSCRAMBLE THE WORDS

- esvael
- wrfloe
- mug tun __ __ __ __
- edes
- nrhbca
- kuntr
- dusb
- rutif

pranch, trunk, buds, fruit
Answers: leaves, flower, gum nut, seed,

Did you know? There are 3 photo monitoring sites in Guilderton.

Volunteers take regular photos at these sites. They are valuable for comparing and recording changes such as beach erosion and vegetation regrowth or damage. **Idea:** You may wish to do you own photo monitoring and take a photo from the same spot every time you visit Guilderton and compare the changes in the photo









NORTHERN DUNE AND GROYNE AREA



Healthy Dunes

What is a sand dune?:

To stop the wind blowing the sand, the dunes have some native plants growing on them.

Can you find and name the plants below? Play Dune Plant Bingo. Tick the plants that you can find on the dunes. You may need to go to a different place to find some of the plants.

Can you say each plant's Noongar name or its scientific name?

- 1. Cockies tongues
 Yackal Djarr Templetonia retusa
- 2. Beach Spinifex Spinifex longifolius
- 3.Native wisteria
 Koorla Hardenbergia
 comptoniana
- 4. Thick leafed fan flower Scaevola crassifolia



Tick some things that may

- be damaging the dunes?

 4WD's Weeds People Feral animals
- Other.....

 How can we keep the dunes healthy?
- Plant native species Keep to tracks
- Other.....

Photos: Rachel Walmsley & Kylie Payne

The Guilderton Lighthouse

was built in 1983 at Wreck Point. It was the last lighthouse to be built in WA and is the only major navigation light between Fremantle and Jurien Bay.

(**Please note**: The lighthouse is fully fenced and can only be viewed from a distance.)

- What colour and type of bricks is it made from?
- How tall is it?

Have a guess or find out in the 'Shipwrecks off our Coast' brochure available from the Visitor Centre.

(ACORN)

Near the lighthouse, on the northern dunes, you can see a sea container.

This houses an Australian Coastal Ocean Radar Network (ACORN) station which is continuously mapping sea-surface currents

What colour is the ACORN station?







14 SIGNS WARRINGS



BEN signs - You might see a few BEN signs around Guilderton.

`BEN' stands for Beach Emergency Number.

Find a BEN sign. What is the location name on the sign?

What is it for?....

Look for a sign at some of the Public Rescue

Devices. Name or draw the symbol of three of the Warnings on the sign.



3._____

What colour are the Warning symbols.....

Draw the symbol for three things you are not allowed to do at the Rivermouth.

1	 	
2	 	
3		

Hint: look at the Regulations on the sign beneath the Public Rescue Device

What is the speed limit for boats and motorised watercraft along the Moore River?











SHIPWRECKS!

Guilderton was named after 40 Dutch coins were found in the dunes which were thought to be Guilders from the 'Gilt Dragon', a ship wrecked there in 1656.

Walk
along the
boardwalk
from the
lookout.
Can you
find the
shipwreck
plague?

Hint: look for a silver plaque – small children may need to be raised up to see the sign.



Draw your favourite shipwreck!

- What was the ships name?.....
- · What year was it wrecked?.....

WALK THE WALK TRAILS...

There are a few walk trails around town. Most are not signposted. Take an adult with you, take care and carry a water bottle with you.

Foreshore Trail • Djena Koorl-iny Trail • Lighthouse Trail • Silver Creek to Riverside Trail

There are also 2 Walking Quizzes -

1. Quiz of the Rivermouth 2. Quiz of the Townsite.

Ask the Visitors Centre for a Brochure!







Did you know? There are a number Conservation projects run by local volunteers and groups protecting the estuary for the future. Please keep to the designated paths and walkways to reduce damage to native flora and fauna habitats. You will be helping to conserve the fragile and beautiful Moore estuary for the future.

16 SILVER GREEK



Silver Creek is a small creek that runs off the Moore River Estuary.

It is a 5 minute drive from the Estuary Foreshore to the Silver Creek Reserve, which is just off Moore River Drive on Stephens Crescent.

Silver Creek is a quiet serene area - a great place to launch your canoe and go bird watching. Explore the Silver Creek Reserve without disturbing the birds and you can watch what they are doing.

The best time to see birds is in the early morning or just before sunset. Keep as quiet as possible and walk or paddle very slowly.

Tick which birds you can find at Silver Creek.

Bird Photos: Gary Tate



Great Egret
How many?____



Nankeen Night Heron How many?



Little Black Cormorant How many?____



White Faced heron How many?____



White Necked heron How many?____



Australian Hobby
How many?____



Top Tip: Take a walk from Silver Creek to the Riverside Trail

Draw 2 birds that you see.

What are the birds doing?
Tick what you
see the birds doing.

O Wading
O In a Tree

O Feeding
O Sleeping

O Flying

O Swimming



Moore River

Some fantastic activities you can do while camping are:

- Go for a hike
- Go fishing
- Watch the sun set
- Toast marshmallows
- LOOK AT THE STARS!
- Sing songs and tell stories around the camp fire
- Go for a swim (in daylight)
- Watch the sun rise

The Lookout is just the spot for Sunsets and Star Gazing.

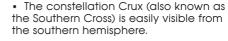




www.scitech.org.au/the-sky-tonight for current information of what you can see in the sky from month to month in Western Australia. There is also a fantastic app you can use on your phone or tablet called Sky View Free. It brings stargazing to everyone by simply pointing your phone or tablet at the sky to identify stars, constellations, satellites and more....



Can you find the Southern Cross in the night sky?



- It is continually visible above the horizon and can be seen throughout the year.
- The Cross rotates in the sky during a night so that it can be found at different seasons.



Barn Owl

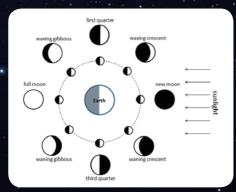
What sounds can you hear?

Do you hear crickets, bats, frogs or owls?



What did you enjoy the most about camping?





Top Tip! Visit the Gravity Discovery Centre and Observatory to find out more about the Night sky.





Use sharp ears and quiet voices
While you listen for creeping noises.
A keen eye is all you need
To spot the creatures among the reeds.
Listen carefully and you may hear
A frog or cricket singing near.









Hold your torch up beside your face and look in the direction of the light. Look for glowing eyes in the dark. You might see kangaroos, frogs, bats, scorpions, mice, cats, foxes, spiders, owls or geckos.

Many animals are nocturnal and come out at night to feed.
Always remember to stay close to an adult at all times and to wear closed-in shoes and mosquito repellent.

You can find small spiders on the ground as their tiny eyes shine in the torch light. Always remember to look and not touch.



The Australian Museum has a free App that you can use to identify frogs that you may spot with your torch. https://www.frogid.net.au/







Shine your torch light into the night sky to spot bats out hunting moths and bugs for their dinner

Where did you go for a night stalk?

What creatures did you find?



Draw your favourite creature of the night.

Tawny Frogmouth

Photo: Rachel Walmsley







19 GEOCACHING PIRATE TREASURE HUNT

THERE ARE THOUSANDS OF GEOCACHE TREASURES HIDDEN ALL OVER THE WORLD? GUILDERTON GEOCACHE TREASURES ARE JUST WAITING TO BE FOUND!

Geocaching is a worldwide treasure hunt that combines technology and outdoor adventure.

You can use a GPS-enabled device (such as a smartphone or iPad) to seek containers called "geocaches" anywhere in the world.

A typical cache contains a log-book and pencil for you to write your name and the date you found it.

To get started you can go to www.geocaching.com and register for a FREE account.





USE A GPS ENABLED IPAD OR SMART

GEOCACHE LOG

Find at least 1 geocache to get your stamp.

When and Where?	What did you find?







WHAT ELSE CAN I DO IN GUILDERTON?



Places to visit around Guilderton

- Caladenia Mini Golf and Le Shed Cafe
- Caraban Canoes
- Gravity Discovery Centre and Observatory
- Guilderton Country Club
- Local Goat Farm
- Moore River Cruises and kids sand boarding tours
- Check before your visit to see if they are open.
- More information at https://guildertonwa.com.au/



PERCY THE PELICAN SAYS

I hope you've enjoyed the Moore River Estuary ADVENTURE KIDS Nature Activities!

Don't forget to get a stamp from the Visitor Centre, Roadhouse or General Store for each activity you complete. If you finish 10 or more Activities you will become a Percy the Pelican's Coastcare Hero and receive a certificate from the Visitor Centre.

What did you think of the Nature Activities? Which activity did you like best? To help us make improvements please email moorecc@bigpond.com with your comments and suggestions or via Facebook https://www.facebook.com/moore.catchmentcouncil/



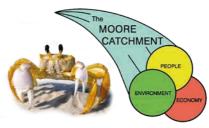


THIS MOORE CATCHMENT COUNCIL PROJECT WAS SUPPORTED BY COMMUNITY COASTCARE VOLUNTEERS

Download a digital copy here

from Moore Catchment Council under 'News and Resources'







Thanks to MEHG for giving us this idea for the booklet





Funding from





And support from the Guilderton Community







Photographs by: Gary Tate, Let Me Be Free, Linda Johnson, Kylie Payne, Phil Lewis, Rachel Walmsley, Perth Fishing Safari's, Recfishwest

