

# The River Red Gum

*Eucalyptus camaldulensis*



# YOUR TURN- Student Activity-

## KWL

Complete a KWL on the River Red Gum. You will need to set up a paper or digital copy to complete your work..

The River Red Gum is one of the most iconic species in the Australian landscape. It is one of the dominant species at the Gol Gol School Immersion Centre. As well as being vital habitat for many species it plays a major part in the Centre's ecosystem. It is found widely throughout Australia but many people don't realise what an amazing tree it is.

Think about what you already know about River Red Gums. List this information in dot points in the KNOW section. Then think about what you WANT to know. Write this in the WANT section. Leave the LEARN until you have completed this unit on River Red Gums.

Be sure to come back at the end and list all the important information you have learned.

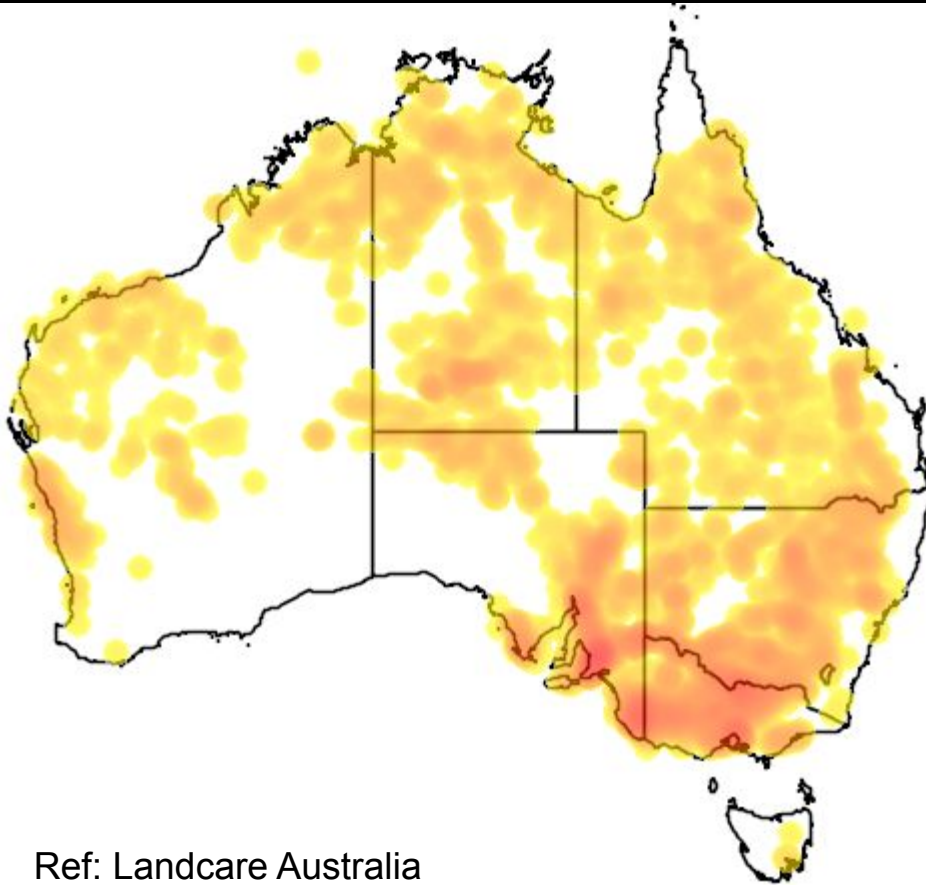
# KWL - The River Red Gum

What I **KNOW**

What I **WANT** to know

What I **LEARNED**





Ref: Landcare Australia

## Distribution in Australia

Locally common along flats and waterways in most districts. Mainly found on major watercourses such as the rivers Murray, Tumut and Murrumbidgee. The species has been identified in the following Australian States - NSW, ACT, VIC, TAS, SA, NT, WA



## **Scientific Name:**

Eucalyptus Camaldulensis

## **Family:**

Myrtaceae

## **Genus:**

Eucalyptus

**Rainfall** - 500mm

**Growth Rate** - fast

**Height** - to 30m

**Lifespan** - 500 to  
1000 years

**Flowers** - Dec - Feb

**Seed** - March - Sept







## River Red Gums In Flood



## River Red Gums In Drought





**River Red Gum Fruit**



**River Red Gum Seed**



**River Red Gum  
Bark**





# CANOE TREE

River Red Gum trees have been used for thousands of years by Indigenous people.

Wood and bark was used for canoes, bowls, shields and other utensils.

It was also used as a food source including the lerps and grubs in the roots of the tree. Oils and chemicals from the tree were used for medicinal purposes.

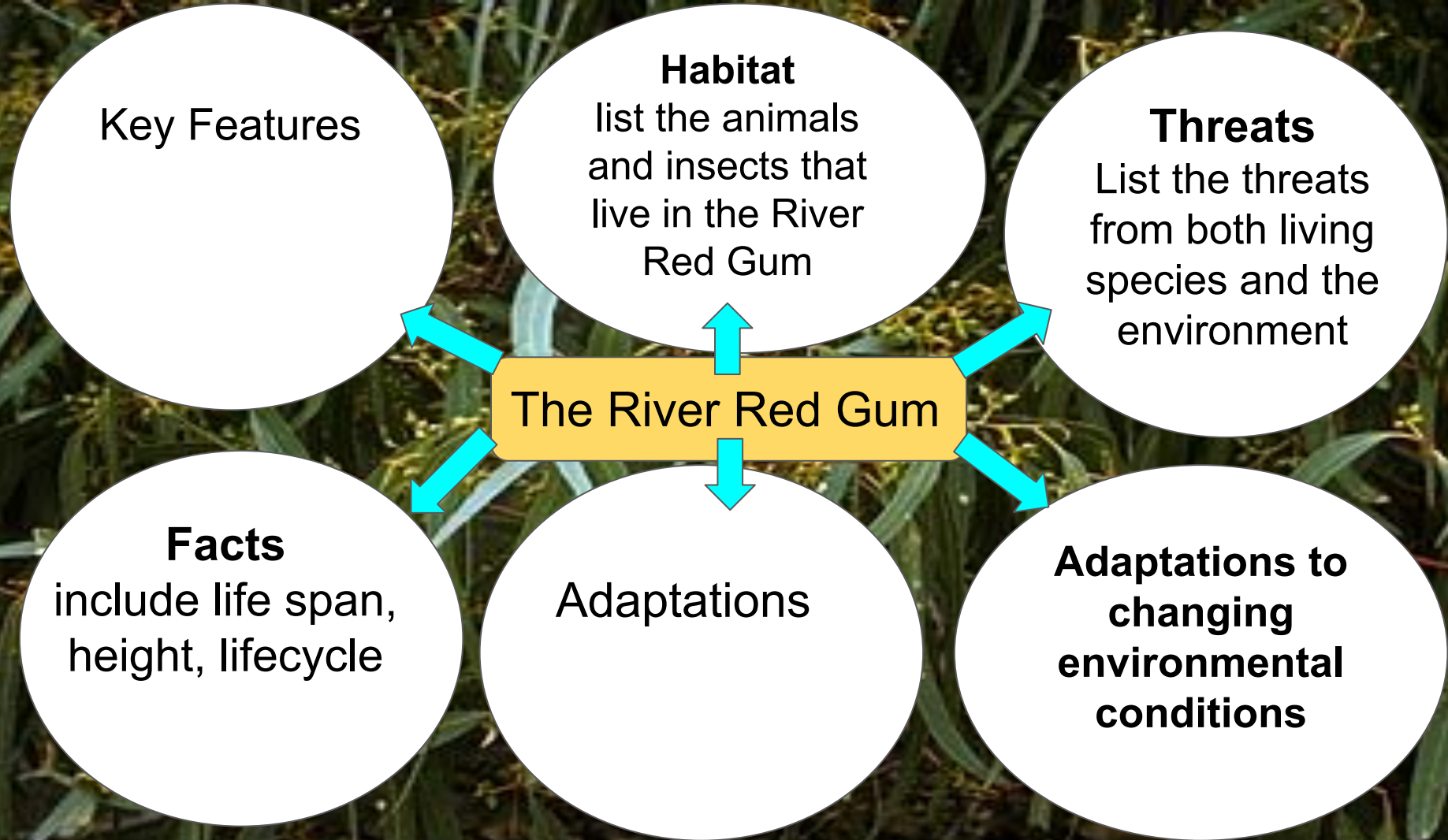
## YOUR TURN - STUDENT ACTIVITY

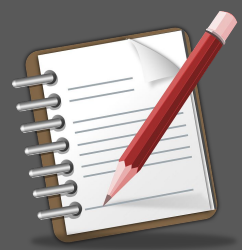
# River Red Gum Mind Map Activity

1. Print out or draw up a mind map as per the following slide.
2. Watch the River Red Gum Documentary - link located on slide after Mind Map. Please note: this is an older documentary but the information is clear and concise.
3. Complete the mind map by listing facts and information in the relevant categories.





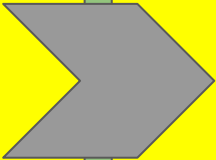




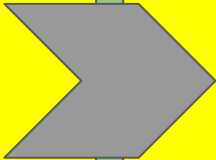


## YOUR TURN - STUDENT ACTIVITY

Using your gained knowledge and further research, identify the key features of a River Red Gum tree.



Draw a detailed diagram of a River Red Gum tree. Label the key features.



Use a different colour and label the adaptations of the species.

## Further Knowledge

# Adaptations of the River Red Gum

- Produces and drops a large amount of seed during Spring to coincide with flooding. If flooding occurs, dense strands of young saplings appear over large areas. They form impenetrable thickets which gradually thin out as they grow to form forests of straight trunked trees.
- During drought the River Red Gum drops its leaves and can also drop limbs. It can drop up to  $\frac{2}{3}$  of its foliage. It does this to conserve energy and water which is needed for photosynthesis until water is available again
- Trees survive during long periods of drought. They have a very deep root system that grows down to seek out underground water which sustains photosynthesis in times when water is limited.
- Trees live for up to 1000 years old.



## Further Knowledge

### Adaptations cont:

- Trees can survive immersed in flood waters for up to 9 months, this is because some of their extensive roots contain a spongy, air-filled tissue called aerenchyma, which allows for the accumulation and transportation of oxygen in waterlogged soils.
- River Red Gums are territorial and don't like sharing their space with other species. They produce a water soluble chemical which is washed from their leaves during rainfall. These chemicals infiltrate the soil and inhibit the growth of other plant species, including young River Red Gums. This and a thick canopy stop other trees competing with their water supply.
- This phenomenon is called allelopathy. When flood occurs these chemicals are washed from the soil, which allows for germination of seedlings when water is plentiful and there is enough for all trees.

## YOUR TURN -

Student Activity

### Watch clip on Ecological Thinning Trial

<https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-management/river-red-gum-forests/research-in-the-river-red-gum-forests>

Complete the following table:

Environmental Conditions	Structural Adaptations	Features
Eg; Flooding	Long roots, some with spongy, air filled tissue	Allows for accumulation and transportation of oxygen

## YOUR TURN - FINAL TASK

Design an advertising campaign to champion the River Red Gum. Ensure your campaign informs the community of the importance of the River Red Gum tree to the natural environment. It must also include the adaptations of the tree and how it can survive in different environmental and weather conditions..

Your advertising campaign can be in the form of a short film clip or advertisement. It can also be in the form of a Google Slides presentation or even a tourism brochure.. Supporting documents could include posters, promotional stickers including bumper bar.and merchandise such as hats and tshirts.

You campaign should make Australians understand how amazing and important the River Red Gum tree is.