

Victorian Entomologist



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of Victoria

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THE ENTOMOLOGICAL SOCIETY OF VICTORIA (Inc)

MEMBERSHIP

Any person with an interest in entomology shall be eligible for Ordinary membership. Members of the Society include professional, amateur and student entomologists, all of whom receive the Society's News Bulletin, the Victorian Entomologist.

OBJECTIVES

The aims of the Society are:

- (a) to stimulate the scientific study and discussion of all aspects of entomology,
- (b) to gather, disseminate and record knowledge of all identifiable Australian insect species,
- (c) to compile a comprehensive list of all Victorian insect species,
- (d) to bring together in a congenial but scientific atmosphere all persons interested in entomology.

MEETINGS

The Society's meetings are held at the Activity Room Ground Floor, Museum Victoria, Carlton Gardens, Melway reference Map 43 K5 at 7:45 p.m. on the third Tuesday of even months, with the exception of the December meeting which is held earlier in the month. Lectures by guest speakers or members are a feature of many meetings at which there is ample opportunity for informal discussion between members with similar interests. Forums are also conducted by members on their own particular interest so that others may participate in discussions.

SUBSCRIPTIONS

Ordinary Member	\$35	
Overseas Member with printed bulletin		\$65
Country Member	\$31 (Over 100 km from GPO Melbourne)	
Student Member	\$23	
Electronic (only)	\$20	
Associate Member	\$ 7 (No News Bulletin)	
Institution	\$40(overseas Institutions \$80)	

Associate Members, resident at the same address as, and being immediate relatives of an ordinary Member, do not automatically receive the Society's publications but in all other respects rank as ordinary Members.

LIFE MEMBERS: P. Carwardine, D. Dobrosak, I. Endersby, R. Field, T. New, K. Walker.

Cover and logo design by Ray Besserdin 2017

Cover photo: Beaded Lacewing *Austroberothella* sp. 8mm long from Frank Pierce's presentation of "Insect sightings at the Bend of Islands" p 69. Photo by Frank Pierce.

Minute of Entomological Society of Victoria
General meeting Tuesday 18 June 2019
19:45 Melbourne Museum

Attendance: Julia McCoey , Martin Lagerwey, Lyn Meredith, Linda Rogan, Peter Marriott, Peter Carwardine, Maik Fiedel, Sharon Mason, Ken Harris, Peter Muller, Ben Kurek, Daniel Kurek, Carol Page, Ian Endersby, Geoff Hogg, Joseph Schubert, Stuart Lay; Frank Pierce, Steve Williams.

Guests: Jeremy Shaw.

Apologies: Joshua Grubb, Trevor Kennedy, Robin Sharp, Ray Besserdin.

Previous minutes:

Minutes of the EntSocVic General Meeting 19th February as printed in VE Vol 49 no. 24 p21.

M: Linda S: Martin

Minutes of the EntSocVic General Meeting 16th April as printed in VE Vol.49 no.3 p.46

M: Sharon S: Lyn Both carried.

Treasurer's report: Treasurer, an apology for this meeting.

Editor's report:

Thanks to all who are contributing to the Victorian Entomologist. In June and August we will have articles which look at the effects of bushfires on moths and some other insects. Also included are interesting notes on wasps, ants and longhorn beetles. The editor encourages all members to contribute items on insects or other invertebrates which interest them. These can range from simple observations to full scientific articles.

Le Souëf Memorial Award: Council plans to resume presentation of the award at the Christmas break up 2019. A sub-committee of Linda, Julia, Peter M and Sharon was determined. Award nominee submission details to be advertised in the August bulletin with submissions acceptance expected to be received until 30th Sept.

EBSCO item: Contract received.

Other business:

Next general meeting, the room location will change due to building works at the Museum. The next meeting will be held in the Seminar Room where the meetings used to be held and that is downstairs.

Correspondence: The Society of Insect Studies circular. A photography competition is open to its members.

Upcoming meetings: See Bulletin back cover.

Members' night presenters:

Insect sightings at the Bend of Islands by Frank Pierce

Frank started with a photo of a minute lacewing which had not been included in Ken Harris Neuroptera series since Ken had not seen it nor photographed it until more recently. This is a beaded lacewing *Austroberothella* sp. in the family Berothidae, collectively known as beaded lacewings (photo front cover).



Figure 1 *Campion australasiae* eating Green Lacewing Organ Pipes NP December 2018.

Frank's observation, on 6 December 2018 at Bend of Islands, is probably only the second record of this undescribed species. The first record was by Ken Harris, found in Morwell National Park on 18/12/2017. The genus was described by Professor U. Aspöck and Ken's specimen has been sent to her and is currently in Vienna. Prof.

Aspöck says she would need to see a female to confirm or describe the species. These first two specimens are both males. Frank's specimen is now in the Melbourne Museum. (Figure front cover)

Frank has recorded 30 species of Neuroptera at his home in Bend of Islands (BoI)*. This includes three species of Mantispidae recently photographed: *Austromantispa trevori* (second record for Victoria), *Campion callosus* (common but new for BoI) and *Campion australasiae* devouring a green lacewing. Although this species is seen at BoI, the photo shown of the latter was shot at Organ Pipes NP in December 2018 (Figure 1).



Figure 2 Feather Legged Assassin Bug *Ptilocnemus* sp.

The next photo was from the Reduviidae family. The Feather Legged Assassin Bug *Ptilocnemus* sp. is remarkable in appearance. It hunts by waving its feathered legs while emitting a pheromone that attracts ants upon which it dines (Figure 2).

Nine ghost moths, family Hepialidae have been photographed at BoI from 2005 onward. These were recently identified by Frank with the help of MoV6 (2015). Frank thanked the MoV team for all the time they have invested in these essential publications.

Although involving vertebrates Frank also shared an amazing video of a fox killing a Copperhead Snake
<https://youtu.be/9zBhW45dygc>

Many thanks to Frank for sharing some of the biodiversity he observes at Bend of Islands.

*<https://bendofislands.wordpress.com/>

Two interesting invertebrates at Metung by Lyn Meredith

After Autumn rain Lyn had a visitor to a doorstep. Attracted to the outside light and peeping out from the decking crack where it must have fallen was Ghost Moth *Trictena atripalpis* (Figure 4.)

Lyn was curious to see just how deep that moth had ascended from earth. A hole that had a larvae casing was tested for depth with a lengthy and bendy stick. The inserted stick measured more than 50cm. Not very scientific but fun!

Also photographed at same house were two Marbled Scorpions, *Lychas marmoreus*



Figure 3 *Abantiades labyrinthicus* 16 March 2019
Bend of Islands
Photo Frank Pierce.



Figure 4 *Trictena atripalpis* Metung 2019
Photo Lyn Meredith.

found inside on the carpet on different evenings. The first scorpion had 5 red legged mites attached (Figure 5).



Figure 5 *Lychas marmoreus*. Notice red spider mites
Photo Lyn Meredith.



Figure 6 *Lychas marmoreus* pectines
as seen through a wine glass.
Photo Lyn Meredith.

The second Marbled Scorpion was taken to the kitchen table for a photo. When transferred to a wine glass the camera's focus revealed the white fringing on the scorpions underside. On further research these were identified as sensory organs named pectines (Figure 6).

X-ray CT for the study of insect structure and function by Jeremy Shaw

Jeremy who was visiting from Western Australia shared a slideshow of some amazing techniques now available for the study of insects and other items.

The slide (left) shows the complex x-ray tomography machine utilised for creating 3 D models without destroying the original specimen.



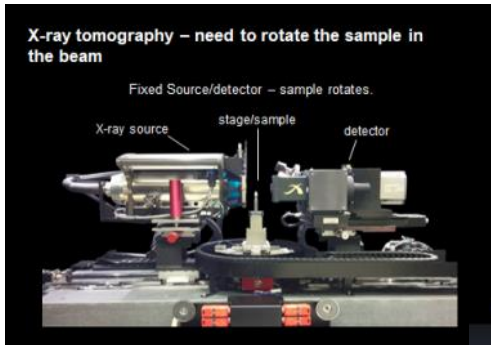
X-ray CT for the study of insect structure and function.

Dr Jeremy Shaw

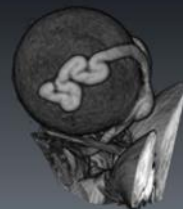
Centre for Microscopy Characterisation and Analysis UWA



Jeremy's presentation included videos of virtual dissection of a honey bee's abdomen and also of the female bee's reproductive organs. The slide (right) shows the bee's



Queen Honey bee reproduction



spermatheca which can be visualised and investigated within the intact abdominal structure.

Jeremy mentioned that the disadvantage of this method is that colour is lost. However, very accurate models of invertebrates such as the cave spider *Draculoides* sp. which is a troglidite arachnid can be obtained with this equipment (slide right).

The actual arachnid is approximately five mm long. The one shown on the right is from the museum outreach program.

The slide below demonstrates how well this technique can allow visualisation of male genitalia during copulation and without distraction of the specimen. The

X-ray Ct dataset will be used for exhibits in WA's New museum.



BUG SEX

Courtesy of Dr Liam Dougherty – Evolutionary Biology



structure of the male genitalia is often needed to confirm species.

In conclusion some non-faunal structures such as titanium, geological specimens and plant seeds were illustrated.

Thanks to Jeremy for showing us some of the possibilities offered by CT tomography.

Ian Endersby: New Book – *Etymology of the Scientific Names of North American Odonata*

Ian Endersby showed a book which he had co-authored with Heinrich Fliedner entitled 'The Scientific Names of North American Dragonflies'. It was similar in style to the one that they had published on the Australian taxa and arose because they had both seen elements in the North American Checklist which needed review mainly because of new information.

Sales and distribution from Australia would have been difficult so POD (Print on Demand) was set up so anyone who orders a copy will have it printed and posted from their own region or country.

www.busybird.com.au can assist.

Delegates to the International Congress of Odonatology to be held in Austin, Texas in July 2019 will each get a copy in their conference satchel.

Linda Rogan: Some interesting short-tongued bees

Linda's slide's briefly reviewed some facts about bee's tongues. The long-tongued bees include the families Apidae (sugar bag, carpenter, reed and Amegilla) and Megachilidae (resin, leaf cutting and mortar) and make up about 400 out of 2000 native bee species in Australia.

Short-tongued bees, however, comprise about 1600 species in Australia including over 1000 Colletidae, about 500 Halictidae and about 30 Sternotritidae species. In general the success of short-tongued bees in Australia can be related to the large number of Myrtaceae plants with flowers from which nectar can easily be lapped.

However some short-tongued bees have developed adaptations that help them reach more deeply seated nectar. The slides showed some that she has photographed over the years. Two examples are shown here.



Lasioglossum platyphilum on *Scaevola* bloom shown here using it's hinged mouthparts to concentrate nectar it has collected.
Photos Linda Rogan



Euhesma tubulifera with extremely long fused palps specialised for feeding on *Calothamnus quadrifidus*. Photographed near Perth on 7 November 2011 by Linda Rogan.

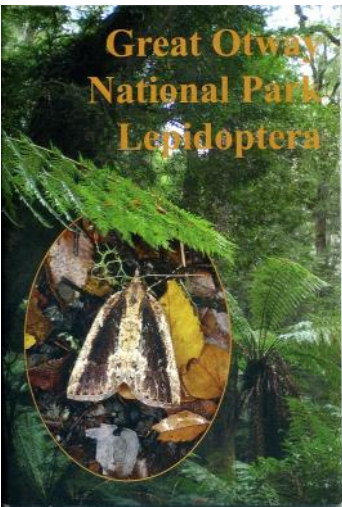
Martin Lagerwey: Insect attacks windscreen

Martin was on a country drive and when parked on a mountain way-side stop he observed an insect land on and glance off his car bonnet. When it happened again he hopped out of his car to discover it was a backswimmer. Martin then assumed that the backswimmer had misidentified his electric blue station wagon to be a source of water. That blue must have looked positively lake like from an insect's eye view!



Peter Marriott: Book – Great Otway National Park Lepidoptera.

Peter presented a powerpoint Moths of the Otways describing the Lepidopteran finds from the Melbourne Museum Bioscans October 2018 to March 2019. Most of these are included in the new book shown here:



This map shows the 17 different survey sites.

In brief, the Bioscan visited 17 locations (map above), finding 1130 species and still counting as further information is received. Of these, 47% were observed in one site among the Anglesea heathlands. So far there has been one undescribed species of *Chrysolarentia* discovered and also one undescribed Totricid species discovered (see slides next page).

Chrysolarentia Undescribed species



Tortricid
undescribed
species



Page 17

Page 32



The Bioscan results have contributed to the Moths of the Otways booklet which is on sale for \$5 and is free for Entsocvic members. Sample pages are shown above.

Not presented at this meeting as time ran out is Julia McCoey: Paper review – Visualization of metamorphosis with biophoton emission imaging. This is something to look forward to in the near future.

Meeting closed.

Effect of a Recent Wildfire on the Insect Life in Morwell National Park

Ken Harris, David Mules, Matt Campbell

Introduction

On 2nd March 2019, a bush fire started just SE of Yinnar South. It was quite a hot fire in some areas, but it burned more slowly towards the North. It got into the SW corner of Morwell National Park, burned across Silvertop Hill, spread east into a less accessible part of the park and climbed the hill to the north to the Stringybark Ridge. We feared that the fire would reach Fosters Gully and threaten the Butterfly Orchid population, but the fire fighters did a great job and bulldozed a firebreak across the top of the Stringybark Ridge Track and succeeded in preventing the fire from crossing the firebreak.



Figure 1. *Eucalyptus cypellocarpa* after the fire

It burned for at least a week, and it was not until 21st April that we got to explore the burnt area and assess the damage. On Stringybark Ridge the fire had not burned the canopy. Messmate (*Eucalyptus obliqua*) and Yertchuk (*Eucalyptus considenia*), both had their leaves killed by the heat, but not burnt. On the other hand, the Mountain Grey Gums (*Eucalyptus cypellocarpa*) with smooth bark retained all their leaves. We even found a Koala in one of the Mountain Grey Gums. There was practically no regrowth after the fire, although a few bracken plants were emerging and a few Spiny-headed Mat-rush (*Lomandra longifolia*) were visible.



Figure 2. Pre-burn 31st December 1999



Figure 3. Survey site on 6th June 2019

We were keen to monitor the recovery from the fire and I wanted to do an immediate light-trapping for moths in the burnt area. My permit was out of date and I was in the process of getting it renewed and did not expect to have it active for quite a while, but at the end of March, I learned that my permit had been issued. I immediately sought permission from Parks Victoria to carry out a mothing session in the burnt area, which was still closed to the public.

Checking my records, I found that one section at the end of Stringybark Ridge had been sampled previously, on 5th May 2016. This provided an opportunity to compare a pre-fire survey with a survey soon after the fire and explore whether the moth fauna was unchanged by the recent bushfire. The best day weatherwise, was 7th May, almost exactly three years after the previous session. David Mules, Matt Campbell and I drove up to that site on the evening of 7th May and set up the light sheets ready to start at sunset.

Results

The first half hour was very slow, with only a few tiny flies. The first arrival was a little Tortricid moth and it proved to be *Holocola triangulana*, a species not previously recorded in the park. We subsequently saw three or four of the same species. We have already recorded 674 moth species in the park, so the chance of a new species seemed pretty low. To our amazement, in the 2 1/2 hours that we kept the light on, we found a total of 11 moth species not previously recorded in the park. We also found a cranefly and a tiny little Cicadellid leafhopper – *Eurymeloides minutum* (Figure 7), which were also new to the park. From that slow beginning, things accelerated and in the end 58 different moth species appeared. The most spectacular were the two species of *Chelepteryx* in the Anthelidae, the White-stemmed Gum-moth *Chelepteryx chalypteryx* (Figure 4) and the Batwing Moth *Chelepteryx collesi* (Figure 5), one of each occurring during the evening. Both have only been recorded twice previously in the park. One of the two earlier *Chelepteryx collesi* was found at the same site three years previously. The weather was still and dry but not very warm and we closed a bit early at 10.45 pm.



Figure 4. *Chelepteryx chalypteryx* Female



Figure 5. *Chelepteryx collesi* Male

Here is a list of the 11 moths and two other insects that were new records for the park

Family	Species
Geometridae	<i>Fisera hypoleuca</i>
	<i>Mnesampela privata</i> (Figure 6)
	<i>Prasinocyma</i> MoV sp. (1)
Noctuidae	<i>Proteuxoa paratorna</i>
	<i>Proteuxoa</i> MNP sp. (2)
Tortricidae	<i>Hermenias rivulifera</i>
	<i>Holocola</i> sp. KH02
	<i>Holocola triangulana</i>
	<i>Strepsicrates infensa</i>
Unknown Moths	Moth KH628
	Moth KH629
Cicadellidae	<i>Eurymeloides minutum</i> (Figure 7)
Tipulidae	<i>Dolichocheza</i> sp.



Figure 6. *Mnesampela privata*



Figure 7. *Eurymeloides minutum*

Table 1: Insect species new to Morwell National Park

Comparison

Hewish et al. (2019) presented a comparison between moths in an unburnt site and a nearby site burnt in a wildfire. The fire had been about three years earlier, whereas in our case the fire was only two months before our survey. We do have an earlier pre-fire survey of the identical site three years and two days before the current survey. Here I make a comparison between our 2016 and 2019 surveys, following and comparing with Hewish et al.'s results.

Firstly, the methods varied a little between the two surveys. In 2016 a single vertical sheet was suspended with a 250w mercury vapour light suspended in front of it. The same set-up was used in 2019, but an additional smaller sheet was set up 100m east of it with a Hitachi 8-watt long-wave ultra-violet light. The two sheets attracted some different moths, but the mercury vapour light attracted approximately the same number of moth species on the two occasions.

The number of species common to both surveys was remarkably low amounting to only 15 moth species. In total, the 2016 survey found 44 moth species and the 2019 survey found 58 moth species. There was therefore no evidence of a loss of Lepidoptera as a result of the fire, although some other insect orders show different results (see below).

Following Hewish et al., I have prepared a table comparing the number of species in each Lepidoptera family on each occasion.

Family	Species in pre-fire survey 2016	Species in post-fire survey 2019
Anthelidae	1	2
Arctiidae	3	3
Carposinidae	2	
Cossidae	1	
Crambidae	1	2
Gelechiidae	3	4
Geometridae	11 (25%)	23 (40%)
Gracillariidae	1	
Noctuidae	4	5
Nolidae	1	2
Notodontidae	1	
Oecophoridae	4 (9%)	4 (7%)
Psychidae		1
Pyralidae	4	2
Tineidae	1	
Tortricidae	2 (4.5%)	7 (12%)
Unidentified	4	3
Total	44	58

Table 2: Number of species in each Lepidoptera family

Hewish et al. commented that there were significantly more species in the Geometridae in the burnt area. We found the same effect but even more strongly. Eleven Geometrid species in 2016 (25% of the moth species,) increased to 23 species (40%). The 2019 percentage is probably the highest I have ever seen in a single evening surveying moths. Hewish et al. also saw the opposite effect with the Oecophoridae, with fewer species in the burnt area. This effect was not so marked, with four species on each night, but that does represent a drop from 9% to 7%. Many Oecophorid moths feed on leaf litter, which will have been very significantly reduced by the fire. There was a significant drop in the number of families represented, with 15 families in 2016 reducing to only 11 families in 2019. One other family is worth noting. Our 2019 survey showed a big increase in members of the Tortricidae. Seven Tortricid species (four of them new to the park) were found in 2019, compared with only two in 2016.

It was very pleasing to see a significant moth population so soon after the fire. In addition to examining the moth fauna, I was interested to see any noticeable effects to other insect orders, so I drew up a table of species numbers by Order for the two surveys:

Order	Species in pre-fire survey 2016	Species in post-fire survey 2019
Coleoptera	2	1
Diptera	9	3
Hemiptera	2	1
Hymenoptera	2	2
Lepidoptera	44	58
Neuroptera	3	
Trichoptera	1	1

Table 3: Number of species in each Insect Order

The number of orders represented is reduced with seven in 2016 and only six in 2019. In 2016 there were three lacewing species (Neuroptera) and none in 2019. Lacewings are predators, mainly on small insects and insect larvae and it is quite possible that their prey was significantly reduced by the fire. Only one beetle, Coleoptera, was present in 2019. It was a tiny little beetle (about 2mm long) possibly a Shining Flower Beetle in the family Phalacridae. Beetles are usually an obvious component of the visitors to the light sheet, but one so small would often have been overlooked. The bugs (Hemiptera) were reduced from two in 2016 to just one very small leafhopper in 2019, although that one, *Eurymeloides minutum* (Fig 7) was a new species for the park. The biggest reduction was in the flies (Diptera). Nine species in 2016 reduced to only three in 2019. Neither figure will be accurate as most small flies and mosquitoes are rarely recorded, but there were a lot fewer small insects than is usual when light-trapping. The reduced numbers of Diptera species is probably an effect of the fire.



Figure 8. *Phalacridae* sp. Beetle

All the insects photographed in the 2019 survey are on the iNaturalist page listed in the references below.

Acknowledgements

We would like to thank:

- Peter Marriott and Marilyn Hewish for assistance with identifications.
- Parks Victoria for permission to perform the field work in the park.

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iNaturalist

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Swamp Bluet *Coenagrion Lyelli* Tillyard (Odonata: Zygoptera: Coenagrionidae) In South Australia

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Abstract

Coenagrion lyelli (Tillyard, 1913) is recorded from South Australia for the first time. Adult males were observed in a small plantation wetland, 16km east south east of Mt Gambier in Caroline Forest. The species is suggested to be a wind assisted vagrant until such time that breeding is observed in South Australia.

Introduction

Coenagrion lyelli (Tillyard, 1913) is endemic to Australia and is the only species of *Coenagrion* known from Australia (Theischinger & Hawking, 2006). *Coenagrion* is a genus of the Coenagrionidae family which are more commonly known as Pond Damsels (Hawking, Smith, LeBusque & Davey, 2013). The range of *C. lyelli* is from south-east Queensland, eastern New South Wales, central and eastern Victoria and Tasmania (Theischinger & Hawking



Figure 1 – Picks plantation wetland habitat
24th December 2018

2006; Theischinger & Endersby, 2009; Endersby, 2010). Richter has also observed *C. lyelli* in Victoria from as far west as the Grampians (Richter, 2019). Tillyard (1913) described how this is a very beautiful and conspicuous species first found in Gisborne (Victoria) in 1908. Adults males are approximately 29mm long, with an L-shaped black line on abdominal segment 2 (on both sides), and a transverse pale blue line on front reaching onto the eyes. The flight period documented is December to January (Tillyard, 1913). *C. lyelli* inhabit still and sluggish waters, streams, riverine pools, lakes, ponds and swamps (Theischinger & Hawking 2006). Richter (2019) considers *C. lyelli* to be rare throughout its range on the mainland and it may prefer thick aquatic vegetation.



Figure 2 – *Coenagrion lyelli* on 7th December 2012



Figure 3 – *C. lyelli* on 20th November 2016

Table 1 – Inventory (and abundance) of Odonata observed at Picks plantation wetland, Caroline Forest, SE of South Australia

Common Name	Scientific Name	2011			2012			2013			2016			2017			2018		
		19-May-11	7-Dec-12	28-Aug-13	20-Oct-16	20-Nov-16	6-Dec-16	21-Jan-17	17-Oct-17	19-Nov-17	23-Dec-17	24-Oct-18	24-Dec-18						
<u>Aeschniidae</u>																			
Australian Emperor	<i>Hemianax papuensis</i>		1	1	A	B	A	B	A									A	
Blue-spotted Hawker	<i>Adversaeschna brevistylata</i>		A		A	A													
<u>Coenagrionidae</u>																			
Aurora Bluetail	<i>Ischnura aurora</i>		B		C	C	C	C	D	C	C							A	
Common Bluetail	<i>Ischnura heterosticta</i>																	A	
Eastern Billabong-fly	<i>Austrogrion watsoni</i>					B	B			B									
Red & Blue Damsel	<i>Xanthagrion erythroneurum</i>		A			B	B												
Swamp Bluet	<i>Coenagrion lyelli</i>		1			A													
<u>Hemicordulidae</u>																			
Tau Emerald	<i>Hemicordulia tau</i>		1			B	C	C											
<u>Lestidae</u>																			
Blue Ringtail	<i>Austrolestes annulosus</i>		1											A	A				
Cup Ringtail	<i>Austrolestes psycbe</i>													1	1				
Slender Ringtail	<i>Austrolestes analis</i>															A		C	
Wandering Ringtail	<i>Austrolestes leda</i>			1			B										2		
<u>Libellulidae</u>																			
Blue Skimmer	<i>Orthetrum caledonicum</i>				A	B	A												
Wandering Percher	<i>Diplacodes bipunctata</i>					B	A							B	A				

Abundance Code: A = 1-3 individuals, B = 4-10, C = 11-30, D = 31-100, E = 101-300, F = 301+

South Australian Observations

Figure 2 was seen at 10:20 am 7th December 2012, at a small ephemeral wetland which was surrounded by a Radiata Pine *Pinus radiata* plantation in the Caroline Forest. This is 16 km ESE of Mt Gambier in the lower south-east of South Australia [37°54'42"S, 140°56'23"E] (Figure 1). Only one male was seen and photographed (Figure 2).

A subsequent observation occurred at 12:00 pm on 20th November at the same wetland where more than one male was observed and one was photographed (Figure 3). Females have not been observed at this wetland.

Other Odonata species observed at this wetland during regular visits to this site from 2011 to 2018 (including abundance) is shown in Table 1. The observations were collected using a ramble transect walk around the site for 20 minutes during warm and sunny conditions.

One nearby observation in western Victoria [38°01'08"S, 141°34'56"E] at Annya State Forest (NW of Heywood) on 5th January 2017 in open grassy woodland included several males. The only months in which *C. lyelli* has been observed flying in South Australia are November and December (Haywood, 2018).

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Meet your Council Members

The Society can trace its origins back to the 5th of April 1927 where “The Entomological Club” was formed. It continues to thrive today because of the ongoing enthusiasm of its membership and the behind the scenes work of its Council. Over the next few issues each council member will introduce or re-introduce themselves. We start with our new President and Secretary and a re-introduction to our Editor.

Julia McCoey—President



I have been interested in entomology since a young age. My interests are not limited to one insect order; I am fond of mantises, phasmids, ants, and any insect that will sit still long enough for me to capture that perfect photograph! I joined the Entomological Society of Victoria in 2014. The first meeting that I attended stands out in my memory, as it presented the incredible story of the re-discovery of the Lord Howe Island stick insect. In 2016 I joined the council, and was privileged to meet such a dedicated group of entomology enthusiasts. I hope to serve the society well in the coming year, and see the entomology community flourish.

Lyn Meredith—Secretary

Hello my name is Lyn and I am new to the group and the Council having been invited along by friends. I am thrilled to be involved in the Society as you are a friendly and interesting bunch. (I am sure there must be a collective noun for a bunch of entomology enthusiasts - maybe a buzz or perhaps, a scuttle?) Anyway, I was asked at my first meeting what ‘my’ insect of interest is, but in all honesty I cannot whittle it down to one. Having grown up in the wood-heap splitting wood with my dad, my interest in recovering and relocating the harassed beetles, grubs and centipedes started back then. Rolling the little slaters in my palm and trying to see daylight beneath native cockroaches both a major fascination and childhood meditation.



I have a work history as bushland regenerator, a gardener, production nursery manager and I currently work as land management officer supporting Landcare groups and landholders achieve biological improvements. My brain is full of plants names, bird calls and don't get me started on the deer problem! I have been keeping European honeybees as a backyard apiarist for about six years and I suspect this has unleashed an entomological addiction. I am inspired by the potential to learn so much more of the immense diversity and wonderful lifeforms in the world Entomology.

Linda Rogan—Editor of *Victorian Entomologist*



Some of you will know me as the Editor for several years. Just briefly I came to Australia with my young family in 1979 where a childhood interest in nature was rekindled. After retiring as a Physiotherapist and Manager in Aged Care in 2002, I had time to really pursue my interests. These moved from flora, native orchids in particular, on to pollinators and insects that are attracted to the indigenous plants in my garden. Australian Native bees capture my interest at present.

Becoming editor of our Bulletin and joining the Council has been a wonderful opportunity to learn from other members and authors, both professional entomologists and enthusiasts. This is a great pleasure that I hope will continue for years to come, so please keep your articles and observations coming.

Some Victorian Records for *Syllitosimilis aberrans* McKeowyn and *Titurius salebrosus* McKeowyn (Cerambycidae)

S.K. Smith aenetus@hotmail.com

The distribution usually given for *Syllitosimilis aberrans* is from southern Queensland to central New South Wales (McKeowyn 1938b, Slipinski & Escalona 2016). However, the Atlas of Living Australia records a specimen held by Museum Victoria collected in the Warburton district Victoria in January 1919 by J E Dixon. I have also collected this species in Victoria as listed below:

Warburton Vic.	18 December 2007	2 specimens	At mv light
Warburton Vic.	28 December 2007	1 specimen	At mv light
Yallourn North Vic.	28 December 2017	1 male	On the foliage of <i>Acacia dealbata</i>

A female *S. aberrans* emerged on 15 December 2014 from dead branches of an undetermined species of *Acacia* collected at McMahons Creek Victoria on 18 October 2014. This species has been collected emerging from *Acacia aulacocarpa* from Qld. (Webb, Williams & de Keyzer 1988).

The genus *Titurius*, with three species, has a similar recorded distribution to *Syllitosimilis*; from southern Queensland to central New South Wales and the Australian Capital Territory (Slipinski & Escalona 2016) and the Atlas of Living Australia indicates that *Titurius salebrosus* is confined to New South Wales. I have two records for this species in Victoria as below:

3 kms west of Wiseleigh Vic.	10 December 2000	6 specimens	<i>Kunzea</i> sp. <i>Leptospermum phylloides</i>
Steiglitz Vic.	9 December 2003	1 male	<i>Leptospermum juniperinum</i>



Syllitosimilis aberrans
McKeowyn 8 mm



Titurius salebrosus
McKeowyn 7 mm

References:

- Atlas of Living Australia. Accessed September 2018. <http://www.ala.org.au>
 McKeowyn 1938b - Descriptions of New Species of Australian Cerambycidae (Coleoptera) - The Australian Zoologist 9(2): 173-179
 Slipinski & Escalona 2016 - Australian Longhorn Beetles (Coleoptera: Cerambycidae) Volume 2 Subfamily Cerambycinae
 Webb, Williams & de Keyzer 1988 - Some New and Additional Larval Host Records For Australian Cerambycidae (Coleoptera) - Australian Entomological Magazine Volume 15 Part 3

Observation of Mating Bullants *Myrmecia tarsata*
Paul Whittington

Identification of the reproductive castes of ants can be difficult ... but it's made easier when you have both male and female!

I first spotted this large, wingless female sitting perched atop a tall sedge. As I looked on, a winged male arrived. At first I thought the male was a wasp. He circled the female several times, then landed below her and they immediately mated. She remained clinging to the grass, and they remained attached for several minutes (figure 1). Even as I collected them into a container for closer photos, they remained coupled. She did eventually start to bite him, and then they separated.

Myrmecia tarsata is a species well-known to us here in the most southern forests of NSW. But this is our first sighting of a male. I note that there are no photos of males in ALA, making our sighting still more exciting.

According to the literature, females of *Myrmecia tarsata* may be either totally wingless (ergatoid), or they may show some wing development, but these wings are never functional (brachypterous). The female I found is brachypterous. She has elaborate development of the mesonotum, although without any obvious wing remnants.

Both insects are destined for the Australian National Insect Collection (ANIC) (Figures 2,3).



Figure 1: *Myrmecia tarsata* mating pair, 21st March 2019, Wonboyn



Figure 2. Wingless female of the mated pair.

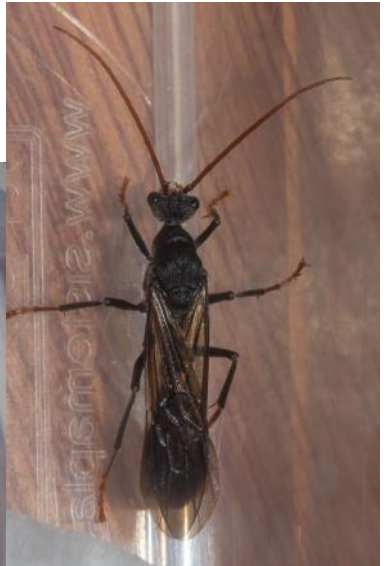


Figure 3. Male of the mated pair.

Update to the distribution of Southern or Green Grass-dart (*Ocybadistes walkeri*) in south-east South Australia

Bryan T. Haywood
brytonwood@bigpond.com

Introduction

Ocybadistes walkeri Heron (1894) or the Southern, Green, Yellow-banded or Greenish Grass-dart (Braby, 2000, Braby 2004, Field, 2013, Grund, 2019) is a common species in the Adelaide and Mount Lofty Ranges region however considered rare in all other parts of South Australia (Grund, 2019). *O. walkeri* is a species of open woodlands and urban gardens and larvae feed on a range of native and introduced grasses (Braby, 2000; Field, 2013; Grund, 2019). Field (2013) displayed *O. walkeri* as being absent from south-western Victoria, until a population was observed in and surrounding Hamilton in 2013 (Haywood, 2013). It was suspected that this colony (near Hamilton) should be continuous with an SA population where it was known from Naracoorte and across to Beachport, but with further survey effort required.

Recent observations

In 2018 and 2019 several new observations occurred by the author (and colleagues) near Mt Gambier in south-east South Australia and western Victoria - adding to the Southern Grass-dart distribution story. The recent observations and photographs (Figure 1-3), highlight new records for this skipper and include an updated distribution map (Figure 4). Table 1 provides more details on each observation.



Figure 1. Bryton Wood (9th March 2018)



Figure 2. Kurrawonga (18th November 2018)



Figure 3. Walker St, Mt Gambier (20th March 2019) (source: P Anesbury)

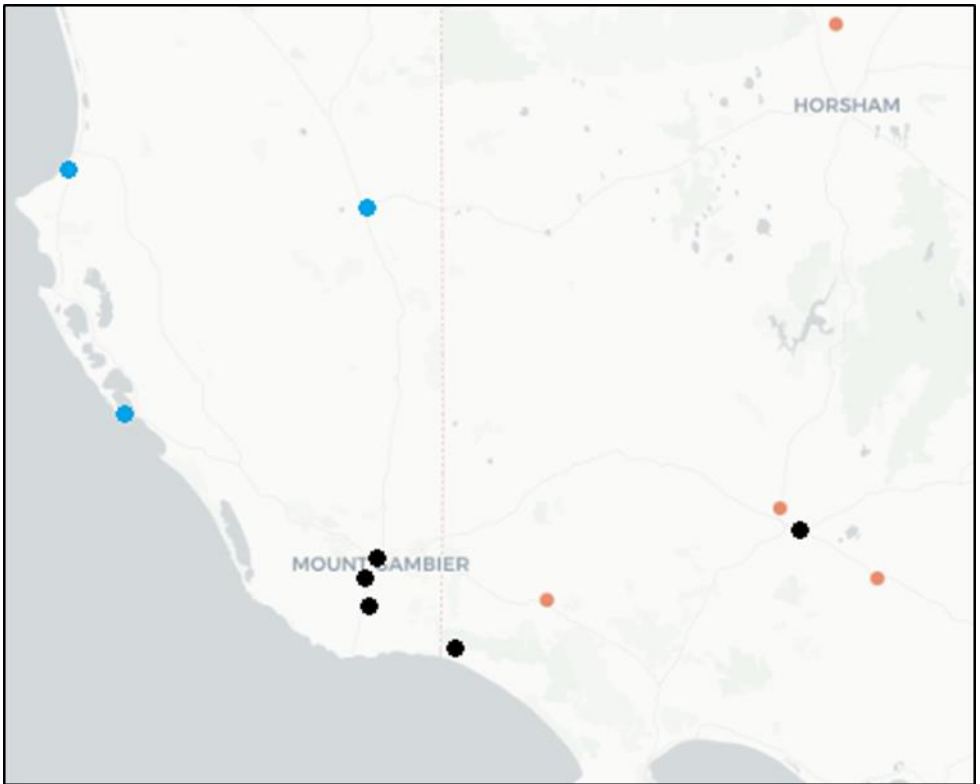


Figure 4 - Updated map of observations (incl. ALA records in red (ALA, 2019), previous known SA locations in blue (Grund, 2019; pers. comm A Lines, 2013), new records in black) [Source: adapted from ALA]

Date	Number	Location	Observer/s	Easting	Northing
Victoria					
25-Oct-17	1	Hamilton (Vic)	A. Lines	596475	5818274
18-Nov-18	2	Kurrawonga Restoration Reserve, Nelson	A. Lines & B.T. Haywood	500165	5790725
South Australia					
18-Mar-17	1	Mount Schank	M. Sargent	476460	5800700
8-Mar-18	1	Vansittart Park, Mt Gambier	B.T. Haywood	480165	5813555
9-Mar-18	2	Bryton Wood, Moorak	B.T. Haywood	477285	5808110
20-Mar-19	1	Warren St, Mt Gambier	P. Anesbury	481135	5812280

Table 1: New observations of *Ocybadistes walkeri* (since 2017)

The author would appreciate receiving any other historic or future records of *O. walkeri* from western Victoria or south-east South Australia.

Acknowledgement

Thanks to Andy Lines for providing comments on an earlier draft and the Butcher Gap Conservation Park observation from 2013, and to Paula Anesbury for her photograph.

Reference

- Atlas of Living Australia (2019). *Ocybadistes walkeri* Heron, 1894. <https://bie.ala.org.au/species/urn:lsid:biodiversity.org.au:afd.taxon:fca2fec4-4c20-4adc-ba92-e130a6e74383>. [accessed 20-Jun-19]
- Braby, M.F. (2000). Butterflies of Australia. Vols I & II. CSIRO Publishing, Melbourne.
- Braby, M. F. (2004). The Complete Field Guide to Butterflies of Australia. CSIRO Publishing, Melbourne.
- Field, R (2013). Butterflies : identification and life history. Museum Victoria, Melbourne.
- Grund, R (2019). Datasheet – Southern/Greenish Grass-dart. <https://sabutterflies.org.au/hesp/walkeri.html> [accessed 23-Jun-19]
- Haywood, B. (2013). Southern Grass-dart *Ocybadistes walkeri* (Lepidoptera) observed in south-western Victoria. Victorian Entomologist, 43 (2), pp36-37.

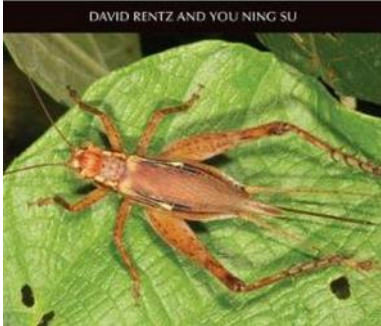


BOOK REVIEW

A Guide to Crickets of Australia
David Rentz and You Ning Su

A GUIDE TO CRICKETS OF AUSTRALIA

DAVID RENTZ AND YOU NING SU



Until now, for many, there have been two species of crickets, the black one and the brown one. "A Guide to Crickets of Australia" is an impressive work and covers the 539 species in Australia including silent crickets, bush crickets, field crickets, house crickets, imposter crickets, pygmy crickets, dwarf crickets, burrowing crickets, clasping crickets, forest crickets, tree crickets, tree runners, grass crickets, litter crickets, ground crickets, big headed crickets, striped crickets, scaled crickets, short winged crickets, bells, spraddlers, longtails, spider crickets, mole crickets, and ant crickets. Whoever knew there were ant crickets? Never again will it be sufficient to simply say "I saw a black cricket."

This publication is the next in the familiar series of CSIRO guidebooks and fits perfectly in the gap in Orthopteroids between 'A Guide to the Katydid of Australia' 2010 and 'A Guide to the Cockroaches of Australia' 2014 both by David Rentz. For this work, he co-authored with the eminently qualified You Ning Su, who has already published taxonomic papers on Orthopteroid? and Lepidoptera. This book is the largest of the three, with a round 400 pages if we count the covers. As with the others it is an easily readable user-friendly, tome rich with illustrations for easy identification. With the increase of citizen scientists crisscrossing the nation with cameras and smartphones pointed at unsuspecting and unnamed creatures and uploading to social media and data aggregation sites, the importance of accessible and reliable references has never been greater.

Crickets are fairly undifferentiated insects and therefore can refer to several groups and this book uses the 'sensu stricto' definition of Gryllidae or Grylloidea (true crickets) (520 sp.) and Gryllotalpoidea (mole and ant crickets) (19 sp.) superfamilies, leaving out Gryllacrididae (raspy crickets) Anostomatidae (king crickets) and Caelifera (pygmy mole crickets) which are unrelated and belong elsewhere.

The contents include the history of Australian cricket researchers, then biology, morphology, systematics, collecting tips, curating tips, breeding tips and even feeding tips including recipes for feeding crickets and humans alike. There is mention of good nutritional and environmental reasons for eating crickets and now the only remaining question is it a protein smoothie or stir fry?

The main section of the book is the species list, each with a clear and detailed description, giving clear features for differentiation, distribution maps, sometimes with charts of chirping pattern (song) and genitalia for the professional and serious enthusiast. Keys are provided but most identifications will be easily achieved by visual matching of specimen to photographs and further information is offered where necessary.

The book ends with a complete species list, glossary for specialist terms, recipes, entomological suppliers, links to recommended websites, bibliography and index. It is a very complete work and a credit to the authors, and we expected nothing less. This book is an essential addition to the book shelf of every school, library, museum, university, naturalist and entomologist in Australia.

Martin Lagerwey
Entomological Society of Victoria



Le Souëf Memorial Award

Now is the time to make your nominations.

The Entomological Society of Victoria invites you to nominate a suitable candidate for the Le Souëf Memorial Award. **Due by 30th September 2019.**

The purpose of the Award is to recognise the very substantial role played by amateurs in the development of knowledge of our insect fauna, this is to be interpreted in the broadest sense. The Award is to be made for contributions to entomology by amateurs in Australia. Such contributions may comprise published papers and notes, broadcasts, newspaper articles, talks to Societies and/or amateur groups, or may be less tangible, such as a substantial record of help to others or public relations involving entomology. No more than one award shall be made, by a group or individual, in each calendar year.

Nominations may be made at any time, by any individual or group of people, and should be submitted to the Secretary of the Society, by 30 September. Nominations received after the closing date may have to be deferred until the following year. A nomination will remain current for three successive calendar years or annual meetings of the Council, unless an award is made to that nominee, and additional information may be provided to supplement the nomination at any time during this period. Such shall not be considered to constitute a new application. After three years, a candidate may be nominated afresh. No person may receive the award more than once in a ten year period.

Income from a Trust Fund finances the Award. Currently, it comprises books or entomological equipment of the winner's choosing to the value of \$250.

Content of the Nomination

A nomination should give the Committee sufficient information to assess the nominee's worthiness for receipt of the Award.

It should include:

- a) The name and full postal address of both nominee and nominator,
- b) A clear statement of the grounds on which the nomination is being made (max 300 words),
 - (i) the period over which the contribution has been made,
 - (ii) the details of the contribution, lists of publications (etc.),
 - (iii) comments on allied activities such as involvement in naturalist or conservation groups and help to other entomologists, collections made (etc.) and
 - (iv) a declaration that these activities have been made in an amateur capacity. Copies of publications (on loan) could be useful.
- c) A brief resume/curriculum vitae of the candidate (one page),
- d) The names, contact addresses and telephone numbers of at least two (2) referees not involved in the nomination.

Any additional enquiries and nominations should be sent to secretary@entsocvic.org.au

Minutes of the Entomological Society of Victoria Council Meeting Tuesday 16 July 2019 Melbourne Museum

Attendance: Julia McCoey, Peter Marriott, Peter Carwardine, Maik Fiedel, Sharon Mason, Lyn Meredith.

Apologies: Ray Besserdin, Martin Lagerwey, Linda Rogan, Joshua Grubb.

Previous minutes: Minutes of the EntSocVic Council Tuesday 21 May as printed in VE49 no.2 p. 40.

M: Julia

S: Peter C.

Treasurer's report: None presented.

Editor's report: Linda will be an apology for July Council and possibly August general meeting.

General Business:

Webmaster: Determined updates for the website particularly what's coming up for the member's nights need to be communicated to webmaster as soon as known so that he can add the information on the website.

New Nametags for members: Deferred for Ray Besserdin's input.

Le Souëf Memorial Award:

The content of the advertisement of the award was discussed. A few changes were made. This will be sent out to relevant groups, be included in the August Bulletin and be updated on the website. Small changes included describing the maximum time nominations will be valid and reinforcing the closing date.

Preparation for August Museum live exhibit:

This session will start in the TAC room, our future meeting space. Due to an event it will not be possible to enter the building through the usual entrance. Members are reminded to enter through the IMAX entrance. Simon Hinkley will assist with ushering members to enter through IMAX. A reminder to members to try to arrive 10 minutes early for a 7.45pm start will be added to the website. We will have a short meeting, and induction and then split into two groups for Maik and other staff member to show us around.

Future meetings: The TAC room will be booked for the rest of this year and for 2020.

Discussion was held about organising speakers for the 2020 member's nights and may include a February speaker on orchid pollinators, April AGM (speaker to be determined), June - members presentations, August - possibly a visit to AQIS.

Future meetings scheduled: See back cover of the Bulletin.

EBSCO item closed.

Meeting closed 6.50pm

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WEBMASTER and FACEBOOK: Josh Lagerwey webmaster@entsocvic.org.au

COUNCILLORS: Ray Besserdin, Peter Carwardine, Maik Fiedel, Sharon Mason.

Thanks to Ray Besserdin, Ian Endersby and Carol Page for assistance in producing the *Victorian Entomologist*.

CONTRIBUTIONS TO THE VICTORIAN ENTOMOLOGIST

The Society welcomes contributions of articles, papers or notes pertaining to any aspect of entomology for publication in this Bulletin. Contributions are not restricted to members but are invited from all who have an interest. Material submitted should be responsible and original. The Editor reserves the right to have articles refereed. Statements and opinions expressed are the responsibility of the respective authors and do not necessarily reflect the policies of the Society.

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Contributions may *preferably* be E-mailed to Internet address: editor@entsocvic.org.au or posted to the Hon. editor in **Microsoft Word for Windows** with an enclosed hard copy. Tables should fit an A5 page with 1 cm borders i.e. 12.5cm width x 18cm height as a maximum size and complex tables should be in .pdf format. Preference will be given to articles with 5 or fewer pages of solid text and articles longer than this will be returned to the author for reconsideration. The main text of the news bulletin is prepared in 9 pt font Source Sans Pro (please do not use fixed point paragraph spacing). The deadline for each issue is the third Friday of each odd month.

Notice to contributors to ESV Bulletin regarding the EBSCO database. All Bulletins backdated to 2010 will be listed in the EBSCO database. Also future Bulletins when they reach sufficient age. If for reasons unforeseen, in part or in full, any contribution does not meet an author's approval for inclusion, please notify council so we may block your work from appearing in the EBSCO database. Current and future electronic copies are also listed on EBSCO.

ADVERTISING

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DIARY OF COMING EVENTS

Next Meeting: Back of the House visit to the Melbourne Museum live exhibits
20 August 2019

Note 7:45 pm start

General Meetings:

<i>Month</i>	<i>Date</i>	<i>Planned event</i>
October	15 Tuesday	The <i>Maratus</i> sp. Peacock spiders presented by Joseph Schubert
November	30 Saturday	End of year excursion Yarran Dheran Nature Reserve details to follow.
February	18 Tuesday 2020	General Meeting - Speaker TBC

Council Meetings are held at the Museum Victoria at 5:00 pm
on the following Tuesdays in 2019:
16 September and 18 November



The Society's Home Page on the World Wide Web is
located at:
www.entsocvic.org.au

Also find us on facebook.



Scientific names contained in this document are *not* intended for permanent scientific record, and are not published for the purposes of nomenclature within the meaning of the *International Code of Zoological Nomenclature*, Article 8(b). Contributions may be refereed, and authors alone are responsible for the views expressed.