



1 April 2015 Ken Walker ([kwalker@museum.vic.gov.au](mailto:kwalker@museum.vic.gov.au)) Museum Victoria.

With the Easter Bilby about to scatter her alfoil wrapped scats around, this is a short week so the “Friday afternoon” email is moved forward to today!

Most science related websites launch full of images and text; BowerBird launched without a single image or a single line of text. “Build it and they will come” was our motto ...

And so, it has been a delight to watch previously little known and perhaps unloved animals gathering bands of committed followers. No other group of inverts has built such a BowerBird following as the humble flatworm: Phylum: Platyhelminthes; Class: Turbellaria; Order: Seriata.

Indeed, when the first flatworm image was posted on BowerBird, I had no idea whom to contact so I sent an email out on the Australian entomology list server asking for help and Dave Britton from the Australian Museum replied “Try Leigh Winsor at JCU.” So, I contacted Leigh Winsor and what a gem of a scientist and friend to flatworms he turned out to be.

BowerBird has its own Master Names checklist built from the Australian National Species Lists (NSLs) for plants (APNI) and animals (AFD). Unfortunately, AFD does not yet have a flatworm’s checklist so Leigh has had to work with no taxonomies for any his animals when identifying an image. But

what Leigh lacked with a checklist he has made up by telling stories. Who was the person that flatworm was named after? Where does it occur? What does it eat? How does it reproduce? Is it native? It was almost as if Leigh had been waiting for years to tell people about flatworms and now was his big chance! And, didn't he take the stage and deliver in a spades.

Unless you are a committed rock or log roller, you probably have never before encountered a flatworm. My advice is to start rolling stones and logs and connect with your local flatworm fauna – their colours and life histories will not disappoint you.

There is now a dedicated BowerBird flatworm project which can be viewed at this URL (You do not need to be registered on BowerBird to view this URL)

<http://www.bowerbird.org.au/projects/1633/sightings>

Privately, Leigh has told me that for many of the species he has identified on BowerBird, these were the first times he had seen the live animal – compared to pickled specimens in museum jars around the world. Leigh used to trudge around the country looking for flatworms “all alone” – but now, flatworms come to him. People send in images and some have even collected and sent him specimens for DNA analysis. This is a great example of science and citizen science combining with both parties receiving much back from these interaction.



Where did this “flatworm-mania” all start? Well, the first flatworm image uploaded to BowerBird came from that dynamic naturalist duo from the west – Jean and Fred Hort.



Field Naturalists extraordinaire ....

If you have a spare few days! Then you can peruse their photographic collections on Flickr

(<https://www.flickr.com/search/?q=Jean%20and%20Fred%20Hort>) or on BowerBird

(<http://www.bowerbird.org.au/users/3458/sightings>).

On 21 July 2013, they posted the first flatworm image on BowerBird which turned out to be a first record for this species in Australia !



Photo by Jean and Fred Hort.



Nuytsia Road, Wandoo National Park, Flynn WA  
6302, Australia

From

I contacted Leigh for an identification and somehow he was able to recognise this blob of jelly! Here was his reply:

“The images of the land planarian from your garden are of a *Dolichoplana* sp. cf *signata* Graff, 1899. If it is this species, *D. signata* comes from Ambon in the Molucca Islands of Indonesia, and would be the first record of the species as an exotic land planarian in Australia. I have about five *Dolichoplana* species for Australia, some are native and others are exotic. The exotics invariably turn up in urban gardens and garden centres, having been probably transported there together with potted plants. You do not mention the size of the flatworm or include a scale in the image, so I am guessing that it is about 2-3 mm wide/thick, and extended about 30-40mm. The original specimen of *D. signata* – if this is the same as your specimen – was (preserved) about 90mm x 2.6mm wide and 1.6mm thick. Members of the genus *Dolichoplana* are long and thin, and slightly flattened when crawling. If your specimen is *D. signata*, I would expect it to be relatively smaller living in a temperate climate than the specimen from Ambon. If you look carefully at the head end you will see an eye (there are two, one either side) rather than tiny multiple eyes as in the previous species. The hind end is blunt and slightly puckered suggesting that the species is reproducing asexually by architomy in which the planarian sheds a small portion of its hind end that then eventually develops into an adult. This mode of reproduction is common in tropical species that are living in temperate climates, as for example happens with The Kew flatworm, *Bipalium kewense*. Species of *Dolichoplana* feed on earthworms, and some species are regarded as pests in earthworm farms.” And so it began .... Leigh hooked us!

## The Flatworm Rogue's Gallery ...

There are yellow ones ..



Photo by Russell Best

Blue ones ...



Photo by Darren Carman

Brown ones ...



Photo by Patrick Honan

Orange ones ....



Photos by Reiner Richter

Brown on top, blue underneath .. Brownish pink ones ...



Photo by Mitch Smith



Photos by Reiner Richter

White ones ...



Photo by Leigh Winsor

Brown with yellow stripes ones



Photo by Kate Cranney

Yellow with brown stripes ones .. And again, but different ...



Photo by Reiner Richter



Photo by Reiner Richter

Brown with a racing stripe..



Photo by Ken Walker

Green ones ....



Photo by Jae Soumeru

Tiger print colours ...



Photo by Kristi Ellingsen

More stripes .....



Photo by Reiner Richter

Black ones ....



Photo by Darren Carman

Mottled ones ...



Photo by Ken Walker

Dressed to impress ones ...



Photo by Martin Lagerway

finally, an Aqua coloured one ..



Photo by Bruce Fuhrer

But are flatworms a “pest” by eating fruit as would seem here??

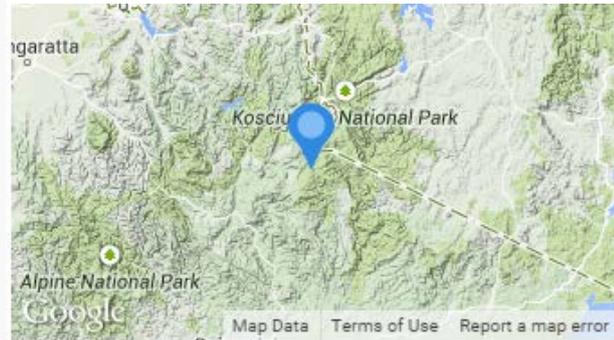


Photo by Suzanne Jones

But Leigh put such an idea soon to rest:

“Suzanne's clear photos show a small and as yet unidentified land planarian on a strawberry. Land planarians are sometimes found curled up in small holes in strawberries and also in holes in fallen fruit such as apples. Growers are concerned that the flatworms eat the fruit and are responsible for making the holes. Flatworms are carnivores and do not eat plant matter. In Suzanne's example shown here, possibly the flatworm was out hunting for the insects, millipedes, slugs or snails that are most likely the real culprits in the veggie patch.”

And finally on the flatworm front, imagine my surprise when I rolled a log on a Bio Blitz last year in the NE Victorian high country and found a Jaffa coloured and sized “lolly” under the log!! Not what I expected to find in the middle of nowhere.



Limestone Road, Alpine National Park, Cobberas VIC 3900, Australia

Photos by Ken Walker



**Leigh explained:** “Of particular interest is the newly laid egg capsule. The bright orange-red colour suggests that the cocoon has been recently laid. Over the following 1-2 days the colour of the cocoon will darken due to chemical process termed quinnone tanning. This results in an impervious protective shell that resists desiccation. The cocoon will possibly contain 3-6 juvenile flatworms.”

The BowerBird photo of the week must go to Maree Goods who spent most of an entire day lying on her stomach photographing insects that visited her garden bird-bath. Country folk do such weird things!! (:->! Look at the water's reflection of this Pompilid *Fabriogenia* spider hunting wasp.



Photo by Maree Goods

Here is another of Maree's bird-bath images – A Potter wasp



doing the walk on water trick:

And, then there was this conundrum that stumped us all.



Photo by Cathy Powers

Sighted 18 Mar 2015



Cathy is actually a plant person (ex President of the Victorian Australian Plant Society) but she runs a light sheet most nights and has a competition with Russell Best (another committed plant person) on who can record the most moth species in their

respective backyards – I guess at night, plants don't look so good so why not look at moths!

Cathy posted the above aesthetically pleasing moth image and labelled it: **? Noctuidae** thinking "A common one no doubt"

Believe it or not, that's as far as any of Australia's leading moth Gurus were confident to go as well. The "Head Guru" from Canberra ventured to say – "A definite maybe".

"It looks as though it is a male but I cannot be certain. If it is a male it will be in the Hadenini, related to *Persectania* and some similar species. It is possible it is an odd *Agrotis* in the Noctuini in which case it would have to be a female as the male should have clearly visible pectinate antennae. The definitive test between these two would be whether it has hairy eyes or not. But the photo loses definition before I can tell if it has hairy eyes. I do not think there is any doubt that it is in one or other of the two tribes."

Apart from Cathy's conundrum moth, it was an exciting week for moths on BowerBird: This moth, collected near Bruthen, proved to be the first Victorian record for this species!



Photo by Ken Harris

The story goes that the Victorian “moth-ers” all thought it was in one particular family until the Head Moth Guru in Canberra casually said – “Oh, that’s *Cascera muscosa*” .. in a completely different family! We all learn something new each day.



*Cascera muscosa*  
(species)

Taxonomy: Animalia: Arthropoda: Insecta: Lepidoptera: Notodontidae: *Cascera: muscosa*  
Common Names: Moths, Notodontids, Prominent moths

Here is the current ALA distribution map for *Cascera muscosa* showing the new Victorian location record for this species.

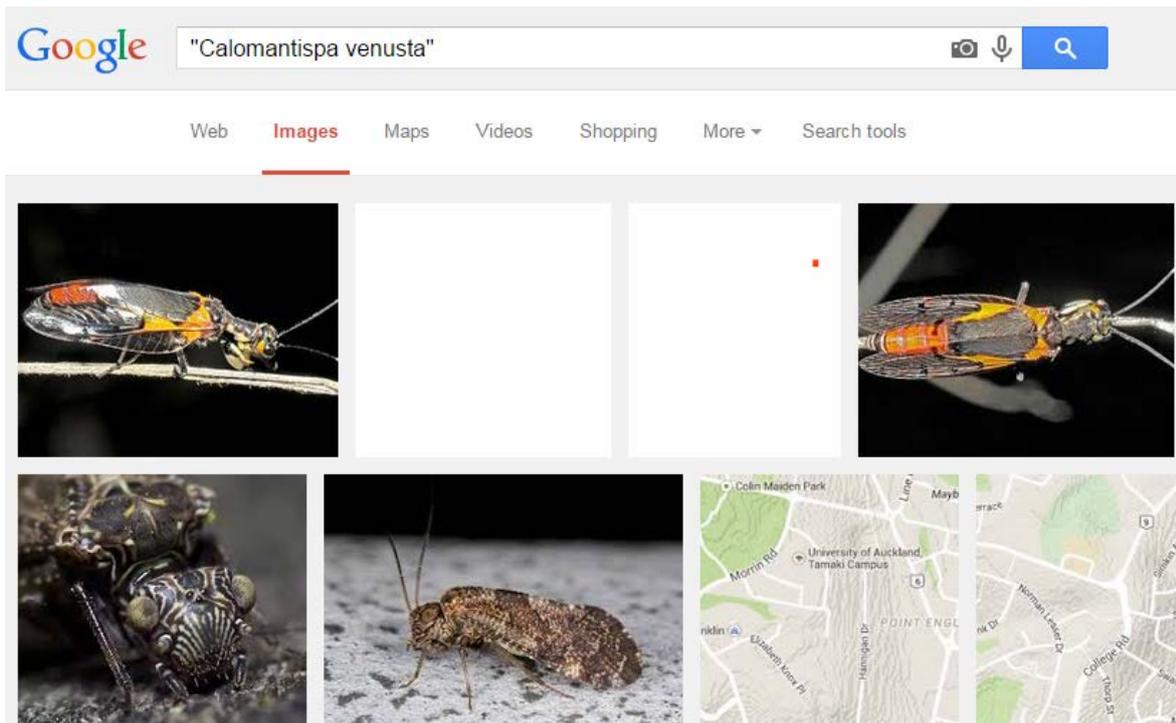


And finally, the first ever live images of this magnificently coloured Mantispid Lacewing (Neuroptera: Mantispidae) : *Calomantispa venusta* from east Gippsland.



Photo by Rudie Kuitert.

Notice the single visible spine (arrowed) on the foreleg which has been likened to the raptorial forelegs on Praying Mantis insects (Mantodea: Mantidae). Only images now on Google !



**WISHING EVERYONE A  
HAPPY & SAFE EASTER**

Cheers – Ken

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