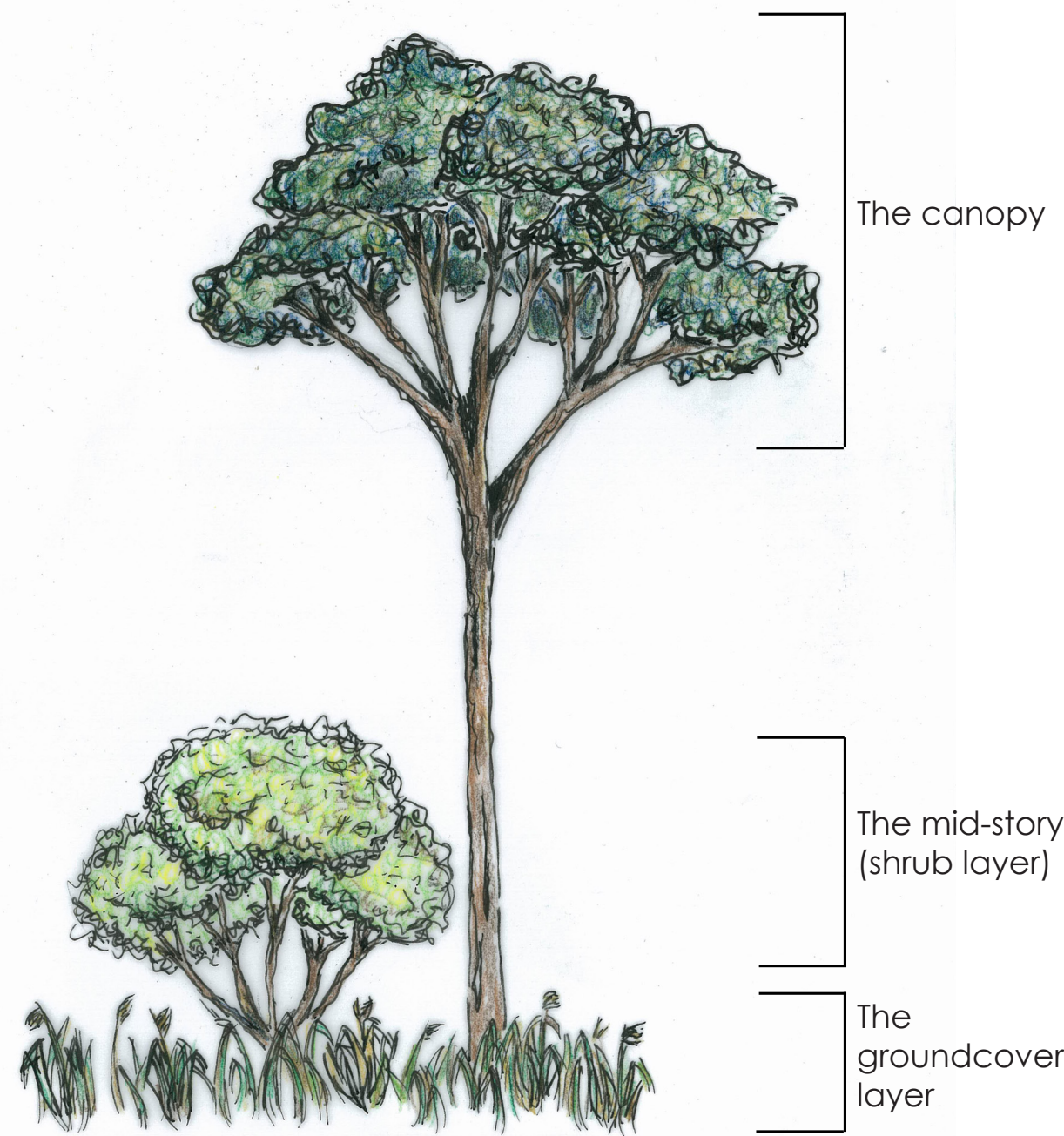


Cumberland Plain Woodland: a rare natural relic within a modern suburban setting

Prior to the arrival of European settlers, the gently rolling landscape of western Sydney would have been draped in a unique woodland plant community consisting of a mix of large gum trees, patchy shrubs and grasses, known as Cumberland Plain Woodland. It is estimated that only around 6% of the original 125,000 hectares remain in small fragmented patches scattered across the Cumberland Plain. Unfortunately this woodland is now listed as a Critically Endangered Ecological Community by both New South Wales and Commonwealth Governments and is protected under relevant legislation. Remarkably, whilst it is located alongside a distinctly suburban setting, Noorumba Reserve forms one of the largest areas of Cumberland Plain Woodland under public ownership in south western Sydney, and provides habitat to a wide range of native wildlife, forming a vital link in a wildlife corridor that has the potential to connect the native vegetation of the Georges and Nepean Rivers.



Structure of the woodland

The canopy

The upper level of the woodland, and indeed the Cumberland Plain Woodland itself, is marked by the presence of three main species:

- Forest Red Gum (*Eucalyptus tereticornis*),
- Narrow-leaved Ironbark (*Eucalyptus crebra*) and
- Grey Box Gum (*Eucalyptus moluccana*).

The mid-storey (shrub layer)

This shrub layer in the Cumberland Plain is generally dominated by the prickly shrub Blackthorn (*Bursaria spinosa*). This layer tends to be patchy throughout the woodland. While this patchiness provides a remarkable diversity of microhabitats among remnant patches, it is quite possible that this fateful feature led to the woodland's undoing: the absence of substantial understorey vegetation - and thus its ease of clearing - may have led settlers, searching for suitable agricultural lands, to settle on the Macarthur region, ultimately resulting in its mass-scale clearance.

The groundcover layer

This is the most species-rich layer of the woodland in terms of diversity, and consists of grasses and herbs, including native perennials like Kangaroo Grass (*Themeda triandra*).

Long live the woodland!

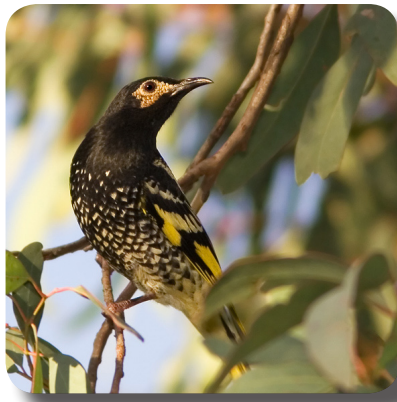
Some species in the Cumberland Plain may live several hundred years, with some individual Narrow-leaved Ironbarks and Forest Red Gum trees in the area that may have been standing when the Europeans first arrived.

There are others, like Blackthorn (*Bursaria spinosa*), which resprouts from its base again and again after fire, and so if disease, severe drought, or other external conditions don't kill it, it could live on forever!

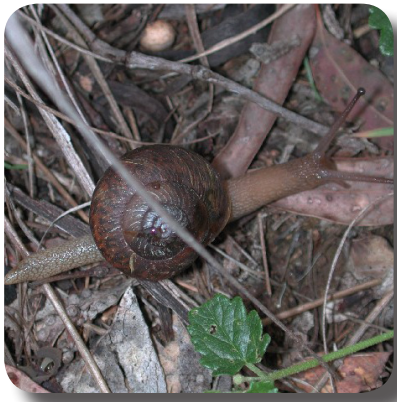


Wildlife

Cumberland Plain Woodland is habitat for a variety of Australian wildlife, including a number of threatened species. Several species of honeyeaters, cockatoos and owls mark the birdlife, while micro-bats tend to dominate the mammal count. However, the fragmented state of the remaining woodland area has degraded the quality of the Cumberland Plain as habitat. Declines in the presence of a number of woodland dwelling species have been observed in recent surveys, including many small native rodents, goannas, honeyeaters, finches, robins and more. Some appear to have disappeared from the woodland completely. The patchy nature of remaining woodland habitat makes finding suitable mates more difficult for these already small populations. Establishing wildlife corridors - or linked sections - of remaining woodland through bush regeneration works, can help to provide a bridge for some species to reach each other and other areas of habitat.



Koalas, Regent Honeyeaters and Grey-headed flying foxes are just a few of the threatened species that have been recorded in Cumberland Plain Woodland.



Cumberland Plain Land Snail: not your ordinary garden snail

This tiny tenant of the Cumberland Plain differs from other snails in that it only feeds on fungus, and is active at night. The Land Snail is an endangered species, relying on the remaining remnants of Cumberland Plain Woodland as habitat - much of which occurs in small fragmented patches.

Threats

- Clearing of woodland for development or agriculture, which causes limited connectivity of remnants
- Livestock grazing
- Increased nutrient loads from agricultural and residential runoff
- Exotic plant invasions
- Improper fire regimes

Did you know...?

It's not only dogs that can play dead.

Many of the ground species of the Cumberland Plain Woodland have thick rootstocks, in the form of taproot systems, underground tubers and the like. During difficult environmental conditions such as prolonged drought, plants are able to kill off their above-ground vegetation, retreating back to their rootstocks until conditions improve. Even grasses are able to die back and resprout (though not through heavy rootstocks)!



WARNING

Risk of invasion: high

One of the major threats to the survival of remaining Cumberland Plain Woodland communities is from foreign invaders... not the military kind - but from exotic weeds which have been introduced by humans. These pest plants, brought in from other regions and countries, compete with native species for resources and can even change the state of the landscape, drying soils, blocking light and changing the composition of the understorey. These persistent pests disperse their seeds through a variety of methods, making them very difficult to eradicate. Many are garden escapees which spread through waterways after rain or from animal fruit and seed feeders.

Look carefully: you might recognise some of these invaders from around the area. Do you have any lurking in your garden?



African Olive (*Olea europaea africana*)

The most serious threat to the woodland, the woody weed forms dense groves which hinder the growth of native plants underneath. The fruit is a favourite of birds, who are co-conspirators in its successful spread.

Privet (Long and small leaf) (*Ligustrum lucidum*, *Ligustrum sinense*)

Like the Olive, Privet berries are a favourite of birds, who disperse seed into previously undisturbed areas. Privet is also spread through waterways, and can make a home just about anywhere - even stormwater drains.



Bridal Creeper (*Asparagus asparagoides*)

This vicious vine was originally introduced as a decorative plant and continues to escape residents' gardens today. It kills native plants by overgrowing them and cutting off sunlight.

St John's Wort (*Hypericum perforatum*)

Considered a major threat to the Cumberland Plain, seeds are sticky and can be spread by animals, wind, water and humans. Seeds can remain intact in the soil for several decades!



Want to help?

If you're interested in helping to restore some of this unique natural habitat, why not contact Council about joining a bushcare group? You can be directly involved in its recovery by getting rid of some of the weeds that threaten this rare community.

Other ways you can help include:

- Making sure your garden isn't playing host to a heap of invasive weeds - stick to native species.
- When bushwalking, keep to designated paths and keep pets on a leash or away completely.
- Dispose of rubbish responsibly, including garden waste.



Fire

Bushfire is a natural phenomenon occurring throughout much of the Australian landscape, and historically was also set deliberately at times by aboriginal people to manage the landscape for hunting and navigating. Occurring throughout the driest part of Sydney Basin, Cumberland Plain Woodland is well adapted to drought and fire. Many understorey plants have developed special mechanisms to allow them to survive hot, dry conditions, such as underground tubers, profuse seed production, or shoots which resprout from buds lying dormant beneath the bark. The frequency of fires is a key factor in determining the composition of the woodland: too frequent, and it may kill off certain species in their juvenile stage before they develop resistance to fire, as well as fire sensitive species before they get the chance to produce more seed. Not frequently enough, and species richness (or biodiversity) might be reduced, since many species reproduce through a somewhat regular burning regime.