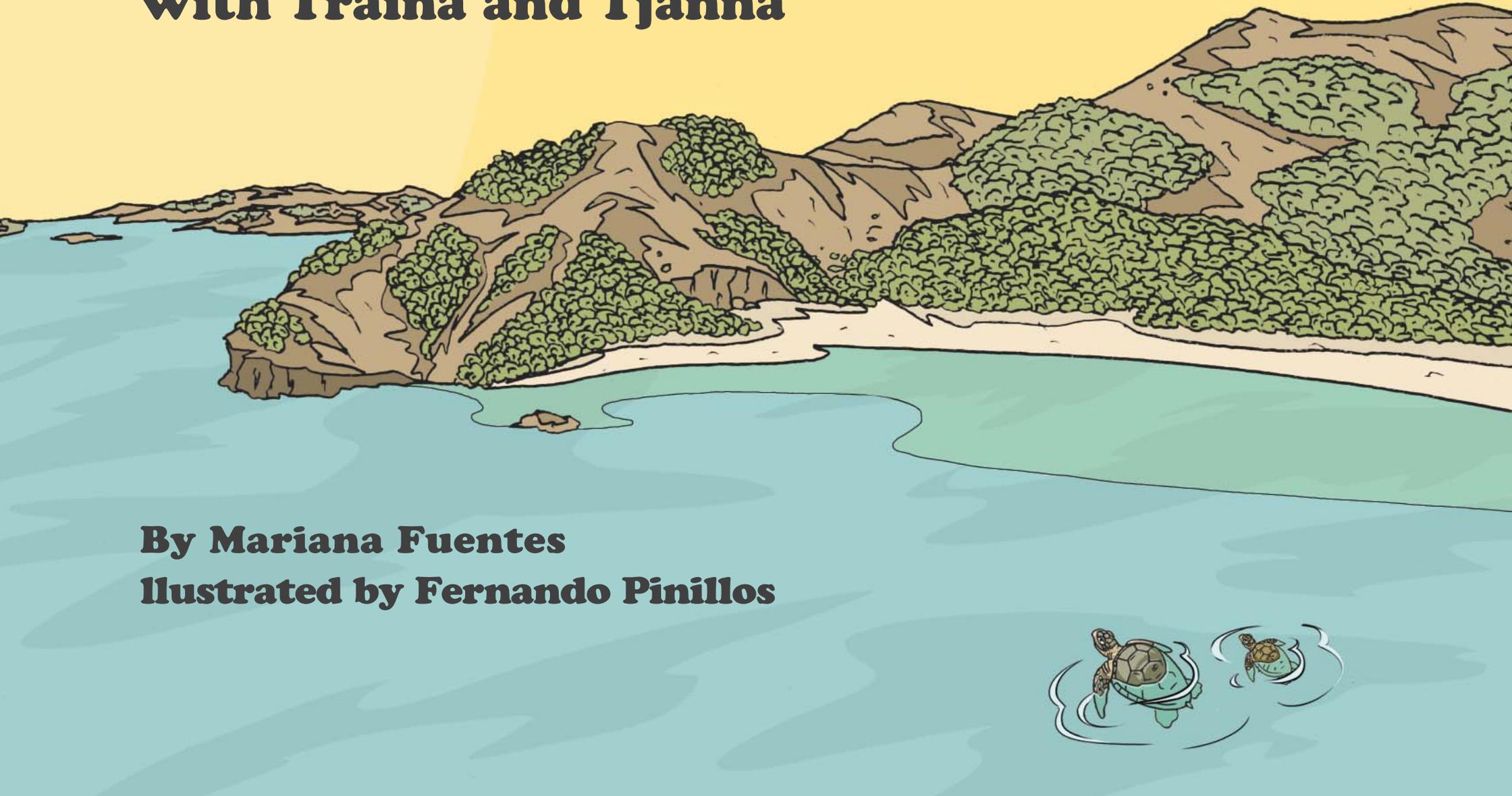


# **A sea turtle lesson with Traina and Tjanna**

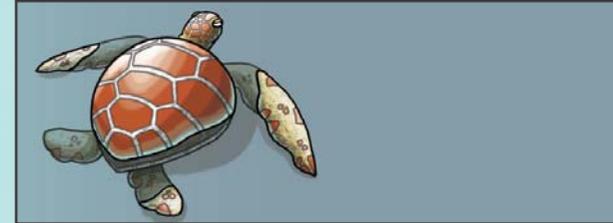
**By Mariana Fuentes  
Illustrated by Fernando Pinillos**



Dr Mariana Fuentes is a marine conservation biologist who has worked on marine megafauna research, conservation and management for the last 15 years. Mariana is committed to building the capacity of local communities to preserve marine megafauna, such as sea turtles. She has published three not-for-profit educational books, including this one which aims to educate children of the Australian Cape York region about the perils faced by sea turtles, and what these challenges mean to local communities.

Funding to support book design and print production was provided by the Save Our Seas Foundation. Mariana is grateful for the editorial and technical help and support provided by Shannon Hogan, and for comments and suggestions from Melanie Hamel, Baressa Frazer, Johanna Karam and Jane Blackwood. Mariana is particularly grateful to the school kids of Western Cape College at the Mapoon campus, whose drawings are included in this book.

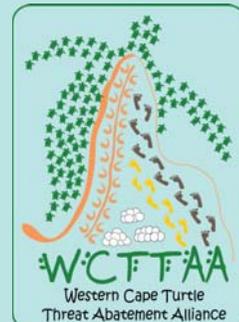
## Also by Mariana Fuentes



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Dhyum the Dugong



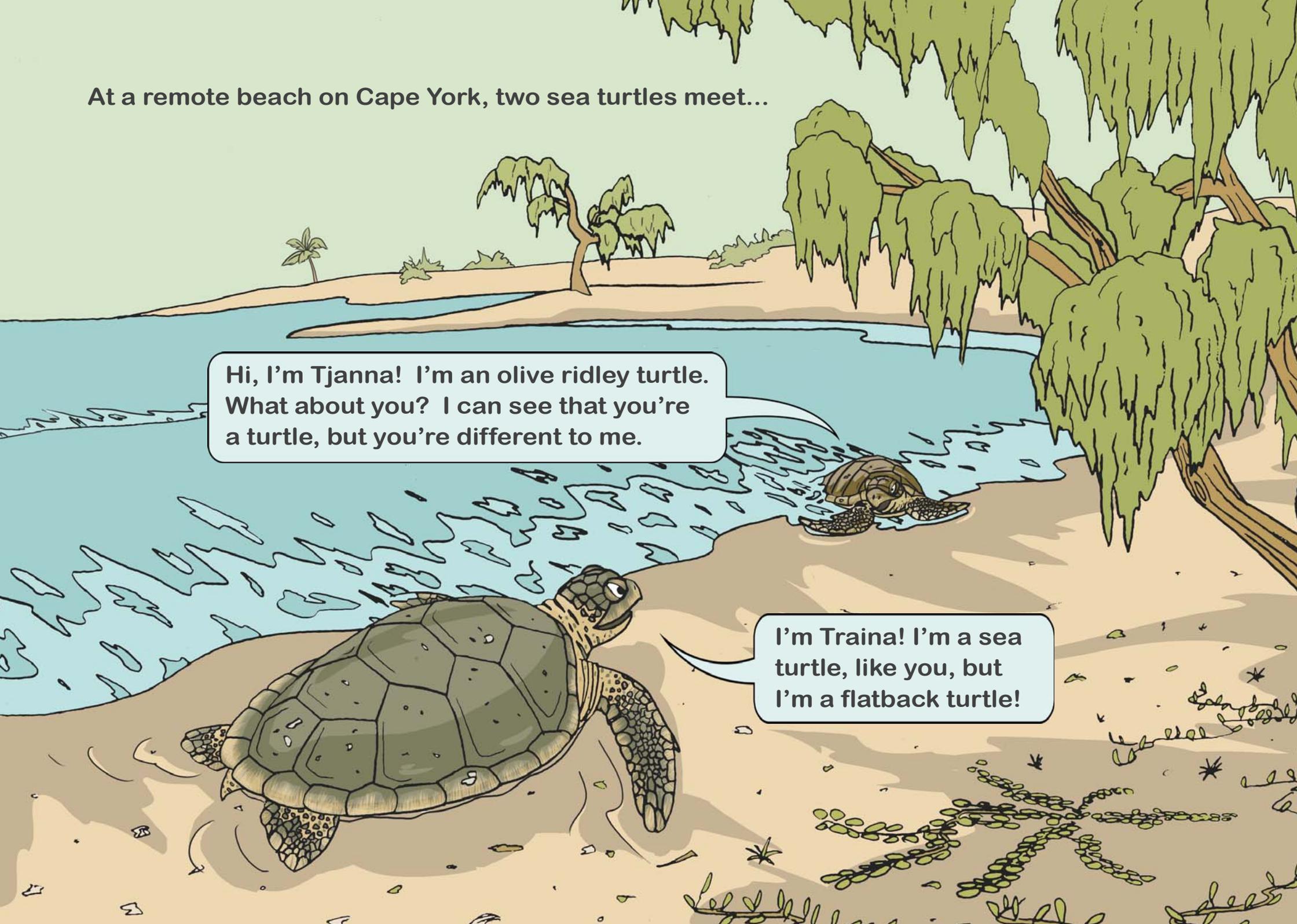
ISBN 978-0-9808178-7-4 (.pdf)  
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Mariana Fuentes, 2015  
[www.marianafuentes.net](http://www.marianafuentes.net)

Illustrations by  
Fernando Pinillos  
[www.drawingscience.com](http://www.drawingscience.com)

Typeset and published by  
Adelpha Publishing & Design  
[www.adelphadesign.com](http://www.adelphadesign.com)

Printed in North Queensland by  
Lotsa Print & Design  
[www.lotsa.com.au](http://www.lotsa.com.au)

At a remote beach on Cape York, two sea turtles meet...

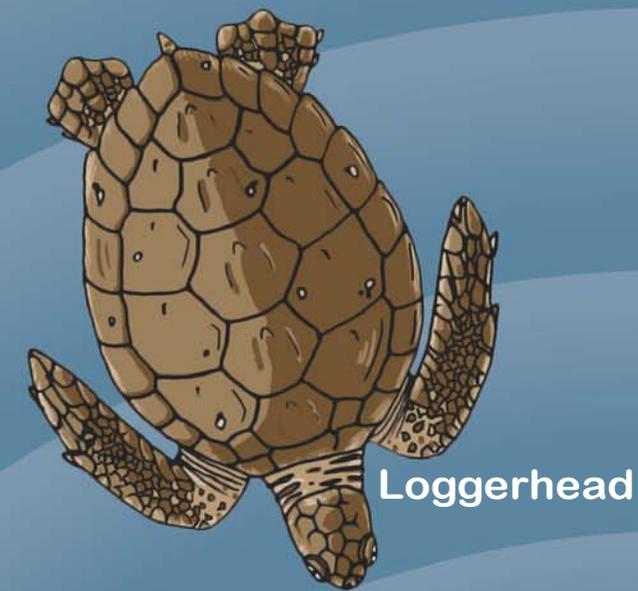


Hi, I'm Tjanna! I'm an olive ridley turtle. What about you? I can see that you're a turtle, but you're different to me.

I'm Traina! I'm a sea turtle, like you, but I'm a flatback turtle!

Did you know there are seven species of sea turtle in the world? Each species is different in size, colour, diet and characteristics.

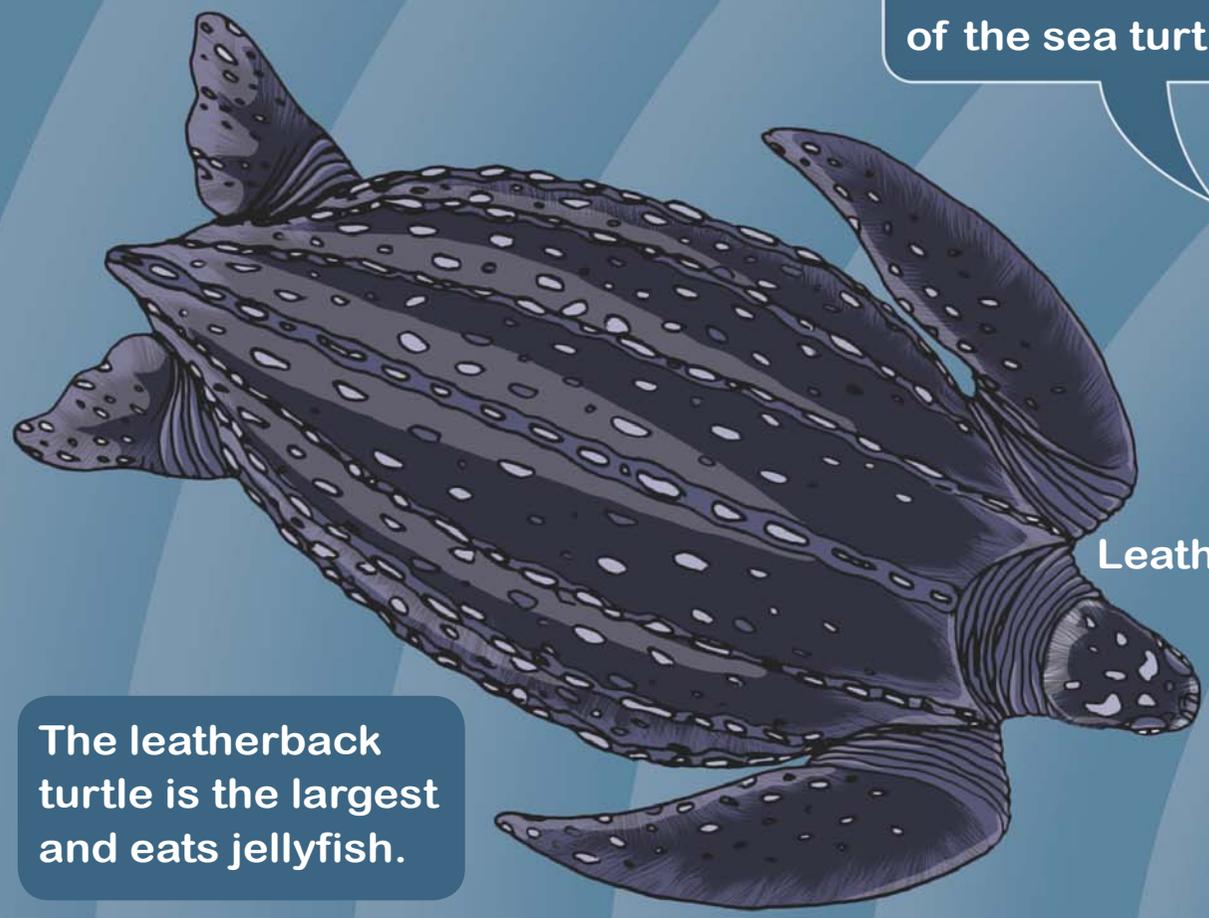
Olive ridley turtles are one of the smallest of the sea turtles.



Loggerhead



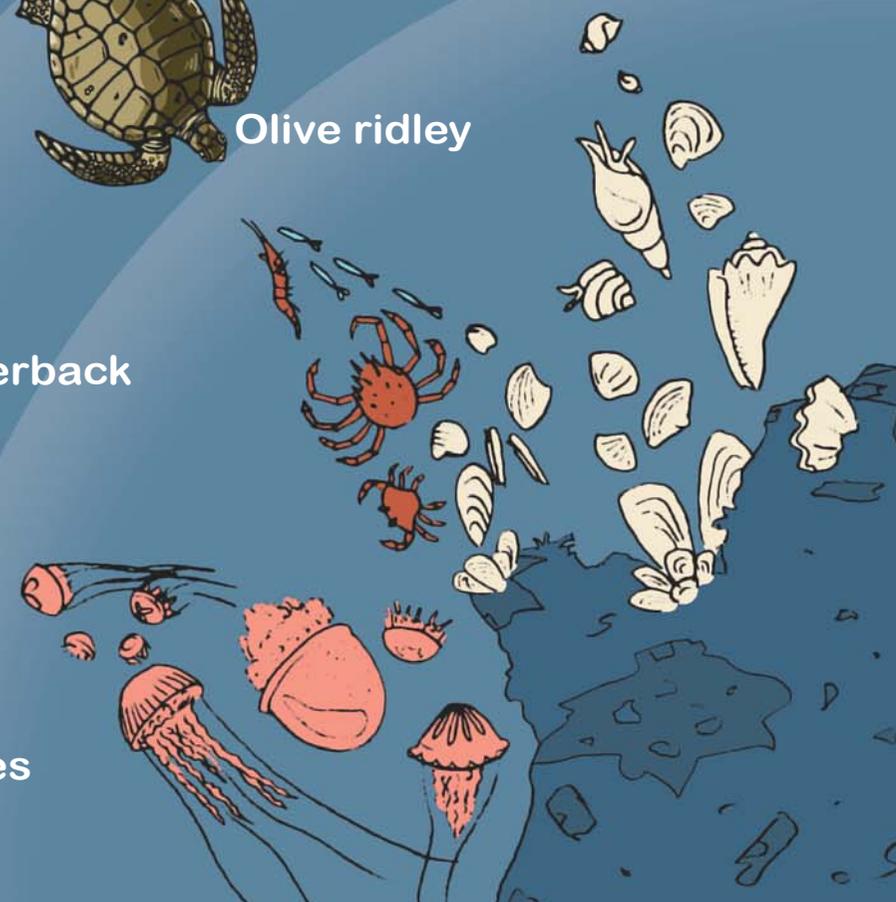
Olive ridley

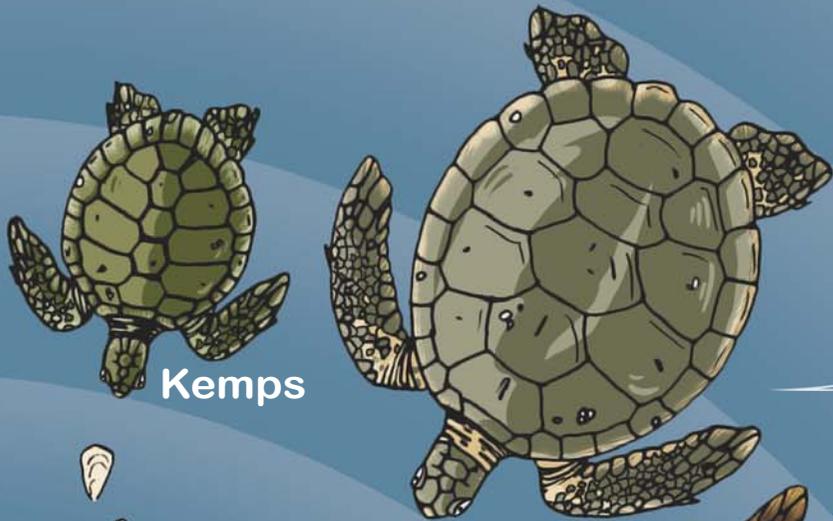


Leatherback

The leatherback turtle is the largest and eats jellyfish.

2 m      1.5 m      1 m      0.5 m      0 metres





Kemps

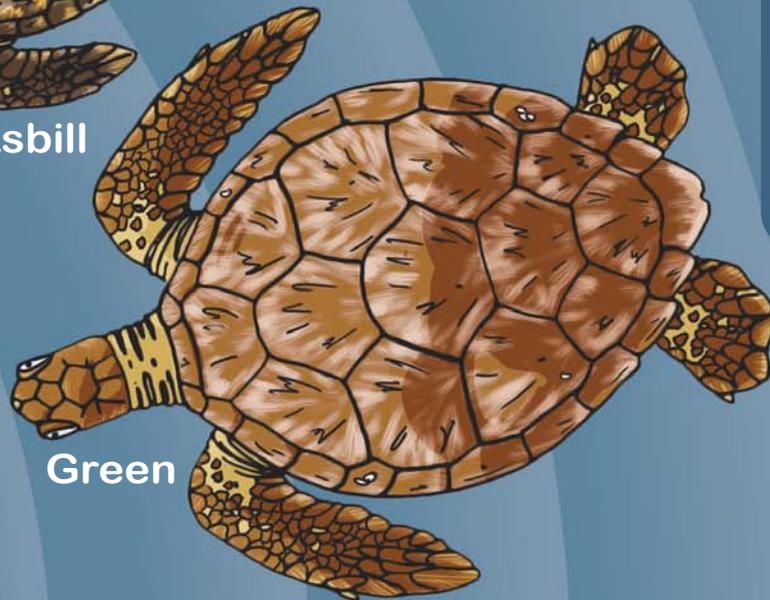
Flatback

Flatback and olive ridley turtles are carnivores, like the Kemp's and loggerhead turtles.



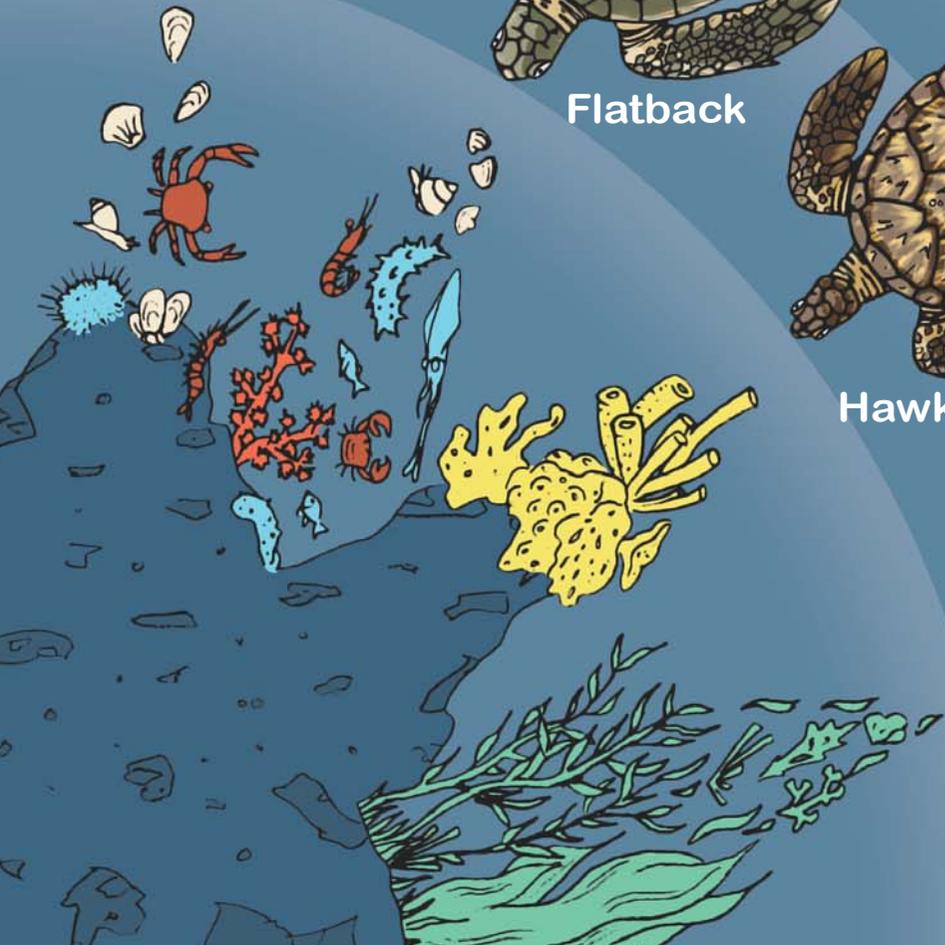
Hawksbill

Hawksbill turtles eat sponges.



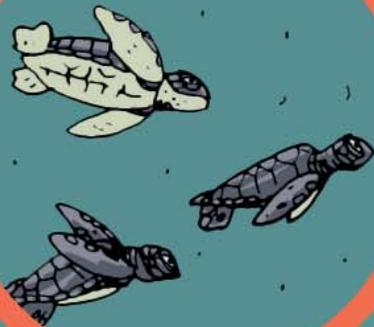
Green

Green turtles are herbivorous, they eat mainly seagrass and algae.



Sea turtles use the land and the ocean.

### Development



### Development



Flatback turtles are different to other sea turtle species. They live in shallower water near the coast.

### Hatchlings



Olive ridley hatchlings make their way to the ocean and travel far away from shore.

## Maturity



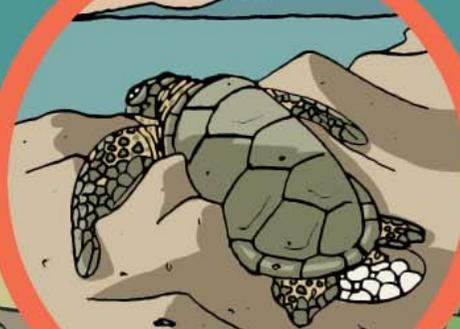
It can take more than 30 years for a turtle to reach sexual maturity.

## Mating



Once the eggs are laid in the sand, it takes 45 to 60 days for them to hatch. Eggs will hatch faster when the sand is warmer.

## Nesting



Sea turtles lay several nests during the nesting season, with an interval of about 15 days.

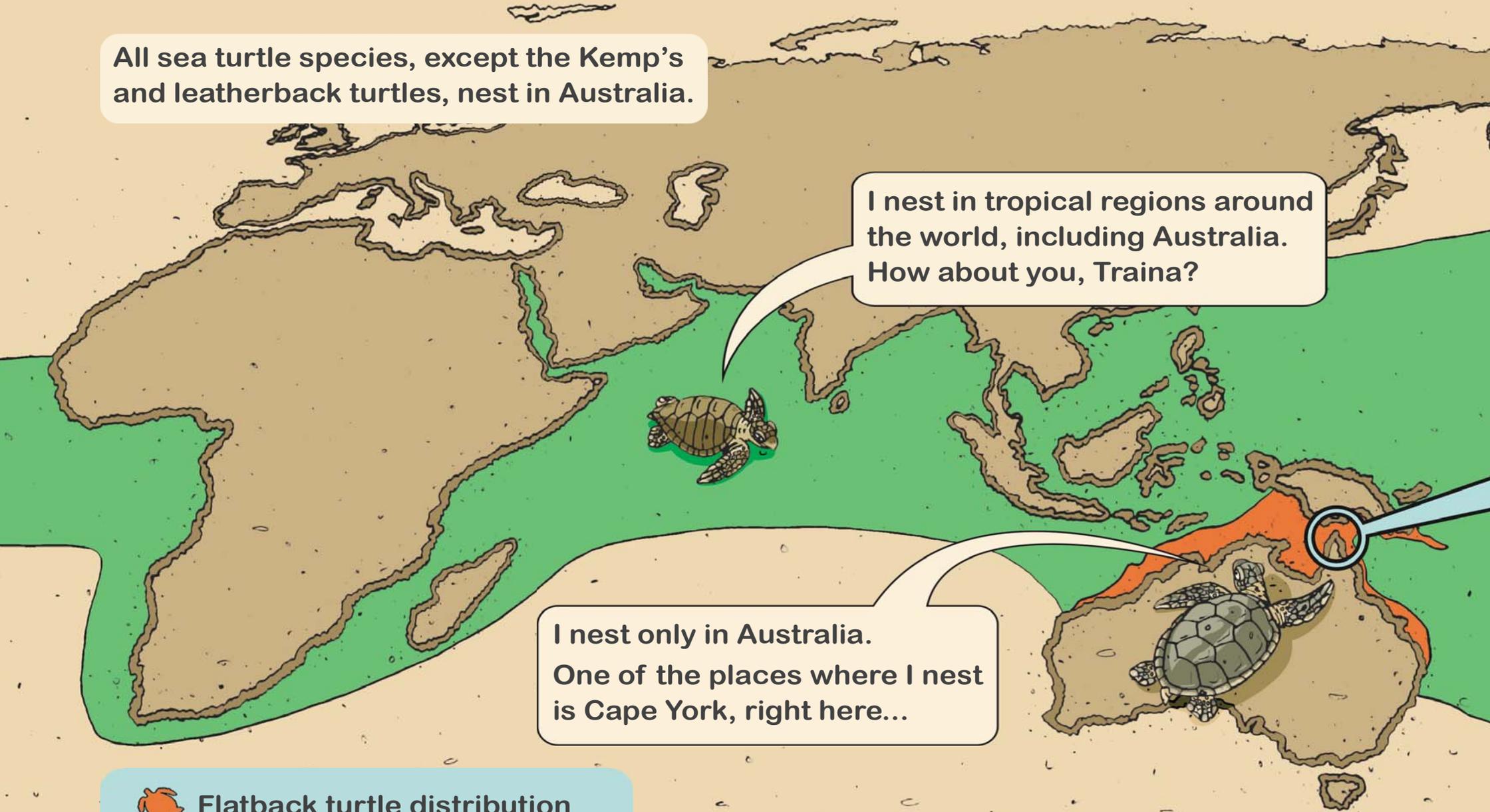
All sea turtle species, except the Kemp's and leatherback turtles, nest in Australia.

I nest in tropical regions around the world, including Australia. How about you, Traina?

I nest only in Australia. One of the places where I nest is Cape York, right here...

 Flatback turtle distribution

 Olive ridley turtle distribution



Important flatback turtle nesting grounds can be found on the west coast of Cape York. Do you see the orange turtles on this map? Those are flatback turtle nesting areas.

Northern Peninsula Area

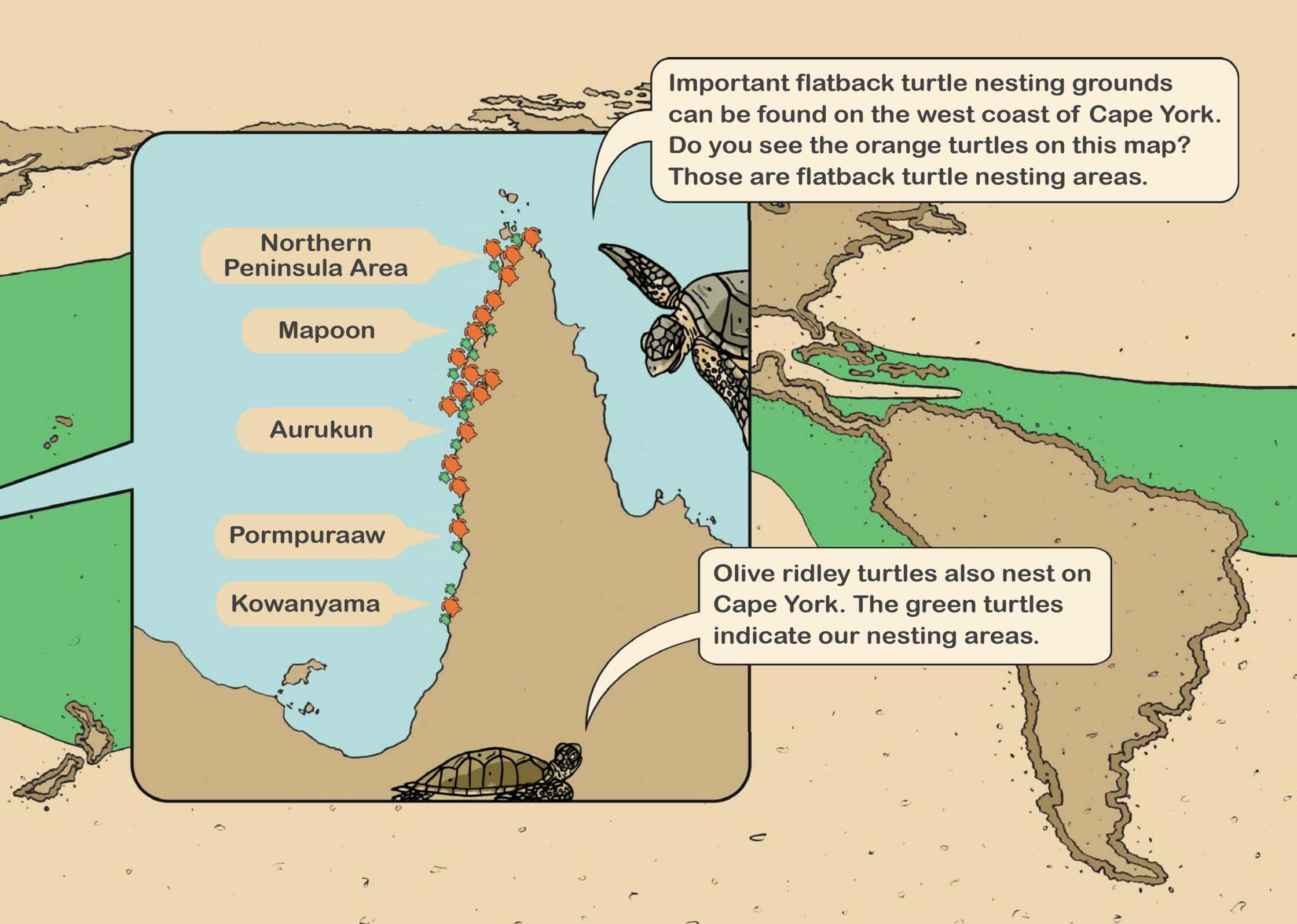
Mapoon

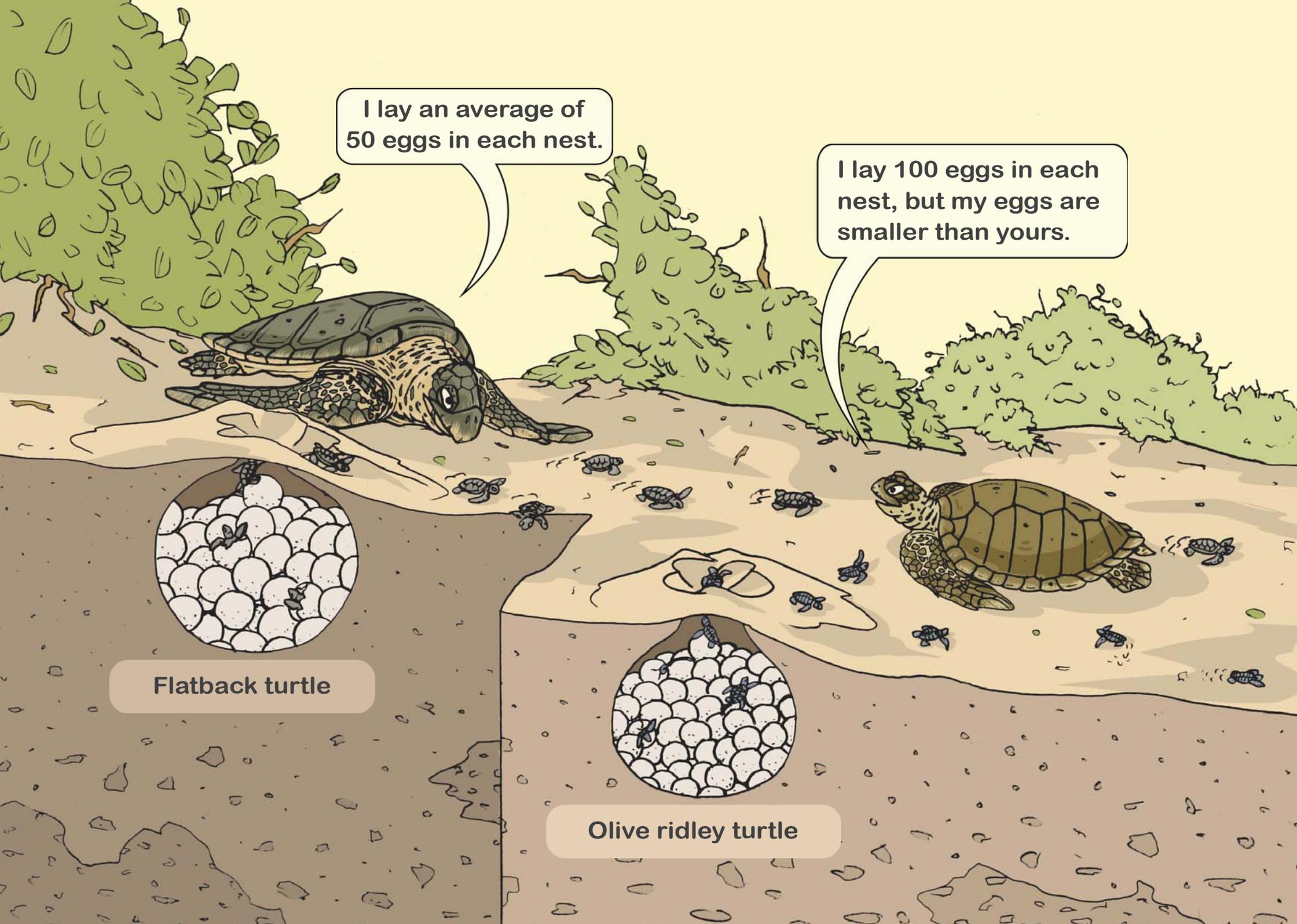
Aurukun

Pormpuraaw

Kowanyama

Olive ridley turtles also nest on Cape York. The green turtles indicate our nesting areas.





I lay an average of 50 eggs in each nest.

I lay 100 eggs in each nest, but my eggs are smaller than yours.



Flatback turtle

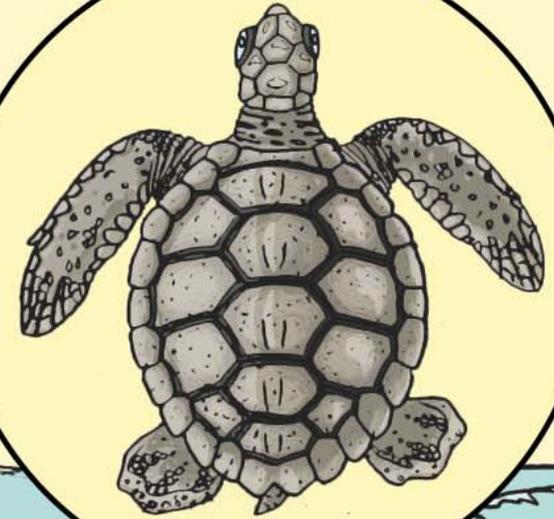
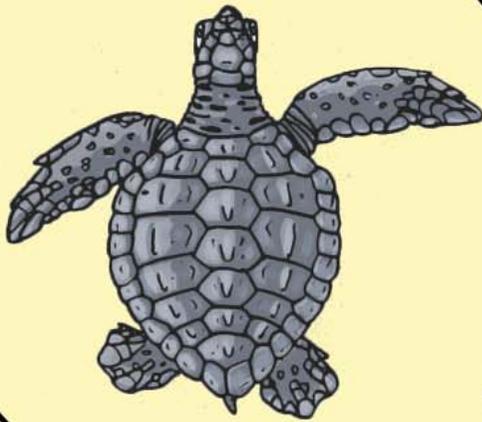


Olive ridley turtle

Flatback turtle hatchlings are one of the largest produced by any turtle species.

Flatback hatchlings measure up to six centimetres and are about three times heavier than olive ridleys.

Olive ridley hatchlings measure about four centimetres and weigh 15 grams on average when they leave the shell.



In western Cape York, feral pigs, dogs and goannas like to dig up turtle nests and eat the eggs.

Rangers and communities work together to protect the nests.

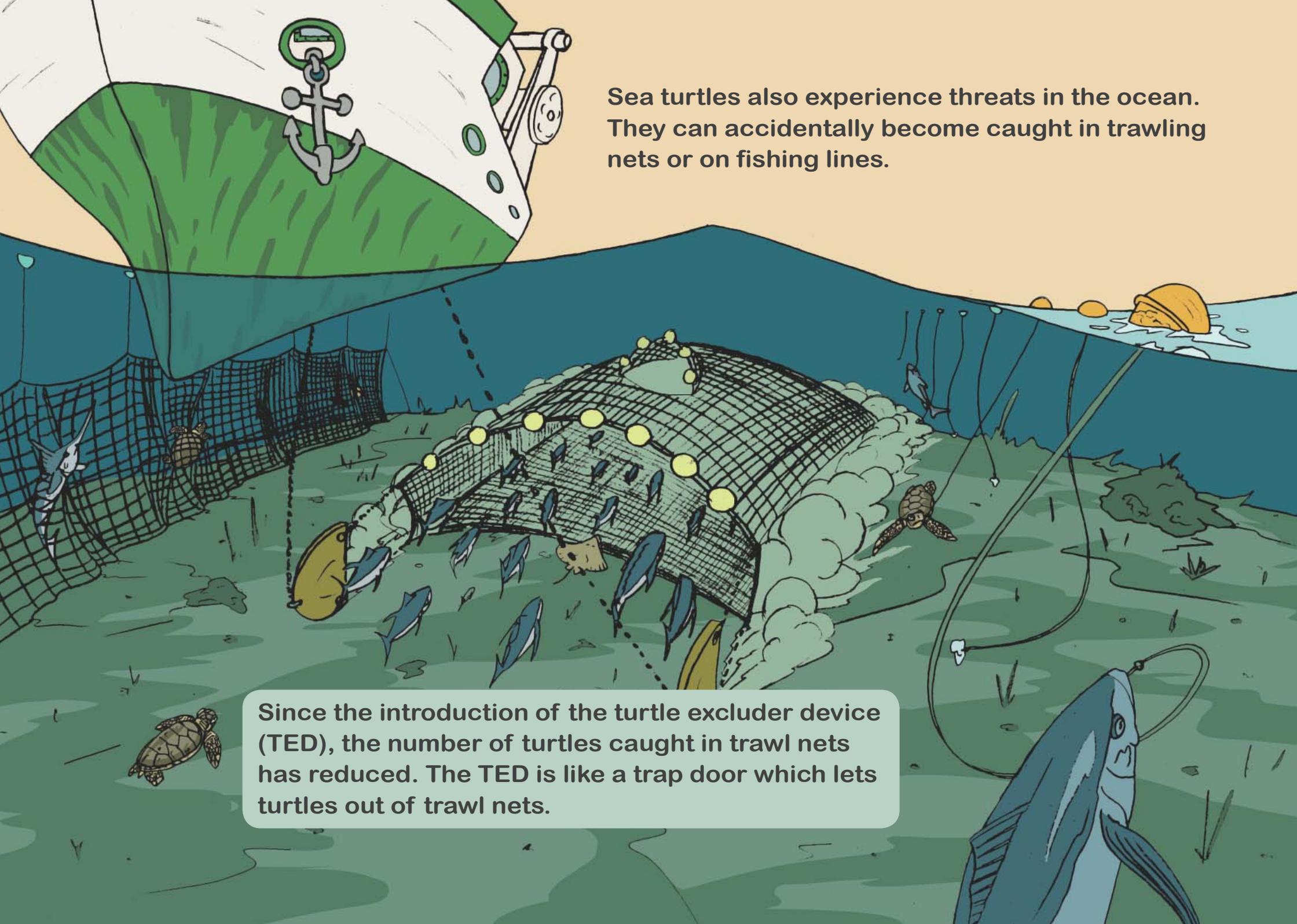


Rangers shoot feral pigs and cover our nests with mesh to prevent other animals from digging up our eggs.



Sea turtles nesting near towns or houses can get confused by the lights and have difficulty finding the sea.

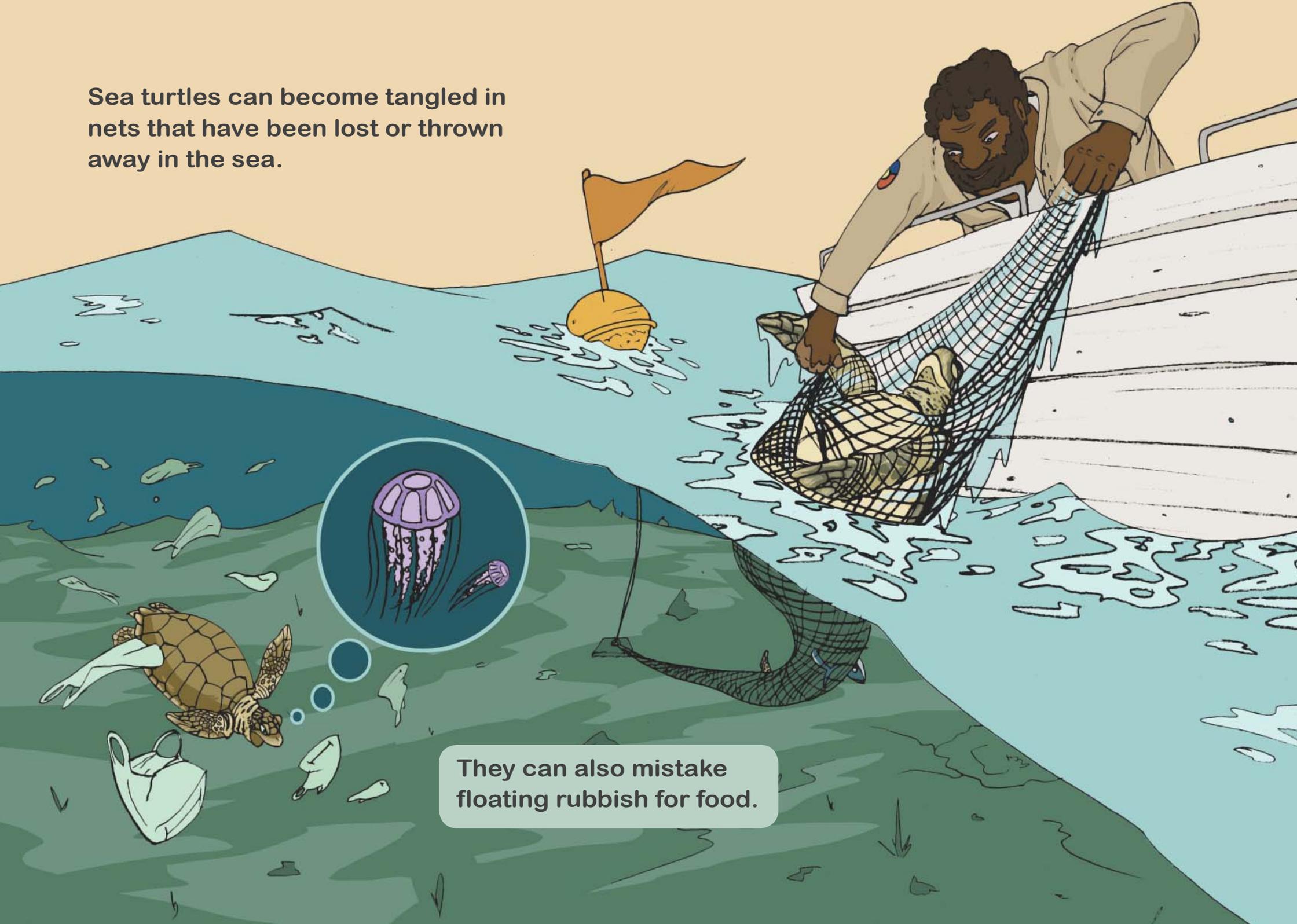
We are lucky in Cape York because most of our nesting beaches are remote, and away from people or houses.



Sea turtles also experience threats in the ocean. They can accidentally become caught in trawling nets or on fishing lines.

Since the introduction of the turtle excluder device (TED), the number of turtles caught in trawl nets has reduced. The TED is like a trap door which lets turtles out of trawl nets.

Sea turtles can become tangled in nets that have been lost or thrown away in the sea.



They can also mistake floating rubbish for food.

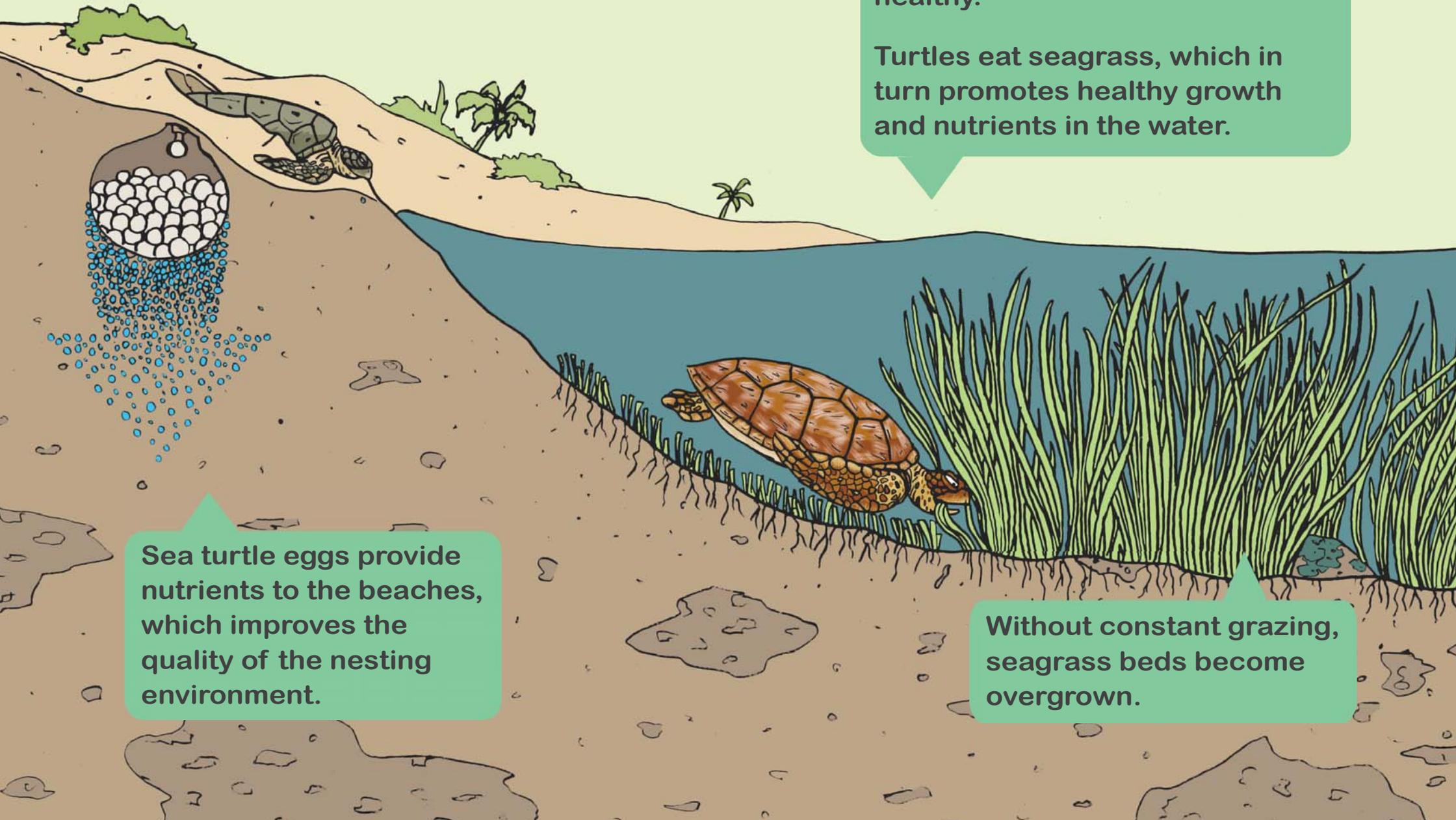
Fewer turtle numbers can be a problem for the environment, because sea turtles play important ecological roles.

Green turtles help keep seagrass healthy.

Turtles eat seagrass, which in turn promotes healthy growth and nutrients in the water.

Sea turtle eggs provide nutrients to the beaches, which improves the quality of the nesting environment.

Without constant grazing, seagrass beds become overgrown.



Hawksbill turtles eat sea sponges on reefs, which helps make room for other species, such as coral.

Without hawksbills, sponges can dominate reef communities and limit the growth of corals.

Turtle shells are often covered with epibionts, which are plants and animals that live on other plants or animals.

Sea turtles help transport epibionts to and from reefs, seagrass beds and the open ocean.



There are several things you can do to reduce threats to sea turtles.

Don't disturb nesting female turtles.  
Instead, watch them from a distance.

Don't let your dog run free  
when you visit nesting beaches.



Don't throw your rubbish on the beach.  
Rubbish can find its way out into the ocean,  
where sea turtles mistake it for food.



Remove obstacles from the beach.  
Sea turtles can get tangled in things  
like beach chairs and tents.

Slow down! Be on the lookout  
for swimming turtles when  
you're in your boat.

**Cape York Rangers are working hard to help sea turtles.  
Look at the great things they're doing!**



Turtle nests are vulnerable to predation by animals such as feral pigs.



Rangers work to protect a turtle nest from predators.



Rangers use helicopters for aerial shooting of feral pigs to mitigate predation of eggs.



Rangers clean ghost nets from nesting beaches.



A ranger investigates the hatching success of a turtle nest.



A ranger monitors a nesting turtle.

These drawings by Cape York students from the Western Cape College at the Mapoon campus represent the value they place on sea turtles and their wish to preserve them.

