

26 October 2018 Ken Walker (kwalker@museum.vic.gov.au) Museums Victoria. Edition 58.

Hi All –

















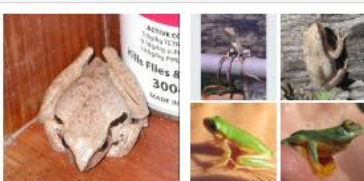









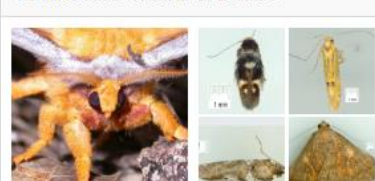
I begin this Bugle with the sad news of the passing on 9th June 2018, of BowerBird's most enthusiast contributor – Graeme Cocks.

Graeme lived in Townsville, Queensland and the local newspaper had this death notice:

“COCKS, Graeme Verdun Late of Hermit Park. Passed away peacefully on Saturday, 9th June, 2018 at Palliative Care Unit, The Townsville Hospital. Beloved Husband of Pam. Loving Father of Mathew, Amanda, and Danny. GRAEME will be sadly missed by his Family and his Friends.”



Graeme uploaded an amazing 8003 records and created or joined 40 different projects. Below are the nine BowerBird projects Graeme created for the plants and animals of Townsville.

<p>Townsville Plants</p>  <p>Pictures of the plants of Townsville, including weeds and plants of the parks and gardens.</p> <p></p> <p> 18  339 Join</p>	<p>Townsville Insects</p>  <p>Pictures of insects from Orthoptera, Blattodea, Mantodea, Coleoptera, Trichoptera,</p> <p></p> <p> 39  1899 Join</p>	<p>Townsville Spiders</p>  <p>Pictures of the spiders and other arachnids from around Townsville.</p> <p></p> <p> 15  323 Join</p>
<p>T'ville wasps, ants & bees</p>  <p>Pictures of the wasps, bees and ants from around Townsville.</p> <p></p> <p> 36  1442 Join</p>	<p>T'ville Lizards, Snakes & Frogs</p>  <p>Pictures of snakes, lizards and frogs from around Townsville.</p> <p></p> <p> 15  110 Join</p>	<p>Townsville Bugs (Hemiptera)</p>  <p>Pictures of the True Bugs (Hemiptera) of Townsville.</p> <p></p> <p> 15  784 Join</p>
<p>Townsville Birds</p>  <p>Pictures of the birds of Townsville.</p>	<p>Townsville Flies</p>  <p>Pictures of Townsville Flies.</p>	<p>Townsville Moths & B'flies</p>  <p>Pictures of Townsville moths and Butterflies.</p>

Below is one of the thousands of Graeme's BowerBird records now on Atlas of Living Australia (ALA).

Dataset

Data resource	BowerBird
Basis of record	Human observation
Observer	Cocks, G. Graeme <i>Supplied as "Graeme Cocks"</i>
Record number	http://www.bowerbird.org.au/observations/31663
License	Creative Commons - license at record level
Occurrence remarks	beetle - Anthribidae?
Occurrence status	present
Abcd identification qualifier	Not provided

Graeme also helped and assisted many website with his images as well as constructing his own websites.

Below is just a sample of the hundreds of Lepidoptera images Graeme contributed to the Butterfly House website:

<http://lepidoptera.butterflyhouse.com.au/logos/graemec.html>

Lepidoptera Photos in this website by



Graeme Cocks Townsville Queensland

Sadly Graeme
passed away
9 June 2018

- Non-Lepidoptera

Psychopsis mimica

- ANTHELIDAE

Anthela achromata
Anthela phoenicias
Gephyroneura cosmia
Munychryia senicula

- ARCTIIDAE

Aloa marginata
Amata paraula
Amerila rubripes
Amerila timolis
Asura bipars
Asura monospila
Asura semivitreata
Creatonotos gangis
Eilema plana
Eressa geographica
Eutane trimochla
Heliosia perichares
Hemonia micrommata
Hemonia simillima
Heterallactis microchrysa
Heterallactis stenochrysa
Lambula pleuroptycha
Lambula pristina
Lyclene quadrilineata
Lyclene reticulata
Nyctemera baulus
Nyctemera secundiana
Oeonistis altica
Paralacydes maculifascia
Philenora aspectalella
Scaptosyle equidistans
Schistophleps albida
Symmetrodes sciocosma
Thallarcha levis
Thallarcha macilenta
Thallarcha phalarota
Thallarcha sparsana

- GRACILLARIIDAE

Gibbovalva quadrifasciata
Macarostola ida

- HELIOCOSMIDAE

Heliocosma exoeca

- HESPERIIDAE

Cephrenes augiades
Hasora chromus
Trapezites iacchus
Telicota mesoptis

- HYPERTROPHIDAE

Eupselia beltera
Hypertropha chlaenota
Thudaca monolinea
Thudaca obliquella

- IMMIDAE

Imma tetrascia

- LASIOCAMPIDAE

Cyclophragma cyclomela
Entometa fervens
Genduara pinnalis
Opsirhina alphaea
Pararguda australasiae
Pemattia brevipennis
Symphyta myctopis

- LECITHOCERIDAE

Cophomantella lychnocentra
Crocantthes chordotona
Crocantthes diula
Crocantthes halurga



(Photo: courtesy of [Graeme Cocks](#), Townsville, Queensland)

Through BowerBird and many other sources, much of Graeme scientific data has been captured and permanently stored in ALA.




The screenshot shows the ALA dataset page for the Australian Museum Graeme Cocks Collection 3 Expedition. The page includes the Atlas of Living Australia logo, the title 'Australian Museum Graeme Cocks Collection 3 Expedition', and the subtitle 'Atlas of Living Australia DigiVol (Managed by)'. A 'Dataset' icon is in the top right. Social media icons and 'Viewed: 125' are in the bottom right. On the left, there are buttons for 'Access the data', 'Cite', and 'Save to MyRDA', along with 'Licence & Rights' information showing 'Open Licence' and a 'view details' link. On the right, a 'Brief description' states: 'Graeme Cocks is an amateur entomologist who started an online pictorial catalogue of the plants and animals around Townsville, called Insects of Townsville. He is a contributor to the International Barcode of Life (iBOL) project since 2006. He has collected a variety of insects around Australia, predominantly in Queensland. This expedition of 864 tasks is fully transcribed and validated.'


Graeme donated many of his Townsville specimens to the Australian Museum, which now through the citizen science DigiVol process, have been digitised, photographed and uploaded to ALA. Here are two such specimens:






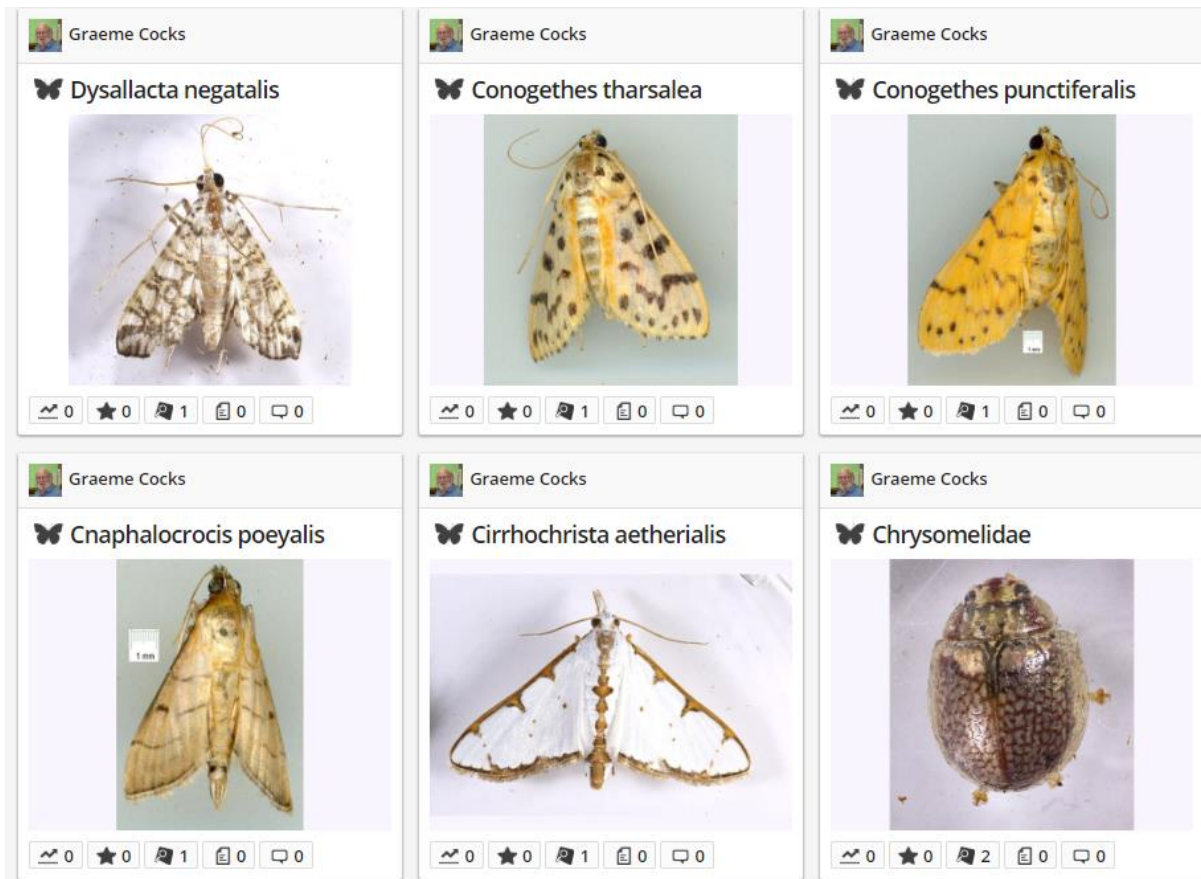
This record is last BowerBird activity from Graeme in March 2018 when he identified and uploaded this record.

 Graeme Cocks identified a sighting
7 months ago



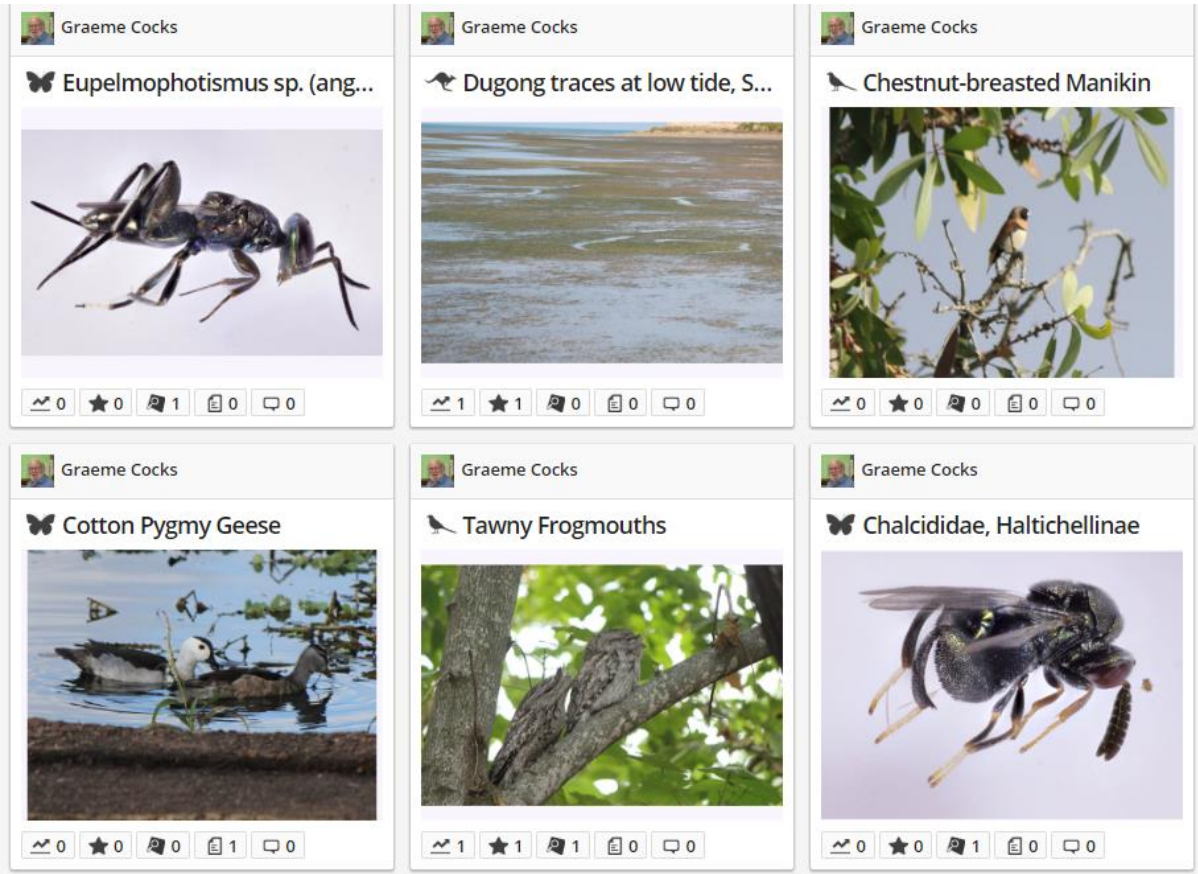
 **Eupelmus australiensis**
(species)
Taxonomy: Animalia: Arthropoda: Insecta
Eupelmus: australiensis
Common Names: Parasitic wasps, para

Graeme's BowerBird records were immediately recognisable as most were photographs of collected specimens. He obviously ran both malaise and light traps as well as hand collecting specimens.

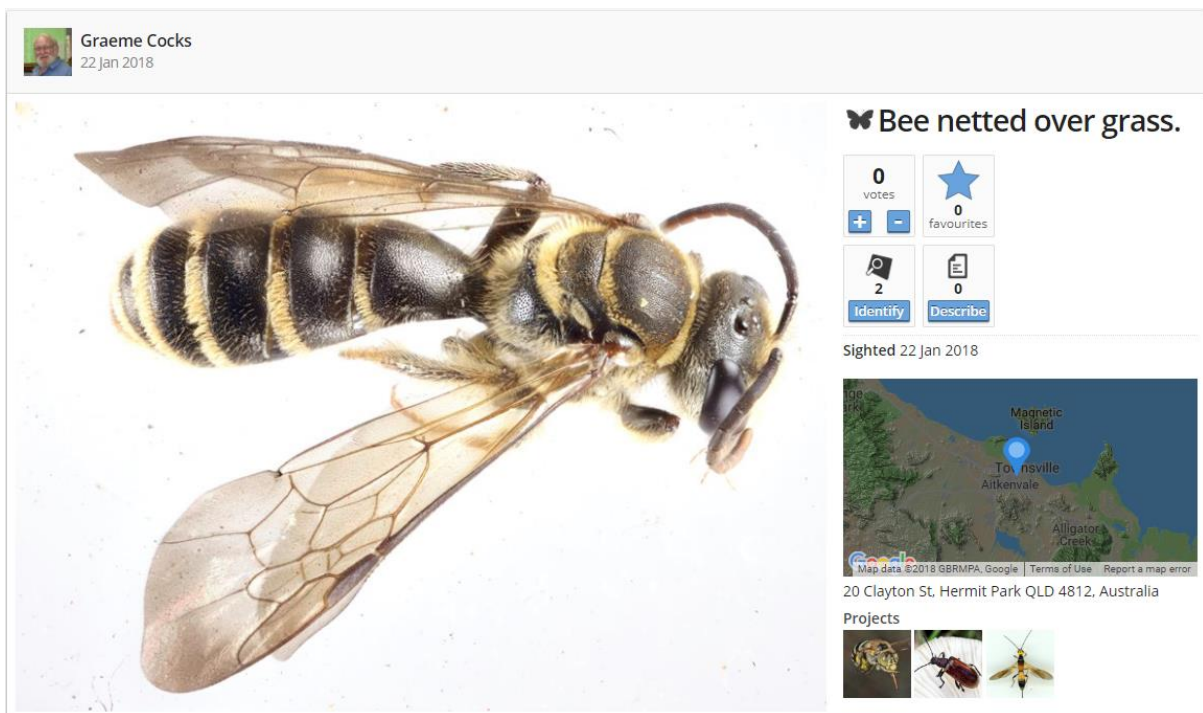


However, mixed amongst these collected specimens are a wide range of live images or tracks and traces of where animals had been.

What impressed me most about Graeme's BowerBird records was the wide range of his taxonomic abilities from vertebrate species to the most difficult of small, parasitic Hymenoptera (wasps). His knowledge was immense and he was happy to share and teach.



One of Graeme's last posts was a bee that intrigues me and Graeme's record title: "Bee netted over grass" helped me to reaffirm the pollen preference of this species.



In general, bees visit angiosperm flowering plants and grass flowers are primarily wind pollinated. But, as is the way of nature, if there is a “rule” then nature will break it. A few years ago, a scientific paper was published detailing 60 African bees that specialise in collecting grass pollen. The species occur in only one subgenus called *Lipotriches* (*Lipotriches*). Australia has over 1600 species of bees and we have just two species that belong to *Lipotriches* (*Lipotriches*). These two species occur in coastal north Queensland and the records are few and far between. I have scoured the label data of these few records and some of them mention begin collected on grass flowers. Graeme’s 23 January 2018 title: “Bee netted over grass” is yet more evidence that these rare Australian species are indeed grass pollen collectors.

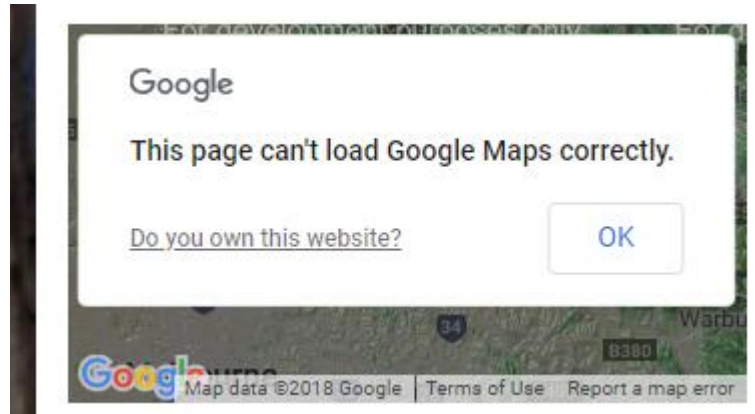
Graeme realised a long time ago to record as much data as possible when posting a record as it may be useful to someone at some time in the future as is this one of Graeme’s last BowerBird posts.

The collection date is equally important as some time in the future, I intend to travel to north Queensland and I will revisit the few locations where these two species have been collected. I will not only try to collect these bees but also to photograph them collecting pollen from grass inflorescences.

From information in the African bee paper, these bees forage only in the early morning as the dew on the grass pollen helps the bee to collect the pollen. The bee’s pollen collecting hairs are not the usual branched style but were been described as “lasso” style with the ends of each hair extended into a long, thin, simple hair that is curled at the end like a lasso. It was trill for me to see Graeme’s record.

Thank you and Vale Graeme.

The Google Maps issue



I'm sure you have all seen the recent Google Maps issue. If you click the OK button you do actually see a map but that's not really a fix.



The problem has come about due to a change at Google. They have provided free access to their Google Maps software for over a decade and now they have decided to charge for that service so they changed the code. The charges are very reasonable as the first 25,000 maps per day on a website are free. BowerBird currently has over 100,000 records so I am not sure whether we would be charged each day for all 100,000+ possible maps that could be opened or whether the charge only applies to maps that are generated when someone creates a new record or opens an existing record. If the charge is for all

100,000+ possible maps, then the first 25,000 maps per day are free leaving 75,000 maps per day at \$0.50 per map making the charge \$37,500 per day – at least! Yikes – we could not afford these costs.

I have spoken with the old BowerBird programmers. I employed these two people for two years when they developed BowerBird back in 2012-2013. Unfortunately, that funding has long since been fully expended and sourcing new funding is challenging.

However, funding will not easily solve this problem as one of the programmers explained to me. First up, the BowerBird software was compiled and made live back in 2013. Any changes now to the BowerBird code base would require the programmers to reuse the 2013 compiler. The Microsoft compiler code has been upgraded each year since and so the 2013 compiler is no longer readily available. The programmers would have to rebuild a 2013 compiler program on a separate machine and that will take time ... and funding.

The other problem is the so called “knock-on” effect. Programmers hate going back to old software to make changes as you can never predict the possible knock-on effects of changing something that inadvertently affects some other pieces of the code.

So, we will look into the actual costs which will either be \$0 or at least \$37,500 per day and then factor in the “gamble” of changing the code.

Nothing is ever simple is it? Thanks for your patience.

Ron Greer has recently added almost 800 BowerBird records in recent months and they have provided a wonderful treasure trove of images and identifications. Here are but a few to share.



Bleeding Tooth Fungi, *Hydnellum peckii* Location: Wilsons Prom, Vic Photo by Ron Greer



Slime Mould, possibly *Dictydiaethelium plumbeum* or *Tubifers ferruginosa* Location: Drouin, Vic Photo by Ron Greer



Sea Hare, *Aplysia parvula* Location: Portsea VIC Photo by Ron Greer



Smooth Anglerfish, *Phyllophryne scortea* Location: Edithburgh SA Photo by Ron Greer



Nudibranch, *Polycera capensis* Location: 2 Wharf Rd, Tathra NSW Photos by Ron Greer



Pacific Gull, *Larus pacificus* with sand crab. Location: Tidal River, Vic. Photo by Ron Greer
Incidentally, our curator of crabs was able to identify the crab as *Ovalipes australiensis*.



Yellow Billed Spoonbill, *Platalea flavipes* Location: Sale, Vic. Photo by Ron Greer



I loved these photos! Noisy Miner, *Manorina melanocephala* Sale, Vic. Photo Ron Greer



Welcome Swallow, *Hirundo neoxena* Location: Sale, Vic Photo by Ron Greer



Sawfly larvae *Lophyrotoma zonalis* Location: Longford VIC Photo by Ron Greer



Squat lobster, *Galathea australiensis* Location: Flinders VIC Photo by Ron Greer



Ichneumon wasp parasitising paropsine larvae. Location: Sale Photo by Ron Greer



Ron wondered about this sphecid wasp grasping a leaf and the white dots behind its head.
Location: The Heart, Vic Photo by Ron Greer



Spider with legs



Spider without legs Pompilid wasp, *Fabriogenia* sp. Location: Sale Photo by Ron Greer



Fine Lined Tambja, *Tambja tenuilineata* Location: Port Stephens, NSW. Photo by Ron Greer.

Thanks Ron – I would recommend everyone to take a look at Ron's images.

See here:

<http://www.bowerbird.org.au/users/15847/sightings>

I just went WOW when I saw this image



Very fine Spider's webs holding water.

Location: Lorne, Vic.

Photo by John Eichler

And now for a range of images that amazed and taught me as always on BowerBird.



Jumping spider inside its camouflaged, silken home. Mount Fairy NSW by Irene Richardson



First photo of rare huntsman spider *Yiinthi anzsesorum* Watsonville QLD Matthew Connors





This is the only record on ALA of this rare species provided by Matthew Connors.

Didymuria virginea

Matthew wrote:

“This adult female was found hanging in a low eucalypt, and is the only individual of the species I have come across. This species is very similar to the much more common and southerly *D. violescens*, but differs in a number of respects. Primarily, the males lack the large spines on the hind legs that are characteristic of *D. violescens*, but unfortunately this cannot be seen on the female. A more subtle feature of females is the length of the wings - in *D. virginea*, the female's hindwings reach approximately to the end of the fourth abdominal segment, whereas those of female *D. violescens* reach only the end of the third abdominal segment (note that the first abdominal segment is not generally seen). This is only the third recorded population of this species, and extends their known range by more than 250km.”



Sticknest Rainbow Ants (*Iridomyrmex conifer*) frantically building their mounds of twigs higher as the water table clears the surface. Location: Alison Baird Reserve, Kenwick WA
Photos by Daniel Heald



An amazing pair of Lasiocampidae: *Genduara acedesta* Location: Sale, Vic. Photos by Ron Greer. Ron wrote: "They were sitting on a cocoon with a hole in the base which I am assuming the larger moth has recently emerged to find the waiting male."

Two images of a male peacock spider - *Maratus fimbriatus*



Abdomen relaxed Location: Gindie QLD Photo by Laurence Sanders



Abdomen raised and flared Location: MacKenzie River QLD Photo Laurence Sanders



The caption to this record says: "Observed inserting ovipositor into bamboo stakes." Most likely there was a bee larva inside the bamboo that this wasp was parasitising. Location: Calliope QLD Photo by Teale Britstra



All at the pollen being shaken from the flower by this bee.
Blue banded bee, *Amegilla zonamegilla* sp. Sunnybank Photo by Jenny Thynne

An amazing photo



I have never seen this behaviour before. Jenny explains:

“As I watched these mating wasps on our *Leptospermum flavescens*, the male would busily sip nectar from a few of the flower cups and then bend over and feed the female. It was amazing to witness this behaviour which carried on for some minutes.”

Flower wasps mating, *Zaspilothynnus* sp. Location: Sunnybank, Qld Photos by Jenny Thynne.

Rose Robin took a series of images of a developing caterpillar that had us all stumped. Time to call in the expert.



Date taken 6 September 2018



Date taken 9 September 2018



Date taken 9 September 2018



Date taken 12 September 2018. This photo seems to show the caterpillar molting its skin.

Location for photos: Tamborine Mountain QLD All photos taken by Rose Robin

The Canberra moth expert, Ted Edwards, said: "It is definitely a lepidopterous pupa of the family Depressariidae."

Down the hatch with that spider !



Common Garden skink, *Lampropholis guichenoti*, with poor little spider prey.
Location: Tamborine Mountain QLD Photos by Rose Robin

Possible new species of bee – look at the weird hind wings!



Leioproctus sp. male Location: Flynn WA Photos by Jean and Fred Hort



Banksiamyces toomansii growing on a Banksia cone. Glen Valley VIC Photo by John Eichler



Fan shaped Polypore, *Favolaschia calocera* - An introduced fungus that seems to be spreading rapidly. Location: Beaumaris VIC Photo by John Eichler

And finally, what's a Bugle without Mark Berkery's

Nature Place

There's a tree in the garden where these beetles live their lives, at least for mating purposes – food to eat.

It's a new tree, only been growing a couple years. And they aren't found anywhere else around here.

Other plants in the garden have a similar function, only hosting a certain kind of creature.

It makes sense, one kind of creature for one kind of plant for a certain time or season.

Everything has its time and place, given the conditions it needs to initiate.

But space first and last, or nothing can begin or end.

Here am I, there and everywhere.

Keeping the genie in the bottle.



© Mark Berkery - Beingmark.com

They rained down from the leaves above, one stormy night.



© Mark Berkery - Beingmark.com

All I had to do was get out and look for them in the shadows of the garden.



© Mark Berkery - Beingmark.com

A torch helps to find them, then it's time to employ the gear and technique.



© Mark Berkery - Beingmark.com

They were all over the place, different situations and varied colouring.



© Mark Berkery - Beingmark.com

All with a single purpose, to live and reproduce. That's nature ...



© Mark Berkery - Beingmark.com

Walking a tightrope some, a precarious existence, but never a sign of distress.





© Mark Berkery - Beingmark.com

Signs of life though, a certain excitation on the end of an crucifix orchid.



© Mark Berkery - Beingmark.com

Or the end of a stick, nowhere else to go but onward. To inevitability ...



Or to a view of the jacaranda flowers that also fell in the wind of the night.



A spent dandelion is a good place to wait out the darkness, until the sun comes up.



© Mark Berkery - Beingmark.com

Meanwhile, there's things to do, mates to meet. Purpose to fill ...



© Mark Berkery - Beingmark.com

It's a small world sensed by a beetle on my finger, vibrations of another form.



© Mark Berkery - Beingmark.com

Some with the enhancement of colour by the lens of water. Raindrops to wear ...



© Mark Berkery - Beingmark.com

And time for a break ...

As always from BowerBird .. that's your lot for this month.

Haveagoodweekend all Happy photographing ...

Cheers – Ken

(If you wish to leave this email list, please contact me directly at
kwalker@museum.vic.gov.au – else share with your friends)