

26 June 2015 Ken Walker (<u>kwalker@museum.vic.gov.au</u>) Museum Victoria. Edition 14.

Hi All – The BowerBird user community is a rich and varied one. Through the Bugle, I try to introduce you to some of these people by presenting some of the BowerBird images they have posted. For me, it is fascinating to see what interests different people and what they find worthy of photographing and then posting and sharing on BowerBird. As I have said before, I love the serendipity of these spontaneous decisions – "Variety is the spice of life!"

However, from time to time, BowerBird community members make news by themselves through either their own activities or through incidents that happen to them. For me, this all adds to the richness of getting to know about a "BowerBird community".

In the past week, two BowerBird members have been in the news and I felt compelled to share these news items with you.

The first news item this week came from a long-time colleague and my much valued impartial sounding board - Lee Belbin. Lee is "computer geek" who is primarily responsible for the Atlas of Living Australia's Spatial Portal. For me, this is "the gem" in ALA's data management tools. Here you can plot the distributions of a single or multiple species on the one map. Indeed, way back in 2005 or so when ALA was but a twinkle in our collective eyes, we posed a question for ALA to solve as we could not do at the time. The question was: Show me the distribution of the Koala species, then overlay on the same map its host food plant's distribution. Now model a climate change of 2C over the next 50 years and show me how the two distributions will vary. In 2005, to answer this question you would have had to contact each individual Australian Museum and scientific and community datasets to gather the Koala distribution data points. Then you had to overcome permission problems to use the data and that's even before you begin to aggregate data coming from a myriad of different computer platforms and ways that people had collected and recorded the data. Then repeat same process and problems for all of the Australian Herbaria to gather the host plant data. You then had to find a mapping program that would allow you to add and distinguish two different datasets on the same map. Then you had to find modelling software. Then you made a cup of tea and gave up!

Since the launch of ALA (28 July 2010), the above question is now not only possible but a student could do it. You can combine any number of species on a single map and then overlay any number of over 300 different biotic and abiotic overlays to the distribution map (eg. land use maps, rainfall, temperature, vegetation etc). These overlays allow you to attempt to define and discover what factors determine the distribution of a species. Is it rainfall or vegetation or temperature or soil type any of another 300+ potential factors that influence and determine a species distribution? To me, the spatial portal adds "meat" to dots on a map and allows us to see how the past has influenced what patterns we see today and how we can predict the future if we change these variables.

This is why I am so passionate that BowerBird contributes to the ALA species biodiversity datasets.

Now, perhaps it is this "computer geeks" way of clear thinking that he goes for an ocean swim every single day and he lives in Tasmania. Recently, a group of enthusiastic Taswegians decided to celebrate the annual shortest day of the year, the Winter Solstice, by going for a nude swim on 21 June at 7:38am. Apparently thousands "promised" to attend but when the time came to decide whether to leave the warmth of the bed sheets to scamper about in the nude on a beach, only 720 brave souls ventured out. Of course, Lee (who I think is part Penguin) was there in a flash. The air wind chill temperature was reported to be just 1C while the water temperature was a bracing 9C. Lee reported to me that the worst part of the swim was being held on the beach by the organisers for 30 minutes waiting for the 7:38am deadline. For these 30 minutes, Lee was dressed in his birthday suit wearing nought but a small, white towel. Madness I hear a chorus in the background and I fully agree. Lee assures me he was standing on the right of the pack to avoid the camera. He's the one wearing the red cap ...



Our second BowerBird member to achieve media "stardom" this week was Lily Kumpe. Lily works in a remote mining WA community east of Peak Hill. I have written before about Lily. She has found and photographed many amazing invertebrate and vertebrate animals at her work site and her locations have created significant distribution extensions to most of the animals she shares on BowerBird.



Lily's photography is distinctive as most of her images are photographed on a white background. Here are a few of Lily's amazing photographs:



Photos by Lily Kumpe

However, this week Lily and her husband ventured to the sea side WA town of Denmark to do some surfing. There was just Lily and her husband in the surf at the time and the WA News recorded what happened next: "Ms Kumpe said she was lying down on her board when she saw a large black mass. "I just felt something hit me and I fell off my board," she told ABC radio. "I don't know for sure that it was a shark. It seemed gigantic but we didn't see it. Ms Kumpe said her husband paddled over immediately and brought them both to shore. She has bruising on her face where the surfboard hit her and lacerations on her left hand. I feel very fortunate I've not been injured - a little shaky still." Look at the bite mark on Lily's surfboard. YIKES!!



Lily Kumpe was left with minor injuries after the shark attack. ABC

I sent Lily an email and she replied like a truly committed BowerBird user: "Too bad I couldn't get a photo of the mysterious beast for a Bowerbird identification." Love it!

However, I have wondered how Lily would have got the "mysterious beast" against a white background? While still with the media, sometimes the news just jumps out and hits you between the eyes as did this news item:



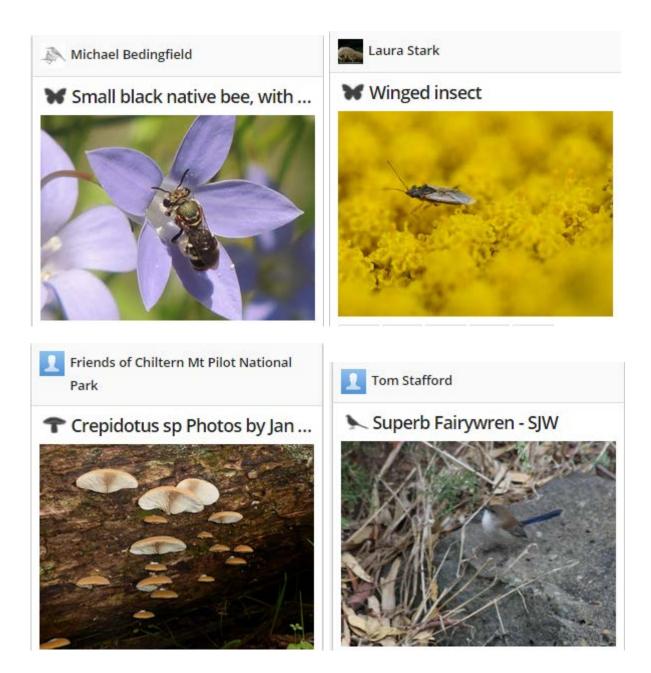
The adult form of a silent and deadly predator: a Beaded Lacewing. This species is from Udzungwa, Tanzania. (2) Patrick Coin/Cotinis

This creatively written story about a lacewing neuropteran goes: "When a baby *Lomamyia latipenni*s gets hungry, it stuns a termite with a "vapor-phase toxicant" released from its anus. That's a fancy way of saying it farts on it. In fact, their farts are powerful enough to immobilize six termites with one blow."

My favourite paragraph read: "Once the larva delivers its toxic toot, it can leisurely scuttle over and chow down. If a few extra termites are caught in the backdraft, that's just extra food."

Beware the "backdraft" is my take away thought ...

One of my many pleasurable observations on BowerBird is to watch as new contributors join and "pop" up. I have no idea who they are but their records are most welcome and shared. Here are a few new names for this week:



Welcome !

Speaking of pleasures some mossies from north Queensland ..



Photo by Lek

Ochlerotatus notoscriptus. This species is arguably the major domestic pest species in southeastern Australia; it has been incriminated as an important vector of dog heartworm, has been shown to be able to carry Murray Valley encephalitis, and transmit Ross River and Barmah Forest viruses as well.

Note the "beautiful" lyre shaped white markings on its thorax.

And, another "great" mossie image by Lek. Look how far down this mosquito's head is suggesting its mouthparts are well into the victim's blood vessels.

Lek has added invaluable temporal data as to when this mosquito is looking for a meal:

"A female mosquito busy feeding, shortly before noon, seen in a suburban yard. Perhaps Ochlerotatus vigilax? "



Photo by Lek.

Both mosquitos were recorded from Townsville:



Townsville City QLD 4810, Australia

Being there WITH A CAMERA at just the right moment!

We all know that invertebrates moult or shed their skin as they grow older and larger. Moulting takes about 30 minutes and then it takes about another 30 minutes for the new skin to oxidise with air and to harden. Here is an amazing image of a freshly moulted Red and Black spider (*Nicodamus peregrinus*) still carrying the old cephalothorax skin on its back. Two heads!

Look at the size difference between the "old" cephalothorax and the new skin – at least half a size larger.



Photo by Dr Bevan Buirchell

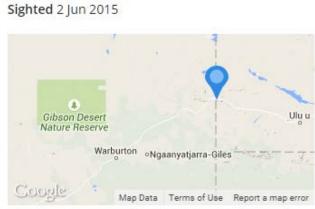


The above photo was uploaded by a relatively new BowerBird member who obviously "likes" spiders and has recently travelled through central Australia. This lovely corinnid spider's name - *Nyssus albopunctatus* - was only published by Dr Rob Raven (Queensland Museum) in a 400+ page revision of this Australian family.



Photo by Dr Bevan Buirchell

And look at the location – On the border of NT – WA west of Uluru – that's remote. What a great record.



Tjukaruru Road, Kaltukatjara NT 0872, Australia

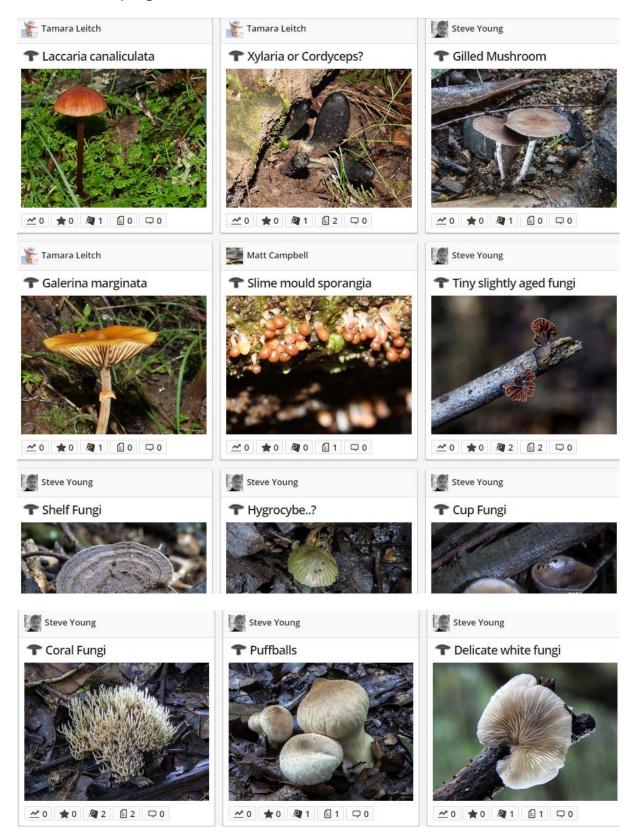
And, these magnificent "Ant spiders" – Zodariidae



Photos by Dr Bevan Buirchell

Fungal forays in abundance

Fungal images are coming into BowerBird even as I type this newsletter page!



Here is a striking picture of a *Mycena* fungus from 35 minutes ago. This image reminds me of that moon landing image with the earth in the background – for those who were "young enough" to have sat glued to a black and white TV on a cold 21th July 1969 morning and watched Neil Armstrong walk down the stairs and walk on the moon. "One small step for man …"



Steve Young added a sighting 35 minutes ago

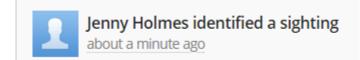


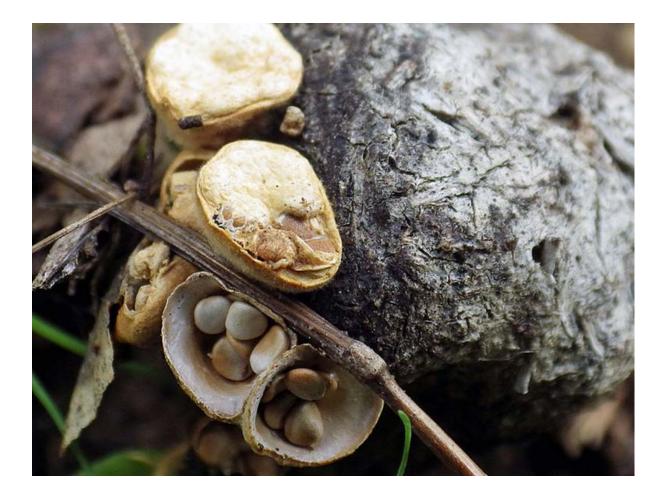
Photo by Steve Young



Mycena (genus) Taxonomy: Fungi: Basidiomycota: Agaricales: Mycenaceae: Mycena

And, here is a record that arrived "about a minute ago'!







Crucibulum laeve (species) Taxonomy: Fungi: Basidiomycota: Agaricales: Agaricaceae: Crucibulum: laeve Common Names: Fungi, Gilled mushrooms And look at this magnificent image of a Bird's Nest Fungi.





Nidula emodensis (species) Taxonomy: Fungi: Basidiomycota: Agaricales: Agaricaceae: Nidula: emodensis Common Names: Fungi, Gilled mushrooms

Here are two just about to open -

Photos by Reiner Richter.

Honestly, the fungal images are just superb!



Stropharia semiglobata

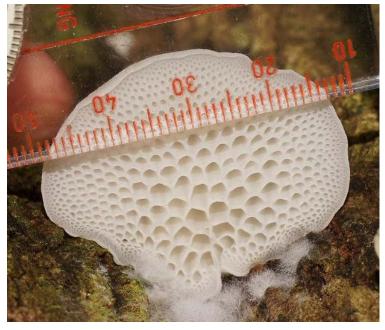


wood-rotting fungi - Antrodiella zonata

Photos by Mark Ridgway

This should be called the "Tripe" fungus but instead it is called the Giant-Pored Fungi –almost 50mm across





Photos by Reiner Richter

BUT – Just as beautiful

This Red triangle slug – what a well named animal !



Photo by Reiner Richter



Triboniophorus graeffei (species) Taxonomy: Animalia: Mollusca: Gastropoda: Pulmonata: Athoracophoridae: Triboniophorus: graeffei

Common Names: Gastropods, Red-triangle Slug

And finally, to the unknown

Reiner posted this larval image. To date, no one has attempted to try an identification. I think beetle but that is a real guess.



Did anyone see the story during the about the spiky fossil called *Hallucigenia*, so named for its fantastical appearance. They now think it could be the ancestor to the velvet worms ..



Caricature by Danielle Dufault

And under the title of "I get all the good jobs"

In the ento department, the "witching hour" always happens late Friday afternoons.

I have just received a pathology request to identify a fly maggot extracted from the left buttock of a 26 year old woman who has recently returned from Rwanda, Africa.

The maggot measures 11mm in body length and it's still alive.

Technically, this is an exotic incursion! But I will soon have the maggot in alcohol.

I would love to breed it through to an adult fly ... all I need is a buttock for about 2 weeks ... not a big ask I think (:->!

I have a good idea of what it is ...

I'll show you images of this buttock maggot next week!

As always from BowerBird

Haveagoodweekend all Happy photographing ...

Cheers - Ken

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