

Warralakin Block

The Bush Blocks Guardians Inc. Newsletter

CONTENTS

Carbon Positive and
Revegetation

Baseline Ecology
Research

Motion Camera
Results

Other News and
Events

Socials, Contacts and
How You Can Help



THE JOURNEY BEGINS

After 18 months of growing the BBG and sourcing funds and donations from supporters like yourselves, BBG secured 666ha of land in the Eastern Wheatbelt on the 19th November 2021. Since then the committee and other volunteers have been working hard to achieve the long-term goals to rehabilitate degraded areas, monitor flora, vegetation and wildlife and describe the heritage value of the block.

Over the past year Carbon Positive Australia, an independent charity working with BBG to revegetate the block, have generously donated time and resources to collect vegetation, grow seedlings, and begin planting and seeding the cleared areas. They also detected rare flora in the paddocks! Committee ecologists have continued to describe species, habitats and plan long-term monitoring, with visits from BirdLife, deploying and analysing motion cameras, identifying rare flora, checking Malleefowl mound activity and adding new species to an ongoing list of vertebrate fauna, which currently totals 4 amphibians, 74 birds, 12 mammals and 22 reptiles.

We have also been lucky enough to receive visits from specialists such as Prof. Steve Hopper, who has explored the block with us twice and helped us greatly with describing flora and geology and identifying Aboriginal artefacts.

Meanwhile maintenance work on the farmhouse and shed continues, with a huge voluntary contribution from Simon Matthews who has visited on numerous occasions and is responsible for our lights and running water!

Revegetation

COLLECTIONS AND NURSERY

About 200ha of the block were cleared for cropping, which we aim to restore as closely as possible to the original ecological value beginning with revegetation! We have contracted Carbon Positive Australia to revegetate the paddocks, and they have generously donated time and effort over numerous visits throughout the past year. Carbon Positive began by collecting local seeds and clippings which will most closely match what was likely to occur before clearing over various seasons. This was coordinated by Carbon Positive's Jess and Ebony with advice and help from Dr Geoff Woodall, their native plant agronomist, and four Noongar Rangers from Northam. We transformed our farm shed for plant clipping storage.

December 2022 saw another 50kg of seed collected; mainly *Acacia* and some *Dodonaea* and *Grevillea* and *Allocasuarina* and *Hakea* were collected during late March, 2023. Two nurseries grew about 130,000 seedlings for BBG. Some seed will be direct-seeded wherever our soils are suitable.



IMPORTANT FLORA FINDINGS

Further flora surveys were prompted when a healthy patch of the rare and endangered *Acacia lobulata* was discovered in our lower paddock. We are aware of at least three threatened flora species on the block and in the adjoining nature reserve.



PLANTING

Dr Geoff Woodall from Carbon Positive began furrowing and direct seeding the cleared paddocks with 70ha completed in early June 2023. Seedling planting was postponed due to rainfall conditions and 60,000 were planted in early July.

Approval will be sought prior to seeding near an area below the breakaway after a rare *Acacia* and *Melaleuca* were identified. Thank you to those who supported the flora surveys run by Carbon Positive to document this distribution!



Baseline Ecology Research

RARE FLORA

Members Marion and Peter read that a rare and endangered plant, *Acacia lobulata* (Chiddarcooping Wattle), is only known from a handful of very local locations, and in specific soils below breakaways. Knowing the block has extensive breakaways, they searched and found a patch of ~20 plants in an hour, with another patch found along a firebreak. They hope to find another rare acacia this year - *Acacia ascendens*, which is only known in the adjacent reserve.



BIRDLIFE AUSTRALIA

Thank you to Tegan Douglas, WA Woodland Bird Program Manager from BirdLife Australia, for visiting the block with committee Zoologist Sam Lostrom late winter last year. Tegan and Sam discussed habitat assessment criteria and avifauna census locations and methods, with aims of collaborating in long-term bird monitoring. All species detected were added to our long-term database, including an echidna and Shingleback, and various flowers were in bloom such as snail, spider and fairy orchids.



MOTION CAMERA DEPLOYMENT

Data analysis from motion cameras deployed in 2022 is nearly finalised (see some results on the following page). Motion camera monitoring in 2023 has begun with deployment of 45 units in April by committee zoologists Sam



Lostrom and Andy McCreery along with ecology volunteer Candice. Most locations were replicated to provide comparative data, with some locations shifted to better represent the habitat types and provide wider spatial coverage. Locations of interest include rock platforms, water sources and at known active or recently active Malleefowl mounds (see below).



2022 Motion Camera Results

FIRST MOTION CAMERA IMAGES

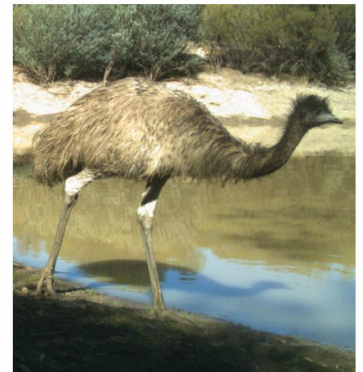
The following images are from the 2022 motion camera deployments. Some of the goals these are helping us achieve are to develop an understanding of baseline species diversity, monitor activity of the threatened Malleefowl mounds and begin to understand the distribution and abundance of invasive species such as the rabbit, fox and cat.



A curious Wedge-tailed Eagle investigates the camera



Grey Currawong



Young Emu



Kangaroos were a common occurrence, including several pouch young and sub-adults



Echidna



Thorny Devil

Invasive species detected were the fox, cat and rabbit, highlighting the need for controls to be developed for conservation

2022 Motion Camera Results

FIRST MOTION CAMERA IMAGES

One of the many draw cards for BBG upon first inspecting the block was the abundance of threatened Malleefowl (*Leipoa ocellata*) on the property! Malleefowl are ground-dwelling birds that mate for life and construct and maintain large mound nests from soil and vegetation in the surrounds. Adults dig a cavity in the top of the mound to lay eggs before burying with soil and plant material, which are heated by the sun or via decomposition to incubate the eggs. They will add or remove material to maintain nest temperature, and hatched chicks emerge from the nest completely independent.

Malleefowl habitat has been reduced, isolated or degraded due to land clearing, and they are also susceptible to cat and fox predation. As such, Malleefowl are listed as Vulnerable under WA state and federal legislation.

We have found 11 mounds on the block so far, and continue to find more!!! BBG aim to set-up long-term motion cameras at mounds to understand Malleefowl abundance and breeding success on the property, and are hopeful these will increase once non-native predator control commences.



Exciting evidence of courtship displays at the mounds



Malleefowl investigate mounds and maintain those that are active, scraping leaf litter and soil

Other News and Events



IMPORTANT VISITORS

We have been very privileged to have had two visits by Prof. Stephen Hopper (UWA botanist ex WA Govt., Kings Park, Kew Gardens in UK) - who knows this area as well as anyone, having visited 40+ times doing research in the adjacent Chiddarcooping nature reserve, especially into *Eucalyptus caesia*. He also has a great interest in granite, having visited over 500 outcrops across the south-west. During his first visit we explored two of our largest granite features and Steve collected dozens of plant specimens and also helped us locate several Aboriginal rock markers and direction indicators including a circular placement which could have been a corroboree site and a dolerite dyke with clear evidence of tool making.

During his second visit we were also joined by local wildflower expert, naturalist and neighbouring farmer, Whispie Bayly, and Merredin Aboriginal elder Mick Hayden, and we learnt much more about the land and its flora. It was surprising to see how many plants were flowering so late in the season. Of note were fields of *Erymophyllum tenellum*, under Wheatbelt Wandoos below a breakaway, and *Calothamnus gilesii*. We walked to an amazing area of miniature granite mogotes which Steve thinks might be quite unique, and commented that he has never seen so many granite A-tents in one zone of granite.

FARMHOUSE AND SHED

Our efforts to turn the run-down farm house into a reasonable base for researchers, workers and education have progressed well. We have 240v working thanks to member Simon's hard efforts to install larger recycled solar panels and repurposing retired electric vehicle batteries for storage, promising about 8kWh of overnight power.

Dustin McCreery generously donated time to sort through machinery on the block, with a tractor and front end loader that would be useful for maintenance successfully starting.



ANNIVERSARY AND CONSTITUTION

November 19th 2022 was our first birthday! The first anniversary of ownership passed without fanfare - the year has gone so quickly but we are proud of what we have achieved to date.

We have been working on a new constitution for our association and have received wonderful pro bono assistance from lawyers [K&L Gates](#) - many thanks to their team. Our existing constitution uses the 'default' rules since we needed to become incorporated urgently to purchase this land upon hearing that another party was about to make an offer. Our new constitution includes many improvements and the required clauses to help us apply for DGR tax deductible donation status. It was approved at our AGM in April.

Socials and Support



The BBG project has become a reality with the support and dedication of many, and it has only just begun! We are looking forward to continuing to restore and describe the Warralakin block, engaging communities to share Australia's unique ecology with others, and seeing just how far our conservation efforts can spread!

We are in the initial stages of the project and are laying down groundwork that involves a range of tasks (some are listed on the right). So whether your help comes in the form of ecological research, building and machinery maintenance/restoration, seed collecting and planting, website and socials design, clean-up, lending equipment, donating supplies/ furniture, or funds it would be greatly appreciated.

If you'd like to help, feel free to **let us know via our website at** <https://bushblocksguardians.org.au/contact-bbg/>

FOLLOWING THE JOURNEY



In addition to sending detailed newsletter updates to donors, we will share our general progress on facebook and Youtube, with plans to set up Instagram and LinkedIn. You can also check for updates on our website. facebook.com/BushBlocksGuardians
youtube.com/@bushblocksguardians
bushblocksguardians.org.au/

WANT TO LEND A HAND? HERE'S OUR UPCOMING TASKS AND EVENTS!

SEED PLANTING

Carbon Positive have completed planting this season, and there will be more next year. Please keep in touch if you would be interested in helping with the next round of planting.



FARMHOUSE MAINTENANCE

The farmhouse needs quite a bit of TLC, including adding appliances and furniture (bunk beds, outdoor seating) and patching/ fixing walls, floors and electrical wiring. If anyone has items to donate or time to help fix up the house, please get in touch.

MOTION CAMERA ANALYSIS

We will have quite a bit of motion camera data to analyse once images are collected from the April 2023 deployments. You don't need to be an ecologist to lend a hand; we welcome those proficient in species ID, those keen to send our ecologists ID queries as they go and those who are happy to sort animal photos from false triggers.