

Mangrove story

Mangroves are an amazing plant, as they have to survive and grow in some of the harshest conditions in the world.

Who can tell me what conditions these are?

[They grow in salt water on the edge of the ocean].

Today, I'm going to tell you a story that I hope will show you just how important mangroves are to some of the species we find in our waters. In fact, we will put some of the species we put up on the board today.

Barramundi was born from an egg. When his mother laid her eggs, she hid them in among the roots of a **mangrove tree** early in the wet season. While some of his brothers were washed upstream on the high tide, he was lucky enough to stay put. What an interesting world for him to grow up in and what an exciting place to explore. And there's so much for him to eat! What are some of the things you think he eats when he is still so small?

*[Mostly microscopic (teeny tiny) plants and animals called **plankton**. There are thousands of them!]*

Now, barramundi doesn't stray far from the mangrove roots and fallen trees. Why do you think that is?

[There are lots of others who would like to make a meal of him. It is also such a productive environment. Briefly describe why].

He spends his days watching the world around him. Who else do you think Barramundi might share his shelter with?

[Crabs scurrying from their burrows for food (they eat detritus, the muddy layer of ooze underneath the dead mangrove leaves); mudskippers dancing from the water to the mud banks, always wary of anything that moves; sea jellies that float in and out with the tide; oysters that scratch his back as he moves between the maze of mangrove roots; and bull sharks who make a feast of anything that goes past]

Oh what a very busy place this is!

Barramundi has to be very careful because if it is dinner time for him and his friends, it must be dinner time for other animals in the mangroves. From the surface of the water, he catches a glimpse of a slow-

moving shadow above him. He moves quickly back into his place in the mangrove roots. "Just in time," he thinks, as the shadow swoops towards the water. What do you think it is?

*[Any one of the birds (**pelican, osprey, cormorant, sea eagle**) that live in the mangroves – a very hungry bird].*

The bird flies away juggling an unlucky **mullet** in its long beak.

As the **clouds** become a more permanent feature in the sky and the wet season sets in, Barramundi is bigger and braver and decides to move out of his comfortable home in the mangrove roots to see what the river is like closer to the freshwater. Here, he notices the species of **mangroves** are different. Why do you think that is?

[they are better suited to the fresher water. Discuss zonation].

"Hmmm... looks like there are some interesting things to eat here," thinks Barramundi and makes himself a new home among the branches of a fallen tree. He sits, still and silent in the branches, waiting for a small fish to stray from the school. Barramundi opens up his big mouth, sucks in a huge amount of water and 'boof', snaps up the fish for a tasty meal.

As he gets older, he will eat almost anything that will fit in his mouth. He enjoys insects (for example, **dragonflies, mosquitoes, prawns** (a real favourite), **frogs** and fish, including other **barramundi, mullet** and **archerfish**. His relatives have even been known to eat baby **crocodiles**!

With all this food around him, Barramundi is a very happy fish. When he's not busy eating, Barramundi uses his big bright orange eyes to watch what goes on above, in the mangrove forest around him. What are some of the things you think he might see?

*[He sees **fruit bats** hanging upside down, asleep after a long night hunting for food; **snakes** slithering in the tree branches trying to warm their bodies when the **sun** comes out from behind the cloud; **mud whelks** in camouflage eating algae from the mud; **lizards** scurrying back to their homes, the beautiful **flowers** of*

the mangrove tree growing into propagules that almost bump him on the head when they fall to the water, ready to begin their journey downstream].

At the start of the wet season a couple of years later, Barramundi decides it is time for a change and swims back towards the mouth of the river. Enjoying the sights of his old home again and smiling as the **seagrass** tickles his belly closer to the river mouth, he gets a big fright when he bumps in to a **hawkbill turtle** making a feast of some funny looking **sea sponges**. Barramundi is now much bigger, almost 60 cm, and laughs at himself for being so afraid. He realises he is now an adult and it's time for him to grow up. And this means having some young barramundi of his own.

After the first full moon in November, when the water is much warmer, Barramundi spawns in the hope that they will find suitable eggs and develop into tiny barramundi in the roots of the mangroves just like he did when he was much younger. Why do you think he has moved down the river to have the babies? *[Barramundi requires brackish (salt) water to spawn. In some populations, such as dams, all barramundi are actually male and need to be artificially stocked in order to maintain the population].*

Barramundi goes on with his life, becoming much bigger as he swims around the mangroves, eating lots of delicious food, spawning during the wet season in the hope of having many more young. "This is the life!" he thinks. He does this for a couple more years before he starts to sense some changes. Now something very, very strange is happening to Barramundi. Does anyone know what it is?

[He is changing into a female barramundi – barramundi are hermaphroditic and change sex from male to female at around 5 years of age or 70-80 cm].

Imagine if I came to school one day and all the boys in the class had turned into girls!

Barramundi finds the change a little strange at first but quickly gets used to being a 'she'. She certainly likes being a lot bigger than a lot of the other animals and quickly convinces a **Mangrove Jack** that she should move into his comfortable home in the snag of a fallen tree. Wet seasons come and go, and barramundi continues to live a very happy life, eating lots, producing lots of young barramundi

[as a female she can produce 32 million eggs!]

and enjoying the wonderful world of the mangroves.

Then one day, Barramundi sees a delicious **cherabin** dangling in the water. "This looks too easy," she thinks. Tempted by how easy it is, Barramundi opens her mouth, sucks in a huge amount of water and 'boof', snaps it up. Barramundi realises straight away that something isn't right. She can't swallow the cherabin and struggles to get back to her place in the roots. Something is pulling her. What do you think has happened?

She struggles and struggles, jumps high out of the water, but just can't pull away. After a long time fighting, barramundi tires and gets dragged to the bank of the river. Exhausted, she feels herself being lifted out of the water. She has been caught by a **recreational fisher**. The fisher and his friends are excited and make a lot of noise as Barramundi is the biggest fish they have ever caught. She is a very big fish, over 1 m long.

The fisher quickly poses for a photo, gives Barramundi a big wave goodbye and puts her back in the water. Why do you think the fisher put Barramundi back?

[Luckily for Barramundi, the fisher had a copy of the Recreational Fishing Guide and knew the correct techniques for releasing fish. Large female barramundi are very important to the sustainability of barramundi stocks. In some locations in Western Australia, these large fish are not allowed to be caught].

After a short while, with all of her energy back, a very happy Barramundi flicks her tail out of the water in thanks and swims back to her place in the mangroves.

Barramundi promises herself never to be so tempted by such an easy feed again and goes on to live a very happy life and produce many more young. She is a very important part of this interesting world of the mangroves.