



# The Wollemi pine

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# Overview

The Wollemi pine is a warm-temperate rainforest tree that grows is often called a living fossil. It is only found in NSW Australia in the wild and is critically endangered. Because it is only limited to one location in the wild it is one of the rarest trees in the world. The wollemi pine is often recognised by its bubbly red bark.

## Why is it famous

The Wollemi pine is over 200 million years old so it is considered a living fossil. Because it's so rare until 1994 when it was rediscovered the Wollemi pine was thought to be extinct.

The Wollemi pine remains in only one discovered spot in the wild. Experts estimate that there might be just less than 90 in the wild. The Wollemi pine is also the only discovered species of it's genus: *Wollemia*



# Discovery

In mid 1994 park ranger David Noble discovered what is decided to be the floral discovery of the century. It all happened when he was canyoning. While in the canyon Noble came across an amazing sight. A unique tree he had never seen before.

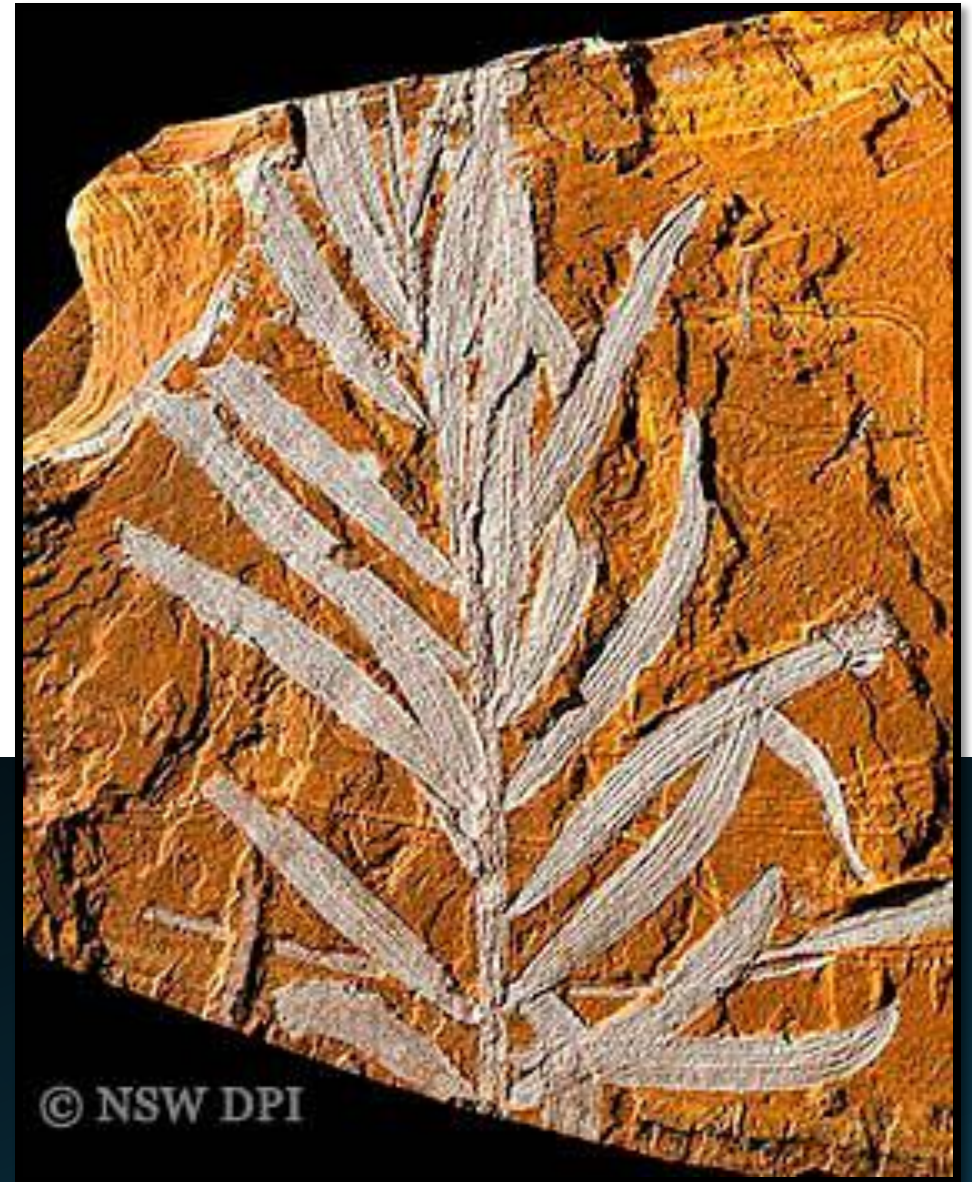
He then took a sample to Sydney royal botanic garden. After several experiments it was concluded that Noble had rediscovered the Wollemi pine. This discovery was a big deal because the Wollemi pine was thought to have thrived along with the dinosaurs around 91 million years ago but before Noble the Wollemi pine was thought to be extinct because of limited distribution.

Today there are less than 90 in the wild.



# History

Scientists believe the Wollemi pine has existed for much of the Jurassic period and through the Cretaceous period. Based on fossil records the Wollemi pine was thought to have gone extinct 2 million years ago.





## *How it survived*

Wollemi pine used to be spread across Gondwana, the supercontinent that existed before Australia broke off from Antarctica and moved north. Australia's climate then changed, slowly becoming hotter and drier which reduced the population of the Wollemi pine until it was almost extinct.

In the canyon that they survived in there was a lot of protection. First of all, there was a hard rocky terrain so humans couldn't travel down which meant no logging or introduced diseases. Secondly, there were steep ridges that the fire couldn't travel down. Also, there were deep gorges that are mostly cold and good for collecting lots of water inside of.



## Experiments

One of the many experiments used to decide Noble's fascinating tree sample was the Wollemi pine was **wood anatomy analysis** (studying the structure of wood). Examining the wood sample's cells and patterns helped determine that this was the Wollemi pine.

Another important experiment was **Morphological comparison** (comparing living trees to fossil records) this comparison revealed that the samples resembled their fossils but the scientists also found some new traits which distinguished them as a new genus *Wollemia*.

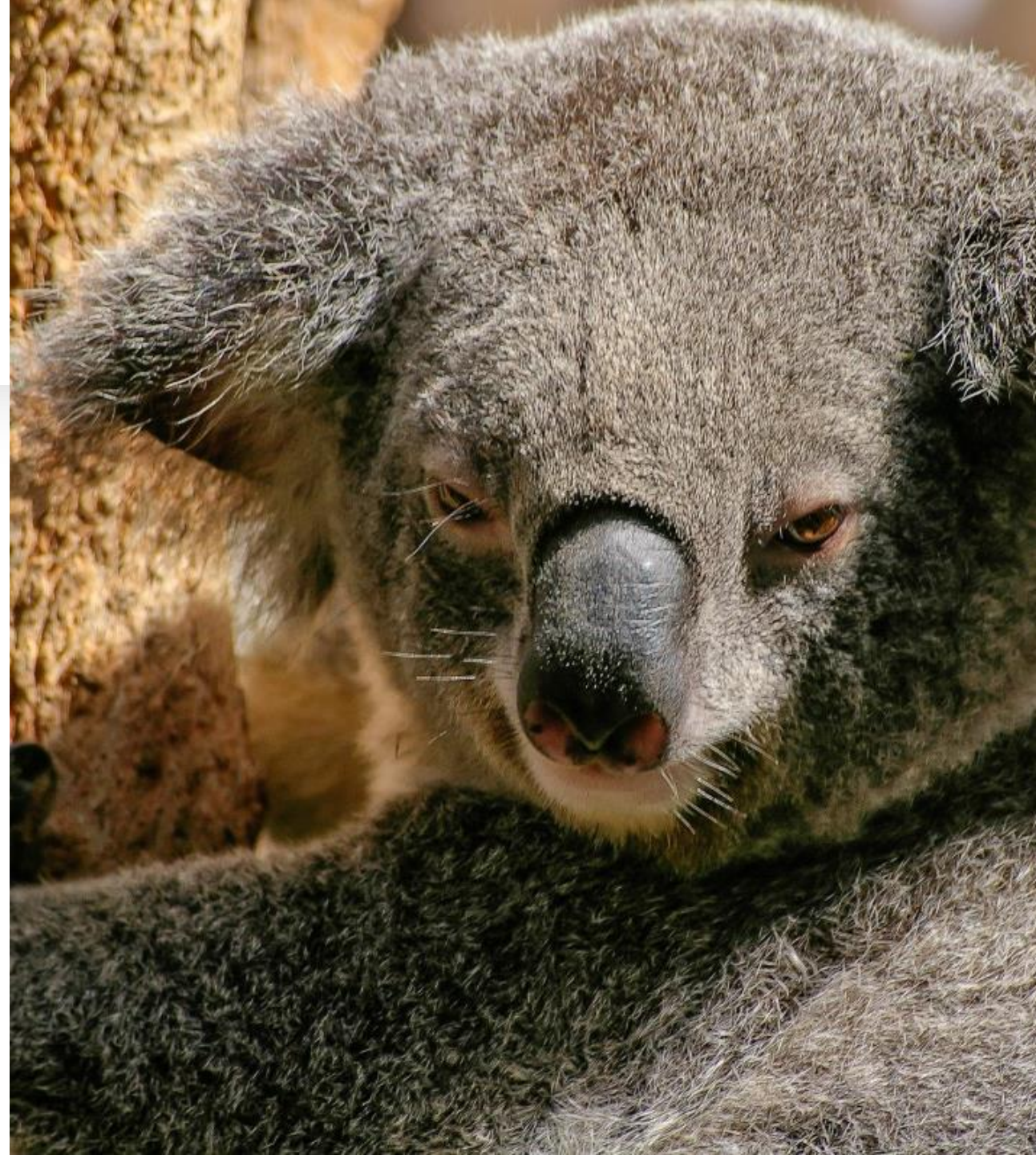


## Fun Facts

- The Wollemi pine can grow up to 40 metres
- They have a very low genetic diversity
- The bark is a distinctive deep-red colour
- A single trunk can reach up to about 450 years old

# Reference list

- Botanic gardens of Sydney
- ABC News
- NSW national parks
- NSW government
- Australian government department of climate change energy and water (DCCEEW)



Thanks for listening (or reading)

