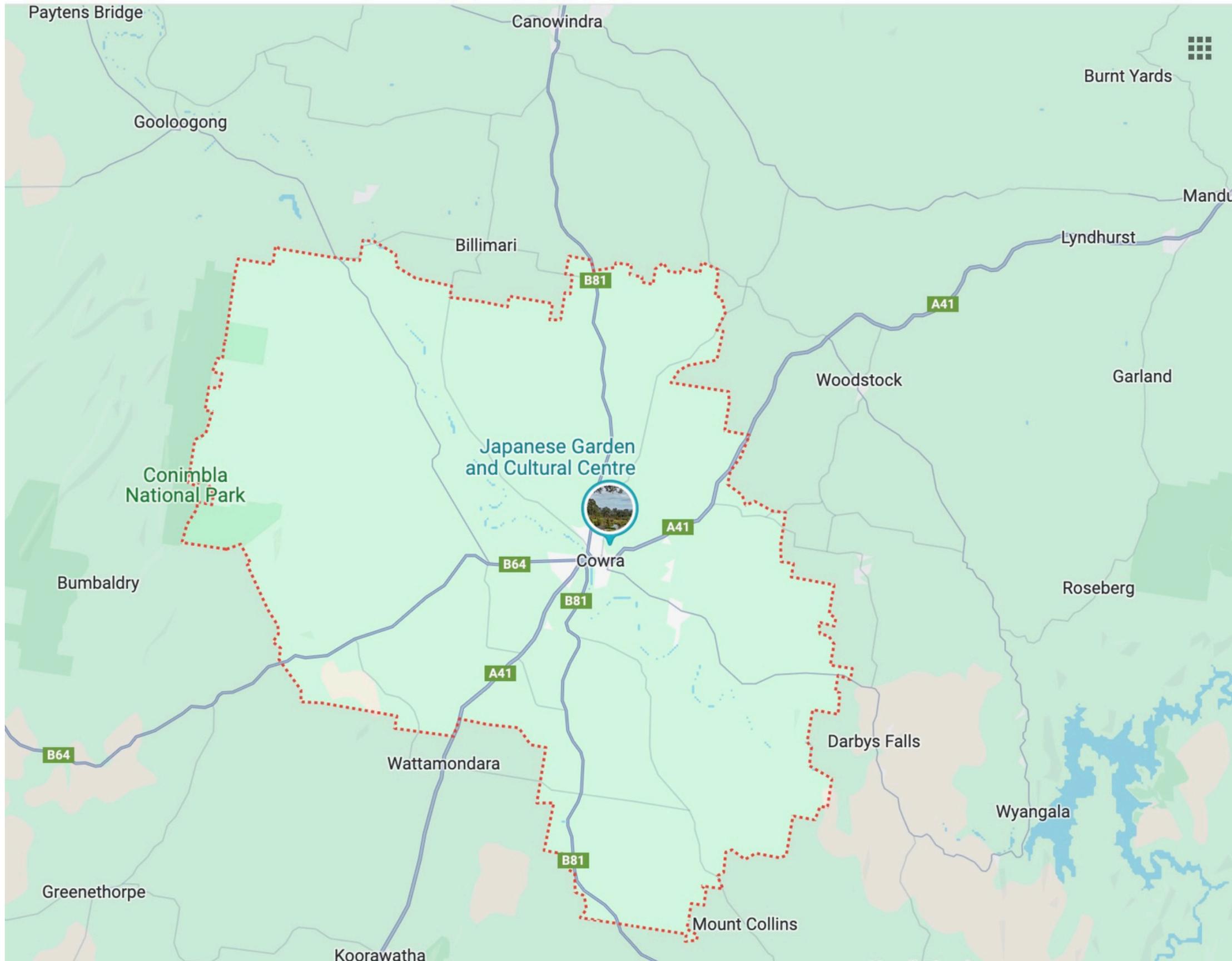




Life Around A Gum Tree Bingo



Mid Lachlan
Landcare



Box Gum Grassy Woodland

- Native woodland of the Mid Lachlan Region.
- Blakeleys, White Box, Yellow Box, Red Stringy Bark, Black Cypress, White Cypress, She Oak.



Box Gum Grassy Woodland Habitat on Farm

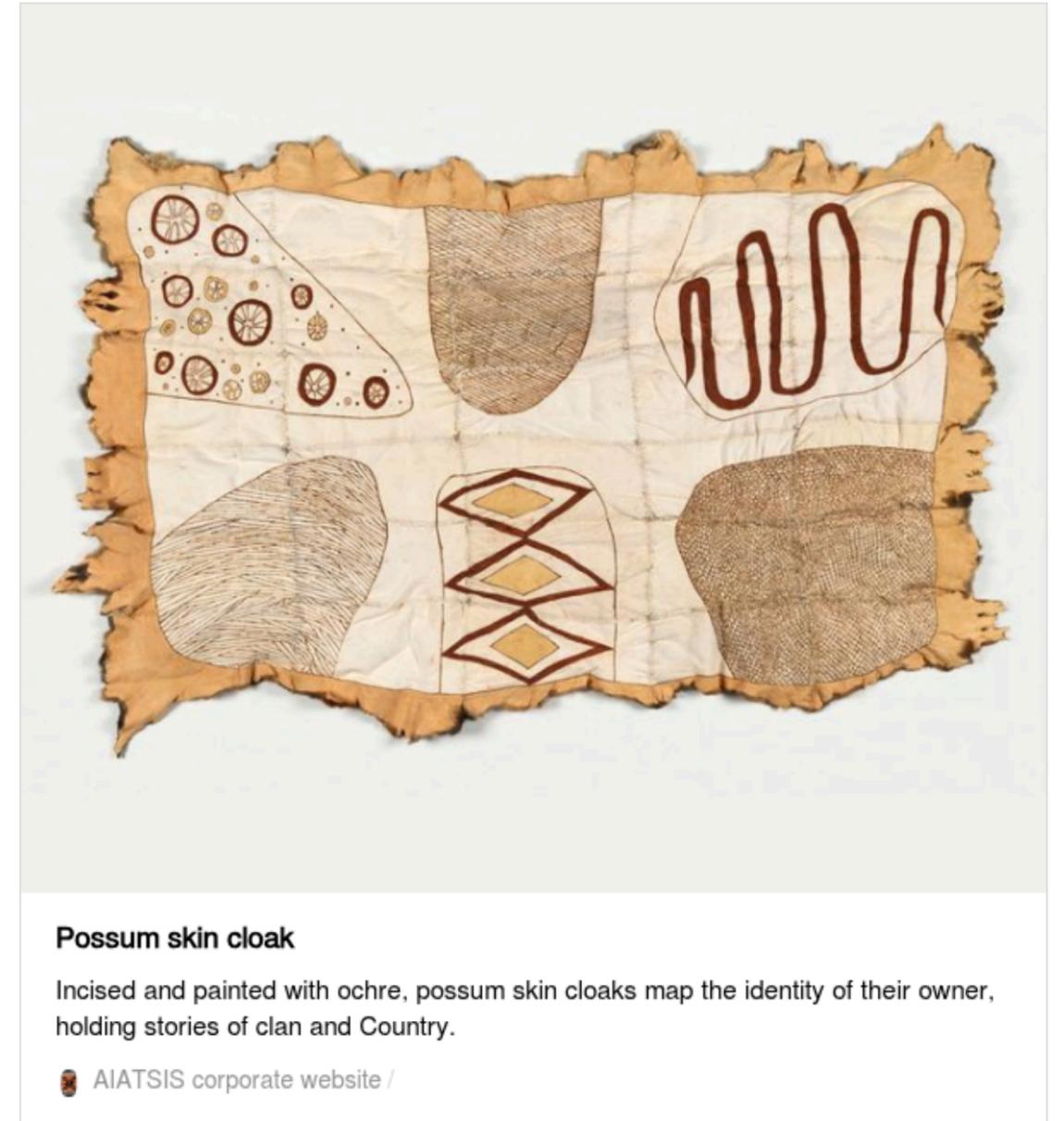
Almost \$300,000 will be spent enhancing Box Gum Grassy Woodlands on farms in the Cowra/Canowindra district over the next six years, as part of the NSW Government's Save our Species (SoS) Program. M...

 Mid Lachlan Landcare / Mar 30, 2020

<https://midlachlanlandcare.org/our-projects-2/box-gum-grassy-woodland-habitat-on-farm/>

Eucalyptus leaves are the favourite food of the **Ringtail possum**. They also eat fruits, flowers and leaves of other native trees. **Ringtail Possums** have two “thumbs” to help with climbing.

The tail of the **Ringtail Possum** can grasp objects and act as another limb. The last third of the tail is always white and the underside of the tip is hairless. This tail is often used to carry nesting materials and to aid in balance.



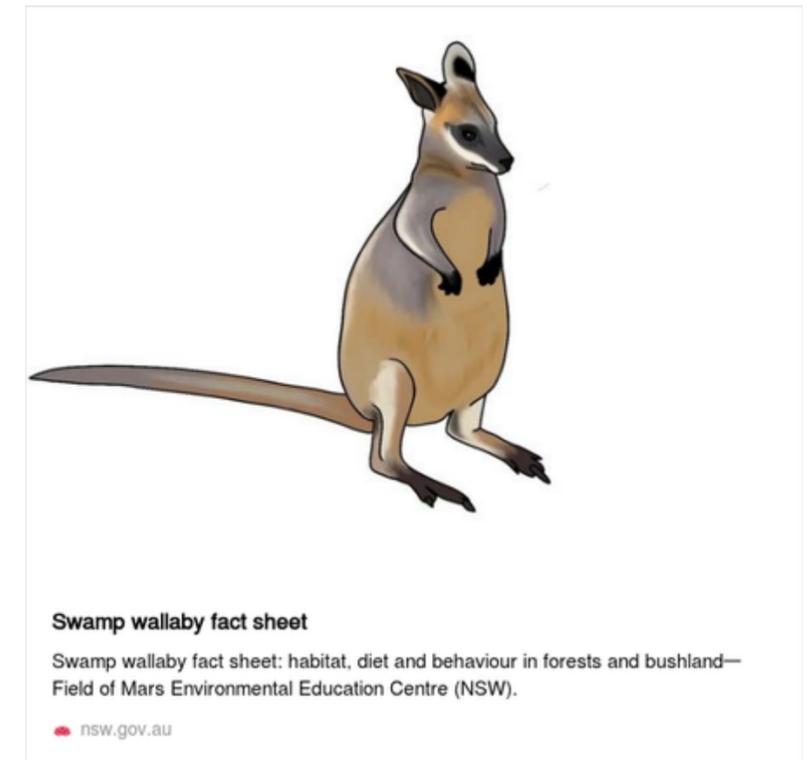
<https://aiatsis.gov.au/explore/possum-skin-cloak>



Macropods such as **eastern grey kangaroo** & **swamp wallaby** also rely on the grassy understorey of the box gum woodland for food.

Eastern Grey Kangaroos eat grasses, herbs and occasionally shrubs. Areas with patches of trees for cover near open grassland provide perfect habitat for **Eastern Grey Kangaroos & Swamp Wallaby's**.

<https://fieldofmar-e.schools.nsw.gov.au/fact-sheets/mammals/swamp-wallaby-fact-sheet>



The **brown tree-creeper** climbs up the trunks and branches of trees in search of food. It probes into cavities and under loose bark with its long downward curving bill searching out ants and other insects.



Brown Treecreeper

The Brown Treecreeper is the largest of Australia's treecreepers. It is mostly pale brown in plumage and climbs up trunks and branches of trees.

 BirdLife Australia /

The Birdlife Australia website has recordings of the brown tree-creeper's calls.

<https://birdlife.org.au/bird-profiles/brown-treecreeper/?srsId=AfmBOopMqdvmJlkn3KabrLNfiq7t0ttwKU3BK29ZKCTDD4TKuCX4RCJI>



Tiny insects called **psyllids** suck sweet sap from the gum leaves.
The **Hooded Robin** likes to hunt insects including **psyllids**. They can often be seen sitting on a dead branch patiently waiting for their prey.
Hooded Robins may also forage for food on the ground.



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Rain moth larvae live in tunnels in the ground, often around gum trees where they feed on the tree roots.

They live in these tunnels for many years before finally emerging as an adult moth, typically after rain.

You can often find rain moth cases poking out from holes in the ground during early autumn.



The **Grey-headed flying fox** can sometimes be found roosting in gum trees. **Flying foxes** live in community groups known as camps or colonies which can contain thousands of individual animals.

Grey Headed Flying foxes forage on their nectar and pollen of gum trees and will fly up to 50km for a good feed. They also love fruit which has led to them often being referred to as 'fruit bats'

Flying foxes are mammals that produce milk to feed their young. Young are cared for in community creches until they are old enough to fend for themselves.

<https://www.ausbats.org.au>



Cowra Golf Course has a colony



The Superb parrot is a **threatened species**. It is one of a range of bird dependent on **hollows** that form in large trees that are between 100-200 years old. These hollows serve as both shelter and nest sites. Eucalyptus blakelyi is a favourite gum tree of the Superb Parrot providing both food and shelter for this beautiful bird.



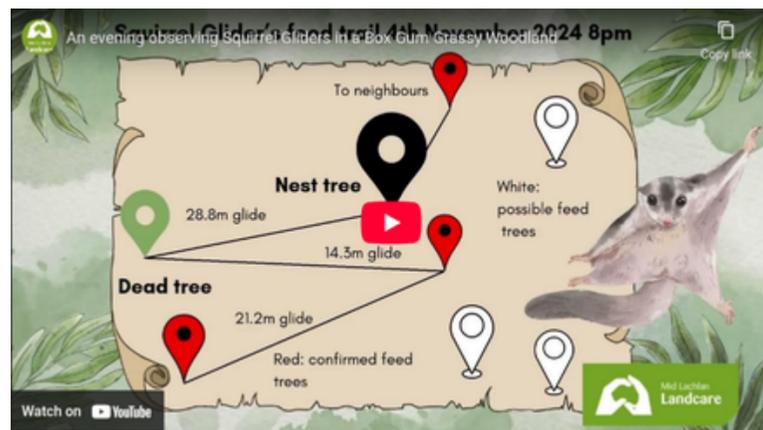
<https://www.youtube.com/watch?v=bGoktKMXCzA>



Squirrel gliders are members of the possum family. They require tree hollows for refuge and nest sites. They typically live in family groups of up to ten individuals.

Squirrel gliders prefer a habitat that includes well spaced gum trees that are surrounded by a shrubby understorey of Wattles (Acacia) for their sap, and Banksia for their nectar.

They move around by climbing up to the top of trees and then gliding down and across to the next tree. If the gap between trees is too large, **Squirrel Gliders** can land on the ground where they can be preyed upon by other animals, get caught in fences or even be ran over by a car!



<https://www.youtube.com/watch?v=7IKrnJHyxul>

Squirrel Glider Math & Mapping



In nature, complex **ecosystems** (communities) are the strongest.

Mistletoe increase habitat complexity & therefore ecosystem health.

The **Mistletoe bird** eats berries from the **mistletoe** plant, pooping out digested seeds into the branches where it sits. This is how the plant spreads.

Mistletoe is a **hemiparasitic** plant meaning it starts to grow on a gum tree, sharing some of its water while producing its own food through **photosynthesis**.

Mistletoe provides food for a variety of animals including invertebrates and nectarivorous birds, as well as the **mistletoe bird**



Fallen timber creates a **microclimate** around the base of the tree. This **microclimate** creates a gentle environment where new plants can **germinate** and grow. Fallen timber also supports populations of **fungi**.

There are many different types of fungi including the '**decomposers**' - a family of fungi that act as nature's recyclers.

Another phrase for this job is '**nutrient cycling**'. That's where old plant and animal material is broken down, digested and returned to the earth as soil. This new soil is alive and ready to help grow a new generation of life under the gum tree.



<https://www.youtube.com/watch?v=uB61rfeeAsM>



The **short beaked echidna** is a soil engineer. Their digging and burrowing behaviour contributes to **nutrient cycling**, dispersal and **germination** of seeds and **spores**, and soil sponginess.

Soil sponginess is also called **soil permeability** and refers to how readily the soil soaks up and holds onto water. With water being essential for all life, we should thank the **Echidna** for all it does to keep the soil moist and spongy.



https://www.youtube.com/watch?v=x_2Vqkynr6Y



The ground beneath and between gum trees can be bare, grassy or be covered in small greeny, brown fuzz-type plants. We call these fuzzy plants the **soils biological crust** & they are the first stage of life coming back to bare soil.

The **soil biological crust** includes **lichens, mosses and liverworts**. The crust protects soil from blowing away - a process we call erosion that can be caused by the weather, by animal use or mechanical forces such as vehicles or diggers.



Biological soil crusts can be seen forming on graves at Woodstock cemetery

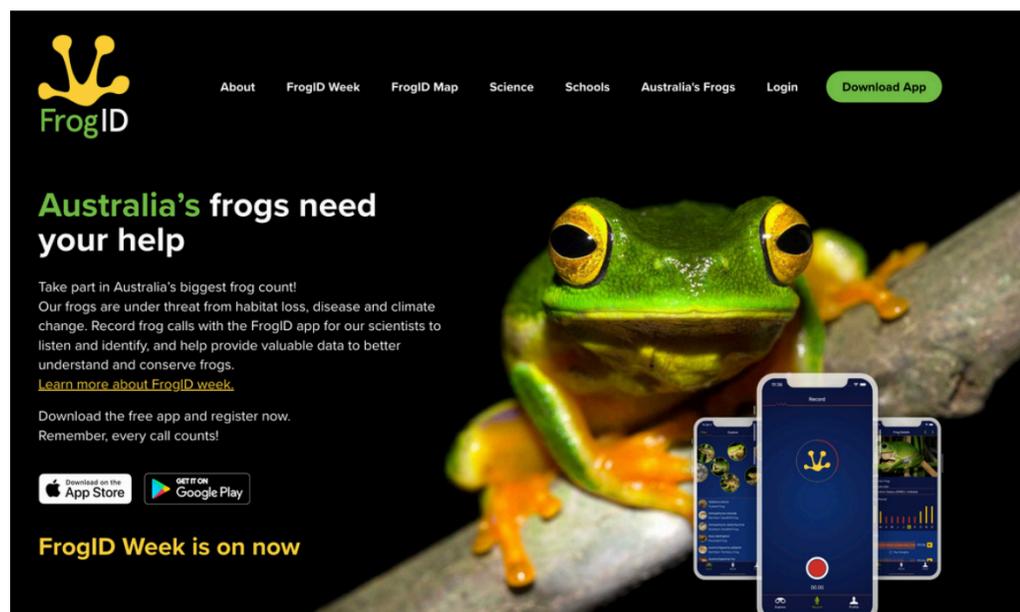
The **pink-tailed worm-lizard** likes living amongst grassy tussocks, particularly where trees are well spread out and there are surface rocks. **Pink-tailed worm-lizards** are rarely seen but if you want to go searching, they live in **ant** burrows where they predate on **ants**



The **Eastern banjo frog** likes to sit in a cool spot under a fallen branch. This frog feeds at night on insects and insect larvae and lives in burrows in the ground, which it digs with its hind legs and proceeds in backwards.

After rain the **Eastern Banjo Frog** comes out in large numbers.

They are most often heard in the breeding season which is between August and April. Their song sounding like a boink rather than a croak.



The screenshot shows the FrogID website homepage. At the top left is the FrogID logo, a yellow crown-like shape above the text 'FrogID'. To the right of the logo is a navigation menu with links for 'About', 'FrogID Week', 'FrogID Map', 'Science', 'Schools', 'Australia's Frogs', and 'Login'. A green 'Download App' button is positioned to the right of the navigation menu. The main content area features a large image of a green frog with yellow eyes and orange feet perched on a branch. To the left of the frog, the text reads: 'Australia's frogs need your help', 'Take part in Australia's biggest frog count!', 'Our frogs are under threat from habitat loss, disease and climate change. Record frog calls with the FrogID app for our scientists to listen and identify, and help provide valuable data to better understand and conserve frogs.', and a link 'Learn more about FrogID week'. Below this is a call to action: 'Download the free app and register now. Remember, every call counts!'. At the bottom left are the 'Download on the App Store' and 'GET IT ON Google Play' logos. At the bottom right, it says 'FrogID Week is on now'. In the foreground, a smartphone displays the FrogID app interface, showing a recording screen with a red microphone icon and a data visualization screen with a bar chart.

<https://www.frogid.net.au>



Conversation Starter 1:

*The habitat provided by a Box Gum Grassy Woodland includes sites for **foraging, roosting, nesting and protection**. Let's explore that.*

Conversation Notes:

Foraged food can include insects (beetles, mosquitos, bees, ants, termites, cicadas & psyllids) & arthropods (spiders, mites, ticks, scorpions).

Provide Protection from predators & harsh weather.

Nesting = creating a safe space to birth & raise babies. Can be in hollows, **fissures** in tree bark, tunnels in ground under tree or nests built on branches & leaves.

Roosting = getting ready to sleep.



Conversation Starter 2:

There is often a lot of old twigs, branches & bark around old trees. Old trees drop woody debris on the ground, providing habitat for lots of creatures including insects such as ants and reptiles including lizards & snakes!

Conversation Notes:

Imagine we are going to go forage around under a gum tree to survey the creatures that live there. How can we do that safely and effectively?

Survey = To collection of data in a way that helps us better understand our subject.

Safety = clothing, supervision, handling of what's found, weather considerations (wind, dust, sun etc)

Effectively = What type of data will we collect and how?



Conversation Starter 3:

Collection of firewood from Box-Gum Grassy Woodland significantly reduces the habitat value. Dead standing trees and fallen timber provide protection and food for a variety of woodland birds, mammals, reptiles, amphibians and invertebrates. Fallen timber also provides the base material and environmental conditions for nutrient recycling.

Conversation Notes:

Round table discussion around sustainable use of resources. Our rights and responsibilities as custodians of nature.



Macropods - family of marsupials including kangaroos, wallabies, quokkas, pandemelons.

Marsupials -marsupials is their unique reproductive strategy, where the young are born in a relatively undeveloped state and then nurtured within a pouch on their mother's abdomen.

Understory - A layer of vegetation under the tree canopy

Fissures - A split or crack, in this case in the bark of a tree

Soil Permeability - the capacity of the soil to allow water to pass through it

Hemiparasitic - A plant that can make its own food but that is partially parasitic on the roots or shoots of a plant host

Parasitic - lives completely off another, weakening and maybe even killing the host



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Sap - the fluid which circulates in the vascular system of a plant, consisting chiefly of water with dissolved sugars and mineral salts.

Nectar - a sugary fluid secreted within flowers to encourage pollination by insects and other animals, collected by bees to make into honey.



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