THE GECKO

Edition 17
October 2017

Welcome to the October 2017 edition of The Gecko.

Spring is definitely here. In the last few weeks we've seen baby Eurasian Coot, Australian Shelduck, Grey Teal and Striated Pardalote. Plus, the Sacred Kingfisher and Black-winged Stilt have returned for the breeding season.

If you haven't been in the bush for a while because of the rain, now is the time to get outdoors and have a look around.

July to September 2017

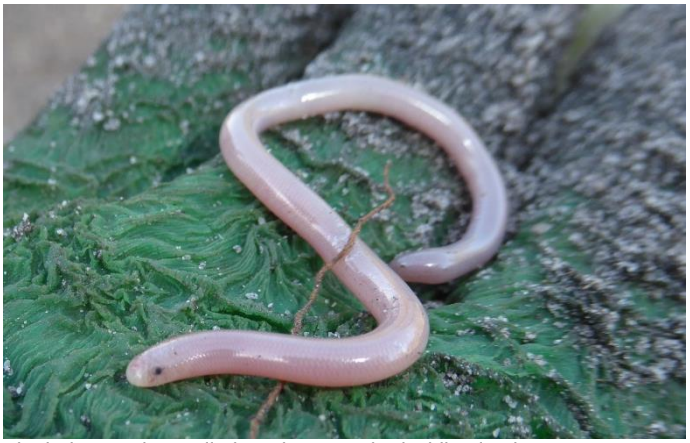
9 July 2017
It was a perfect day for planting when four members met to get 100 more of this year's plants in the ground.


You never know what you'll find while planting.

While digging away we unearthed a Southern Blind Snake, *Anilios australis*. These are seldom seen as they spend most of their time in leaf litter feeding on the young of ants and termites.

This one was only about 10cm long and so is likely to have been very, very young. Southern Blind Snakes hatch from eggs and newly emerged young measure 9-10cm long. Adults can grow to 42cm.

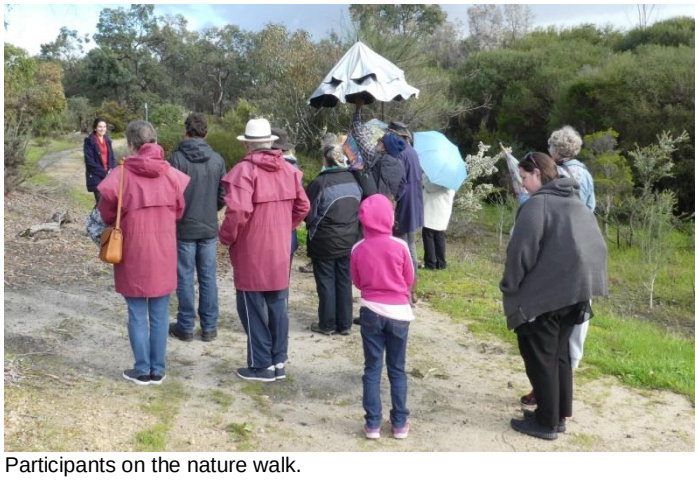
This was not our first record of a Southern Blind Snake – we found a dead one in 2009 which was donated to the WA Museum.


The baby Southern Blind Snake unearthed while planting.

These two records tell us a little about our Southern Blind Snake population. The two snakes were found in different patches of bushland, separated by a road (which a snake that spends most of its time in leaf litter is unlikely to cross), a very deep ditch and found 650m apart, so we can assume they are widespread in our area. Plus, having found a baby strongly suggests that there are at least two others, a male and a female, in the general area.

19 August 2017
Despite the weather forecast 18 people joined in our nature walk. We had an early shower but most of the walk was fine and sunny.

Sara led the walk and kept everyone interested with snippets of information about many of the plants we encountered. There were several species of plants in flower, including a couple of orchids.


Participants on the nature walk.

We learned that *Allocasuarina* species have separate male and female plants and what we think of as their leaves (the needles) are actually modified stems. We had to use magnifying glasses to see the real leaves.

This is a water conserving tactic by the plants. By having tiny leaves, they lose less water while transpiring. The modified stems contain chlorophyll and have taken over the role of photosynthesising. Being green, we assume that they are leaves rather than stems, which we normally associate with being brown.

We were also lucky enough to come across a pair of Australian Wood Ducks checking out a potential nest site. Hopefully we didn't put them off.


A pair of Australian Wood Ducks inspect a potential nesting site. The female is on the left.

Australian Wood Ducks, like most of our ducks, prefer to nest in hollows. Our pair were looking at the trunk of a dead tree that had a hollow about 4m above the ground. The nest and eggs are safe from most predators in tree hollows but the ducklings have to negotiate a drop to the ground when only one or two days old. Their parents then lead them to the safety of water.

Our thanks go to Urban Bushland Council for advertising our walk and to Sara for leading us.

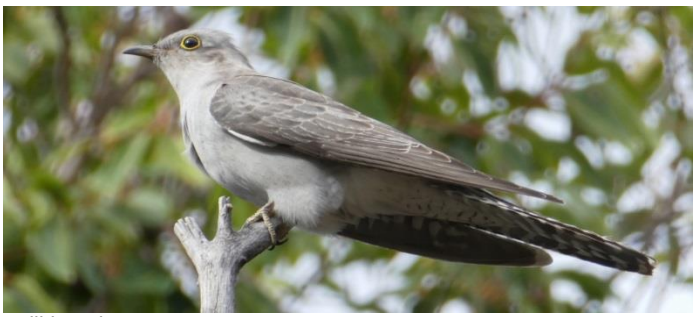
27 August 2017

Our BirdLife WA birdwatching walk saw 32 attendees enjoy a three hour stroll from Station St to Wharf St and back again. As a group we saw 44 bird species.

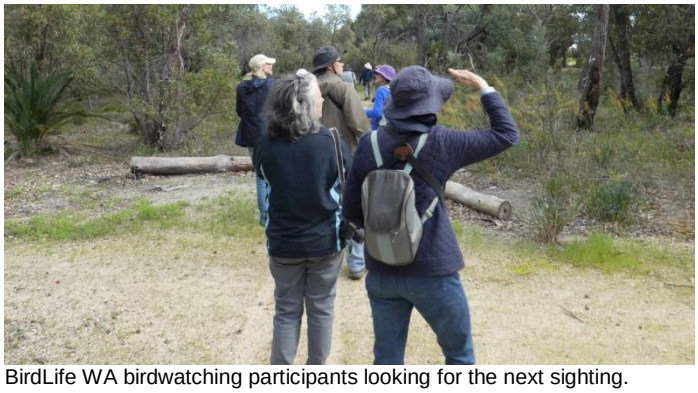
Highlights of the morning included the Yellow-rumped Thornbills. An adult was behaving in quite a strange manner and had everyone trying to work out what it was doing. It was only when a young bird scrambled up a branch from out of the long grass that we realised what was happening. The adult wasn't going to leave the baby by itself and was doing its best to encourage the youngster to move away from the humans.


The young Yellow-rumped Thornbill (top) and an adult with its beak full of food.

We also had splendid views of a Pallid Cuckoo. The cuckoo moved between the groups of watchers and always stopped on a bare branch. This gave everyone an opportunity to see the bird in great detail.


Pallid Cuckoo.

While not watching the birds we were admiring the wildflowers. Many of the participants had not been to our bushland before and were amazed by the wonders that we take for granted. The donkey orchids were everywhere and certainly attracted a great deal of attention.

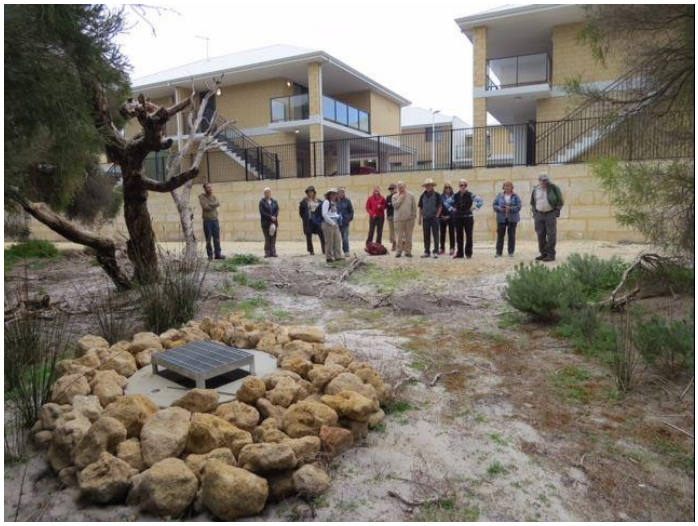

BirdLife WA birdwatching participants looking for the next sighting.

10 September 2017
We had a lovely day to welcome 10 members of CRREPA for the second of our information exchange meetings. The first meeting, in May, saw us go to their area of interest. Now it was their chance to see our patch.

Due to time constraints we only visited one patch of bushland – bounded by Wharf Street and Whitlock Road. Our first stop was to see the constructed wetland near the Neighbourhood Centre.

We explained how a decline in both rainfall and the groundwater table was leaving this corner dry when it previously had surface water during winter. To help remedy this problem we devised a plan to have all of the stormwater runoff from the yet to be constructed housing development directed into the bushland.

Collaboration between the City of Canning (who did the negotiations, legal stuff and heavy lifting), PEET (the development business) and us saw this dream become a reality. This bushland area now receives much more water than it would from rainfall on the site alone. The local groundwater has risen so much this year that there was still water in the wetland for our visit nine days after the last rain.


Stormwater from the housing units in the background is directed into the bushland via a bubble-up pit in the foreground. Photograph courtesy of M Radestock CRREPA

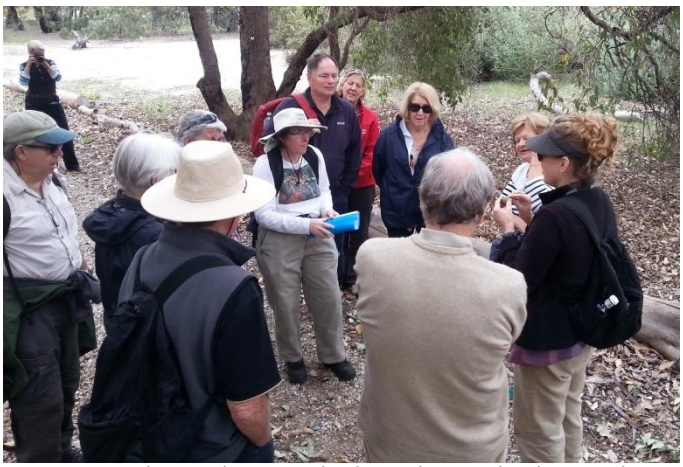
Our next stop was to our revegetation site where the ground had been bare since at least the mid-1960s. We showed photographs of bare soil where even the weeds refused to grow and then explained the work that had been done to reinvigorate the soil.

The City of Canning had, again, done a lot of the heavy work and DPaW funded the initial revegetation work via a grant, but we were also putting in a lot of effort on a continual basis. We hand water on a fortnightly basis, fertilise the plants and try to control the weeds (yes, we must be doing something right as the weeds have returned).

It is still an uphill battle, but some of the plants have survived, they are struggling but alive, and we hope that our continued efforts will one day have this area growing without too much intervention. Until that time, though, this will remain our most intensively worked site.

As we walked and talked, we stopped here and there to take comfort in the fact that there was much of the bushland in very good condition. Many of the wildflowers were in bloom and we were able to see four species of orchid within a couple of square metres.

At morning tea it was agreed that both groups wanted to continue with these visits and that we should see a different patch of bushland next time.


CRREPA members gather around to hear Sian speak. Photograph courtesy of Kade.

24 September 2017
The forecast for rain saw only five participants arrive for this activity where we prepared our seedlings for the coming summer.

After ensuring each plant had a stake to mark it, we applied Ecowet, a soil wetting agent, which helps water penetrate the soil. This was watered in by the rain that followed after we left.

A big THANK YOU goes to Addy, Barbara M, Collette, CRREPA, Ikhlaas, Kade, Katrina, Koda, Margaret O, Margaret W, Omar, Ronnie, Rosemary, Royce, Sara, Sian, Susan, Ubaydah, Zaid and the City of Canning's Natural Areas Team for helping out with these, and other, activities in the bushland.

Upcoming events

October – Watering and weeding
November – Watering and weeding
December – Seed collecting

Details of some activities are yet to be finalised but will be distributed by email and advertised on our website.

Also this quarter

A direct seeding project was started in Gibbs Street Reserve on the corner of Gibbs Street and Welshpool Road. The work is being done by Tranen Revegetation Systems and paid for by the City of Canning.

After some weed control, the soil was lightly raked to create dips and divots into which the seed could nestle. The seed, a mixture of species naturally found in the area, was then mixed with sand and broadcast by hand onto the soil.

Distributing the seed.

Different areas were then given different additives to determine which worked best in our conditions. Some areas were given fertiliser, some were given soil microbes, some were given both and some received no additives at all.

This Marri seedling germinated two weeks after the seed was sown.

The weather performed beautifully to give the seeds their best chance of germinating. It rained almost every day for four weeks following sowing of the seeds.

Monitoring of seed germination and weed control will be undertaken for the next 12 months by Tranen and the results reported to the City.

In the same reserve, a **new swale drain** was constructed (away from the direct seeding areas). In the reserve is a depression in the land that collects water during the winter. Nearby is a drain from Welshpool Road that discharges into the reserve.

The stormwater from the drain was running along the access track, making the track impassable, so it has been redirected into the depression. This will make the depression more of a wetland and add to groundwater recharge where it is needed most – in the bushland.

Stormwater flows from the road (left, out of shot) into the depression.

The vegetation surrounding the depression is a type tolerant to waterlogging so there shouldn't be any problems with extra water.

The wetland will still dry out over summer but should hold water for longer over winter and become a better habitat and breeding area for many species. We have already seen ducks swimming on the water and can hear frogs calling for mates.

Thank you, City of Canning, for helping to make dreams come true.

We have a new species of mistletoe growing in the bushland. The plant, *Amyema miquelii*, grows in eucalypts and is an aerial mistletoe. It attaches to a branch of the host tree and does not touch the ground at all.

While it can produce some of its own food through photosynthesis, it is completely reliant upon the host tree to provide all of its water.

Having only just found this newcomer, we haven't yet seen it flowering. But when it does it should attract the honey-eating birds. The range of species feeding from it will increase when it forms juicy berries. Even more birds will use its dense foliage for nesting.

Tuesday group

You are welcome to join the Tuesday group on a casual basis or as a regular commitment. This group is currently meeting at 9am every Tuesday. This quarter the Tuesday group has been busy weeding.

Not interested in weeding? We will start hand watering the seedlings soon and always need more people to help.

Contact Sian at fqpbushland@gmail.com to find out where and when to meet for this group.

Parasitic plants

While not always the best topic for discussion, parasites are part of nature and deserving of our admiration.

As we've just read, we had a new species of parasitic plant take up residence in our bushland recently. This brings our parasitic native plant total to four.

We are all familiar with the WA Christmas Tree, *Nuytsia floribunda*, with its bright orange flowers during late spring and early summer. But we are probably less sure of the others.

We have a shrub called *Leptomeria empetriformis* and two aerial mistletoes called *Amyema preissii* and *Amyema miquelii.*

The WA Christmas Tree and *Leptomeria empetriformis* are both root parasites and attach to other plants underground. The two *Amyema* species are aerial parasites attached to branches and so, not being attached to the ground, are more obviously parasitic.

No matter the type, each attaches to its host with a haustorium. Through the haustorium the parasite can acquire food and water from its host.

As long as the host doesn't have too many parasites the loss of food and water makes little difference to its health. So let's enjoy these parasites for their beauty and ingenuity.

Left: The tiny flowers of *Leptomeria empetriformis* are so small that they are easily overlooked.
Middle: The berries of *Amyema preissii* are a food sought after by many birds.
Right: Two species of jewel beetles, *Castiarina placida* (left) & *C. rufipennis* feed on the flowers of the WA Christmas Tree, *Nuytsia floribunda*.