



Understanding  
Our Natural World  
Est. 1880

# Field Nats News No 330



**Newsletter of the Field Naturalists Club of Victoria Inc.** Editor: **Joan Broadberry 03 9846 1218**  
1 Gardenia Street, Blackburn Vic 3130  
**Telephone 03 9877 9860**  
P.O. Box 13, Blackburn 3130 [www.fncv.org.au](http://www.fncv.org.au)  
**Newsletter email: [joan.broadberry@gmail.com](mailto:joan.broadberry@gmail.com)**  
(Office email: [admin@fncv.org.au](mailto:admin@fncv.org.au))

Reg. No. A0033611X  
Patron: The Honourable Linda Dessau, AC  
Governor of Victoria

Office Hours: Monday and Tuesday 10 am - 4 pm

June 2022

## From the President

Although the restrictions have been removed, there are still many infections in the community and, sadly, serious illness and death. We have many "at risk" members for whom the benefits of wearing masks and, where possible, maintaining safe distance are obvious, but these are now a matter of personal choice. I urge that we all respect the needs of others in this regard. Good food hygiene practices and hand disinfection need to be maintained as always.

I am looking forward to another very productive year for FNCV, especially now that we are able to resume activities at the hall and continue with our normal field excursions.

The deadline for FNN 331 will be as always, the first Tuesday in the month, **June 7th.**

Please use my home email  
[joan.broadberry@gmail.com](mailto:joan.broadberry@gmail.com)



1: J. Broadberry

The Juniors Group had already planned to be at Mali Dunes this Easter for their usual camp so were going to be there whether we had purchased the property or not at that time. In fact, this was their third visit to the property. As it turns out Mali Dunes became the property of FNCV a week before Easter on April 7<sup>th</sup>.

The weather was very warm and dry until Sunday night when the skies opened and transformed hot (32<sup>o</sup>C) Mallee desert to cool swamp in a matter of hours. The transformation was dramatic; dry moss became green and many organisms suddenly appeared. Fungi, Goat Moths/Rain Moths, amphibians, large spiders, carab beetles, centipedes and many others literally came out of the sand and clay. The rain continued without abatement so we had all left by mid Monday afternoon. Faye and I spent a week drying out and cleaning wet and muddy camping gear. However, it was all worth the effort.



2.

At night, the spotlights reflected from the eyes of thousands of wolf spiders as they hunted for prey in the sand. Many of them are perfectly camouflaged and difficult to see. Some blend into the sand while others, bearing the Union Jack pattern (Photo 2, left) match the litter-covered areas. They were observed actively preying on one another. Social spiders such as *Phryganoporus sp.* make their nests in the trees and shrubs in the dry country (Photo 4, page 4.) The large numbers of spiders rapidly hide when approached so can be very difficult to photograph. They are easier to see at night when they seem to be most active. They also move very quickly at the best of times. One of the more interesting spiders hunting in the rain was a beautifully camouflaged prowling spider, Miturgidae, running at great speed on its long legs to catch its prey.



3.

Soon after the rain started large numbers of enormous Rain Moths/Goat Moths *Trictena atripalpis* (Photo 3, left) appeared and swarmed over the lights. They were flapping around in the cups and plates and clinging to the tent and camp lights.

Many large Scolopendrid centipedes also appeared (Photo 5, p4) and could be found under the tents and equipment when packing up. Other predatory arthropods were also active in the rain including large Carabid beetles (Photo 6, p4).

Index	Page
From the President	1,4
Calendar of Events	2
Members' news, photos & observations	3
<b>Fungi Group News:</b> <i>Ascomycetes—cup, disc and other sac fungi.</i> <i>Foray to the Ada Tree</i>	5-6
FNCV AGM minutes. Second-hand Booksale	7-8
Extracts from SIG reports given to Council	9
<b>Fauna Survey Group News</b> The Grampians- Gariwerd long term fire, climate and small mammals project.	10
<b>Day Group News:</b> <i>Grey-headed Flying Foxes</i>	11-12

(Continued on page 4)



## 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.

### June 2022

**Sunday 5<sup>th</sup> – Fungi Group Foray: Mount Worth State Park, Allambee.** Meet at the Moonlight Creek Picnic Area at 10.15am for a 10.30 am start. <https://goo.gl/maps/xiUDPvGJCxg28Poe7>  
<https://www.parks.vic.gov.au/places-to-see/sites/moonlight-creek-picnic-area>  
 GPS reading at carpark: 38° 16' 58" S 146° 00' 28" E Melway Map X912 U8. Vic Roads Map 97 B6  
 Register with Anna Brady [anna21brady@gmail.com](mailto:anna21brady@gmail.com) 0448 711 116

**Monday 6<sup>th</sup> - Fungi Group Meeting: *Ophiocordyceps***

Speaker: Melvin Xu is the fungi group co-ordinator, a Research Assistant at The University of Melbourne, School of Biosciences and a volunteer at MYCommunity. Melvin will talk about this fascinating fungi. Contact: Melvin Xu [fungifncv@gmail.com](mailto:fungifncv@gmail.com) 0410 522 533

**Tuesday 7<sup>th</sup> - Fauna Survey Group Meeting: *X-rays, superpowers and the ecology, morphology and diversity of Australian lizards.*** Speaker: Rocio Aguilar, Research Fellow at Museums Victoria and Monash University. Contact: David De Angelis [d.deangelis@latrobe.edu.au](mailto:d.deangelis@latrobe.edu.au)

**Saturday 11<sup>th</sup> to Tuesday 14<sup>th</sup> - Fauna Survey Group Survey: *Queen's Birthday weekend camp: Warby-Ovens National Park.*** Surveys in collaboration with Parks Victoria, focusing on birds and mammals. **Prior bookings essential.** Register with Ray White 0458 393 275 [rwhite5@live.com.au](mailto:rwhite5@live.com.au)

**Monday 13<sup>th</sup> - Marine Research Group: No Meeting: *Queen's Birthday Public Holiday.***

**Wednesday 15<sup>th</sup> - Microscopy Group Practical Meeting: *Compound, dissecting and digital microscopes set up for your use*** BYO specimens or view our slide collection with guidance and help with ID. Videos of live microscopic organisms. Contact: Philippa Burgess 0409 866 389

**Thursday 16<sup>th</sup> – Botany Group Meeting: *Why Proteaceae do not need fungi.***

Speaker: Ken Griffiths, FNCV. Contact: Ken Griffiths [botany@fncv.org.au](mailto:botany@fncv.org.au)

**Sunday 19<sup>th</sup> – Fungi Group Foray: *Wanderslore Sanctuary, Launching Place.*** Park behind the general store at 2180 Warburton Highway, Launching Place and meet there at 10.15 am (please note earlier time). We will go as a group to the Sanctuary. Melway Map 287 J6 <https://goo.gl/maps/HchxvJ3gyN2T6bS6>

Register with Anna Brady [anna21brady@gmail.com](mailto:anna21brady@gmail.com) 0448 711 116

**Wednesday 22<sup>nd</sup> – Geology Group Meeting: *To be advised.*** Contact: Ken Griffiths [geology@fncv.org.au](mailto:geology@fncv.org.au)

**Friday 24<sup>th</sup> – Juniors Group: No meeting**

**Monday 27<sup>th</sup> FNCV Council Meeting: 8 pm.** Apologies and agenda items to Wendy Gare [admin.fncv.org.au](mailto:admin.fncv.org.au)

**Tuesday 28<sup>th</sup> – Day Group Meeting: 10.30 am for coffee and a chat. Speaker at 11 am. *Missing the forest for the trees. The ecology of the Box-Ironbark forest of the Heathcote region.*** Speaker: Dr Mary Gibson. Contact: Joan Broadberry [joan.broadberry@gmail.com](mailto:joan.broadberry@gmail.com)

#### COVIDSafe

Members are reminded that they should not attend FNCV activities if they are unwell. Wearing a mask if physical distancing not possible is recommended.

**At meetings members are no longer required to register,** but are asked to sign the attendance book. As a courtesy, some SIG organisers may appreciate members registering beforehand.

However, it is necessary to register for excursions, surveys and camps. In some cases participants must also register with Parks Victoria on ParkConnect. Registering ensures participants can be contacted if arrangements change.



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 per excursion and \$2 per meeting.

# Members' news, photos & observations

We always have space for member photos and natural history observations. Please share with us what you have noted in your daily life, travels or garden. Email: [joan.broadberry@gmail.com](mailto:joan.broadberry@gmail.com) by the first Monday in the month.

Welcome  
Welcome

Warmest greetings to these new members who were welcomed into our club at the last Council meeting:

*Geoff Walker, Danielle Wallace, Gaoxu Zhang, Gaoyue Zhang, Min Zhang, Zachary Pryde, Margaret Fraser, Yanyun Gao, Georg Armstrong, Finley Wilson, Lance Wilson and Fiona Sutton Wilson.*

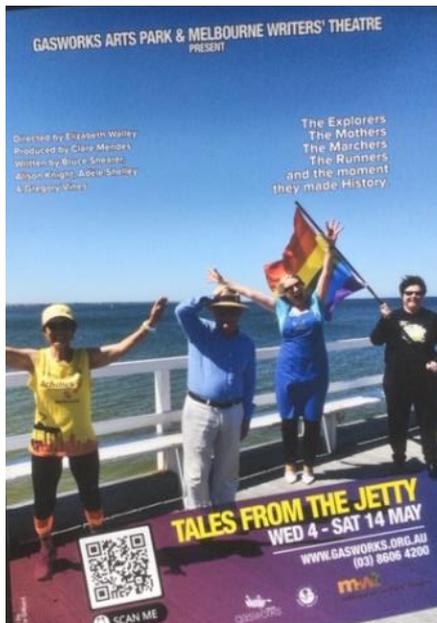
## HILLCREST RESERVE

On my daily dog walk with my Kelpie x Collie I always take time to sit on a seat at the local playground and watch the birds. The playground has a row of *Pinus radiata* at its boundary and a small cluster of Melaleucas and another small cluster of very young Eucalypts and mown grass.

The birds seen on a regular basis in this fairly ordinary park are: recently, twenty one Sulphur-crested Cockatoos feeding on the seeds from the pines, flocks of Eastern and Crimson Rosellas, Grey Butcherbirds, Blackbirds, Kookaburras, Mudlarks, Magpies, Ravens, Grey Shrike Thrush, Pied and Grey Currawongs, Galahs and of course the Noisy Miner. Yellow-tail Black Cockatoos are regularly seen flying overhead.

This proves that a fairly ordinary child's playground if planted out with indigenous and native trees and shrubs can provide food and shelter for our local bird life.

Cecily Falkingham



## TALES FROM THE JETTY

*Tales from the Jetty* was presented in early May by the Melbourne Writers' Theatre in association with Gasworks Arts Park. The theatre, headed by Clare Mendes, commissions plays highlighting aspects of the work of non-profit organisations, with a portion of the funds raised being donated back to the groups. This year one of the four plays shown, written by Bruce Shearer, dramatised the FNCV's campaign to have Wilsons Promontory reserved as a national park.

Interest in the beauty of this unspoiled area began with a hike at Christmas by three FNCV members from Trafalgar Railway station to the lighthouse in 1884. The campaign included stopping a fraudulent attempt to secure a grant of land to resettle crofters from the Isle of Skye. The story of this protracted, but ultimately successful campaign was obtained from Gary Presland's book *Understanding our Natural World*, pages 40-42.

Look carefully and you will recognise Gary in the accompanying poster.

[bookshop@fncv.org.au](mailto:bookshop@fncv.org.au)

for any orders or bookshop queries.

If you don't have access to email, the FNCV office will pass on your message. Kathy will then be in contact with you.

**Thank you to all those who helped produce FNN 330**

Joan Broadberry, Wendy Gare, Sally Bewsher, Pat Grey and Sheina Nicholls.

Facebook followers  
23,3269

*The views and opinions expressed in this publication are those of the authors and do not necessarily reflect those of the FNCV.*



4

View of the nest of the social spider *Phryganoporus sp.*

(Continued from page 1)  
I have previously recorded these beetles consuming large numbers of termites at Mali Dunes. In the warm afternoon, prior to the rain, large, metallic green bristle flies, Tachinidae, were buzzing loudly as they flew around the trees close to the ground

Up until now I was aware of only one frog, *Limnodynastes dumerilii dumerilii* (S.E. Banjo Frog), being recorded from Mali Dunes, so I was delighted to see a *Neobatrachus pictus* (Painted Frog) sitting up in the rain (Photo 7, below). *Limnodynastes dumerilii dumerilii* could be heard calling as we left a very soggy Mali Dunes. Infusoria were already to be seen swimming around in the small, transitory pools that formed.



5.

Fungi also emerged quickly after the rain started with *Geastrum sp.* Earth Stars (Photo 8), puff balls and small gilled fungi appearing everywhere. It was a great opportunity to be able to witness the immediate effects of substantial rain on the hitherto dry Mallee landscape.



7.

*Neobatrachus pictus* (male) emerged during Sunday evening's downpour.

**Max Campbell**  
All photos: Max Campbell unless otherwise indicated.



6.



8.

### Easter at Mali Dunes

I was fortunate enough to spend Easter camping with the FNCV Juniors at Mali Dunes. Although the Mallee was dry the effort put into revegetating the property has made it into an oasis. Max and Faye took us on a tour of the concrete dome with its many innovative off grid features. Spotlighting in the evening with Max produced a wealth of fascinating invertebrates, in particular Wolf Spiders with their glowing, pinprick white eyes.

The Juniors were taken on a number of excursions led by knowledgeable locals, both on and off the property. This included a visit to the Elgin Swamp, an aboriginal birthing tree and Herman's walk in the Big Desert. They were particularly excited to see and learn about Mallee Fowl and their mounds at Mali Dunes..

On Sunday evening, when welcome rain came, it was great to be dry and comfortable in the concrete dome while the juniors earned Easter eggs in their traditional concert/activities evening.

**Joan Broadberry**

Photo: J. Broadberry





## Fungi Group

### Ascomycetes—cup, disc and other sac fungi—Monday 4th April, 2022

Speaker: Pam Catcheside, Honorary Research Associate, State Herbarium of South Australia and Adjunct Lecturer, Flinders University.

Pam gave a fascinating and comprehensive speech on the diverse and sometimes elusive, ascomycete subdivision of fungi. She introduced the differences between basidiomycetes and ascomycetes before diving into the various types of ascomycota; all while highlighting their incredible diversity.

When explaining the different types of ascocarps, she spoke to several species that she has recorded throughout her time as a Research Associate at the State Herbarium of South Australia. It was insightful to see Pam's own micro photography, alongside macro photography by David Catcheside, as she introduced species such as *Aleurina ferruginea* and a species of *Geoglossum*.

The various characteristics that Pam looks for when performing taxonomic work were explained alongside the different methods she uses to capture her records. She explained the function of capturing a post- (or perhaps, pre)- mortem photograph and explained the benefits of using stains for the examination of microscopic characters. It was interesting to see the impact of staining certain asci and how it can bring a new sense of contrast and clarity to the ascus tip.

Pam introduced us to some disc fungi of interest, including *Ascobolus* which is found growing on dung. Its spores are initially colourless but eventually become striated and a brown colour as they mature. It was noted that the tips of the mature asci of this genus can be seen projecting from the disc, even with just a hand lens.

Amongst various fungi that Pam introduced, the *Antrelloides atroceraea*, which she has recorded on Kangaroo Island, was particularly interesting. It has the appearance of black shoe leather, starting glossy and maturing to be a duller matt texture. This is a new genus and species entirely and has recently been added to the IUCN Red List as Vulnerable thanks to Pam's work with Tom May.

It was clear how passionate and knowledgeable Pam is about ascomycetes and her work as a fungi detective. She has clearly contributed hugely to the field as she pieces together key information about the fungi she dedicates her time to.

Anna Brady

## Fungi Group Foray to the Ada Tree

24th April 2022

This is a regular foray area for the group and some thirty attendees were there to enjoy a fine autumn day in the Myrtle Beech rainforest. The last month had seen good rainfall, maybe 40mm or so the week before, promising a productive day out.

The track proper of about 1.6km to the Ada Tree is cool temperate rainforest with enough fungi that the group had not gone far before it was lunch time. Later in the afternoon a few of us did the full circuit, taking the Federal Road back to the carpark. The road track was less interesting being a more open, wet or damp sclerophyll forest.

We were also joined by Dr Sapphire McMullan-Fisher, who as always, generously shared her knowledge and enthusiasm for fungi and their role in our eco-systems. At lunch time she showed us what was involved in making a herbarium collection, including DNA sampling.

Collections of a *Crepidotus* and *Phellodon* species were made. Regarding the small, whitish, downy-surfaced, brown spored oysterling, it could be one of the many species that fall into the *C. variabilis* complex.

The *Phellodon* species was most like *P. niger*, but as Sapphire point-



*Crepidotus* sp.

Photo: Attilio Demicheli

(Continued on page 6)

(Continued from page 5)

ed out, probably not the same as the northern hemisphere species and there may also be variants of the species. This *Phellodon* species is a tough, leathery, dark, mycorrhizal fungus which prefers the ground litter, as opposed to the soft, whitish, saprotrophic *Beenakia dacostae*, another toothy fungus well worth looking out for on woody debris and the trunks of soft trees ferns. Fungimap lists *B. dacostae* as a “lost fungi” and unfortunately none were found on this foray, but they have been on previous occasions.

There was a lot of ghost fungi (*Omphalotus nidiformis*) at various stages of growth, and some good sized groups of *Armillaria* and of course *Mycena*. However, for the most part the fungi were found as individuals or small groups. Fortunately, I did not see any *Favolaschia claudopus*, part of the *F. calocera* complex of currently six species. One highlight was the golden *Pholiota aurivella* in prime condition proudly on display at the cut face of a log on the side of the path.



*Pholiota aurivella*

Photo: Reiner Richter



*Hymenoscyphus berggrenii* Photo: Reiner Richter

An open iNaturalist project was set up for the foray and all forayers were encouraged to post to it. There have been over three hundred observations of over 100 species posted to the project at <https://www.inaturalist.org/projects/fncv-2022-ada-tree>

Attilio Demicheli



*Ramaria botryoides*

Photo: Attilio Demicheli



*Mycena mulawaestris* Photo: Reiner Richter

**Correction FNN 329.**

The photographer’s names were accidentally omitted from two images in the article *Where do Fungi Grow?*  
 P11 *Hymenoscyphus berggrenii* - Reiner Richter  
 P12 Spherical bodies - Donald Hobern



## Extracts from FNCV AGM minutes 1st May 2022

### The full financial reports and the President's report can be found in the Annual Report

*A complete copy of the minutes can be obtained from the office.*

#### Meeting commenced 2.05 pm.

**1. Welcome:** *"We acknowledge the Traditional Owners of the land on which we are meeting and pay our respects to their Elders, past and present."*

Maxwell Campbell welcomed 28 members and one non-member (the administration officer for Minute taking.) Twenty proxy votes were registered.

**2. Apologies:** There were 18 apologies.

**3. Minutes of the 2021 AGM.**

**4. President's report.**

**5. Treasurer's Annual Accounts year ended 31/12/2021.**

**6. Appointment of Auditor.**

**7. Special Resolution Annual revision of membership fees.**

*New fees are as follows: They will commence on 1st July 2022*

Fee Type	Rate
Single	\$88
Family	\$114
Single Country/Concession	\$66
Family Country/ Concession	\$88
Student	\$40
Junior Family	\$53
Junior additional	\$18
Schools/ Clubs	\$101
Institutional	\$176
Institutional overseas	\$189

#### 8. Environment Fund Recipients and Reports

*The projects supported in 2021 were:*

A. Friends of Warrandyte State Park - 1000 brochures on how to attract native bees to gardens in Warrandyte, \$600.

B. Yarran Dheran Nature Reserve Committee - Taxidermy of a Sacred Kingfisher for display in the visitors' centre, \$330.

C. Snape Reserve, Dimboola. Committee of Management - black star posts to mark the corners of quadrants set up on 846 hectares of old growth vegetation, Trust for Nature Property, to assist in regular surveys, \$242.

D. Friends of Wanderslore Sanctuary, Launching Place - Purchase of a laptop and accessories to enable effective documentation, updating, data access and entry regarding species identification and biodiversity, \$973.

E. Friends of Bats and Bushcare - \$332 to buy 15 Wombaroo high-protein milk supplements to feed orphaned Grey-headed Flying Foxes at Yarra Bend, plus purchase of a landing curtain for bats \$450, total \$782.

F. Friends of Leadbeater's Possum were approved for a grant to purchase a GPS which has been deferred until 2022.

#### 9. Presentation of Long Term Member's Certificates

Two members have been awarded certificates of Long-term Membership in recognition of being a member of the FNCV for a continuous period of 40 years. Richard Loyn was present to receive his certificate. Congratulations and thank you to you both for making such valuable contributions to the club:

##### **Richard LOYN**

Richard joined FNCV on 8 February 1982. During his membership, he has been an enduring supporter of *The Victorian Naturalist*. Between 1984 and 2014, as sole or joint author he has published seven articles in the journal. Richard's support for *The Vic Nat* is evident also in his regular willingness to act as a referee of manuscripts submitted by other contributors. This he has done over a 20-year period, from 1991 to 2021, on 12 occasions.

##### **Ian FAITHFULL**

Ian joined FNCV on 10 May 1982. His contributions to FNCV span a significant proportion of his 40-year membership of the Club. He was secretary of the Club in the period 1985–86, and also served on Committee over two separate periods: 1983–84, and 1991–1994. In March 1992, Ian led a Club excursion to Wattle Park. At the time he was compiling a detailed natural history of the park, which he completed in May 1992. The study was carried out on behalf of FNCV, and was published as *The natural history and management of Wattle Park, Burwood*. Also in 1992, at the VFNCA annual camp-out in the Grampians, Ian took on the role of camp superintendent. While other attendees spent time on the various excursions, Ian compiled a list of entomological species within the area of the camp. This was later published in *Field Nats News*. Between July 1987 and December 2009, Ian contributed eight articles for publication in *The Victorian Naturalist*. Wendy Clark mentioned that Ian had been a member of the Juniors for many years prior to these contributions. He was congratulated in absentia.

#### 10. Election of 2022 Council

The chair was handed to Dr. Gary Presland to run the elections. All positions were vacated. As there was one nominee for each position, no ballots were required. The following people were congratulated on their election to the FNCV Council.



Richard Loyn receiving his long term member's certificate from Max Campbell.

<i>Position on Council</i>	<i>Name</i>
President	Maxwell Campbell
Vice President	Philippa Burgess
Secretary	Barbara Burns
Treasurer	Barbara Burns
Councillor representing Botany Group	Ken Griffiths
Councillor representing Day Group	Joan Broadberry
Councillor representing Fauna Survey Group	Susan Dempsey
Councillor representing Fungi Group Councillor	Melvin Xu
Councillor representing Geology Group	Troy Williams
Councillor representing Juniors Group	Patricia Amaya
Councillor representing Marine Research Group	Michael Lyons
Councillor representing Microscopy Group	Philippa Burgess
Councillor representing Terrestrial Invertebrates Group	<i>Vacant</i>
Councillor (Correspondence)	Andrew Brentnall
Councillor	Sue Bendel
Councillor	Judith Sise
Councillor	John Harris

**11. Guest Speaker:** Richard Loyn spoke on “*Wildlife Research, Conservation and Land Management*”.

Richard is an ecologist with particular interest in forests, wetlands and fire ecology. In 1973 he established a volunteer-based survey of waterbirds in Western Port, which is now Australia's longest-running survey of diverse waterbirds in complex ecosystems. He has been a regular contributor to *The Victorian Naturalist* over many years and is a Senior Research Fellow at La Trobe University. Richard's talk was thoroughly enjoyed by those attending.

**Meeting closed at 4 pm** and was followed by afternoon tea.



### SECOND-HAND BOOKSALE

Jolly camaraderie was the order of the day amongst our many volunteer book sorters and cataloguers. Several members got to know fellow members whose paths do not usually cross at our various meetings and old friends reconnected.

As usual a fantastic array of natural history, earth sciences and all our other favourite subjects were in abundance. Many people worked many hours to prepare. Those who attended were impressed by our displays and appreciated our helpers' tireless dedication to the job.

Those members rostered on to our helpers list included: June Anton, Bill McInnes, Geoff Lay, Nicky Zanen, Carol Page, Maggie Ng, Cath Tenni, Gary Presland, Sue Dempsey, Henry Xie, Kath Zonneville and Andrew McCutcheon. We had, of course several wonderful 'drop-in' member helpers during the week and on the day.

Many of our unsold books were donated to Marysville Book Nest which is a community initiative selling books to the local population and tourists. Funds raised are used to purchase necessary items for the community following their devastating fires.

The Blackburn morning market was an impetus for many people, families and their dogs to drop in at the hall for our sale. The afternoon was a little slower, the weather a little dreary which perhaps kept some away.

**Total funds raised were \$1,068.50.** Our previous book sale netted \$1200.00, so we were not far off that.

My grateful thanks to all those who participated, purchased, donated and helped.

**Philippa Burgess**

**Editor:** A huge thank you to Philippa who co-ordinated the preparations and the sale over several days.

**Extracts from SIG reports given at the last FNCV Council Meeting**

**Botany Group:** Beckler's Botanical Bounty project of the last decade was presented in the form of a voiced slide show. Beckler set out on the Burke and Wills expedition of 1860, but chose to stay at Menindee, on the Darling River. Mueller requested from Melbourne that he collect for the Botanical Gardens Herbarium. One hundred and fifty years later, a group of Melbourne botanical illustrators sought out those plants again near Menindee and produced water colour illustrations. Twelve attended the meeting.

Ken Griffiths

**Day Group:** Megan Davidson gave a presentation on *Grey-headed Flying Foxes*. See pages 10 -11.

**Fungi Group:** Meeting April 4th, *Ascomycetes—cup, disc and other sac fungi*. Speaker: Pam Catchside. See page 5. Foray to the Ada Tree, see p5-6

**Juniors Group:** On the 9<sup>th</sup> April the Juniors embarked on an amazing excursion to Portsea to the *House of the Seadragon*. Twenty-six Junior member participants were supposed to come but five had to cancel. Fortunately I secured a place in the future so they will not miss out. This excursion was partially subsidised by a Landcare grant, and thanks to them we had an amazing time at Portsea. We saw the seadragon in its habitat, also a cuttlefish and a few fish. Everyone who participated was very impressed.

**Easter Camp:** *The Juniors had an amazing Easter Camp at Mali Dunes*. Unfortunately, due to unforeseen family circumstances I could not take part in it. However Adam Hosken was happy and keen to be the leader for the camp and he did a great job. The Juniors had the privilege to have not only our FNCV President Max Campbell on camp, but also Joan Broadberry, Barbara Burns and Carol Page. Seven families took part with about twenty-one people in camp. Max and those present will be able to give further details. (See p1,4) From what some Juniors reported to me, all were very happy with the excursions which took place. They told me how great it was for them to see Mallee Fowl in their own habitat. I could not agree more with them. It is truly amazing and how lucky we are to have this opportunity.

Patricia Amaya

**Marine Research Group:**

**Field work at Stoney point**, April 23rd was very productive, particularly working under the pier

Photos: 1 & 2, Stoney Point Pier  
 3 & 4. *Ceratosoma brevicaudatum*, adults and juvenile.  
 5. *Paragrapsus gaimardii*  
 6. *Athanas granti* (snapping shrimp)  
 7. *Scolleclenchelys brevicaps* Long-finned Worm Eel. This is not an invertebrate but was as interesting find, stranded on the mud.

All photos J. Broadberry

**MRG field trip round up**, 9th May.

Over the year there were 10 field work days in nine locations, resulting in 1,401 records of 434 species. Leon Altoff reviewed many of these. Barbara Hall spoke on amphipods and crabs. JB





## Fauna Survey Group

### How will little critters cope with climate change. The Grampians – Gariwerd long term fire, climate and small mammals project.

*Speaker John White, Centre for Interactive Ecology, Deakin University* 5th April 2022

With climate change and warming, fire is predicted to increase in frequency, there may be an increased chance of drought and also extreme rainfall events.

With highly variable climate how will vegetation growth and productivity respond? In Gariwerd, the climate has been highly variable. Wild fires in 2006, 2013 and 2014 burnt a total of 90% of the park and there were extreme floods in 2010 and 2011. Vegetation is also dependant on soil type and hence productivity is highly variable.

The Grampians Fire, Climate and Small Mammals Project was set up to investigate the roles of fire and climate on small mammal communities in the Grampians-Gariwerd landscape. It was established in 2008 in response to the 2006 Grampians wildfires that burnt half the park.

Small mammal surveys have been conducted for each year except 2020, with 9360 trap nights per year, and there is now 13 years of data. Total captures varied year on year but were highest after high rainfall, at 1170 captures in 2011 and 1501 captures in 2012. This fell to a minimum in 2015 at 329 captures, before rising again. A total of 12 small and medium sized mammals have been recorded.

Species response to fire and rainfall were observed. Heath Mouse numbers build up after fire and reach a maximum after about 10-15 years. They may then decline. Common Dunnart, House Mouse and the Heath Mouse were the earliest species to increase after fire. Slower to build up were the Antechinus species- Agile Antechinus, Yellow-footed Antechinus and Dusky Antechinus and also the Brushtail Possum. Swamp Rat and introduced Black Rat were more influenced by good rainfall and vegetation density than the interval since fire. The Southern Brown Bandicoot increased after the heavy rains of 2012, and showed a preference for long-unburnt vegetation. However, it can also persist and may even benefit from recent fire depending on the location and situation otherwise. The Long-nosed Potoroo showed a similar response with a preference for even longer-unburnt vegetation.

Small native mammal richness is greatest at 15-20 years post fire, but is also highly influenced by rainfall. Climate change is likely to have a significant effect influencing periods of drought, and fire. Most, although not all, species prefer long-unburnt vegetation. Dense understorey vegetation such as near the Wannan River provides a refuge in drought times.

**R. Gibson**



Grampians Landscape

Photo: John White



Heath Mouse

Photo: Richard Forse



Yellow-footed Antechinus

Photo: Ray Gibson



Northern Grampians after the 2014 wildfires Photo: John White



## Day Group

## Grey Headed Flying Foxes

Speaker: Dr. Megan Davidson  
Friends of Bats and Bushcare Inc

The four species of flying-fox found in Australia are: Spectacled Flying Fox (critically endangered), Black Flying Fox, Grey-headed Flying Fox (GHFF) (Vulnerable/Endangered) and Little Red Flying Fox. The Black is found across northern Australia, with the Little Red being more inland than other species. The Grey-headed Flying Fox currently ranges from Bundaberg to Adelaide.

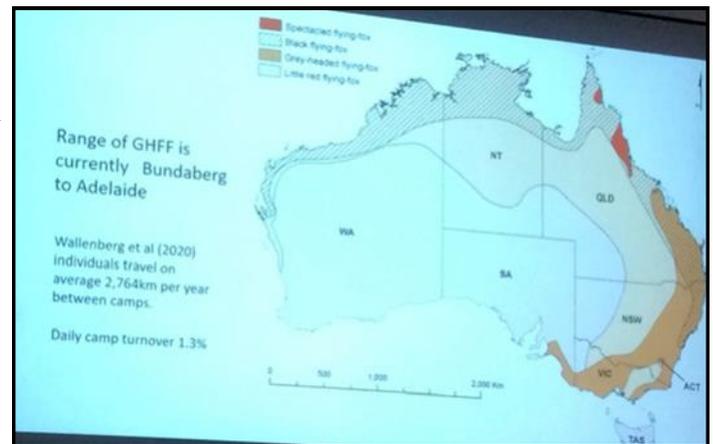
In 1986 a colony of Grey-headed Flying Foxes took up permanent residence in the Royal Botanic Gardens, Melbourne. Over time their numbers built up, especially during the breeding season. Following protests against plans to kill the bats, in 2003 a dispersal program eventually succeeded in relocating the colony to Yarra Bend Park Kew/Fairfield.

There are a number of other GHFF colonies in Victoria. Some, including the Yarra Bend Park colony, are permanently occupied. Others are seasonally occupied, with Flying Foxes leaving the area over winter. GHFFs are migratory and their numbers fluctuate from year to year as they follow food and warmer weather. GHFF play a major environmental role in the health of forests as long-distance pollinators and by dispersing seed. Their preferred foods are nectar and pollen, but they also eat fruit, crushing it and spitting out the fibre and seeds as they move around.

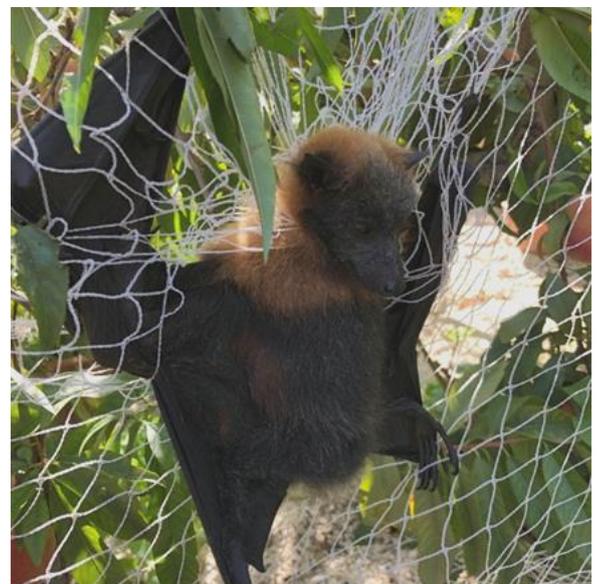
Grey-headed Flying Foxes have suffered a 95% decline since 1900 and are listed on the IUCN Red List as vulnerable to extinction. Their principal threat is from the destruction of their roosting and feeding sites through land clearing and fire. The huge bushfires of 2019/20 devastated their habitat. Drought severely impacts their food supply. In addition they have a slow reproduction rate. Their lifespan averages 8-10 years with females breeding at three years and producing only one young per year. Mating occurs in autumn, with most pups being born between September and November after six months gestation. From January to April the young learn to fly and forage. Not all pups survive. For the first four weeks, latched to the nipple, the baby is carried by its mother when she flies out in the evening to feed. As the young grow they are usually creched in the colony. Some however refuse to be left and, being heavy, may be dropped. Babies often cannot be retrieved as it is very difficult for the mother to take off from the ground. Lost and orphaned babies found in time can be successfully hand-reared by licenced carers.

In temperatures over 40°C Grey-headed Flying Foxes cannot regulate their body temperature and without shade will die. In February 2009 after several days of temperatures over 40°, more than 5,000 GHFF perished. In December 2019, three very hot days resulted in over 4,500 GHFF, mostly young, being lost. Other threats come from barbed wire, power lines and netted fruit trees. For netting to be legal it should only measure 5 mm fully stretched.

Friends of Bats and Bushcare Inc (FOBB) is a volunteer group whose vision is of an Australia whose ancient indigenous species and their role in building and maintaining a healthy environment, is better understood and far better appreciated. The goals of the group are: 'to advance the conservation of Flying Foxes and other bat species, to help maintain the sustainability of their colony sites and to assist in the care of Melbourne's bush and native floral diversity'. Friends of Bats and Bushcare have a long history of protecting the Yarra Bend Park colony. Bats suffering heat stress, juveniles whose mothers have not returned and injured individuals are taken into



Monty, an orphaned GHFF pup

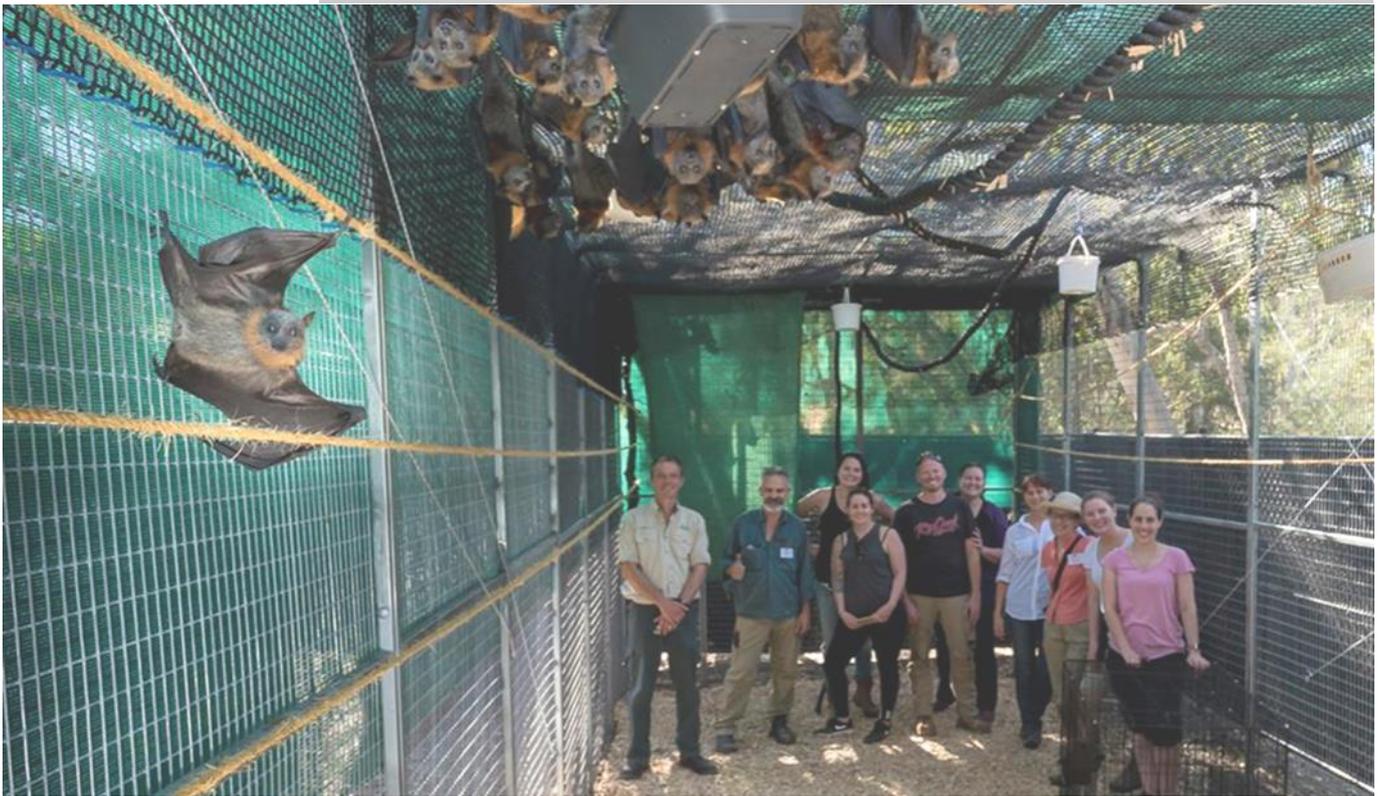


Now made illegal, fruit-tree netting traps and kills GHFF, birds and other creatures.

(Continued on page 12)

(Continued from page 11)

FOBB Yarra Bend Park soft-release enclosure.



care by licenced carers. Hand-reared pups, once weaned and starting to fly, are taken to Fly By Night Bat Clinic at Olinda where they can continue to develop their flying and social skills. When old enough, they are taken to the FOBB's 'soft release' enclosure within Yarra Bend Park from which they are returned to the wild. As GHFF are very social animals they will readily rejoin the colony when released. The group are also active in planting native vegetation in the park and in public education.

Climate change is bringing more heat events and severe storms points to an even more difficult future for Flying Foxes. Megan finished by telling us of a planned project to install sprinklers in order to be able to cool the colony on days of extreme temperatures. She concluded by reminding us that any flying fox found on its own in the daytime will be in trouble and to call Wildlife Victoria on 8400 7300 for assistance.

On behalf of the Day Group I would like to thank Megan for her presentation and for all that she and the Friends Group do. Their work for the survival of the species and the day to day practical work of caring for individuals is a huge and never easy commitment. Please visit the FOBB website for more information.

<https://www.parkconnect.vic.gov.au/Volunteer/group-details-public/?id=d7d85384-dc4b-e711-813b-e0071b676d01>

Joan Broadberry, with special thanks to Megan  
(Photos: M. Davidson)



**Contact  
Wildlife Victoria—  
8400 7300 for  
assistance with Grey-  
headed Flying Foxes and  
other wildlife needing  
help.**

Canopy sprinklers trial at Yarra Bend  
Park