Understanding Our Natural World

Field Nats News No. 295

Newsletter of the Field Naturalists Club of Victoria Inc.
1 Gardenia Street, Blackburn Vic 3130
Telephone 03 9877 9860
P.O. Box 13, Blackburn 3130 www.fncv.org.au

Editor: Joan Broadberry 03 9846 1218
Founding editor: Dr Noel Schleiger
Reg. No. A0033611X

Patron: The Honourable Linda Dessau, AC
Governor of Victoria

Office Hours: Monday and Tuesday 9.30 am - 4 pm.

April 2019

From the President

We have had another very hot month perhaps indicating that we may be experiencing some impacts of climate change. The extremely dry and combustible nature of the bush means that we will need to plan our field activities with caution. The recent bushfires have affected areas that we often visit..

There have not been a lot of invertebrates to photograph this past month. My garden remains relatively depauperate this year. There is a total absence of orb weaving Spiders and the huntsmen spiders have not presented themselves; I normally have dozens of them. Similarly, there are very few mantids. I have seen three in total over this summer period. There was a solitary Dainty Swallowtail caterpillar *Papilio anactus* (photo right) well on its way to defoliating our lemon tree. Unfortunately, the same morning that I noticed it I suspect it was taken by one of our hungry birds. There was a small wet patch on the leaf it was eating. I have only seen one other caterpillar, a geometrid, also on the lemon tree.

The deadline for FNN 296 will be **10 am Tuesday April 2nd.** FNN will go to the printers on the 9th with collation on Tuesday 16th. April.

Papilio anactus **Photo: M. Campbell**

Over recent weeks there has been some concern registered internationally about the reduction in the numbers of invertebrates, notably insects. Human activity in its various forms seems to be causing an insect "Armageddon". As always there is a balance to be struck between scientifically supported research and what might be considered as anecdotal. However, there seems to be a lot of smoke, so many people are looking for the fire. I know that my trips around the countryside these days are rarely troubled by insects splattering on the windscreen or radiators clogging with their desiccated bodies. As a child camping on the Mornington Peninsula in the 1950s and 60s I was always amazed by the number and variety of insects attracted to the Tilley lamp at night. There were many large beetles, moths, megalopterans, neuropterans and mantids. In fact, we had to carefully fit insect guards to protect the delicate lamp mantle. I no longer see the numbers and variety that I used to encounter. In the last few weeks there have been reports of significant drops in the numbers of Bogong Moths on the high plains. On our property at Suggan Buggan I can run the camping lights at night without too much fear of the overwhelming number of insect visitors of a few decades ago.

Recent TIG excursions to Braeside Park and Westerfolds Park provided a few photo opportunities. The hot weather and general desiccation of the landscape meant that there were relatively few invertebrates to see. The smaller wetlands were dry and rapidly degenerating. After careful and prolonged searching a few of the more resilient insects such as the Eucalyptus Tip-wilter Bug - *Amorbus alternatus* could be found. There were numerous *Austracantha minax, The Beautiful Australian* Jewel Spider amongst the reeds in the wetlands. A few *Doratifera quadriguttata* caterpillars were photographed at Westerfolds Park (*photo left*). Unfortunately, the extreme heat forced an early retirement from the field.

Doratifera quadriguttata
Photo: M. Campbell

Continued page 3

Contents

CALENDAR OF EVENTS

All meetings are held at the FNCV Hall, 1 Gardenia St. Blackburn at 8 pm., unless otherwise indicated. On days of extreme weather conditions, excursions may be cancelled. Please check with leader.

April 2019

Monday 1st – Fungi Group Meeting: ***Phylogenetic and taxonomic study of Sarcodon and Boletopsis (Bankeraceae) in Australia and New Zealand.*** Speaker: James Douch, Bachelor of Science (Honours) student at the University of Melbourne, supervised by Dr Alexander Idnurm and Dr Tom May. Contact: Carol Page 9857 6388; cpage356@gmail.com

Tuesday 2nd - Fauna Survey Group Meeting: ***Movement-based signalling in agamid lizards.*** Speaker: Dr José Ramos, La Trobe University. Contact: David De Angelis 0409 519 829;d.deangelis@latrobe.edu.au

Sunday 7th – Juniors' Group Excursion: ***Macedon Ranges Shire Council Visit.*** Leader: William Terry. Meet 11 am at Bald Hill Reserve. **Bookings in advance essential.** Contact: Patricia Amaya juniors@fncv.org.au

Monday 8th – Marine Research Group Meeting: Speaker: Marie Kinsey from the Marine Mammal Foundation. *Topic to be advised*. Contact: Leon Altoff 9530 4180 AH: 0428 669 773; mrg@bluering.org.au

Saturday 13th – Second-hand Booksale 9.30 am to 3 pm. Come early and grab a bargain! We will have a huge range of books, both fiction and non-fiction. Prices from only 50 cents to $10. Prior donations of **clean** books in good condition welcomed Contact: FNCV office admin@fncv.org.au; 9877 9860 More details FNN p 9.

Sunday 14th - Terrestrial Invertebrates Group Excursion: ***Mt Disappointment.*** Meet at 10 am in Mt Disappointment car park in Mt Disappointment Rd. Approximately 19.5Km from Whittlesea. Detailed map will be provided before the excursion. **Register with Max Campbell** 0409 143 539; 9544 0181 AH; mcam7307@bigpond.net.au

Tuesday 16th– Collate FNN 295 Starting about 10 am. Contact: Joan Broadberry 9846 1218

Wednesday 17th - Microscopy Group Meeting: *Speaker to be advised*. Contact: Philippa Burgess 0409 866 389

Thursday 18th – Botany Group Meeting: ***VicFlora: species updates, writing keys, uploading images and more***
Speaker: Andre Messina, Botanist, Royal Botanic Gardens. Contact: Ken Griffiths botany@fncv.org.au

Friday 19th to Monday 22nd – Juniors' Group Excursion: ***Easter Camp at Sugan Buggan.*** 4WD and Portable Toilets essential **Prior reservation necessary.** Contact: Patricia Amaya juniors@fncv.org.au

Friday 19th to Monday 22nd - Fauna Survey Group Survey: ***Easter camp Easter camp Rushworth Forest.*** Checking and maintenance of nestboxes and spotlighting. **Prior Registration essential.**
Contact: Ray Gibson: 0417 861 651; rgibson@melbpc.org.au

Tuesday 23rd – Day Group ***Guided walk around Birdsland Reserve.*** Leader: Sally Bewsher. Meet at 10 am.
Birdsland Reserve is off 271 Mt. Morton Rd. Belgrave Heights. Melway 84B2. Drive through the gate and then continue for 1k into carpark. BYO picnic lunch, camera and binoculars. Contact: Joan Broadberry 98461218

Wednesday 24th – Geology Group Meeting: ***Characterising Alteration Carbonates in the Northern Bendigo: Their relationship to Structure, Timing and Gold.*** Speaker: Declan Tate, Swinburne University.
Contact: Ruth Hoskin 9878 5911; 0425 729 424; rrhoskin@gmail.com

Friday 26th – Juniors' Group Meeting: 7.30 pm. ***Cranbourne Royal Botanic Gardens.*** Speaker: Michael Gavin Cook.
Contact: Patricia Amaya juniors@fncv.org.au

(Continued on page 3)

The policy of the FNCV is that non-members pay $5 per excursion and $3 per meeting, to contribute towards Club overheads. Junior non-member families, $4 for excursions and $2 per meeting.

(Continued from page 2)

Sunday 28th – Fungi Group Foray: ***Cambarville, Yarra Ranges National Park*** From Marysville take the Woods Point Road passing the Lake Mountain turnoff and continuing 5.5 km to the Big Culvert. The Cambarville entrance is a further 1km. Meet at 10.30 am at the Picnic ground. (Mel Ed 37 Map 910 U12) (Google maps: https://goo.gl/maps/DgGDsUaVvKH2)
Contact: Carol Page 9857 6388; cpage356@gmail.com; (on day of foray ONLY 0438 446 973)

Monday 29th April FNV Council meeting: 7.30 pm sharp. Agenda items and apologies to Wendy admin@fncv.org.au

DIARY DATE: FNCV AGM Sunday 5th May. Details page 7

Members' news, photos & observations

We always have space for members' photos and natural history observations. Please share with us what you have noted in your daily life, travels or garden. Email: fnnews@fncv.org.au by the first Monday in the month.

Welcome

Warmest greetings to the following new members who were welcomed at our last Council meeting.
Sarah Matthews, Lyn Miller, John Miller, Anna Ischenko, Benjamin Livingstone, Hannah Foord, Charlotte Foord, Dianne Foord, Jonathon Foord, Louise Coronel and Sandie Czarka

From the President (Continued from page 1)
It was interesting that the water samples I collected from Braeside Park had a much lower diversity of microscopic life when compared with the marsh at the Upper Yarra Dam *(previous FNN).* There were a few protozoans, notably *Stentor* and a couple of species of *Difflugia, arcella,* some amoeboids and numerous, swimming bacteria. I suspect that there is a higher BOD and perhaps toxic residues from the surrounding, developed environment which may affect biodiversity.

I highly recommend all of our field trips and excursions to anyone who likes to investigate and photograph our living systems and organisms. We have also had some brilliant presentations to start the year, so do yourselves a favour and get to as many as you can. It is the best entertainment.


Bacteria from Braeside Pk wetlands
Photo: M. Campbell

Maxwell Campbell

Scarab Beetles

Just recently, whilst walking back to my car from a folding day at FNCV, I was rewarded with a sighting on the footpath of what I think was a Scarab Beetle not dissimilar to the photo in the *March Field Nats News* No 294 that Linda Rogan saw. It had a tan and black elytra, black legs and black fringed feelers on its black head The legs were slightly spiny. Around the elytra was a row of small black dots. I had seen this insect before but had not photographed it. I would be surprised if it was anything rare or unusual.


Photo: C. Falkingham

Most scarabs are nocturnal (family Scarabaedae) and are in the insect Order Coleoptera. The three flattened plates form clubs on the antennae were easily seen when I enlarged the photo. Their enemies are birds, bats in some areas, frogs and humans such as farmers if they are destroying their crops. Scarab Beetles feed on decomposing plant material, some of them feed on leaves and a few on fungi, millipedes and insects.

One of the best collections of Scarabs I have seen was in the London Museum and our own Melbourne Museum with the range and size of colours staggering. The dung beetle *Scarabaeus sacer* was sacred to the Egyptians and rings and other jewellery were made by the ancient Romans. They are found on all continents except the Antarctica and live in grasslands, forests, and deserts and, it seems, in suburban Blackburn.

Cecily Falkingham

Members' news continued.

Warburton


Red Currant Bush
Photo C. Falkingham

Just recently I went to Warburton for a short break. My links with Warburton go back to when I was a small child. We stay in a cabin beside the Yarra River and the sounds of water and birds are a constant delight. One of the most productive walks along the Yarra starts at the end of the camping ground. In the past whilst here we paid visits to Cement Creek and Donna Buang only a short drive away.

The track from the camping ground weaves its way under ancient Tree Ferns and giant Eucalypts, Musk Daisy Bush, Red Currant Bush, beaded at this time of the year with jewel-like berries and many more plants too numerous to mention. Small birds such as: Grey Fantails, Superb Fairy Wrens, Brown Thornbills, Yellow Robins and the glorious Rufous Fantails flip their golden tails in the sunshine. The huge Swamp Gums are much sought after by the Galahs and Sulpur-crested Cockatoos for tree hollows, as a Wedgetail Eagle flaps lazily by, high over the tree tops.

From the verandah of our cabin we observe: Yellow-tailed Black Cockatoos as they fly in noisy flocks back and forth, Yellow-faced Honeyeaters feeding on insects and nectar from the trees and shrubs, and Grey Fantails fliting around the verandah feeding on small day-flying moths. The trunks of the Mountain Grey Gum are lemon and pale green as soft rain falls after a scorcher of a day. I have not yet on my daily walk been quick enough to photograph the Antechinus that dashes with lightening speed across the track at my approach. The tall tussocks of grass that line the track offer shelter for a variety of lizards, mainly Blue Tongues.

This lovely area has thick impenetrable forest just below the Warburton Highway and forms a corridor along the Yarra River. In the past I have seen Platypus on a deep bend of the river but not in recent times. It is amazing to see so many birds in this valuable corridor only ten minutes from the township of Warburton and just over an hour from our home in the eastern suburbs. It is proof that we do not have to travel many kilometres (or hours) to get into good quality bushland, thanks to Melbourne Water keeping most of the weeds in check.

Cecily Falkingham

Library News

The following monographs have been added to the Library's holdings recently. All are now available for perusing or borrowing (or both). Books and periodicals may be borrowed for up to two months; don't forget to put the relevant details in the Borrowing Book.

Allen, Terri Gitsham (1976) *Wyperfeld: the history of the station and settlers and the flora and fauna of Wyperfeld National Park* [508.945 ALL]
Anderson, Alan and Jacklyn, Peter (1993) *Termites of the Top End* [595.736 TER]
Braby, Michael and Olsen, Penny (1976) *A flutter of butterflies* [595.78 BRA]
Carter, David (2002) *Butterflies and moths* [595.78 CAR]
Kiernan, Kevin (2018) *Eroding the edges of nature. Mount Field and the Florentine Valley: Tasmania's first national park and a century of lessons* [333.7 KIE]
Lloyd, Sarah (2018) *Where the slime mould creeps*. Second Edition [589.2 LLO]
Marlos, Daniel (2010) *The curious world of bugs* [595.7 MAR]
Orenstein, Ronald (Text); Marent, Thomas (Photos) (2015) *Butterflies* [595.78 ORE]
Pescott, Trevor (2017) *Birds and botanists: a field naturalist's history of Geelong* [570.6 PES]
Taylor, Barbara, Green, Jen and Farndon, John (2005) *The big bug book: discover the amazing world of beetles, bugs, butterflies, moths insects and spiders* [592 BIG]
Teyssier, Jean-Claude (photography); Febre, Jean-Henri (2009) *Amazing insects: the secret world of invertebrates* [F 592 AMA]

Gary Presland, Honorary Librarian

Many thanks to those who helped collate and label FNN 294

Hazel Brentnall
Edward Brentnall
Andy Brentnall
Cecily Falkingham
Sheina Nicholls
Joan Broadberry
Barbara Burns

Facebook report: 12,293 followers.

Moderators are Ian Kitchen, John Harris, Claire Ferguson and Wendy Gare. Andrej Hohmann has also now been appointed.

Thanks to the editorial and layout team who put together FNN 295

Joan Broadberry
Wendy Gare
Sally Bewsher

Terrestrial Invertebrates Group

Micraspis flavovittata Lady Beetle Discoveries

Micraspis flavovittata **Images: R. Richter**

Lady beetles are scientifically classified in the Coccinellidae family of the insect order Coleoptera (beetles). Although there are many cryptic and tiny species, we are all familiar with the colorful beetles of around 5mm in length occasionally sighted clambering around in our gardens. The easily recognizable species usually belong to the subfamily Coccinellinae, but there are look-alikes in different families altogether, particularly within leaf beetles (Chrysomelidae) – visual mimicry is not uncommon in beetles. Lady beetles can best be distinguished from others by having relatively short antennae.

According to the 1,672 Coccinellidae records for Victoria currently available on the Atlas of Living Australia (ala.org.au) the most abundant lady beetle species in our state is *Harmonia conformis*, which goes by various common names including "large spotted ladybird". This native is a predatory species feeding on such things as aphids and other plant pests, so is very beneficial to have around. It has textbook orange base colouration with uniformly sized black spots.

However not all lady beetles are predatory. Another of the most common species in Victoria is *Illeis galbula.* It is smaller and distinctively yellow and black. As its common name of "fungus-eating ladybird" suggests, it feeds on mould sometimes found on plants and often found crawling in our vegetable patches on cucumber and pumpkin leaves.

One lady beetle very few people have encountered is *Micraspis flavovittata* (it currently doesn't have a common name). Before this decade it had only been recorded four times until it was "rediscovered" in 2014 in Discovery Bay Coastal Park (south-western Victoria). The Club had an excursion to the area in December 2018, which included a successful search for the species there. You may be familiar with its common sibling species, *Micraspis frenata* (striped ladybird), to which *Micraspis flavovittata* is most similar in appearance and size.

Coccineila transversalis **Image: R Richter**

Several *Micraspis* species feed predominantly on pollen and so are often found on flowers. Initial modern observations of *Micraspis flavovittata* were on and around large water-ribbons (*Cycnogeton sp.*) that were in flower and producing large quantities of pollen, so it was assumed the beetles at least supplemented their diets this way. These aquatic plants are quite common and widespread but despite my extensive searching of these plants throughout the state I could find no more beetles.

I had been keeping all my photos since acquiring my first digital camera in 2001 (except those that I lost through poor backup procedures. There's no reason not to keep all your photos, as a 2TB drive costs around $100 and could store a lifetime's worth.) In the last five years or so I had been recording my sightings on bowerbird.org.au and ALA (and more recently inaturalist.org). When I had spare time (usually in winter) I would go through my old images and submit them as well (if I knew reasonably accurately where they were taken).

A few months ago I was looking for a record of mine on ALA but thought it had been lost until I realized I was only half way through processing my older photos from 2011, so I started processing a few more. When I got up to mid December I found an image of a lady beetle from the Otways that, although at the time I had no idea of what it was, I can now recognize well. It was of course *Micraspis flavovittata* rediscovered three years earlier – "prediscovered" if you like. At the time I had nowhere to put an average quality photo of an unidentified beetle so it just sat there for seven years. After the 2014 discovery was publicized a Warrnambool resident mentioned they saw a similar beetle a few years earlier that nobody could identify – but they didn't keep their photo!

This Otways site is in Aire River Wildlife Reserve beside the Great Ocean Road in Glenaire. It consists of a drained floodplain or swamp now extensively covered predominately by exotic herb species (weeds). With a variety of flowers it would appear to provide a pollen food source for long periods throughout the year and the dense coverage also provides protection from weather.

(Continued on page 6)

(Continued from page 5)
Along with the swamp areas in Discovery Bay Coastal Park, this site indicates that *Micraspis flavovittata* favours damp to wet areas and perhaps does not tolerate dry areas and open forests. Although the two historical sites east of Melbourne have seen significant clearing, development and agriculture, there should still be places the beetle has survived too so it is still worth searching. One site in Buxton that was explored in late 2014 as a potential beetle site, turned out to be the only regular location now east of Melbourne for the endangered ancient greenling damselfly (*Hemiphlebia mirabilis*).

Also at Aire River two common lady beetle species were observed: *Harmonia conformis* and *Coccinella transversalis*. All the photos here are from that site from 22 February 2019 (except the one from 2011).

Insects need thickly vegetated areas in which to roost, shelter and hibernate, habitat often missing in our cultivated farmlands and urban areas.

Reiner Richter

Harmonica conformis **Image: R. Richter**

TIG Braeside Park

17th February 2019

Thirteen members and two potential members made it to the Redgum Picnic Area in the south of Braeside Park on this fine day but with very dry conditions (as we have come to expect from our summers). The challenge was on to find something to photograph as my preliminary exploration an hour earlier yielded very little. Fortunately with a reasonably sized group and good eyes among them, many things were found and we barely made the wetlands 500m away before returning to the car park for lunch.

Litoria fallax **Image: R. Richter**

Austracantha minax
Image: Paul George

Near the car park a wattle was in flower. It only attracting a few flying insects but all quite active and difficult to photograph, including two species of *Lasioglossum* bees. Also in the wattle was one of the more common jumping spiders *Opisthoncus sexmaculatus*, although quite a dark individual. Numerous other spiders were also spotted, mostly on tree trunks, including the tiny *Euryopis splendens*, the ubiquitous but still attractive Australian Jewel Spider *Austracantha minax*, a White-tailed Spider *Lampona cylindrata* and the stunning large Australian Golden Orb-Weaver *Nephila edulis*. At the end of the day, after most people had left , several of us also saw the unusually shaped Scorpion-tailed Spider *Arachnura higginsi*.

Beetles we saw included two common lady beetles (Transverse Ladybird *Coccinella transversalis* and Spotted Amber Ladybird Beetle *Hippodamia variegata*), a leaf-beetle *Paropsisterna crocata* and a metallic darkling beetle in the *Amarygmus* genus. Subjects like this latter beetle that are quite shiny can be difficult to photograph; if it's dark one is inclined to use flash but most of this will get reflected away and you get a very dark insect so if there is enough natural light it is often better to just use that or use your camera's high dynamic range (HDR) mode with flash if possible.

Other insects we saw included several common Odonata (damselflies and dragonflies) and a Small Dingy Swallowtail *Papilio*

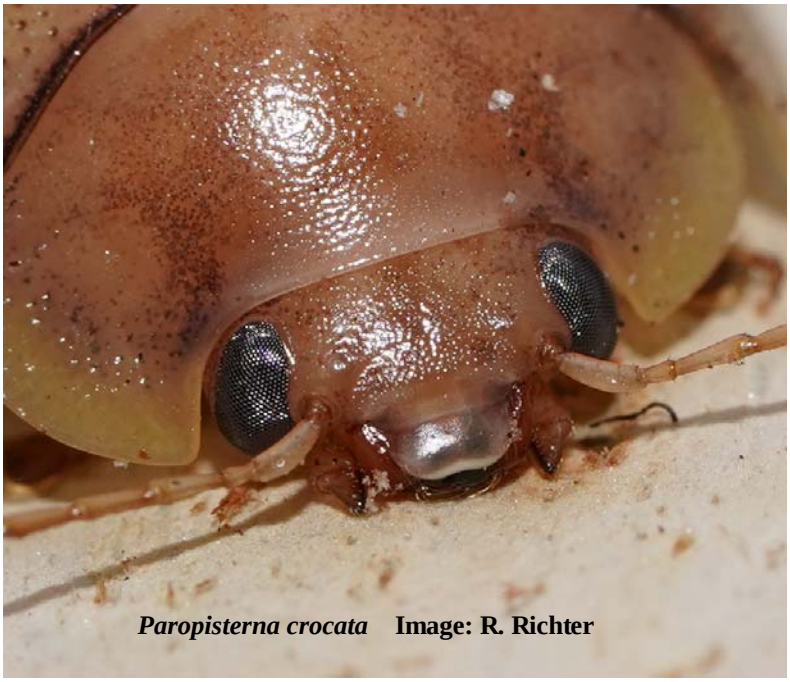
(Continued on page 7)

(Continued from page 6)
anactus. Near the wetlands we even saw an Eastern Dwarf Tree Frog *Litoria fallax* – also called the Banana Box Frog because its natural distribution doesn't extend to Victoria. They have colonized parts of Melbourne by travelling along with one of our favourite fruits.

For more of what we saw have a look at the iNaturalist project page for this excursion:
https://www.inaturalist.org/projects/fncv-2019-braeside-park

Reiner Richter

Arachnura higginsi **Image: R. Richter**



Paropisterna crocata **Image: R. Richter**

Amarygmus sp. **Image: R. Richter**

Tawny Frogmouth DNA vs collection location study - Deakin University

This is the info I have about the DNA Study regarding Tawny frogmouths.

The Deakin Uni study of Tawny Frogmouth DNA vs collection location is inactive at the moment, but the feathers are still being collected and stored for when a Masters or PhD student takes it on. They don't have a student allocated currently but expect to in the future so are keen to continue to accumulate a stock of tawny frogmouth feathers from known locations for DNA analysis.

The project contact person is Assoc. Prof Raylene Cooke at Deakin Uni raylene.cooke@deakin.edu.au phone 03 925 17608 **Feathers with a bit of stiff quill end are apparently better for DNA analysis. Collected feathers should be put into an envelope and labelled with date and location of collection.**

People may like to contact Assoc. Prof Raylene Cooke directly or maybe if the FNCV office are happy with the idea of acting as temporary collection point for the collected feathers in their labelled envelopes, I could take these to Deakin when I take the ones I have collected in a few months time.

Ruth Ault

From the Office

Hi everyone,

- the kitchen is low on tea bags, coffee and biscuits. Donations are always gratefully received.
- Rosters for the second-hand booksale have been sent out.
- Thanks to those who contacted the Minister over the campaign to cancel the duck-shooting season.
- For all of its life the number of pages in the FNVC newsletter, *Field Nats News* has been kept to between 10 and 14. As at 2019, only about 100 readers do not receive the email version. From this issue onwards the size of the digital version of FNN will be expanded as needed. This will make the editorial team's task easier and allow for greater content. *A printed version of up to 14 pages will still be sent out to those who currently receive a hard copy*, but this may sometimes not include all the articles. Paper version recipients will be able to apply to the office for these pages to be mailed out to them.

Wendy Gare

FNCV AGM

Sunday 5th May 2019 at 2 pm

You are invited to attend
The Field Naturalists Club of Victoria Inc.
Annual General Meeting

to be held at the FNCV Hall, 1 Gardenia Street, Blackburn.

Agenda: *Minutes of previous AGM; Annual Report; Financial Statements; Election of Council; Environment Fund; Other Business*

Guest Speaker: A/Prof Michael F Braby
"Butterflies of the Australian Monsoon Tropics" *

Afternoon tea will be served. ***All welcome***

Nominations for Council must reach the registered office of the Club no later than 48 hours before the AGM, i.e. Friday 3rd May 2019, by 2 pm

Proxy and nomination forms FNN p14 & 15 or apply to the office

*** For your interest** ***Michael Braby, guest speaker at the AGM has sent this information about his book and himself.***

At the AGM Michael Braby will talk about his latest book *Atlas of Butterflies and Diurnal Moths of the Monsoon Tropics of Northern Australia*, which has just been published by ANU Press. This 462 page book was launched in Darwin earlier this year. Northern Australia is one of few tropical places left on Earth in which biodiversity—and the ecological processes underpinning that biodiversity—is still relatively intact. However, scientific knowledge of that biodiversity is still in its infancy and the region remains a frontier for biological discovery. The butterfly and diurnal moth assemblages of the area, and their intimate associations with vascular plants, exemplify these points. However, the opportunity to fill knowledge gaps is quickly closing: proposals for substantial development and exploitation of Australia's north will inevitably repeat the ecological devastation that has occurred in temperate southern Australia—loss of species, loss of ecological communities, fragmentation of populations, disruption of healthy ecosystem function and so on—all of which will diminish the value of the natural heritage of the region before it is fully understood and appreciated. Michael will explain why the region is important for butterflies, highlight some of the distinctive peculiarities of the fauna, and what needs to be done to ensure their continued survival.

Biosketch:

Michael Braby is an Honorary Associate Professor in the Division of Ecology and Evolution at The Australian National University and a Visiting Scientist at the Australian National Insect Collection. He is recognised internationally for his research on the biodiversity of butterflies—particularly their taxonomy, systematics, biogeography, conservation biology and ecology—and has published four books, 120 scientific research papers and numerous popular articles. His research aims to better understand and document the composition, biogeographic patterns and evolutionary history of butterflies and the underlying processes shaping their assembly on the Australian continent, as well as management actions needed for their conservation. Michael has lived and worked in the Australian Monsoon Tropics for 15 years, having completed a PhD at James Cook University in Townsville (1989–93) before working for the Northern Territory Government in Darwin (2005–14), where he designed and managed a relational database of invertebrates, including butterflies and diurnal moths, the records of which form the basis of this atlas. He also spent two years at Harvard University as a Fulbright Fellow (1999–2001). In 2001, Michael was awarded the Whitley Medal for the best book on the natural history of Australian animals, Butterflies of Australia: Their identification, biology and distribution.

The Field Naturalists Club of Victoria Inc

Second Hand Booksale

9.30am to 3.00pm

Saturday 13th April

at the FNCV Hall, 1 Gardenia Street, Blackburn

Come early and grab a bargain!

We have a huge number of amaz-ing books: fiction & non fiction.

Prices from only

50 cents to $10

Extracts from SIG reports given at the last FNCV Council Meeting

Botany Group: At our meeting on Thursday 21st February, twenty-one field naturalists were engrossed by Dr Sapphire McMullan-Fisher's presentation on how fungi relate to plants. Very fine hyphae engage with root cells, usually for mutual benefit. To understand soil as an interconnected living network needs a shift in thinking. How to care for native plants with fungi in mind?

Ken Griffiths

Fauna Survey Group: Meeting, 5th February 2019. The speaker was Dr Kirsten Parris, her topic, *'Impacts of Urbanisation on Melbourne's Frogs'*. Kirsten is the Associate Professor in the School of Ecosystem and Forest Sciences, University of Melbourne, and leader of the National Environmental Science Program (NESP) Hub for Clean Air and Urban Landscapes.

Meta communities of frogs were once linked by suitable habitat that allowed for dispersal. City development changes this and many wetlands or ponds are lost, while a few constructed wetlands appear. Kirsten's research showed that larger ponds had a few more species, and some ponds are now so isolated recolonization cannot happen, and support fewer species. Vertical walls on constructed ponds are a barrier to ground dwelling species like the Spotted Marsh Frog and Common Froglet, but not the Southern Brown Tree Frog. Roads are a barrier to frogs, and road noise also interferes in frogs calling. Frogs compensated by calling at a slightly higher frequency. The impacts of pollution from pesticides and copper on frog and tadpole survival was also covered. Kirsten is also developing new theory in urban ecology.

Further reading: https://kirstenparris.com/ ; https://nespurban.edu.au/ ;
*'The seven lamps of planning for biodiversity in the city'*https://www.sciencedirect.com/science/article/pi S0264275117314245 .

Surveys. The February trip to Hattah Kulkyne National Park had to be postponed to a later date as the park was closed at the time of our proposed survey**.**

Raymond Gibson

Juniors' Group: On Friday 22nd February the Juniors had a very successful meeting with Andrew Christie, a senior lecturer at Melbourne Polytechnic. His talk about stingrays and sharks was impressive. The presentation was well attended 22 members and 12 non-members (4 new members joined that night), in total 30 people. We are very grateful to Max Campbell for his presence and support with the technology.

On Sunday 24th February we visited Carranya, an amazing property in Mornington Peninsula, owned by Dr Greg Holland, an emeritus senior scientist at the National Centre for Atmospheric Research in Boulder, Colorado. His work for conservation and protection of indigenous fauna and flora on his property and his neighbour's is admirable.. Fourteen people attended, including two non members. Dr. Holland was very generous with his time and provided water and biscuits for all. Amazing.!

Patricia Amaya

Marine Research Group: On 11th February our speaker was Robert Gardiner. His topic was *Diving in Papua New Guinea.*

Microscopy Group: Wednesday 20th February: Max Campbell presented a talk on Owls, the main topic of the talk being owl pellets. We learnt of the feeding habits and differences in digestive systems from other birds, resulting in the need to regurgitate the indigestible parts of their prey, their gut pH being too low to digest bones and hair. Surprisingly many other birds also produce pellets or castings; Eaglehawks, falcons, vultures, herons, cormorants and ravens. The bird's gizzard holds back indigestible matter, grinds it up with swallowed grit and small stones, compacts it, and coats it with mucus for ease of expulsion following internal spasms. This occurs approximately 10 hours after a good night's feed. The owl cannot feed again until regurgitation. Pellet casting birds do not have a crop.

These pellets can give us a detailed story of their feeding habits and the effect of extreme weather conditions on diet. We looked at a study involving nearly 620 pellets that were dissected and all bones and hair identified.70% of the remains were identified as arboreal mammals. Pellet remains were of possums, sugar gliders, magpies, parrots, budgies, rosellas, frogs, pigeons, insects, beetles, geckos, mice, antechinus and carrion - wallabies. Owls are not aware of course, of the lists of endangered and threatened species, and are quite keen on them too! There are over 200 owl species worldwide. Australian owls we looked at were: Rufous, Barking, Southern Boobook, Morepork, Eastern Barn, Eastern Grass, Marked Sooty and Lesser Sooty Owl

We recently excitedly received a donation of five owl pellets, not so easy to find. We are keen to dissect these and identify what we can. Our recent donation of over 25 dissecting microscopes will give us a great opportunity for this. We can also do hair impressions and see what we can discover there. These pellets can contain bacteria, salmonella, chlamydia and lepospira. Some of their prey may also carry pathogens. These should be sterilised at 240°C for 4 hours or can also be immersed in alcohol or metho; this process softens the pellet and allows ease of separation of the contents. We are all looking forward to proceed with the actual dissection and identification of our pellets at a future meeting.

Thank you once again to Max for sharing his knowledge and enthusiasm. Ten members attended.

Philippa Burgess

WILDLIFE EXPERIENCES

"2019 KWONGAN DISCOVERY"

Join John Harris of Wildlife Experiences and local botanical experts as you discover the beauty and diversity of the Western Australian kwongan heathland. Kwongan is part of a globally significant biodiversity hotspot, rich in species of flora and fauna endemic to the area.

Date: 15 - 21 September 2019 from **Perth**; **min 6 & max 9** people (additional tours may be offered depending on numbers)

Cost: $2,200 pp (incl meals, shared accommodation, park fees & transport, excluding flights)

Highlights:

- 'Hi Vallee' Farm,
- Fauna survey,
- Spectacular wildflowers,
- Mt Lesueur National Park,
- Nambung National Park (Pinnacles),
- Sealion experience
- Stromatolites,
- Stockyard Gully Caves, and more!

For more information, or to book

Contact: John at admin@wildlifeexperiences.com.au or mobile 0409 090 955

Payment: 25% deposit required on booking, with balance due by 15 July 2019.

WILDLIFE EXPERIENCES

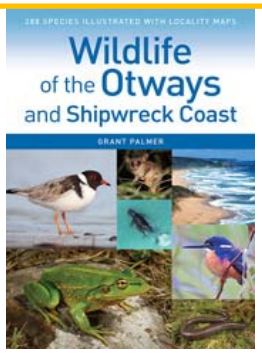
JOIN US ON AN EXPERIENCE YOU WILL NEVER FORGET!

"Wildlife Experiences provided a unique opportunity to discover the fauna and floral diversity of the region which was greatly appreciated. You both went out of your way to ensure everyone got a great experience" – Ann, KD18

NEWS FROM THE BOOKSHOP (April 2019)

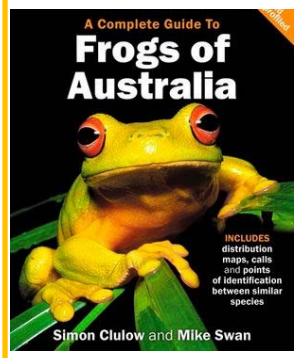
This month includes a new wildlife guide to be released in April, *Wildlife of the Otways and Shipwreck Coast* – grab a copy and explore this amazing area of our coastline. The other four titles have already been released as early as October last year; *A Complete Guide to Frogs of Australia* that use photos to assist with identification, to an old favourite that has had many reprints, *Australian Snakes*. To order or inquire about a book, please send me an email , **bookshop@fncv.org.au** and I will reply as soon as I can.

Happy reading, Kathy



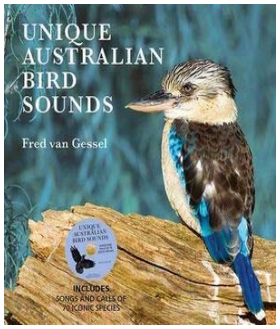
Wildlife of the Otways and Shipwreck Coast (G. Palmer) is a photographic field guide to the vertebrate wildlife of Victoria's south-west. It covers all the mammals, birds, reptiles and frogs that occur in the region, including on land and in coastal waters. Each of the 288 species profiles includes a description and information on identification, range, conservation status, habitat use and ecology and is complemented by an exquisite colour photograph and a detailed distribution map. The book also includes chapters on habitat types, conservation and management, and on 14 key places in the region to view wildlife..

(PB, 304 pp., April 2019) .RRP $49.99, Member $20



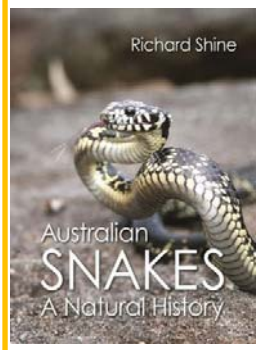
A Complete Guide to Frogs of Australia (S. Clulow & M. Swan) provides concise accounts of all the known frogs of Australia. The books includes the 230 native species of frogs across five families and also the introduced cane toad and nine stowaway species that have arrived in Australia. The text for each species includes details of size, status, distribution, habitat, behaviour and advertisement call. Each species is accompanied by a map of Australia showing is known distribution and full colour photography.

(PB, 304 pp., Oct 2018) RRP $49.95, Member $39.95



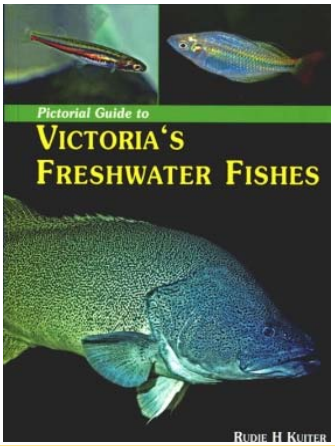
Unique Australian Bird Sounds (F. Van Gessel) covers 70 species which are uniquely Australian. A photo is included for each species along with a description of the key ID features, habitat, and distribution with the songs and calls which can be heard on the corresponding CD audio track. The CD incorporates hundreds of recordings of birds from all over the country, which have been accumulated over many decades.

(PB, 64pp., 2017) RRP $24.99, Member $20



Australian Snakes: A Natural History (R. Shine) is an insight into the biology and life history of snakes in and around Australia. It opens the door on an exciting area of research. Dr Shine has pioneered much of this work himself and may be considered Australia's foremost authority on snakes. Although the foundations of this book are scientific, it has a light and easy style, peppered with amusing and occasionally alarming anecdotes.

(PB, 224 pp., 1998) .RRP $39.99, Member $32



Victoria's Freshwater Fishes (R. Kuiter) is a pictorial guide that includes all the known freshwater species of Victoria. Quick-guideswith small images are presented instead of keys to the families and the genera containing multiple species. Native fishes have a description, distribution map and are illustrated with multiple images. Exotic fishes are included, but with limited text, depending on their importance, and mainly with images.

(PB, 178 pp., 2013) RRP $70, Member $56

Fauna Survey Group

NORTHERN MURRAY MALLEE

5th-11th JANUARY 2019,

Wallpolla Island (Murray-Sunset National Park) to Renmark

In early January, a small number of regulars from the Fauna Survey Group camped along the Murray River west of Mildura, mainly searching for nocturnal reptiles and frogs, and opportunistically recording birds, fish and other fauna during the day. We were joined by club members Brenna Billing, Knud Hansen, consultant Jacob Caon and Phoebe Pace who kindly volunteered their time, skills and additional equipment.

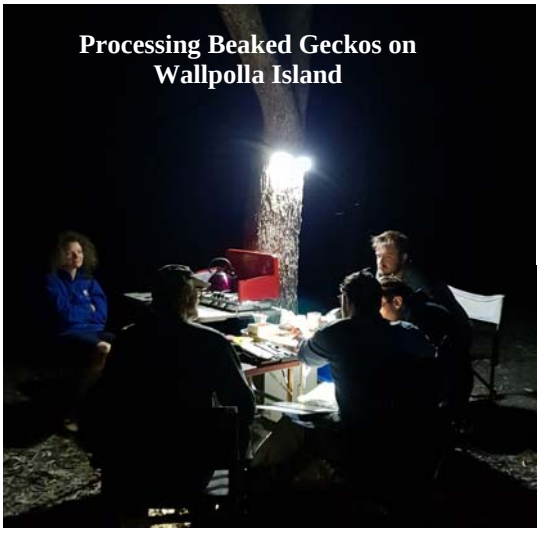
We spent the first night on Saturday surveying an area of riparian woodland on Wallpolla Island where the Beaked Gecko *Rhynchoedura* sp. had previously been recorded. Unfortunately none were found at that spot, although we did see several Tessellated Geckos *Diplodactylus tessellatus*.

Tessellated Gecko *Diplodactylus tessellatus*

Following the taxonomic revision of *Rhynchoedura* in 2011 by Australian National University researcher Mitzy Pepper, the single endemic species of Beaked Gecko *R. ornata* was split into five. As no specimens had been examined from south of the Murray River and the two newly described species occurring close to the Victorian border are difficult to visually distinguish from each other, the FSG had arranged with Mitzy, Peter Robertson, Museums Victoria and Parks Victoria to collect non-lethal tissue (2-3 mm tail tip) samples for genetic sequencing. Confirming the species' identification in Victoria is particularly important given it is advisory listed as critically endangered here.

We had better luck in another area of woodland on Wallpolla Island on the following night, with tail tip samples collected from three Beaked Geckos.

On Monday night we went for a spotlight around Horseshoe Lagoon. The receding water level had left a fair amount of muddy, cracked ground exposed and we were hoping to find De Vis' Banded Snake *Denisonia devisi*. We didn't find any snakes at the lagoon, but the place was alive with frogs! Everywhere we went, there were dozens hopping out of the way as we walked around. We saw Peron's Tree Frog *Litoria peronii*, Barking Marsh Frog *Limnodynastes fletcheri* and Plains Froglet *Crinia parinsignifera*. Unfortunately it was also very alive with mosquitoes and various other bitey creatures. There were so many in fact, it was actually hard to spotlight with the clouds of insects attracted to the torch light.



Processing Beaked Geckos on Wallpolla Island

We also spotted a Nankeen Night Heron *Nycticorax caledonicus*, heard an Australian Owlet Nightjar *Aegotheles cristatus* and got very close looks at a fairly menacing-looking Water Scorpion *Laccotrephes tristis*. Other things of interest were a couple of beautiful Murray Banded Huntsman Spiders *Holconia murrayensis* and on the way back to camp, we found a dead De Vis' Banded Snake on the road which had sadly been recently run over. The specimen was collected and delivered to the Museum along with the gecko tail tips after returning to Melbourne.

Murray Banded Huntsman *Holconia murrayensis*

While on Wallpolla Island we also took the opportunity to sample a poorly known billabong for small fishes using bait traps. Despite the presence of carp, the water being relatively low and sheep grazing its banks, it still turned up good numbers of Carp Gudgeons *Hypseleotris klunzingeri* and much fewer introduced Gambusia *Gambusia holbrooki*. On our arrival to retrieve the traps, a Lace Monitor *Varanus varius* was seen entering a nearby tree hollow.

We recorded 61 bird species in various parts of Murray-Sunset over the five days we visited there, including Wedge-tailed Eagle *Aquila audax*, Gilbert's Whistler *Pachycephala inornata*, White-winged Fairy-wren *Malurus leucopterus*, Chestnut-crowned Babbler *Pomatostomus ruficeps* and Striped Honeyeater *Plectorhyncha lanceolata*.

(Continued on page 14)

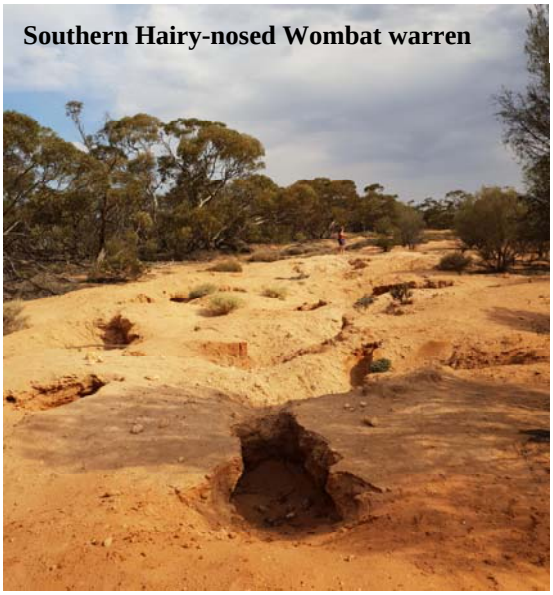
(Continued from page 13)

We called into Ned's Corner for a much-needed shower on Tuesday and then headed on to camp at Plush's Bend near Remark in South Australia. We found a nice spot to camp, but there were quite a few other campers and it felt like a bit of a let-down after our lovely, secluded bush campsite on Wallpolla!

On Wednesday night some of us headed out to a nearby conservation reserve to look for nocturnal reptiles and were not disappointed, finding nine Jewelled Geckos *Strophurus elderi*! We also found one Beaded Gecko *Lucasium damaeum* and a Dark-spined Blind Snake *Anilios bicolor*, in spite of it being quite cool and windy. There were many Southern Hairy-nosed Wombat tracks, scats and burrows, but sadly, no actual wombats were seen.

On Thursday we went for a 'nature cruise' in Jacob's tinny down on the Murray River. We got good views of Sacred Kingfishers *Todiramphus sanctus* and Whistling Kites *Haliastur sphenurus* along with many waterbird species. It was interesting to see the many huge old Whistling Kite nests in the Red Gums along the riverbank too. In the shallow areas there were plumes of sediment rising up every couple of metres, which we assumed were being created by carp feeding on the river bed. We also spotted a couple of Red-kneed Dotterels *Erythrogonys cinctus*, a beautiful Caspian Tern *Hydroprogne caspia* and a small group of Black-winged Stilts *Himantopus leucocephalus*. We were hoping to spot a turtle basking in the morning sun, but didn't have any luck.

Southern Hairy-nosed Wombat warren



Jewelled Gecko *Strophurus elderi*

Returning to camp, we were greeted by a very friendly Brown Treecreeper *Climacteris picumnus* who kept us company (especially every time food appeared!) over the three days we were there.

All animals were handled and processed under the relevant animal ethics approvals, National Parks, Wildlife Research, Scientific Procedures, and Fisheries permits.

Asha Billing, David De Angelis and Andrej Hohmann

All photos: Asha Billing

FNCV AGM Proxy Voting Form

I, _____

Current member of The Field Naturalists Club of Victoria Inc.

appoint (full name) _____

of (address) _____

or in their absence, the AGM Chair, to be my proxy at the 2019 Annual General Meeting to be convened on Sunday 5th May 2019 at 1 Gardenia Street, Blackburn and authorise them to vote on my behalf.

This form must be given to the FNCV Secretary before the start of the AGM.

Signed: _____Date: ___ May 2019

NOMINATION FORM FOR FNCV COUNCIL 2019/20

The FNCV AGM will be held on Sunday 5th May, 2 pm at the FNCV hall, 1 Gardenia Street, Blackburn

Name of Member nominated……

Position Nominated*……

Signature of Member Nominated ……

TWO MEMBERS SUPPORTING NOMINATION

Name …….. Signature …… Date…….

Name …….. Signature …… Date…….

*Elected members of the FNCV Council are: President, Vice-President, Secretary, Treasurer, a Councillor representing each Special Interest Group (SIG) and up to six other Councillors. All must be FNCV members**.**

All nominations, including SIG Councillors, must reach the FNCV office no later than 48 hours before the AGM, i.e. Friday 3rd May at 2 pm

PO Box 13, Blackburn, VIC 3130
Phone 9877 9860
E-mail: admin@fncv.org.au