

10 April 2015 Ken Walker (<u>kwalker@museum.vic.gov.au</u>) Museum Victoria. Edition 3.

I do hope that everyone had a great Easter break. My family took a 6 hour drive east to the small town of Gipsy Point, about 10km west of Mallacoota. We stayed in several cottages and mixed with the local wildlife, took long bush walks and caught some amazing bream and flathead in the Genoa River.

This Kookaburra was able to spot me every time I walked into the kitchen. I usually cut off the tail section of a pilchard bait which he would then grab and bash from side to side several times before it went down the hatch.



Photo by Ken Walker

On one of my walks, I spotted this *Tapeigaster* (Family Heleomyzidae) mushroom fly guarding his mating patch. Males stake out a mushroom where they try to attract females to mate and lay eggs. I observed this specimen for over an hour and it did not move a whisker – no girls around? A wide range of species of these flies are now displayed on BowerBird: http://www.bowerbird.org.au/home/sightings?query=Tapeigaster



Photo by Ken Walker

But probably the "Find of Easter" for me was this enormous 8cm long Anthela varia late instar caterpillar feeding on a eucalypt leaf.

Don't touch me it was advertising!!



"Back from the Dead"

One of the fascinating aspects of BowerBird that I have observed is how many "biological gaps" BowerBird citizen science records are filling - first live image or first Victorian/Queensland/etc record and many first distribution points on the Atlas of Living Australia.

Reiner Richter is a keen Odontologist (Dragon and Damsel fly specialist) and most summer weekends will find him "hanging" around swamps and water courses photographing his favourite insects. Reiner is usually the first to identify to species any dragonfly image added to BowerBird. The story goes that last October, Reiner headed west to the Discovery Bay Coastal Park near Nelson in the western Victoria. While searching for dragon and damselflies, Reiner noticed about 50 specimens of an attractive ladybeetle sitting on the leaves of bulrushes and ribbon plants around him and so he took a number of images.



Photo by Reiner Richter

A few years ago, a CSIRO Australian National Insect Collection scientist, Dr Adam Slipinski, and others published a website detailing images of all known extant Australian ladybeetles.



http://www.ento.csiro.au/biology/ladybirds/ladybirds.htm

So Reiner checked out this website and emailed me to say that he could not find his swamp ladybeetle on this website. Reiner had attached a few of his images to his email and I too could not match his image to any species on the website.

I know Adam in Canberra so I forwarded Reiner's images to him for identification. Adam's first reply questioned Reiner's location veracity as Adam did not believe these images had been taken in Australia. So I "carefully" asked Reiner if he was sure that he had taken his images in Australia – a polite "Yes" came back. Then Adam began to suspect that the images must be of a recently introduced exotic species and he forwarded Reiner's images onto the ladybeetle world authority Dr Roger Booth in the British Museum, London. The next morning, Roger replied to both Adam and I with the email title: "Back from the Dead !" Reiner had captured images of a presumed extinct Australian ladybeetle species known only from 5 specimens - three lodged in Museum Victoria and two housed in the British Museum collections. The last known record for this species went back to August 1949 from Kallista and Narbethong in central Victoria. Any species that has not been seen or collected for more than a 50 year period is deemed to be extinct.

Micraspis flavovittata had done a Lazarus and has arisen from the "scientific" dead – way way west of its original location. What a thrill it was to see these emails and what a win for citizen science and Australian Biodiversity.

For me, this is what BowerBird represents – an interface between the professional zoologists and the citizen science community. If Reiner had posted his images on a website like Flickr, they would have been admired but most likely never identified and the true value of the images never realised.

Reiner's BowerBird records are now uploaded to the Atlas of Living Australia – Australia's National Biodiversity website for all to see and use.

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Reiner has since returned to the Discovery Bay Coastal Park to document the larva of this species for the first time.



Photo by Reiner Richter

We asked Adam in Canberra what he thought these larvae fed on. Without any particular knowledge for this species, Adam coughed up the standard larval habits of most *Micraspis* ladybeetles – "probably aphids". However, Reiner seems to have photographic evidence that suggests the species may be phytophagous - plant or fungus and mould eaters (See below). After seeing Reiner below image, Adam admitted such a diet could be possible as other ladybeetles are indeed known to be phytophagous. Reiner will need to collect a larva and send it to Adam for gut analysis.

The "Magic" for me is bringing together people with a common interest and developing new and exciting knowledge.



Photo by Reiner Richter

Reiner has created a BowerBird project dedicated to "Australian Dragonflies and Damselflies". I recommend people view these records and perhaps join this project to contribute:

http://www.bowerbird.org.au/projects/3137/sightings



"The lengths we go to get an identification."

Anyone who has ever watched the ABCs "Gardening Australia" will know Jerry Coleby-Williams. Jerry's straw hat is synonymous with his presentations. Well, Jerry is an active BowerBird contributor because ... I once visited Jerry's Brisbane suburban backyard and was amazed at what he has squeezed into it. He has a "normal" sized plot but has between 2-300 species of plants at any one time. Many of his shows originate from there. So, Jerry was keen to know and record the invertebrates that visit and pollinate his crops and BowerBird is where he places his images to be identified.



Last week, Jerry uploaded this seemingly innocuous hoverfly. However, the closer I looked at it the more I did not recognise it. The fly did not have the usual yellow coloured "shoulders" (anterolateral corners of the thorax) and curiously, it had two yellow stripes along the posterior margin of the thorax. (See arrows)



Photos by Jerry Coleby-Williams.

Internet and collection searches revealed nothing similar so I contacted the fly experts at the Australian Museum. They too were confused and could not confidently name this fly. So, the images were sent off to Ottawa, Canada where the Australian Hoverfly expert now works. He checked with another colleague and finally they delivered a name:



Syritta orientalis (genus) Taxonomy: Animalia: Arthropoda: Insecta: Diptera: Syrphidae: Syritta orientalis

So, from Wynnum in Brisbane, onto BowerBird, then to Sydney and across the Pacific to Canada and back. Like the famed "Pony Express" – We deliver! Through rain, hail, storms etc etc. Another round the world trip was required to identify this Stiletto fly photographed by Maree Goods. I mentioned Maree in a previous edition when I said she laid on her stomach all day photographing insects visiting her bird bath. Maree has reliably informed me that she only spent part of the day on her stomach - country women are too busy to spend all day in that position!



Photo by Maree Goods

This image was sent to a fly expert at the Queensland Museum who tentatively placed is in either of two genera and then forwarded the image to another expert in Californian Department of Food and Agriculture who named it as:



Parapsilocephala (genus) Taxonomy: Animalia: Arthropoda: Insecta: Diptera: Therevidae: Parapsilocephala

Photos of the week !!

What a wonderful selection of images have been uploaded to BowerBird this week. Since this edition featured Reiner's images so much, I have decided to select his flatworm image taken at Melba Gully Rainforest Walk, Lavers Hill, Vic.



Photo by Reiner Richter

Our ever helpful flatworm expert, Dr Leigh Winsor wrote this interesting information about this species:

"Reiner's excellent photos are of an uncommon, beautiful, and as yet unnamed species of land planarian that at present is best assigned to the collective group *Australopacifica* in which species for which there is no anatomical information are accommodated. I previously encountered this species in May 1972 where I found it near Benwerrin and in the grounds of the State School at Barramunga to the north west of Lorne, and at Cumberland River, Lorne Forest Park. I have also found it at Cape Liptrap, Stoney Rises and Rosebud in Victoria, and in Montague Tasmania. It is one of a few species of land planarians that crossed the land bridge to northern Tasmania following the last glacial period. In the specimens that I found the longitudinal stripes appeared more greenish than those in Reiner's specimens, but otherwise the planarians look the same. The species was briefly described by me in 1977 as a Geoplana sp. This species appears to prefer wet conditions. Sexual specimens were found in May and November."

And, from the beautiful to the bizarre! Looking more like a fossil Trilobite, this is a looper or Geometridae moth caterpillar (*Eucyclodes* sp.).



Photo by Martin Lagerway

Perhaps these images better shows the typical caterpillar head and "looper walk" characteristic of Geometrid moth larvae.



Photos by Martin Lagerway

BowerBird Tip – Voting

BowerBird **VOTES** are something that have confused many people.

There are two places where you can cast a BowerBird Vote.

1. You can cast a Vote to the right of the RECORD'S IMAGE



Photo Martin Lagerway

¥ Leaf Beetle



This Vote is your way of indicating that you like the record's image. BowerBird uses these members' votes to decide which images to display on its homepage. We show the top 20 most voted images and the display changes as different images receive more votes. Remember – you can only Vote for an image once!



2. Identification VOTES.

The second type of voting involves identification. Every identification carries the ability for others to agree or disagree with an identification – a BowerBird community decision. The example below shows that two different identifications were offered for the same image. One was voted down while the other was voted up. The value of votes comes when the below record is uploaded to ALA. If a record has more than one identification, then Atlas of Living Australia will select the identification which has the most positive votes.

Interestingly, every Monday afternoon, when ALA uploads BowerBird records, it uploads the entire dataset. So, even if a second identification comes in 6 months after the first and it receives more votes than the first identification, ALA will change the identification for the record to the one with more votes.



Choerocoris variegatus (species)

Taxonomy: Animalia: Arthropoda: Insecta: Hemiptera: Scutelleridae: Choerocoris: variegatus Common Names: Bugs, Scutellerids, Jewel bugs, Metallic shield bugs





Choerocoris paganus (species)

Taxonomy: Animalia: Arthropoda: Insecta: Hemiptera: Scutelleridae: Choerocoris: paganus Common Names: Bugs, Scutellerids, ground shield bug

Votes are an example of how we wanted the BowerBird community to decide much of what happens and is displayed on BowerBird.

Make your VOTES count.

Haveagoodweekend

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)

Vale Richie Benaud –

What a "Marvellous" innings.