What is the Australian tropical savanna?

The Australian tropical savanna is a region in the North of Australia defined by a tropical climate and a landscape made up of small trees and shrubs and grasses covering the ground.

Where is the Australian tropical savanna?

Australia’s tropical savanna is spread over the top of Australia. It covers the northern section of Western Australia, the Northern Territory and Queensland.

This is 23% of Australia’s land.

There are also tropical savannas in Africa, Asia and South America. They all have tropical climates similar to that found Australia’s tropical savanna.
Vegetation in the Australian tropical savanna

The small plants are grasses and shrubs. There are many species of grass. Each is adapted to survive in different types of soil and the amount of seasonal rain they receive. They grow during the wet periods and become brown during the dry periods. They grow new green shoots from their base after the rain.

The trees of the savanna are often small and spread out. Near water courses other species of trees grow much larger.

Most of the trees are eucalyptus. Eucalypts remain green throughout the year and have their seeds in woody gum nuts.

One of the larger trees is the baobab. It loses its leaves in the dry season.

Tropical savannas can take many forms. They can be grasslands with few trees or they can be woodlands with small or larger trees. There may also be patches of rainforest in places like deep gullies.
The climate of the Australian tropical savanna

This table shows the mean rainfall in mm near the inland town of Kununurra in Western Australia. You can see that this area receives the most amount of rain from December to March, when areas in the south of Australia receive the least.

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<tr>
<th>Jan</th>
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<tbody>
<tr>
<td>198</td>
<td>211</td>
<td>157</td>
<td>28</td>
<td>7.1</td>
<td>1.7</td>
<td>0.1</td>
<td>3.1</td>
<td>23.6</td>
<td>61.3</td>
<td>135.9</td>
<td>828.2</td>
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The Earth rotates on an axis. We call summer the period when the rotation of the Earth faces the sun as close as it can face it. But this is different in the tropics. In the tropics when the sun is more face on the water evaporation over the seas is highest, producing monsoonal rains. This is when Australia’s tropical savanna’s get their rain. During the rest of the year they get very little rain.

The mean temperature of the tropical savanna is below.

<table>
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<tr>
<th>Jan</th>
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<tr>
<td>35.9</td>
<td>35.0</td>
<td>35.5</td>
<td>35.2</td>
<td>32.7</td>
<td>30.1</td>
<td>30.5</td>
<td>32.6</td>
<td>36.5</td>
<td>38.5</td>
<td>38.9</td>
<td>37.1</td>
<td>34.9</td>
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</table>

You can see however, that there is very little variation in the temperature over the year. It is pretty much HOT all the time.
Seasonal changes in the Australian tropical savanna

People often refer to two seasons in the tropical savanna; the wet season and the dry season.

The plants and animals are adapted to these changes in rainfall. They are able to grow and reproduce when there is water available. And they are able to survive the long dry period each year.

Ecology and fire in the savanna

The plants of the savanna are adapted to survive fire.

Grasses grow new green shoots from their roots which remain safe underground. Many shrubs and trees shed seeds or have seeds in the soil that germinate after fire and rain. Eucalypts survive fires unless the fires are extremely hot.

Animals can’t survive severe fires but during cool burns some are able to survive by hiding in holes and burrows, but most need to escape.
Animal adaptations

There are many species of grass finches in the tropical savanna. They use their strong bills to eat grass seeds. Their different colour patterns help them to find the right mate.

Corellas are a species of cockatoo. They use their strong hooked bill to eat seeds, fruits and flowers. They feed in the trees and on the ground.

Agile wallabies mostly eat grass. They protect themselves with camouflage, hiding and hopping at great speed. They rotate their ears to pinpoint any dangerous sounds.

Goannas don’t need a lot of food or water. They use their tongues to help them smell their prey. They pick up the scent on their tongue and then poke their tongue into their nose. Their pointed sharp teeth are used to hold onto struggling prey.

Grasshoppers eat grass. Their eggs can lie on the ground and hatch once it has rained and green grass is available.
Farming in the savanna

The main agricultural industry in the savanna is cattle grazing. The farms are very large and the cattle have been bred to live in tropical conditions.

Conservation

Weeds are becoming a bigger problem in the savanna, and are taking over from native grasses and shrubs.

Some areas also have feral animals, such as buffalo, pigs and cane toads.

Overgrazing can damage the environment by making it harder for the native plants to mature and seed.

Very hot fires do a lot of damage to the plants and can negatively affect native animals.

For more information on how you can help our environment, or to make some suggestions of your own, please go to www.coolaustralia.org