



# EXPLORE. DISCOVER. LEARN.

Empowering future champions of our wild places and wildlife

## OUR TASSIE EUCALYPTUS TREES



**Common names:** Eucalyptus trees are often called bum trees, because if there are breaks in their bark, a lot of sap comes out.

**Height:** From around 5 metres to over 90 metres.

**Lifespan:** This depends on the species of eucalyptus. Most eucalyptus trees can survive more than 250 years in the wild.

### What is the scientific name for a eucalyptus tree?

The scientific name of a plant (flora) or animal (fauna) is made up of its genus and species names. Plants and animals of the same genus are closely related and share characteristics.

**Eucalyptus is the genus name for all eucalyptus trees.**

Two examples are:

- **Eucalyptus globulus** or Tasmanian blue gum. This native tree provides food for critically endangered nature swift parrots (*Lathamus discolor*).  
*Pictured right.*
- **Eucalyptus coccifera** or Tasmanian snow gum. This tree grows best in high, cold places and is endemic to Tasmania, which means that it naturally occurs nowhere else on Earth.  
*Pictured left.*





## Why are trees and plants so important?

- Trees and plants are home to reptiles, mammals, birds and insects
- Trees help fight erosion by their roots holding soil in place
- Trees protect against floods and landslides
- Trees and plants provide food for many animals including endangered species
- Many plants and fungi also rely on trees to survive
- Trees and plants remove and store carbon dioxide and produce oxygen into the atmosphere for animals to breathe, including us!
- Trees help cool Earth's air and surface temperatures which also helps against climate change.

### DID YOU KNOW?

The Tasmanian Blue Gum, *Eucalyptus globulus*, is the floral emblem for Tasmania. It was proclaimed this in 1962.



Forests and woodland areas need both big and small trees, along with native grasses, shrubs and trees to stay healthy.

We need to protect these from weeds and invasive species.

Taking care of forests and woodlands helps our endangered flora and fauna survive. When we protect and grow more native trees, we help give homes and food to our native and endangered species that depend on it.

**Protecting trees is important for our environment, our wildlife and for us!**

## Let's look at one of our great trees: the eucalyptus

### DID YOU KNOW?

- Tasmania has 29 native species of eucalyptus, and there's over 500 species in total, most are native to Australia.
- Eucalyptus trees are adapted to the conditions of their environment. They can be short shrubs or a giant tree. The smallest eucalyptus tree is the **varnished gum** (*Eucalyptus vernicosa*), which grows to about one metre when fully grown, while the **swamp gum** or **mountain ash** (*Eucalyptus regnans*), one of the tallest trees in the world, can reach heights of over 100 metres. The swamp gum is the world's tallest flowering plant!
- As eucalyptus trees grow older, they drop their branches, creating nesting hollows for birds and small tree-dwelling mammals to live in.
- Fossils and DNA samples show that eucalyptus trees have grown on Earth for about 60 million years!



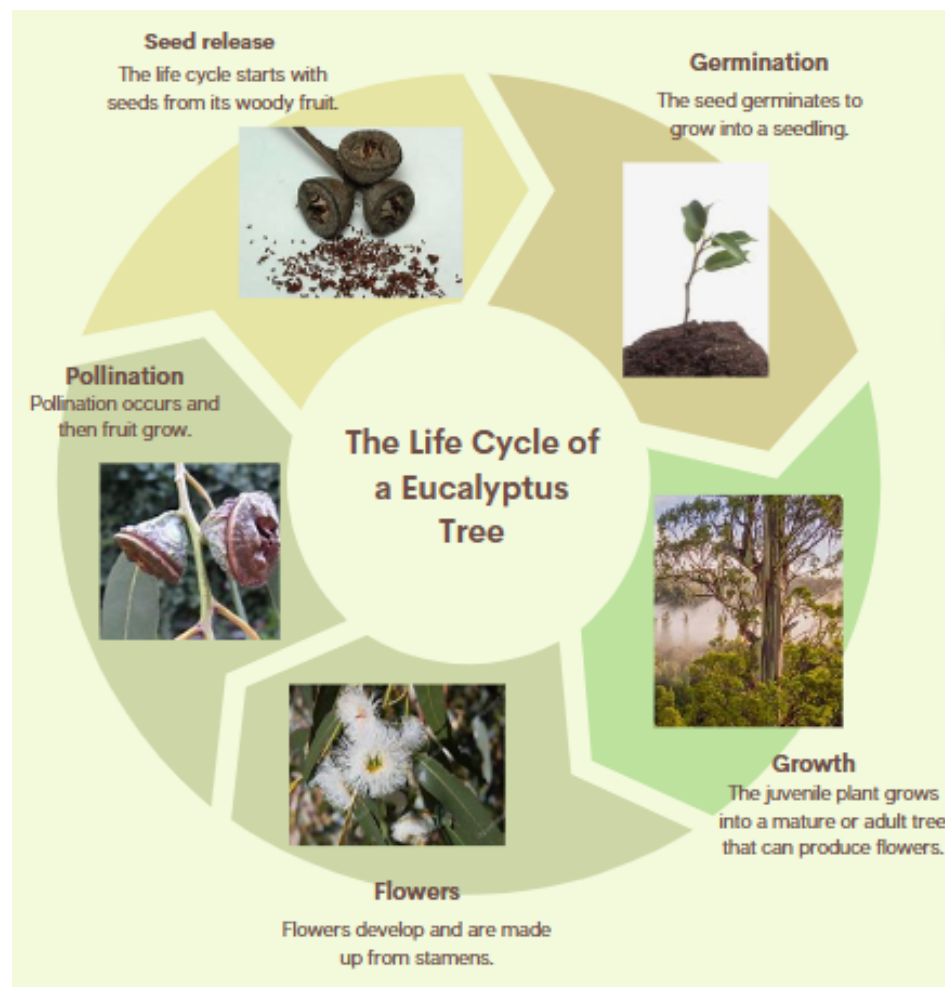


## The life cycle of a eucalypt

- Eucalyptus begin life as a seed. The seed has an outer layer or coat and inside the seed coat is a young plant and a food store to help it grow.
- A eucalyptus seed germinates (starts to grow) when it has heat, light, warmth, oxygen, nutrients and water or moisture.
- The seed grows roots into the soil and a shoot grows up towards the sunlight. With enough light, the seed grows into a seedling, and then into a young plant called a sapling. The sapling must keep growing quickly before other plants block out the sunlight.
- When the plant grows into an adult it can produce flowers. Eucalyptus trees need to be a few years old before this happens.
- Eucalyptus trees have flowers or blossom that look like a fluffy brush made up from stamens of the flower.
- The flowers need to be fertilised before they can grow into fruit. Pollination is the process of the pollen from a male cell of the plant reaching the stigma on the female part of the plant.
- The flowers are pollinated by a range of animals including microbats, mammals, insects as well as being wind pollinated. The tree attracts animals with their colourful flowers and for the nectar (food) inside them. Insects, birds and mammals such as bats and possums help to pollinate eucalyptus trees. These animals collect pollen on their bodies as they eat the nectar and then move between flowers. So, the pollen travels with them to new flowers.
- Once the flower sheds, gumnuts develop. These are woody capsules and are the fruit of the eucalypt.
- Eucalyptus trees are adapted to survive and thrive in fire-prone environments. They shed bark and leaves, creating a layer of flammable material on the ground, which encourages fire. Fires help open the woody capsules (gumnuts) to release seeds, allowing new trees to grow.



*Eucalyptus sieberi* capsules (photo: UTAS)





## Eucalyptus leaves

- Eucalyptus trees are **scleromorph**, meaning they have tough, thick, leaves that help them survive in dry, poor soils by holding onto water and protecting themselves from harsh conditions.
- Most eucalyptus trees have leaves that hang down. This helps them avoid direct sunlight so they can save water.
- The leaves come in many varieties and shapes and have a waxy outer layer to protect them from drying out.
- Some eucalyptus trees have leaves that change colour based on their age.
- The leaves, especially older ones, contain oils that give off a strong smell. Some smell like peppermints, others smell more like lemon, and some have a minty pine smell.



Photo: Types of Eucalyptus Trees: Leaves, Flowers, Bark (Pictures) (leafyplace.com)

## Eucalyptus bark

- Eucalyptus trees also protect themselves with a layer of dead, dry bark. This helps them save water.
- Most species of eucalyptus trees shed their bark once per year.
- The bark on many eucalyptus species peels away in long strips, revealing smooth, fresh layers underneath.





## Eucalyptus flowers

- Eucalyptus flowers have a fuzzy look. This is because of all the stamens that grow in a circle.
- Flowers have a range of shapes and sizes. Colours range from white, cream and yellow to pink and bright red.



Photo: Types of Eucalyptus Trees: Leaves, Flowers, Bark (Pictures)

## Eucalyptus oil and medicine<sup>1</sup>

- When the leaves are crushed, oil is released. Oil, as well as leaves and bark are used in some medicines and in disinfectants for cleaning.
- It is important to remember that eucalyptus products can be good, however they can be poisonous if not taken or used correctly.

<sup>1</sup> Source: Among the Gum Trees, Primary Connections, Australian Academy of Science.



## Why are some eucalyptus trees in danger?

Eucalyptus trees are threatened by climate change, invasive species and human activity. Some of these threats are explained in more detail below.

### Threats to the eucalyptus tree

- **Changes in environment conditions:** Climate change is playing a part in this. Climate change impacts the trees with rising temperatures and changes in rainfall causing stress to trees. If a tree is under stress, it has fewer defenses against insects and pathogens. A pathogen is an infectious thing such as a virus, bacterial fungi or parasite, which causes a disease.  
As an example, huge patches of forest in Tasmania had many trees dying after a long dry summer with very low rainfall between February and April 2024. As a result, there was sudden tree death due to a dieback. Dieback can be caused by stress due to drought like this, and also by fungus and other diseases.
- **Plant diseases:** Most eucalyptus tree problems take place when the tree is stressed. This can be the result of disease or insects. Some fungi can cause disease in stressed trees. It can infect the bark and cause the leaves and branches to drop off. Other fungi can destroy the tree from the inside.
- **Humans:** Poorly managed fires in eucalyptus forests, and land clearing for agriculture, mining and housing threaten eucalyptus trees. If large areas of forests are destroyed, it also affects the animals and plants that depend on the eucalyptus tree for survival.

#### DID YOU KNOW?

Trees have a special day in Australia. **National Tree Day** is held during July. It's one of the biggest tree-planting and nature care events in every state and territory. Many schools also take part in **Schools Tree Day**, which is also in July. Ask your teacher if your school does and if yes, what do they do?

### More FUN facts:

- Some eucalyptus species are among the fastest-growing in the world.
- Bees are especially attracted to eucalyptus flowers. The honey they make from eucalyptus nectar is unique and full of flavour.
- Koalas have a special diet and eat about 500 grams of eucalyptus leaves daily. However, they only eat leaves from some eucalyptus trees, not all.
- Some insects and other animals don't like eucalyptus trees because the leaves contain oil that can be toxic and acts as an insect repellent.

To find out more, check out this great YouTube clip: [Why is a scientist's work so important?\(youtube.com\)](https://www.youtube.com/watch?v=...)



# EUCALYPTUS TREE QUIZ

Check what you've learned about eucalyptus trees!



1. How tall can some eucalyptus trees grow?
  - a. 60 cm
  - b. Over 150 metres
  - c. Up to 100 cm
  - d. Over 90 metres
2. How old can most eucalyptus trees live to?
  - a. About 5 years
  - b. Less than 20 years
  - c. More than 250 years
  - d. More than 500 years
3. How many native species of eucalyptus are found in Tasmania?
  - a. 5
  - b. 43
  - c. 17
  - d. 29



*Eucalyptus vernicosa* foliage

4. Most eucalyptus trees shed their bark...
  - a. At least 3 times a year
  - b. About once every 10 years
  - c. At least once a year
  - d. Once in their lifetime
5. Which of the following is a threat to the eucalyptus tree?
  - a. Controlled fire
  - b. Koalas
  - c. Some fungi
  - d. Snakes
6. Which of the following is correct?
  - a. Trees and plants provide food for many birds and animals
  - b. Trees can protect against landslides
  - c. Trees and plants produce oxygen
  - d. All of the above



*Eucalyptus ovata*

# DESIGN A POSTER

Feature one of our native Tassie eucalyptus tree species



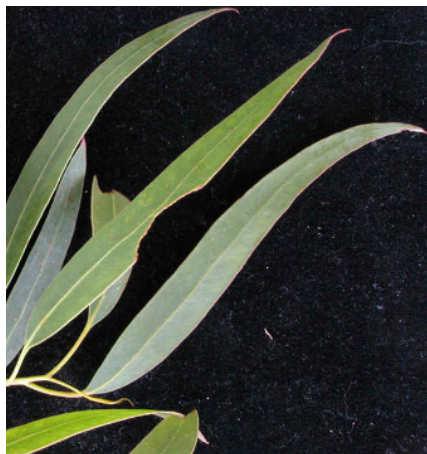
- Choose one of the native eucalyptus tree species from the list below. Your poster can include:
  - Species and common name of the eucalyptus you chose
  - At least 5 interesting facts
  - A photo or drawing of the tree or a part of the tree such as the leaves, fruit or flowers
  - Why it is important to look after our eucalyptus and other native trees in Tasmania.
  - Anything else that you find interesting about the tree you have chosen.

**Hint:** If you need some help a good website to look at is <https://kids.kiddle.co> and then type the species name in the search box (i.e. type in 'E. archeri').

Species	Common name in Tasmania
E. archeri	Alpine cider gum
E. coccifera	Snow gum
E. globulus	Blue gum
E. ovata	Black gum
E. regnans	Swamp gum or giant ash
E. sieberi	ironbark
E. vernicosa	Varnished gum
E. viminalis	White gum



*Eucalyptus viminalis* (juvenile leaves)  
Photo: UTAS.



*Eucalyptus viminalis* (adult leaves)  
Photo: UTAS.



*Eucalyptus regnans* flower



# LEAF & BARK RUBBINGS



Follow the steps below:

- You will need paper, a selection of leaves or different bark, crayons or charcoal.
- Place your leaf or piece of bark under your paper. The underside of a leaf facing upwards is best, so the veins are clearer.
- Hold the paper and leaf or bark in place with one finger or hand, and then use your charcoal or crayon to rub over the leaf or bark.
- Now experiment and use different colours or different crayon strokes, and different leaves and bark.



## More WILD fun activities

- Write a story or a poem about the life of a eucalyptus tree in the bush.
- Write an acrostic poem. Choose one of the eucalyptus tree species. You can choose its species or its common name. Or just choose the word 'tree' or 'eucalyptus'. Here's an example using 'tree'.
  - o **T**all and proud
  - o **R**eaching for the sky
  - o **E**ach one is special
  - o **E**veryone needs trees to stay alive
- Enjoy sketching outdoors. Take paper and a pencil, and find a tree or part of one, such as a leaf, nut or flower.
  - o Spend time looking closely and include as much detail in your drawing as you can.
  - o Now you've done one sketch, you could start a 'tree journal' and do a different sketch every day or week.

For more Wildcare Tasmania information and activities to enjoy check out the Children's University portal.

### GET INVOLVED:

- **Join a group:** Wildcare groups take care of our environment and wildlife. Find out more at <https://wildcaretas.org.au>
- **Art projects:** create native tree art to raise awareness about how important they are for us, wildlife and the planet.
- **Community projects:** encourage your family to take part in local environment or beach clean-ups, working bees, or conservation programs.