

THE SANCTUARY

Bushland ecosystem rehabilitation

proudly supported by Economic Development Queensland



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CARSELDINE VILLAGE: THE SANCTUARY

The Sanctuary, Cabbage Tree Creek Bushland, at Carseldine Village is a really interesting ecosystem. Fundamentally, it's an 18-hectare forest serving as a riparian (creek) corridor for Cabbage Tree Creek. The Carseldine Village team, in Economic Development Queensland (EDQ), is working with Ecomanagement Specialist Habitat Matt to rehabilitate more than five hectares of the bushland that needs attention and preservation.

The rehabilitation works commenced in November 2020 and are due for completion mid-2021. The total area of rehabilitation works, valued at \$470,000, will be monitored and maintained for a two year period and funded by EDQ.

FIRST STEPS TO REHABILITATION

The first step is to undertake a detailed site investigation to determine an appropriate management response before any works are undertaken. Some areas will require what's called Naturally Assisted Regeneration and other areas will need Ecosystem Reconstruction. Naturally Assisted Regeneration is a process of going through areas and steadily eradicating threatening weed species. The idea is to eradicate all the nasty exotic species while allowing the existing surrounding native vegetation to continue to thrive.

Sites best suited to Naturally Assisted Regeneration will always have a good native plant presence within them. However, within these areas, there will be a low to medium weed presence. And it's these plants that need to be eradicated. This process is an inherently slow, careful and methodical exercise of progressively eradicating weeds. It's labour intensive and great care has to be taken at all times to ensure nearby native plants are not damaged in the process. Over time the weed biomass reduces while the native biomass remains the same. Eventually, the targeted weed species are eradicated while the natives remain and are allowed to thrive.

FAUNA BREAKDOWN

Ecosystem Reconstruction relates to sites where either there's severe weed infestations or open areas created from clearing works in the past. The two areas seen in the photos (bottom of the page) are examples within The Sanctuary, Cabbage Tree Creek Bushland. Both had very severe weed infestations before commencing rehabilitation work. How severe? Well, here's a few of the weed species found:

- Ipomea
- Ochna
- Lantana
- Chinese Elm
- Cats Claw
- Tobacco Bush
- Devils Fig
- Passiflora
- Mother of Millions
- Climbing Asparagus
- Camphor Laurel
- Cadagi
- Pepper Tree
- Castor Oil Plant
- Singapore Daisy
- Cassia
- Cocos Palm
- Giant Elephant Grass
- Mulberry.

While these types of sites always require an aggressive approach to getting the weeds under control, all care must be given to ensure native plants are protected during the weed eradication works. To do this we first carefully go through the weed-infested areas and identify the few (if any) native plants existing. Often the weed infestations are very thick so when we find a native, we'll hang a heap of fluorescent tape on the plant so we can avoid it when we're clearing weeds later. In one photo you can see that there were several native trees poking above the ground layer and midstory weed infestations. In the other photo, you can see all the weed vines growing on the native trees and the ground area dominated by elephant grass. Presently, the weed seed is germinating in cleared areas. By allowing these viable weed seeds to germinate means the weeds can be eradicated before planting natives.



JULY 2020



OCTOBER 2020



JANUARY 2021

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CARSELDINE VILLAGE

Inspired Living

Successful long term weed eradication is always a methodical process. All care (and time) must be given to get it right at the very beginning and not rush the process. Approximately 20,000 native plants will be planted with two long-term objects:

1. provide long term nesting, shelter and food resource for native wildlife.
2. create an Ecosystem Resilience to protect the bushland from becoming weed infested again.

These types of works at sites are really important because they set the tone for wildlife recovery to occur. In a very short space of time, these works will create fantastic habitat values for a wide variety of native fauna which currently calls this bushland home.

FAUNA IS THRIVING

So, with the bushland health being given a big 'turbo charge' we're also looking to give native fauna populations a big boost to their breeding opportunities too. A total of 228 fauna boxes have been installed throughout The Sanctuary. These Australian Made wildlife boxes are in a range of shapes and sizes and are purposebuilt. The following species have been specially identified to live and breed in the nest boxes:

- Gliders
- Parrots
- Possums
- Microbats
- Cockatoos
- Night Jars
- Dollar Birds
- Antechinus
- Microbats
- Boobook Owls
- Barn Owls
- Kookaburras
- Pardalotes
- Galahs
- Wood ducks.

They're each designed for individual species' needs which is why they prove very successful. From my own experience over the years I've witnessed other natives taking up residence in these boxes too. I've seen pythons,

lace monitors and native bees make homes in these boxes too. Well designed and built nest boxes make a great contribution to increasing fauna populations and I'm confident that the bushland will see a very healthy increase in native fauna as a consequence of these boxes being installed.

The bushland is now in a good position with the weed eradication and site preparation works underway. We're now in a good position with our weed eradication and site preparation works. We've been working solidly for months now and within a couple of months, we'll have all the native plants in the ground and the aggressive weed species well under control and on their way to full eradication. All the fauna boxes are now up in pre-existing trees, waiting for native animals to discover them and make a new home where they'll be safe. In a couple of months, we'll have all our works complete and then we start on maintaining the site for two years to ensure all the good work is not in vain. In particular, keeping an eye on any new weeds and quickly eradicating them as they pop up across the site.

I've now been doing this work for 27 years and I have seen firsthand what enormously positive changes occur for nature when some hard work and love is given to places like Carseldine. In time the place will become a true walkthrough sanctuary where locals will regularly spot native animals happily going about their business daily. I encourage future residents and the local community to regularly visit such a great natural place in their backyard. It's truly a magic spot.

For Nature.

"Habitat Matt" Keys



JULY 2020



DECEMBER 2020



JANUARY 2021