

25 May 2018 Ken Walker (kwalker@museum.vic.gov.au) Museums Victoria. Edition 57.

Hi All – Finally, "Discovering Diversity: A decadal plan for taxonomy and biosystematics in Australia and New Zealand 2018-2027 was launched at Parliament House on 27 April 2018. It is now available for download as a pdf from <a href="https://www.science.org.au/support/analysis/decadal-plans-science/discovering-biodiversity-decadal-plan-taxonomy">https://www.science.org.au/support/analysis/decadal-plans-science/discovering-biodiversity-decadal-plan-taxonomy</a>."

This 80 page document is well worth a read over a couple of cups of tea – something to warm your cockles on a cool autumn or cold winter's night.

I recommend visiting the website link above to view the 1 minute video with Sir David Attenborough recommending the plan. The statement is made that there are approximately 800,000 species of plants and animals in Australia and New Zealand and yet only 30% have been formally described. At our current rate of species discovery, it will take over 400 years to document our biodiversity – but can we take that long before species disappear?

The media feeding frenzy has been enormous with over 60 news and online stories published as well as numerous radio and TV interviews. The Academy of Sciences Facebook and Twitter feeds reached 107,000 people and still counting.

Fingers crossed this plan work and translates into taxonomic jobs that will attract students to enter this field of study.

Did you know that Australia now officially has two different species of honey bees. The European honeybee, *Apis mellifera*, was transported to Australia in 1822 on a ship called the Isabella and it has now spread throughout much of Australia. The Asian honey bee, *Apis cerana*, was first recorded in the Cairns district in 2007. The original colony arrived inside the hollow aluminium mast of a fishing boat that has visited Papua New Guinea before being placed in dry dock in Cairns. After initial attempts of eradication, funding was removed. The Asian honey bee is smaller than the European honey bee and has a different hind wing venation pattern.



Apis cerana Location: Cairns, Qld Photo by Matthew Connors

While on the subject of bees, Matthew posted an interesting image of a native bee being attacked by green tree ants (Oecophylla smaragdina). These ants are interesting as they do not possess a sting but rather they bite their prey and then squirt an acid spray into the bite wound from the tip of their abdomen. They attack and gather mainly beetles, flies and other wasps, bees and ants to feed their young. They are commonly known as weaver ants as they weave together leaves inside which they build a nest colony. The use their larvae to produce the silk used to weave the leaves together. While sweeping flowers in a gum tree in Cape York, I accidently hit a nest of green tree ants which showered down on me and I was bitten in all places seen and some unseen places ...... it was very painful and embarrassing as the shed all my clothes and ran around like a chook without a head trying to get the ants off me. Apparently, you can eat the abdomen of the ants.



Nomia (Hoplonomia) rubroviridis Location: Douglas QLD Photo by Matthew Connors

And, no task is too small or too large for these tenacious ants to tackle. This amazing image says it all –

Think of great caption to this image ... "If I get this home, we will all eat like Kings!"



Oecophylla smaragdina Location: Crystal Creek QLD Photo by Matthew Connors

#### Cane toad march

I read a paper a few years ago that showed the cane toad individuals at the front of the push into the Northern Territory and northern Western Australia had longer front legs than toads back in Queensland where they were originally released. Well, these images may well prove that theory – but a FIVE LEGGED Cane toad is going a bit too far. Get ready to be amazed.





Cane toad Rhinella marina Location: Kununurra, WA Photos by Simon Ong

#### **Masters of camouflage**

Gordon Claridge commented: "On the stem of Barbed-wire Grass (*Cymbopogon refractus*), with one pair of fore-legs sticking out to the side, exactly like the position of a seed head on the stem."



Runcinia acuminata Location: Vinegar Hill QLD Photos by Gordon Claridge

And here is an image of a grasshopper using its antennae to mimic the stem of a flower head.



Monistria discrepans Location: Gum Flat NSW Photo by John Courtney

This wonderful image came from an 84 year old father of a friend of mine. Her father has been a natural history photographer for many years and this photo was the one he liked most. To him, it reflected so much about nature itself.

I uploaded the image to BowerBird and my friend took her father to the local library and showed him his image was now online for others to enjoy and appreciate. He was very pleased.

When we first envisaged and developed BowerBird, the social aspect and its "well-being" ability never entered any of our minds. Over the years, I have learnt and appreciated that the well-being aspect of social media is one of its greatest assets.

## Spot the caterpillar - if you can ...

See if you can spot this very well camouflaged geometrid "looper" caterpillar. When you give up, look at the second image below. Amazing.



Aeolochroma sp. Location: Douglas QLD Photo by Matthew Connors



## It's not often that ambulance station contacts me asking for assistance!

Peter Carnegie is an officer at the Ouyen Ambulance Station, NW Victoria and he sent me several images of rather large beetles that he found in the engine bay of the station seeking an identification and explanation for their presence.

The beetles were the introduced Egyptian beetles, *Blaps* polychresta, which are usually associated with grain. At the time, Ouyen was in the middle of a mouse plague.



Blaps polychresta Location: Ouyen, Vic. Photo by Peter Carnegie

## What an amazing group of spiders are in the genus Arkys.



Arkys walckenaeri Location: Alpine National Park Photo by Reiner Richter



Arkys cornutus Location: Murrumba Downs QLD Photo by Tony Eales



Arkys bulburinensis Location: Mount Mee QLD Photo by Tony Eales



Arkys lancearius Location: Mapleton QLD Photo by Dianne Clark



Arkys tuberculatus Location: Wollongong NSW Photo by Jeannie



Arkys alticephala Location: Upper Burnie TAS Photo by Rob Dean



Arkys curtulus Location: Wollongong NSW Photo by Jeannie



Arkys curtulus Location: Cooyar QLD Photo by Glenda Walter



Arkys curtulus Location: Bridport TAS Photo by Kristi Ellingsen



Arkys speechleyi Location: Mount Mee QLD Photo by Tony Eales



Arkys sp. Location: Gembrook VIC Photo by Carol Page



Arkys sp with lunch. Location: Wollongong NSW Photo by Jeannie

## Here are some more images taken by John Courtney



Spotted bowerbird *Ptilonorhynchus maculatus* Location: Gum Flat NSW



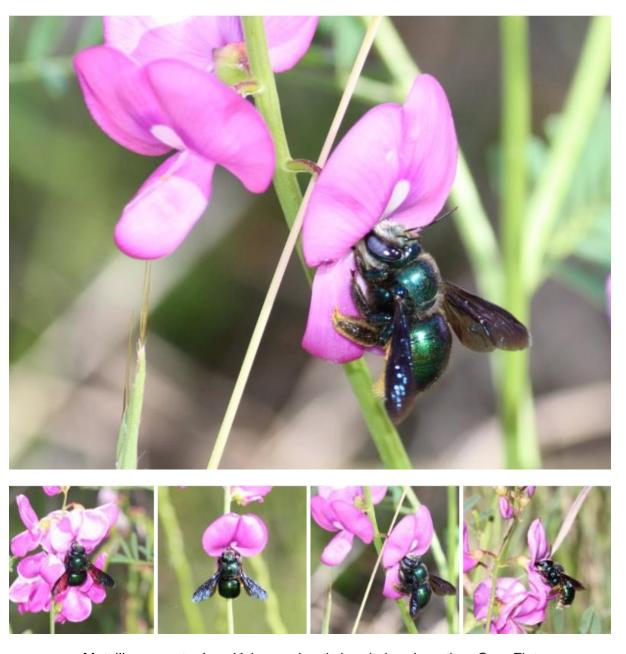
Satin bird Ptilonorhynchus violaceus Location: Lamington National Park Rd, O'Reilly QLD



Greater bowerbird Ptilonorhynchus nuchalis Location: Mount Carbine QLD



Mud dauber wasp Sceliphron laetum Location: Gum Flat NSW



Metallic carpenter bee Xylocopa Lestis bombylans Location: Gum Flat

Thanks John for sharing your nature images with us all.

## First ever spider images

Laurence Sanders has had many "firsts" on BowerBird and here I report yet another. What is it about that central Queensland area?





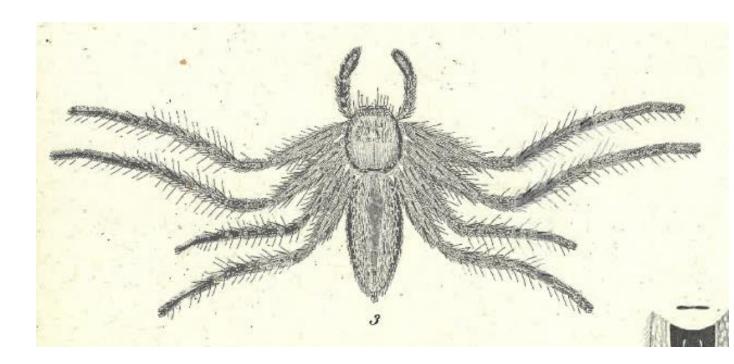
Huntsman Neosparassus macilentus Location: Blackwater QLD Photos by Laurence Sanders

Being a taxonomist, I enjoy delving into the past history of the people and publications that have given us our modern day nomenclature. One of the early and prolific spider taxonomists, who described many Australian species, was Ludwig Carl Christian Koch Born 8 November 1825 Regensburg, Germany Died 1 November 1908 (aged 82) Nuremberg, Germany.

Laurence's pictured spider was named and first described in Koch's 1875 publication: *Die Arachniden Australiens, nach der Natur beschrieben und abgebildet.* Nürnberg: Bauer & Raspe Vol. 1 577-740 pp. The species was described in page 711. It was figured as a line diagram in plate 61 figure 3.

Laurence's BowerBird image is the first known image for this species following the 1875 line diagram.

I find that all rather "nice". Thanks Laurence.



#### Another first seen adult spider on BowerBird

While webs of this spider have previously been photographed, the live adult had never been photographed until ..... Glenda Walter spotted and photographed one on bark.



Paraembolides boycei Location: Rangeville QLD Photo by Glenda Walter

Glenda commented: "The spider was seen on a tree trunk not far from one of the funnel-shaped nests and identified by Dr Ron Atkinson of Find-a-Spider website. This the first spider of this species that I've seen, although there are plenty of the webs on the trunks of large conifers. The spider was about 16 mm long."

Currently on ALA, there is an image of an adult but one look at the positioning of the legs shows that the spider is indeed dead and the lighter body colour suggests that spiders had been in alcohol for some time. Below are images of the web.



Paraembolides boycei web images Location: Rangeville QLD Photos by Glenda Walter

# We all love a good mystery. These images were originally posted as a "Mystery".



Ant egg - Formicidae Location: Cann River VIC Photo by Carol Page



Mystery fly later identified as Ephydridae: *Ochthera* sp. Location: Bibra Lake WA Photo by Daniel Heald.



Mystery bee later identified as Homalictus sp. Mount Stuart TAS Photo by Kristi Ellingsen



Mystery bug was a Derbidae - Zoraida essingtonii Location: Freshwater QLD Photo by John Eichler

Janet titled this record "Spider mystery unfurls". She was initially confused as to what the four balls at the front of the spider were but when she returned next day the balls turned out to be spiderlings.



Theriididae Location: Lake Macquarie NSW Photos by Janet Grevillea

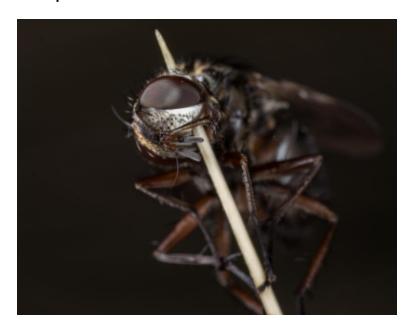
#### A fate worse than death? Gruesome speared fly.

Kristi Ellingsen related this curious tale:

"How horrible and weird is this? I saw a fly being weird on a piece of marram grass. I immediately wondered if it was fungus infected, but I couldn't see any spores. I finally looked a bit harder and saw it was impaled on this floppy spiky leaf of the marram. It was in a random spot on a beach, well and truly alive. There were very few people about (we saw about 10 over a few hours). I can't see this being a human caused spiking as I think people would push through the abdomen or the thorax. Surely the head would be too hard to manipulate, and I don't think people would want to hold it that way. I know birds do some impalings, but the grass would be way too floppy for it. Surely this can't be just a bit of really bad luck??

To answer the obvious question....no I didn't take it off or kill it... I did as I usually do and leave it untouched. Yes, it now gives me the heebie jeebies. It wasn't as clear what had happened on the glare of the beach."

Now this is a mystery. Who or how did the fly's head get impaled in the spike.







Muscidae Location: Marion Bay TAS Photo by Kristi Ellingsen

#### First record for WA.

Simon Ong is another contributor who comes up with many firsts. His location in northern WA provides him with a wide hunting area which is ripe for such finds. Here is one recent find that got the entos in Canberra excited.



Gryllidae Cephalogryllus sp. Location: Florina NT Photo by Simon Ong



Previous known distribution

## It's always fun to create your own image captions.

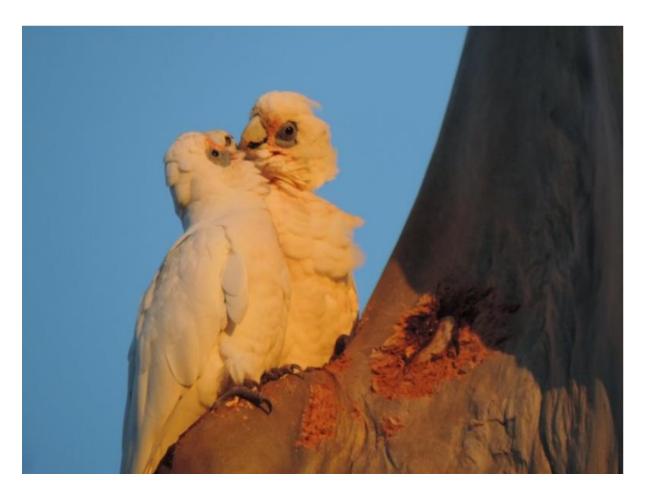
Here's "my" interpretation of these images ........



Mexican standoff ......



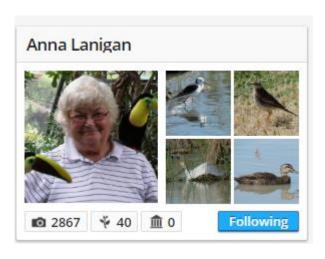
Who will break first?.....



All's well that ends well .....

Many thanks to Anna Lanigan who supplied these images of little corellas (*Cacatua sanguinea*) in Essendon Victoria.

I first met Anna when I gave a BowerBird talk to a photographic club and she has been an enthusiastic BowerBird contributor ever since uploading 2,867 records and counting. Thanks Anna.



## "Something terrifying" ... was the record's caption!

If you look hard, you can just see the outline of the animal with the "bright eyes". Wonderful.



Agile wallaby Macropus agilis Location: Douglas QLD Photo by Matthew Connors

Matthew commented: "Not exactly something you want to come across unexpectedly at night!

#### Tattered and torn but still a new inland record.

Gordon Claridge uploaded this tattered and torn looking moth record from near Gatton, Qld which after looking at the ALA distribution map for that species, makes it the furthermost inland record for this species. Gordon jokingly commented: "Maybe that explains the state of its wings."



Traminda aventiaria Location: Near Gatton Photo by Gordon Claridge



ALA map showing previous known distribution

#### A good news story

On Facebook, Laurence said that he saved this legless lizard as it was initially thought to be a snake. But, how many snakes have ear holes ??? None!



Legless lizard or Excitable Delma *Delma tincta* Location: Blackwater, Qld Photo by Laurence Sanders

#### This one had the expert wondering .......

The record came in with the title "Help identify please!" Was it a millipede or flatworm or snake – all of which were ruled out by the experts. We knew more about what it wasn't than we knew what it was. Then finally, the BowerBird network of "crowdsourced" identifications kicked in and we had a name. That name was confirmed by the Queensland Museum who provided a generic name. The specimen is fascinating and the pathway to name it was equally fascinating – we all learnt a lot.





Tiger worm Annelida: Megascolecidae: Fletcherodrilus sp. Mount Warning NSW Adam Fisher

## Secondary evidence is valuable evidence

Daniel Heald's scat photos provide valuable evidence of presence and prey/food.



Fox scats with bones of bobtail skinks Location: Wattle Grove WA Photo by Daniel Heald



Fox scats with seeds (figs?) Location: Wattle Grove WA Photo by Daniel Heald

## **Amazing colours**

The colours in this three-cornered Murex are amazing.





Pterochelus triformis Location: Beaumaris VIC Photo by John Eichler

#### **Richness of observation**

Jenny Thynne recently posted these comments and images. A wonderful resource of information indeed.





Meroglossa itamuca Location: Sunnybank QLD Photos by Jenny Thynne

#### Jenny commented:

"I was lucky enough to witness these male *Meroglossa itamuca* bees emerging recently from their nests.

We now have quite a colony of these little bees. They are about 9 or 10mm long. The females build their nests in vertical bamboo garden stakes, and I have at least 10 stakes which are occupied.

The females spend all year in the stakes, but the males leave after a few weeks."

## **Nature Place**

The rains started a while back and a few days into it the cat got jittery, hadn't seen him like it before. It occurred to me the wet would be a time of migration for the native creatures so attributed his apparent anxiety to a passing snake, perhaps – I had seen a small one.

Weeks passed and he was still nervous about going out, either the back or the front deck, and I thought he just needed more time to get over it, whatever it was. But he wasn't getting over it ... he wouldn't even go out on his own any more. And it was becoming problematic.

Then one day I was watering a pot on the deck and I noticed faint movement where no movement should be, it was a snake, with a belly full of mouse – I presume. It was wide awake and well aware of me nearby but obviously unwilling to take flight.

What to do ... Looking inside I saw the primal fear of a body for snake, or any wild animal capable of inflicting damage, so I had to encourage myself, to figure out what to do with it, and do it. I would leave it be, but not with a scaredy cat in the house, it was making him unhappy and cat was here first.

I've seen it done on TV so I got a pillow case and put on leather gloves, but the snake was entwined in the stems of a plant by the cactus so I had to cut what looked like would make it easier

to extract the snake without entanglement, if I could get a hold on the head end without hurting it, or me.

And so it was ... I disturbed missy snake enough to get her to raise her head and gripped her firmly so as not to allow for accidents of bite, snake bite. Snake didn't come without a struggle, though a minor one really. The digesting mouse would have sedated it too, I think.

I had its head end in one hand and the pillow case in the other while also using it to release its body from entanglement with the stems, it was easy enough, with room for error. It did try and hold on to one stem it could still easily entwine, but I had a will to remove it ...

... without harming it if possible. And all went well. They are powerful creatures, muscle tone like a tree trunk, unbending unless forced. But it never panicked, snake was calm throughout, more or less.

And so was I, more or less. It was a partnership, of a kind. The contrary kind. Into the car and off to the local bush, Eprapah, and release. Pillow case on the seat next to me seeming alive.

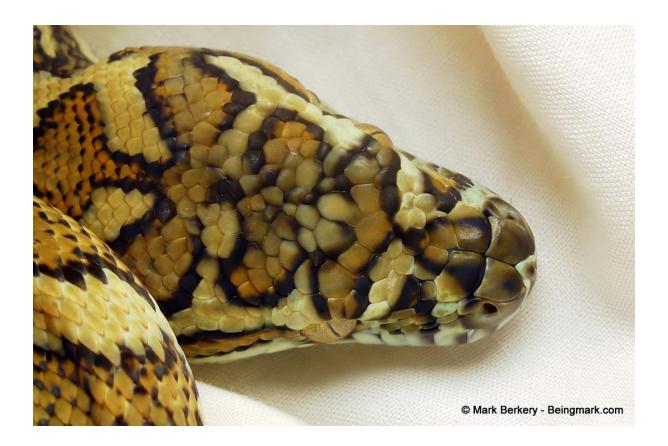
Once there I opened the pillow case and had to prod it out and once out it didn't hesitate, off it went into the undergrowth, barely a chance for a clear shot.

Throughout she appeared to just take it in her stride, fight response disengaged, in it to the end, naturally.

Bye bye snake ...







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 <a href="mailto:kwalker@museum.vic.gov.au">kwalker@museum.vic.gov.au</a> – else share with your friends)