

Respecting our

NATURAL ENVIRONMENT



Fraser Coast
REGIONAL COUNCIL

Discover • Connect • Conserve

.....

THREATENED SPECIES EDUCATION BOOKLET

Easy

APPROPRIATE FOR AROUND AGED 9



EASY APROPRIATE FOR AROUND AGED 9

EDUCATION BOOKLET

Parent, Guardian and Teacher Notes

Hi there!

Hi there! We hope that your child/student enjoys completing these activities before and after 'The Sign Search' for information about these amazing threatened species on the beautiful Fraser Coast. Our goal is to empower your child/student with knowledge of their local natural environment and also, the 'know-how' to be able to help protect it.

This Fraser Coast Regional Council education booklet was developed to align with the information provided on the signage installed in Point Vernon.

This signage has been installed by the Fraser Coast Regional Council to raise awareness about the environmental values of this region and to provide nature-based learning experiences in the following three key areas:

- **Marine Turtles**
- **Shorebirds**
- **Marine Values** (Seagrass Meadows, Coral Reefs, Rocky Shores and Mangroves)

Activities are divided into the following:

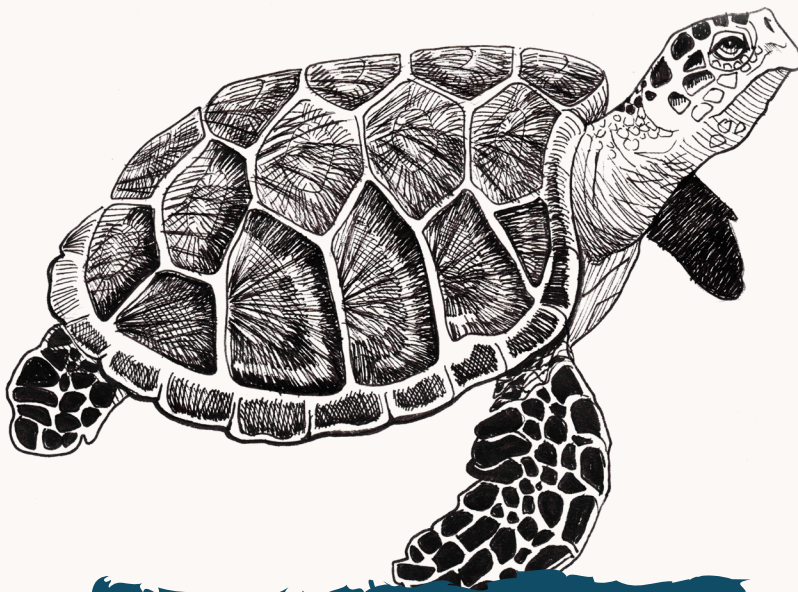
- Before your '**Sign Search**'
- '**The Sign Search!**'
- After your '**Sign Search**'

'The Sign Search!' activities have been designed to be completed at the sign location specified in the activity explanation.

MARINE TURTLES

EASY

Turtle of the Sea



Turtle of the sea
Wise and patient is she
Swimming with the current
Travelling the seas
Experiencing the world

A lifetime spent growing wise
Following the changing tides
Navigating with grace and
beauty
Popping up for a quick breath
Disappearing in the blink of
an eye

An outer shell protects
That which is within
She is strong, wise, beautiful,
patient and graceful
She is a sea turtle
Turtle of the sea

ACTIVITIES IN THIS BOOKLET

- ACTIVITY 1:** 'Before Sign Search'
Start a 'Marine Turtle KWL Chart'
and do a 'Marine Turtle Drawing'
- ACTIVITY 2:** 'Sign Search'
Find the 'Turtley Awesome Turtles'
sign. Have a read and choose your
favourite of the four turtle species
described in the sign. Create a sand
sculpture of a marine turtle at the
beach
- ACTIVITY 3:** 'After Sign Search'
Complete the 'Marine Turtle KWL
Chart, complete 'Marine Turtle
Life Cycles' and do the 'Turtley
Awesome Word Search'.
Create your own paper turtle craft!



ACTIVITY 1: 'BEFORE SIGN SEARCH'

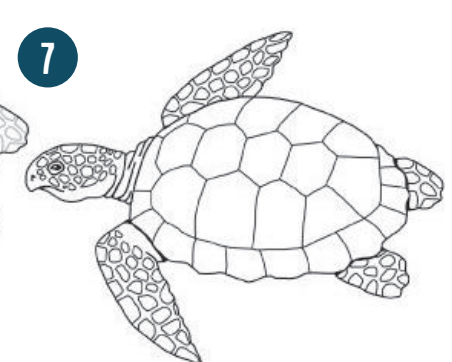
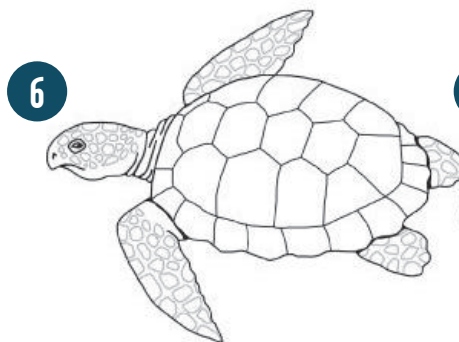
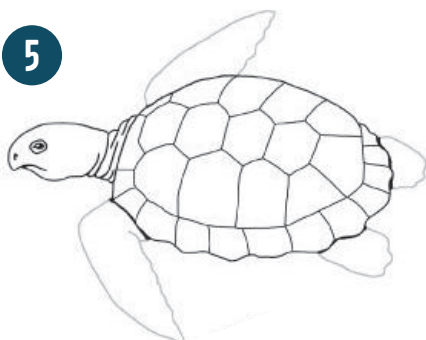
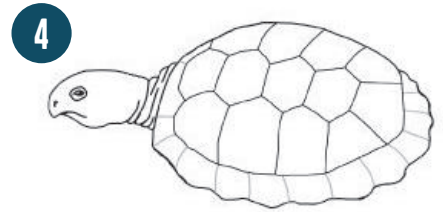
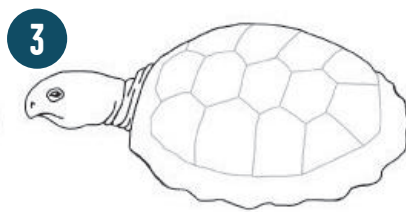
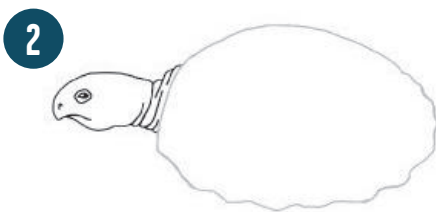
Marine Turtle KWL Chart

In the first column, write what you already know about marine turtles. In the second column, write what you want to know about marine turtles. After you have completed your research and read the signs, write what you learned about marine turtles in the third column.

<p>K</p>	<p>What I <u>Know</u></p>	
<p>W</p>	<p>What I <u>Want</u> to know</p>	
<p>L</p>	<p>What I <u>Learned</u></p>	

ACTIVITY 1: 'BEFORE SIGN SEARCH' Marine Turtle Drawing!

Draw your own marine turtle in the space below following the step-by-step guide.



ACTIVITY 2: 'SIGN SEARCH' 'Turtley Awesome Turtles' Excursion

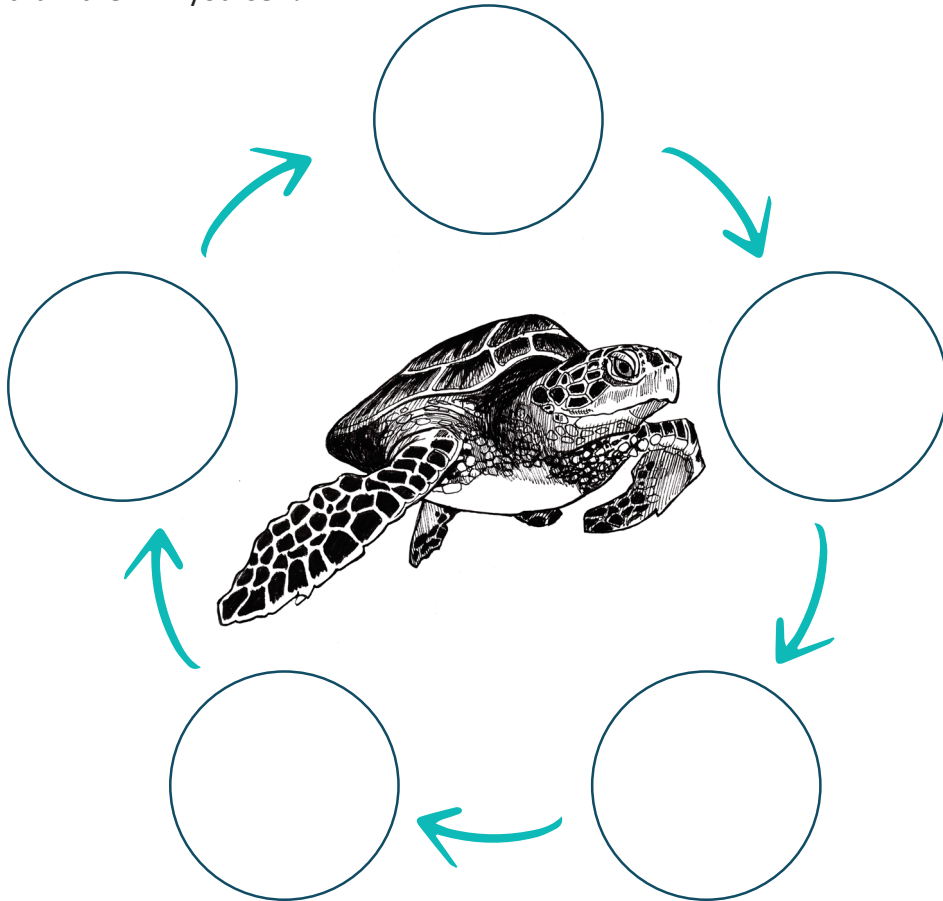
Find the '*Turtley Awesome Turtles*' sign. Have a read and choose your favourite of the four turtle species described in the sign. Create a turtle sand sculpture of a marine turtle at the beach - you could even add a nest and eggs!



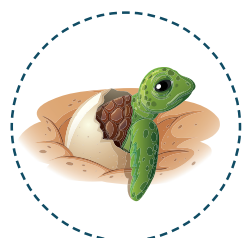
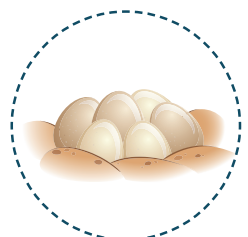
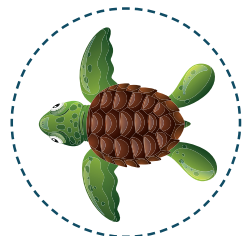
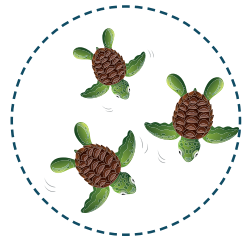
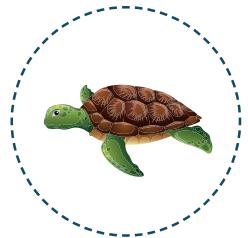
ACTIVITY 3: 'AFTER SIGN SEARCH'

Marine Turtle Life Cycles

Choose from the stages, cut them out, draw a line to the correct circle or draw them in yourself!



Stages



DID YOU KNOW?

During the nesting season, female turtles will come ashore to dig a hole in the sand and lay eggs. A total number of 80 – 120 eggs are often laid. The females return back to the sea after covering their nests with sand to ensure that they are safe from being preyed upon.

Once fully developed, the baby sea turtles, also known as hatchlings, break through their eggshells (which are actually soft!) and slowly dig their way upward out of the nest. The hatchlings make their way to the sea at night to avoid being detected by predators – from the sky and below water. Most hatchlings do not survive to become adults due to the high number of obstacles they face.

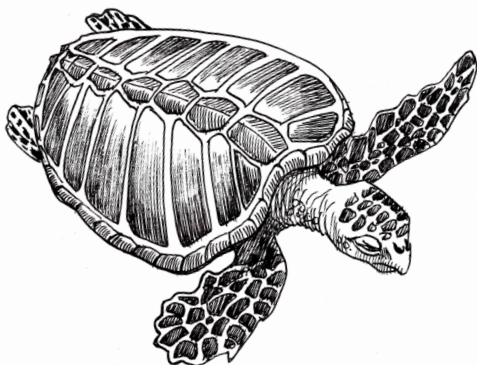
Mating occurs between adult males and females. Within a few weeks, females return to nest at the same beach where they emerged as hatchlings. Males will migrate back to the areas with food to replenish their energy.

ACTIVITY 3: 'AFTER SIGN SEARCH'

Turtley Awesome Word Search

Find the marine turtle words below hidden in the box. Words can run forward, backward, diagonal, up and down. Good luck!

L	U	Y	Q	P	J	V	A	U	Q	V	P	S	V	A	V	E	Y	Y	O
L	O	T	P	Q	B	X	O	X	J	W	G	B	R	W	D	H	R	S	T
E	H	G	G	H	A	T	C	H	L	I	N	G	K	E	D	P	K	G	X
A	J	W	G	D	H	T	M	N	A	X	S	A	A	F	P	Q	E	E	B
T	U	P	S	E	F	G	Q	N	V	D	A	N	E	U	G	P	I	S	M
H	J	I	L	P	R	D	R	S	H	U	E	W	B	Y	G	J	I	L	D
E	G	G	S	U	B	H	W	E	Q	Q	V	P	K	I	T	B	U	L	M
R	G	K	O	X	T	X	E	J	E	A	E	Z	A	E	R	D	O	N	F
B	S	Y	O	G	D	M	U	A	K	N	F	K	M	Z	D	X	L	H	X
A	W	O	Y	K	J	P	K	C	D	P	G	Y	I	Z	H	T	L	T	B
C	G	O	A	I	V	V	A	A	S	L	C	J	A	M	U	Q	I	K	Z
K	O	L	Z	V	W	B	L	R	A	A	S	B	M	R	T	V	B	P	Y
U	R	U	M	F	T	R	J	W	B	S	Y	S	T	S	C	J	S	Y	U
E	C	A	P	A	R	A	C	K	R	T	R	L	E	A	S	C	K	A	C
I	R	Z	L	V	Q	J	Y	D	J	R	E	N	O	T	R	J	W	S	A
B	X	F	D	X	D	A	W	T	N	O	D	Y	I	Q	U	J	A	F	H
I	L	S	M	L	J	I	M	F	U	N	E	Z	P	A	D	C	H	B	F
R	U	O	T	Z	X	D	T	P	G	Z	M	I	P	G	L	A	S	Q	F
N	E	Q	O	I	V	T	U	E	L	Z	R	J	A	I	O	F	J	K	W
O	L	I	V	E	R	I	D	L	E	Y	Z	O	S	E	N	Y	T	O	L



- | | | |
|----------|-------------|--------------|
| Beak | Green | Nest |
| Carapace | Hatchling | Olive Ridley |
| Eggs | Hawksbill | Plastron |
| Flatback | Leatherback | Scutes |
| Flippers | Loggerhead | Turtle |

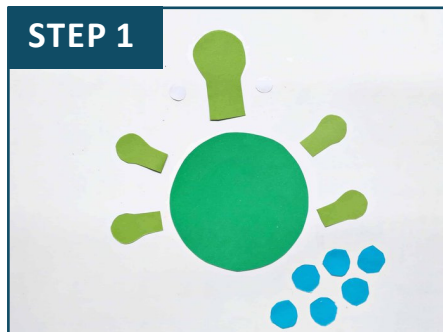
ACTIVITY 3: 'AFTER SIGN SEARCH'

Create your own paper turtle craft!

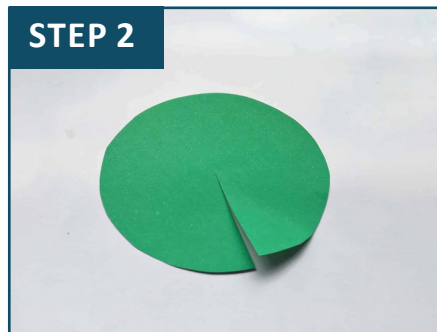
SUPPLIES:

- Colorful Craft Papers
- Scissors
- Glue
- Ruler
- Pencil
- Markers

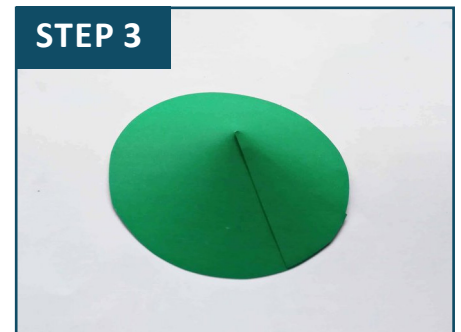
HOW TO MAKE A PAPER TURTLE KIDS CRAFT



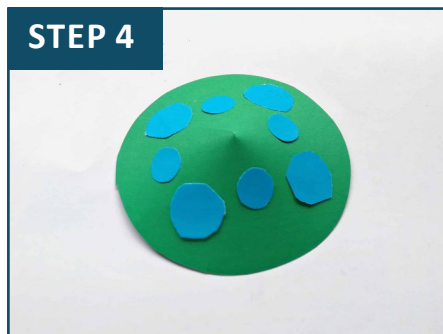
STEP 1
Cut out a circular piece of green paper for the turtles body/shell.



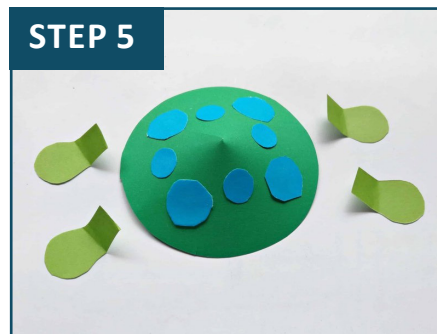
STEP 2
Make a cut along the radius of the circle.



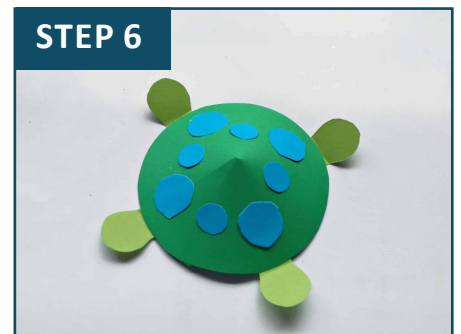
STEP 3
Overlay the edges of the paper and glue or tape it down.



STEP 4
Take the circular tiny pieces to decorate the turtles shell. Glue them on the turtles shell.



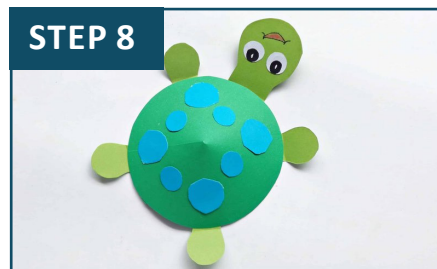
STEP 5
Take the feet of the turtle and bend them slightly in half.



STEP 6
Glue the four legs on four sides of the circle.



STEP 7
Take the head for the turtle and glue tiny circular pieces for the eyes. Then use a black marker pen to draw the eyes and use a pink pen to draw the face.



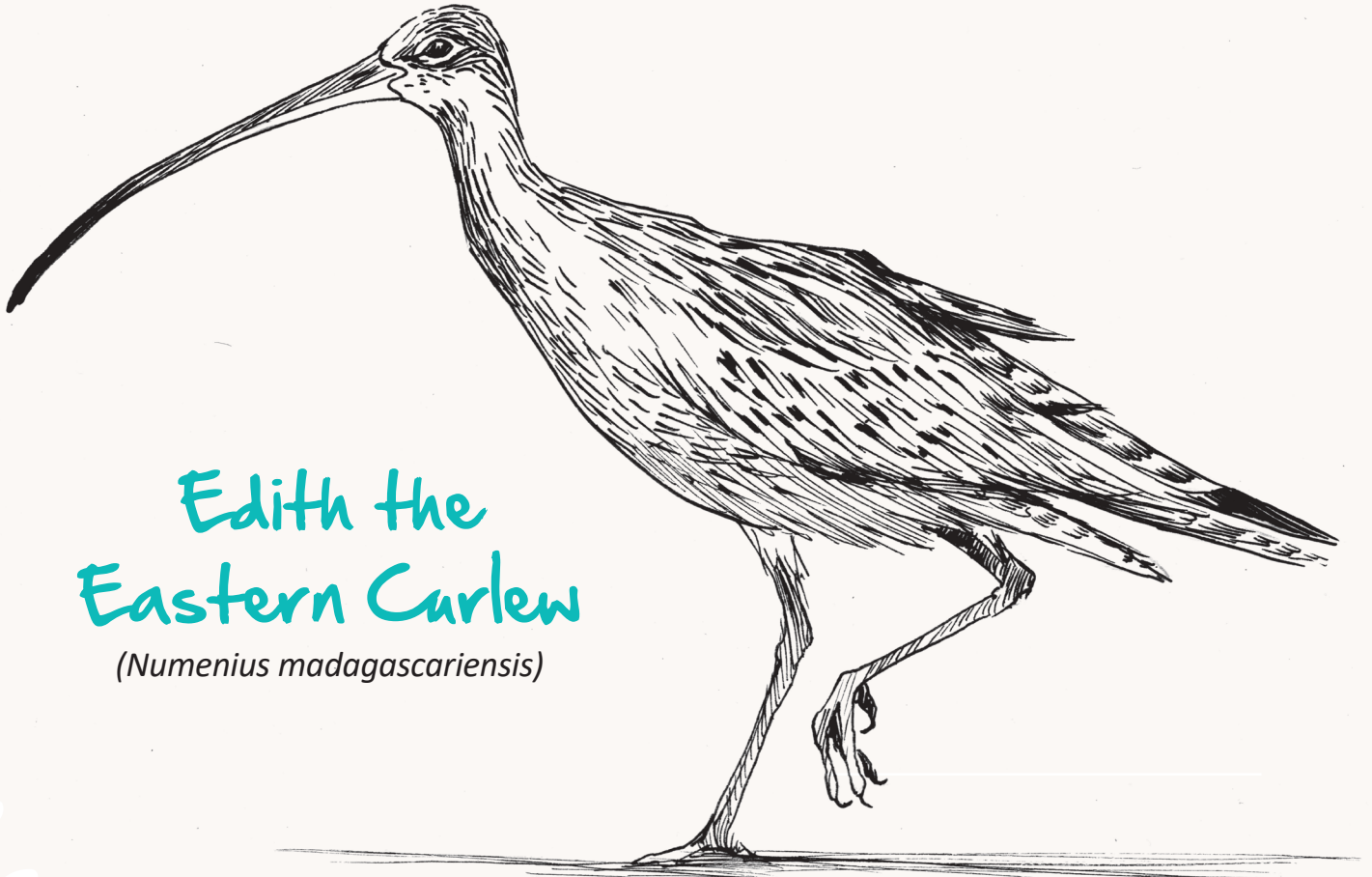
STEP 8
Then glue the head of the turtle to the shell. And there you go...



Source: www.theinspirationedit.com/paper-turtle-craft

SHOREBIRDS

EASY



Edith the Eastern Curlew

(Numenius madagascariensis)

ACTIVITIES IN THIS BOOKLET

ACTIVITY 1: 'Before Sign Search'
Shorebird Colouring Activity

ACTIVITY 2: 'Sign Search'
Find the 'Shorebirds - between land and sea' and 'Meet the locals' signs, do the 'Shorebird Treasure Hunt and Nest Design' activities

ACTIVITY 3: 'After Sign Search'
Do the 'Shorebirds Word Find'

Edith is a beauty queen, she's sleek, she's smooth, she's stunning,

Not a feather out of place, the longest beak and a gorgeous face,

Feathers, perfectly patterned brown with cream white flecks,

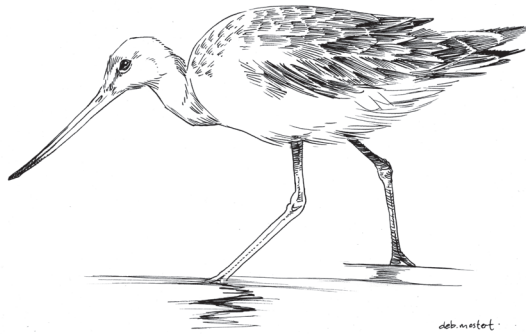
Edith towers above the rest, and always looks her very best.

ACTIVITY 1: 'BEFORE SIGN SEARCH'

Shorebird Colouring Activity

CHANGING COLOURS

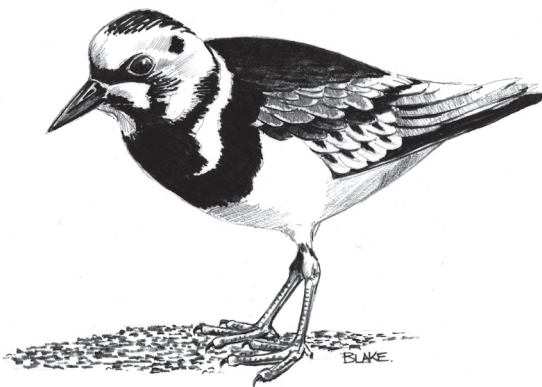
Before flying to the Arctic, shorebirds change their feathers to colours that blend in perfectly with the Arctic tundra where they nest. This is called their breeding plumage. While they are in Australia, they are in their non-breeding plumage which is often grey or brown coloured to camouflage with our wetlands and beaches. Research the below shorebirds plumage and colour them in.



Bar-tailed Godwit
(*Limosa lapponica*)



Red Necked Stint
(*Calidris ruficollis*)



Ruddy Turnstone
(*Arenaria interpres*)



Lesser Sand Plover
(*Charadrius mongolus*)

ACTIVITY 2: 'SIGN SEARCH'

Shorebird Treasure Hunt and Nest Design

Find the *'Shorebirds – between land and sea'* and the *'Meet the Locals'* signs and read about the birdlife in the area, find a feather, spot a nest, spot one of the local Ospreys, count the seagulls you see, spot a shorebird that isn't a seagull.

Build your own bird nest from natural materials you find (weave shea-oak needles, leaves and twigs - not easy without a beak is it!) take a photo and leave the nest at the beach for a bird to find.



The **Osprey** (*Pandion haliaetus*) builds a nest with a commanding view such as a high coastal headland. The nest is reused, sometimes for decades, with new material added each year. An older nest may grow to be 2 metres wide and 2 metres tall and be made of sticks, bark, seaweed, driftwood, bones and other shoreline debris. A newer nest may be a metres more simple sparse collection of sticks.



The **Pied Cormorant** (*Phalacrocorax varius*) breeds in colonies on coastal islands, flooded tree plains and mangroves. The large nest is constructed from seaweed, twigs or sticks cemented together with droppings, and is placed in a tree or on the ground.



ACTIVITY 3: 'AFTER SIGN SEARCH'

Shorebirds word find

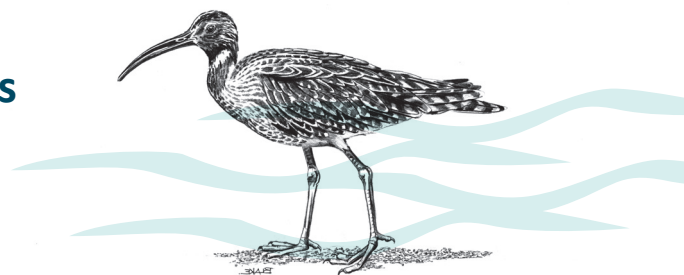
Find the shorebird words hidden in the box. Words can run forward, backward, diagonal, up and down. Good luck!

S	J	B	J	D	Q	B	H	I	T	E	Z	O	J	S
B	Q	C	C	Q	I	J	E	C	Y	Y	T	S	G	H
Y	S	M	R	U	L	S	N	G	T	Q	T	F	Y	O
B	E	F	B	L	Y	A	T	L	D	A	K	N	D	R
B	A	G	L	Z	M	Z	V	A	T	I	H	N	D	E
S	D	N	A	L	T	E	W	I	N	F	G	D	J	B
S	P	E	C	I	E	S	B	T	V	C	K	Q	A	I
Q	J	B	N	B	W	A	R	H	E	R	E	O	G	R
V	M	H	O	Z	H	E	Z	G	F	S	U	S	J	D
O	V	K	U	F	S	M	X	I	Q	F	N	S	O	F
M	T	M	E	I	V	G	O	E	R	F	R	R	T	D
W	S	D	D	J	W	H	E	W	V	X	A	M	Z	E
M	B	E	Y	R	O	T	A	R	G	I	M	R	Z	M
H	N	H	O	N	T	V	P	H	N	F	P	L	X	N
T	T	X	H	Y	G	U	L	T	D	A	C	T	Y	C

Distances
Habitats
Migratory
Resident

Sea
Shorebird
Species
Survival

Weight
Wetlands



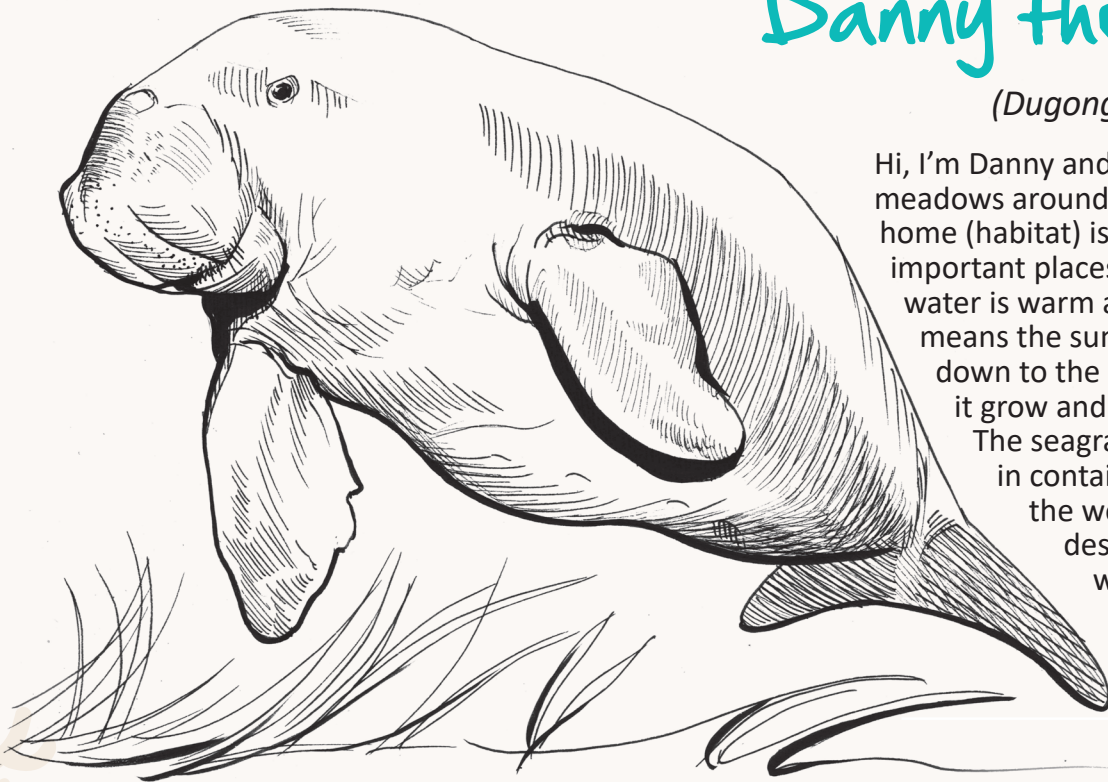
MARINE VALUES

EASY

CORAL, SEAGRASS MEADOWS, ROCKY SHORE AND MANGROVES

Danny the Dugong

(*Dugong dugon*)



Hi, I'm Danny and I live in the seagrass meadows around Australia. My home (habitat) is one of the most important places in the world. The water is warm and shallow which means the sunlight can reach down to the seagrass and help it grow and photosynthesise. The seagrass meadows I live in contain around 18% of the world's carbon, and if destroyed, that carbon would contribute to climate change. So many different animals live in these seagrass meadows... it's really beautiful!

Everyday I swim with

sea turtles and seahorses that have their babies here and gosh they are adorable! Have you ever seen a baby seahorse? They are something else! There are heaps of baby fishes too, the seagrass meadows are a nursery (daycare) for about 20% of the world's fishes. That means all the baby fish need this place so they can grow big enough before they go out to live at sea. You can learn more about my home in this video: youtu.be/zY2WCPwkmog

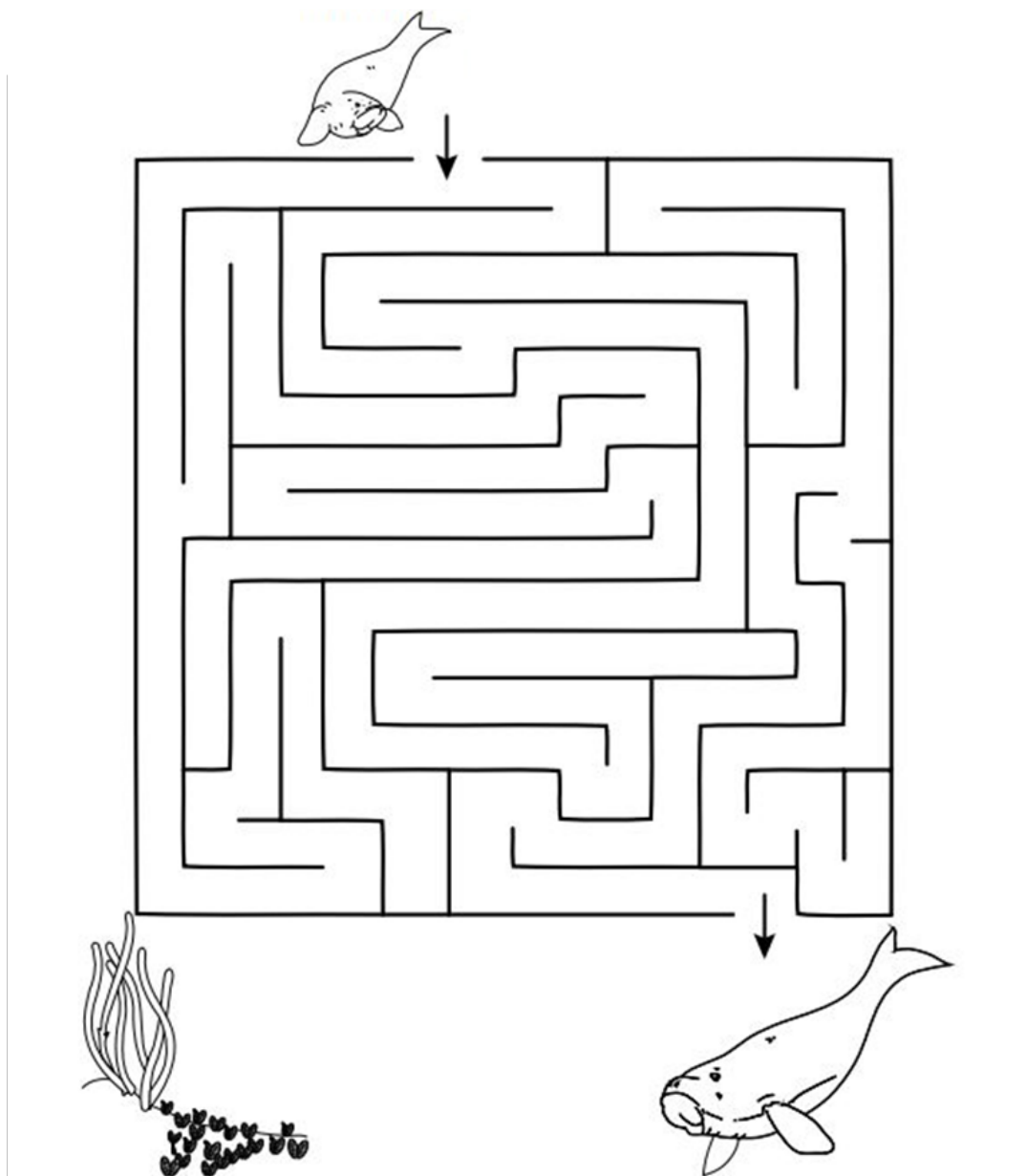
ACTIVITIES IN THIS BOOKLET

- ACTIVITY 1:** 'Before Sign Search' (SEAGRASS MEADOWS) Help Danny the Dugong find his way through the seagrass home to his Mum!
- ACTIVITY 2:** 'Sign Search' (ROCKY SHORES) Find as many creatures as you can from the food web diagram - take pictures.
- ACTIVITY 3:** 'After Sign Search' (CORAL REEF) Print the pictures, colour them and cut out the creatures in the pictures to make your own coral reef

Photosynthesis is the process used by plants, algae and certain bacteria to turn sunlight, carbon dioxide (CO₂) and water into food (sugars) and oxygen.

ACTIVITY 1: 'BEFORE SIGN SEARCH'

Danny the Dugong is stuck! Help this calf find his way to his mother in the maze.



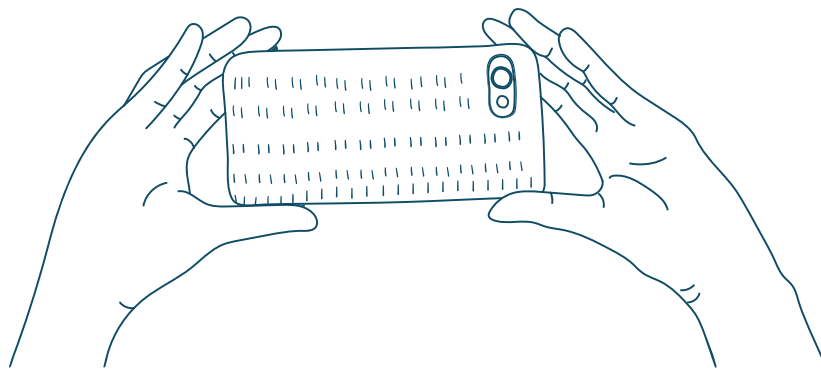
The dugong is a marine mammal which eats seagrass. Dugong eat the parts of seagrass plants which are buried in the mud or sand. These parts are called rhizomes and roots.

ACTIVITY 2: 'SIGN SEARCH'

Rocky Shore Hunt

Find the '**Rocky Shores**' sign and read all about rocky shores.

Have a look at the rocky shore and find as many creatures as you can from the pictures on the sign (sea stars, sea cucumbers, sea urchins, fish, crabs, limpets). Take photos and create a digital 'scrap book' with descriptive captions using Powerpoint or Prezi (or any other program of your choice).



Coral Reefs

Find the '**Coral Reef**' sign and read all about our coral reefs. See next page for coral reef activity.

ACTIVITY 3: 'AFTER SIGN SEARCH'

Create your own Coral Reef Artwork or Diorama!

Colour in and cut out the *Coral Reef Drawings*. Alternatively, you could design and draw or paint your own corals and animals. Use a range of craft materials when decorating your coral reef images, including incorporating different textures and patterns in your designs!

Check out the example for some inspiration!

