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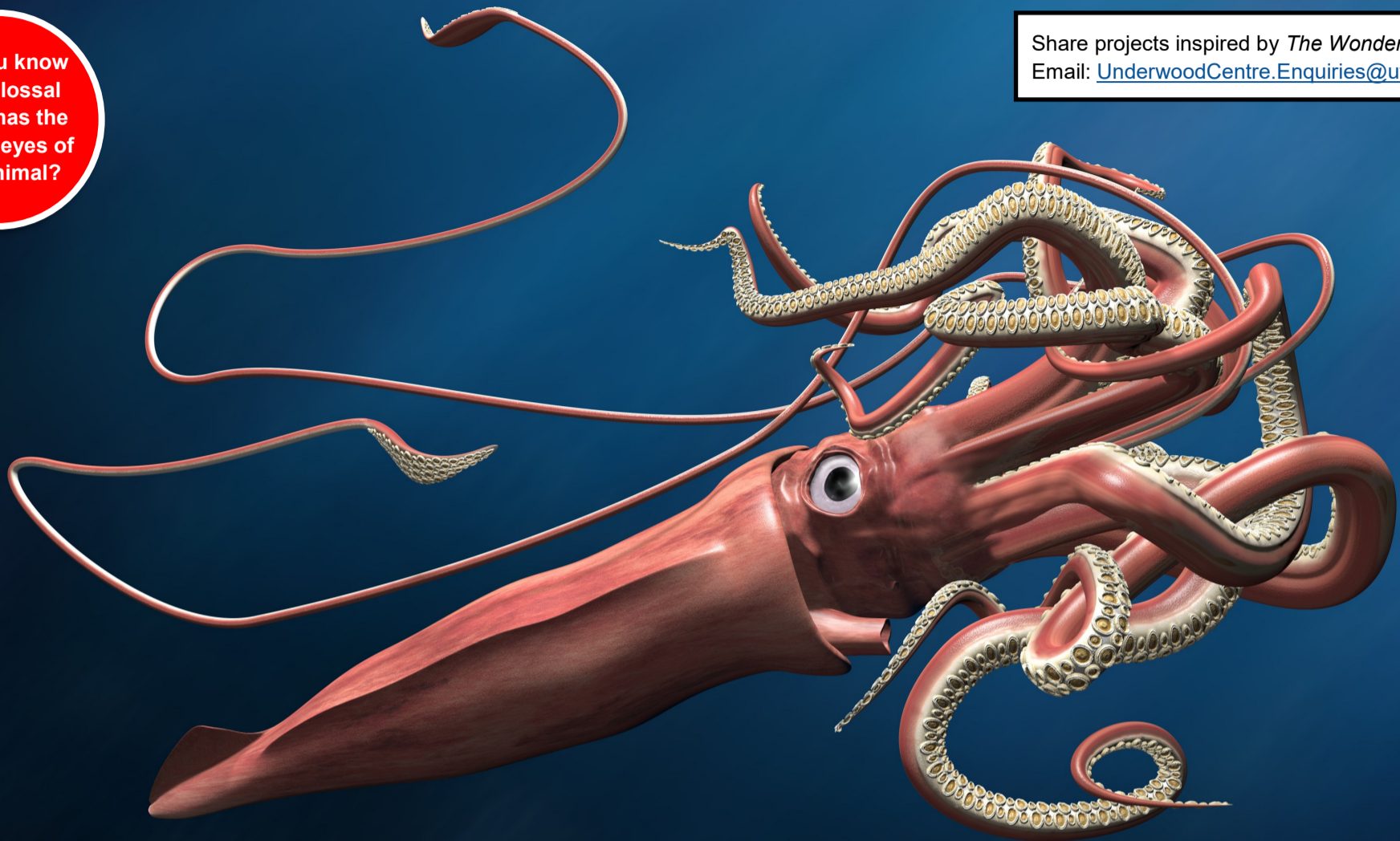
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February 22, 2021

Did you know the colossal squid has the largest eyes of any animal?

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Did you know dolphins only close one eye when they go to sleep?



# EYE POPPING

THE colossal squid has the largest eyes of any animal ever studied, and perhaps the largest eyes of any creature that has ever lived.

Their eyes can grow to at least 27cm in diameter, about the size of a soccer ball.

Now make no mistake, colossal squid are big creatures.

They can be as much as 10-metres long, and weigh 600-700 kilograms.

But that is nothing compared to a blue whale, which has quite small eyes compared to its body size, and quite poor eyesight.

Last week's edition of *The Wonder Weekly* focused on human eyes and how they work in partnership with the optic nerve and the brain to allow us to see the world around us.

But the vision of other animals has evolved in all sorts of weird and wonderful ways.

Wedge-tailed eagles, like other birds of prey, have incredible eyesight, which led to the saying "eagle-eyed".

'Wedgies' could see an ant



PICTURES: iStock/ Paul Fleet/ Andrew Haysom/ andrewburgess

crawling on the ground from the top of a 10-storey building.

They have bony rings on their eyes, that can squeeze and lengthen the eyeball; nature's telescopic camera lens.

Their eyesight also extends into the infrared and ultraviolet light bands.

This helps them spot their prey even better, but also allows wedgies to see rising thermals, which they can use to gain altitude without using much energy.

So why is it the case that some

animals have extraordinary vision and others have very poor eyesight?

The answer perhaps lies with the environments in which they live, and the senses they need to best survive in those environments.

Blue whales, for example, live in deep, dark water.

They rely primarily on their sense of hearing, and communicate to one another through the low frequency sounds they make.

They consume their main source

of food, krill, with huge gulps of water.

One of our favourite animals at *The Wonder Weekly*, the wombat, also has little use for good eyesight in the wild.

Wombats compensate for their tiny eyes with excellent senses of hearing and smell.

**Your challenge** is to choose an animal, perhaps your favourite, and find out as much as you can about their eyesight.

How important is sight to the animal?

Are other senses more important?

How has their eyesight adapted to the environment in which they live?

You can choose a Tasmanian native animal if you like.

But if another animal outside Tasmania, or Australia, is of more interest to you, check it out.

You might like to consider:

- Camels, which have three eyelids and

eyelashes up to 10cm long.

- Geckos, which can see 350-times better than a human.
- Snakes, which have two sets of eyes.
- Scallops, which have about 100 eyes.

Children's University Tasmania members can earn stamps in their passports for this challenge, at the discretion of their school coordinator.



"Education perhaps more than anything else is a passport to a better life." - Peter Underwood AC