



Understanding
Our Natural World
Est. 1880

Field Nats News No.307

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

Newsletter email: joan.broadberry@gmail.com

(Office email: admin@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

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May 2020

From the President

All photos: M. Campbell

I hope you are all safe and well and able to endure the ennui of the enforced restrictions. Personally, I have never had so much free time with virtually all of my activities curtailed by Covid19. The pandemic has certainly altered our lifestyle to an incredible degree but, as naturalists, we can do a lot to improve our lives until it is resolved.

I am spending my free time wandering around the garden and closely observing the local inhabitants who have always been subjected to more scrutiny than they needed or deserved. The combination of drought and fires has increased the number of native birds in suburbia, particularly parrots and cockatoos. A great cacophony of sound and vibrant



Above: Rainbow and Musk Lorikeets taking control of the water bath.

Below: Interspecies bathing and drinking together without rancour



flashes of colour signalled the arrival of a large flock of Rainbow Lorikeets supported by a similar group of Musk Lorikeets. Even the normally aggressive Noisy Miners retreated and kept to themselves, no match for the aggressive gang of colourful hooligans overwhelming their territory. Photos p2. Sulphur-Crested Cockatoos have been visiting the garden and flocks of Corellas frequently fly over the house. The butcherbirds are continually calling and the frequent calls of Currawongs and Ravens constantly remind me that I am living in Australia. Oddly, there are no sparrows, Indian Mynahs, blackbirds, thrushes or starlings appearing of late. I suspect they have been driven away by the more aggressive Noisy Miners.

There are a few small jumping spiders about and they can be seen patrolling the plants and

Continued p2

For FNN 308, please continue to share with us what you have noted on your walks, reading, garden or wherever.

Do **NOT** use the office or newsletter email address, but joan.broadberry@gmail.com by **Tuesday 7th May**.

See, From the Editor p13

Index	Page
From the President.	1-2
Members' news, photos & observations:	3-4
From the Office	3
Nature Quiz 1:	5
Bookshop News	
Fungi Group News: <i>Australian fungi from Red Listing to On-ground action.</i>	6-7
Natural History Podcasts	8
Extracts from SIG reports given at the last Council meeting	9
Small revegetation areas do count:	10-11
Answers to Nature Quiz 1.	11
Marine Research News: <i>Surveys in the Corner Inlet area.</i>	12-13
From the Editor.	13

Continued from page 1.



A freshly-bathed Rainbow Lorikeet oversees the ongoing bathing activities.



A very subdued and wet Noisy Minor watches quietly from the foliage as lorikeets take control of the water bath after driving him from his ablutions.

pavement searching for prey and/or mates. They do not have it all their own way and I often see paralysed jumping spiders, legs contracted, being hauled around by small wasps, half their size. They don't seem to get airborne but doggedly drag the spiders to a small tunnel or nest as food for their offspring.

I am spending a lot of time peering down microscopes, searching for the tiny organisms living in leaf-litter, moss, compost, soil and pondwater. So, if you own a microscope, drag it out and start looking at the microscopic world around you. There is too much to study in an urban garden to possibly remain bored. Even the water that has been standing for a while in the dishes under pot plants has amazing biodiversity to be seen. *Stentor*, a ciliate, is frequently found in such places.

Have a close look at some of the food stuffs in your pantry; depending on your particular phobias, you may be pleasantly or unpleasantly surprised by what you find.

Pscocids in the oats, weevils in the grains, dermestid beetles in the spices and herbs, moths in the flour and so on. All very interesting for the enquiring naturalist.

Stentor sp in the water tray of a pot plant.

On the other hand, what the eye does not see, the heart does not grieve over. I must confess however, that the possibility of finding uninvited wildlife in the weeties would be neither an enjoyable nor an interesting experience for me. Nevertheless, with so much free time, I am certainly going to be examining the contents of the pantry.

If you are keeping yourself "socially distanced" make sure you have plenty to do and avoid so-called Cabin Fever by getting out into the garden and/or fresh air to see how nature is coping with decreased human interference. If the canals of Venice and deserted tourist venues in general are any indication, Nature is coping nicely with the reprieve. One of the first activities we will run after everything settles down will be a Nature Trivia evening. The questions will be entirely related to the natural world. There is no intention to make the questions too easy so this is a perfect opportunity to study hard for the friendly competition. Look through all of those references that you have purchased from the bookshop and come prepared to offer robust competition with well-prepared grey matter. **Nature Quiz 1— see page 5.**



A tiny Salticid patrolling a Geranium stem seemingly oblivious to the danger of predatory wasps.

Members' news, photos & observations

Thank you to **Ruth Hoskin** for being the *First Responder* to our request made in FNN 306 for members' observations— Ruth's email came at 3.40 pm, 17/3/20, with digital FNN 306 only being sent out from the office at 2.30 pm.

Ruth writes: "*Just thought I'd send some Naturalist News items, made prior to current restrictions, so you can start to work on FNN.*" **Editor:** Thanks so much Ruth

On an afternoon stop at Happy Valley, I was fascinated to watch two Wedge-tailed Eagles circling around each other which then flew off to find some food. What majestic birds! Driving on to Ballan we noted high numbers of Cabbage White Butterflies. Many committed suicide on our windscreen.

Walking to Forest Hill Shopping Centre on the footpath in the hot sun, was a Blue-winged Flower Wasp. I was planning to send a description to Max when I got home to ask for an identification of such a stunning insect, but opened the Newsletter and there was a photo in glorious colour! Thanks Max for such a relevant and interesting *President's Report*.

Editor: Blue-winged Flower Wasps seem to plentiful this season as I have seen a number. Recently I managed to get some photos of a freshly dead insect. Not as good as a live one, of course but the iridescence on the wings is stunning. **Better photos welcome.**



Photo: J. Broadberry

Hungry Baby

Edward Brentnall was a very close second, in the responder stakes, with this evocative photo of an adult Kookaburra sitting with its chick on the veranda of the Brentnall family holiday home, waiting for a handout. Sent at 5.16 pm 17/3/20. The photo was taken some years ago.

Editor: Thank you Edward.

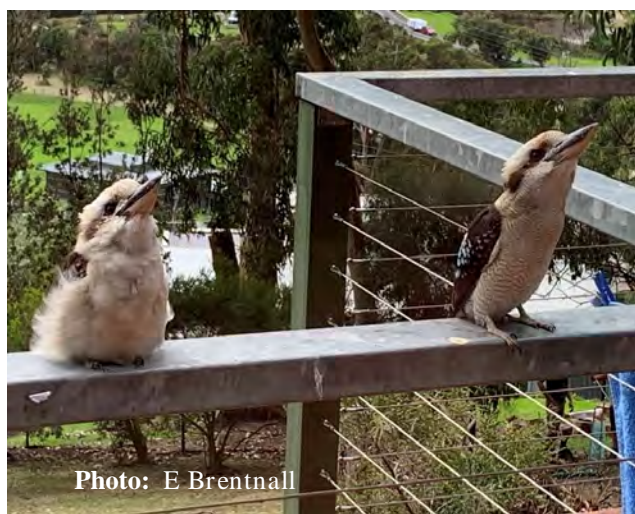
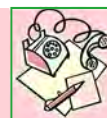


Photo: E Brentnall

From the Office

Dear members, there are several changes to the normal distribution of the FNCV's publications. We have decided not to send out any printed newsletters because it is not possible to assemble a team to collate them. The email version, will of course, continue to be sent or you would not be reading this. We will be posting a letter to all those subscribers who have no email address explaining the situation. If you know anyone in this category and are able to help them by printing the newsletter out for them, we would be very grateful.



The Victorian Naturalist will be ready for publication this month, possibly a little later than usual. The link to it on our website will be emailed to you as usual. The printers of the Vic Nat are currently operating normally and as they also collate and label it, this issue will be mailed as usual to those members who still receive the paper copy, via Australia Post. The editors of *The Victorian Naturalist* are all working from home and future issues will be sent electronically when they are available, but there may be fewer than the usual six editions for the year.

Our other publication, the June to September Calendar of Events, has been postponed until the future is more certain. Kathy, who is in charge of our bookshop, is still happy to send out books via Australia Post to those of you who want to order them. Contact her on bookshop@fncv.org.au.

We apologise that the office, library and hall are all closed to members and any other visitors until further notice.

HOWEVER, I will be available by phone **03 9877 9860** or email admin@fncv.org.au 10 am to 4 pm Monday and Tuesday as usual. Feel free to contact me. It is very quiet in the office by myself, **BUT PLEASE DON'T COME IN.**

Keep safe everyone, Wendy Gare, Administration Officer



Green on green is not easy, this could so easily have ended up on Val's plate!

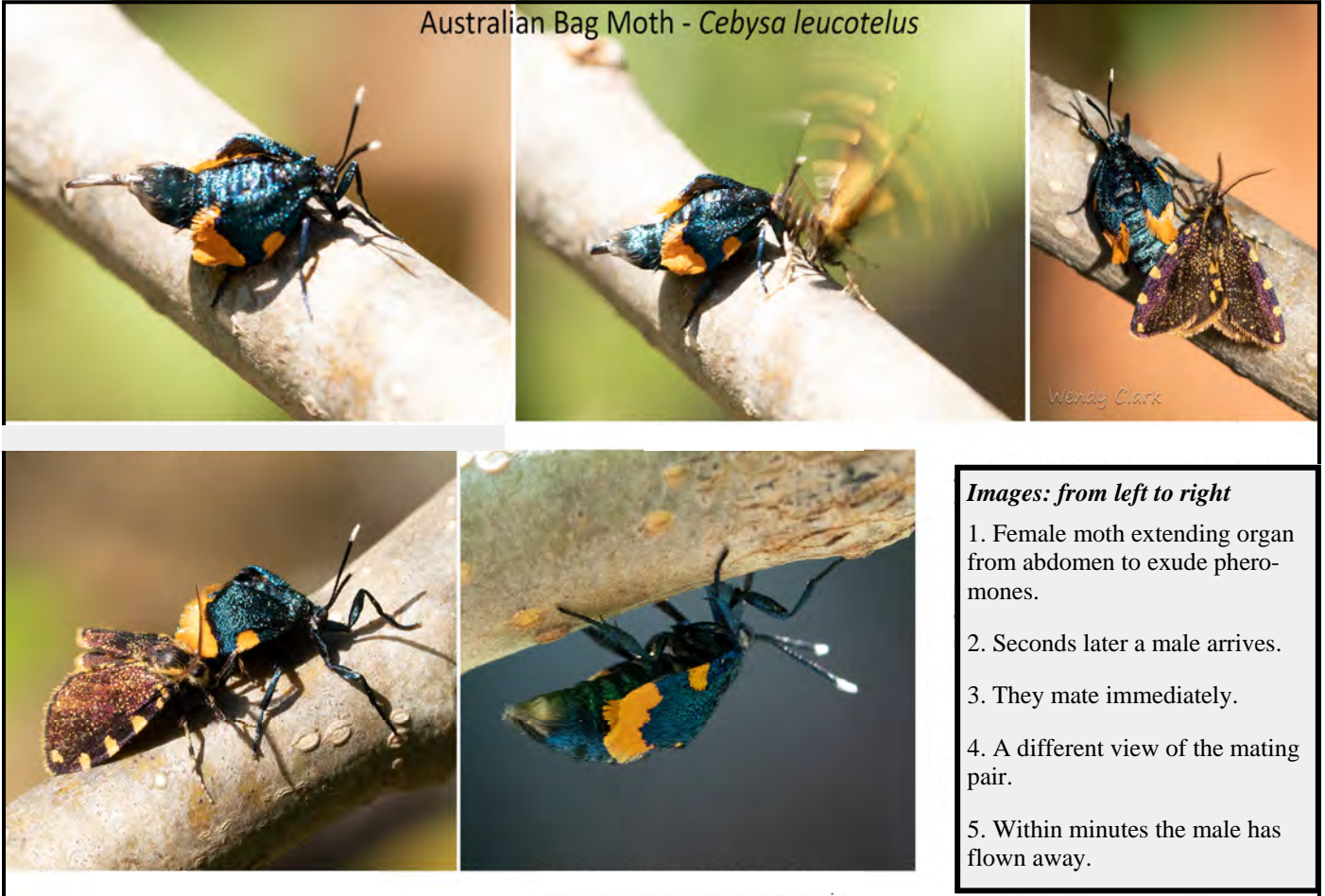
'I was in my garden about 5.30 pm. willy nilly grabbing handfuls of parsley from my small courtyard veggie garden. No spectacles on because I had dashed out to get parsley for my dinner.

But I noticed something odd and stopped grabbing parsley to have a closer look. A lovely green Praying Mantis on top of my parsley.

I raced into the house, got my specs, went back to the parsley and took some photos with my iPhone.'

Val La May

Australian Bag Moth - *Cebysa leucotelus*



Images: from left to right

1. Female moth extending organ from abdomen to exude pheromones.
2. Seconds later a male arrives.
3. They mate immediately.
4. A different view of the mating pair.
5. Within minutes the male has flown away.

Australian Bag Moth mating—*Cebysa leucotelus*

The female of this species is flightless. It has vivid colours and if you try to pick it up it will slip out of your fingers, shedding scales. It walks around rapidly with jerky movements, waving its white-tipped antennae, much like a wasp! The photos show the moments of mating. The female sits on a suitable spot and extends an organ from her abdomen, which I presume emits a pheromone.

The male appeared within seconds. Mating was immediate. It was over and the male gone within minutes.

Try zooming in on Wendy's images, they are absolutely stunning. JB

Wendy Clark

Nature Quiz 1. Compiled by Barbara Burns

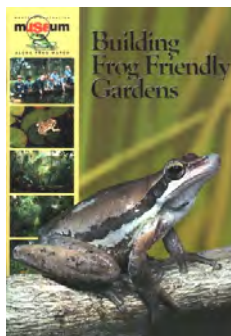
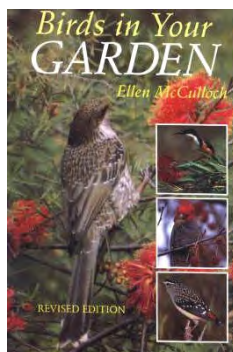
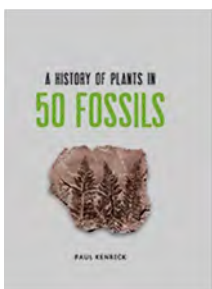
1. Name three Australian bird species that cannot fly.
2. Which is the closest figure to the number of bird species that exist worldwide:
4,800, 7,800, 9,800, 11,800 or 14,800?
3. Which species is thought to be most closely related to birds:
Bats, butterflies, crocodiles, frogs or possums?
4. Name the smallest Australian gull.
5. Are crocodiles amphibians?
6. Which group of mammals can fly?
7. What name is given to egg-laying mammals?
8. What defines a marsupial?
9. What is an amnion?
10. What special method does the Striped Possum use to assist it in extracting wood-boring insects from their tunnels?
11. Where do file snakes get their name from?
12. What colour is the female Eclectus Parrot?
13. What is the common name for the plant *Brunonia australis*?
14. What is another term, starting with G, for the column of an orchid?
15. Which country is the frangipani indigenous to: South Africa, Australia, Thailand or Mexico?

ANSWERS P11.



NEWS FROM THE BOOKSHOP (May 2020)

Our great selection of books is all still available to you, with assistance from the post office. Extra time on your hands? A book can take you places whilst you are still in your home, provide you with information to help fill in the time or help label your photos. Have a browse through our catalogue on the FNCV webpage (www.fncv.com.au) There are plenty of books to choose from. This month there are some new books soon to be released and two other titles that may help bring nature closer to your back door with a little bit of landscaping and appropriate plant selection. As always, if there is a natural history-related book that you are interested in but do not see it in the catalogue, please send me an email and I can order it in. Also, it provides the opportunity for any new and interesting titles to be shared with other like-minded members. To order or inquire about a book, please send an email to, bookshop@fncv.org.au and I will reply as soon as I can. Remember, it is not just members who can purchase from the bookshop, but it is only members that get the 20% discount



Happy reading and stay healthy, Kathy

bookshop@fncv.org.au

For any orders or queries, if you don't have access to email, phone Wendy at the FNCV office on Monday or Tuesday between 9.30 am—4 pm (9877 9860). She will gladly pass on your message to Kathy who will then be in contact with you.



Fungi Group

Australian Fungi from Red Listing, to on-ground action

A presentation by Dr Tom May, Senior Research Scientist (Mycology)

at Royal Botanic Gardens Victoria

2nd March 2020

The International Union for the Conservation of Nature (IUCN) Red List of Threatened Species (<https://www.iucnredlist.org/>) is recognised as the most authoritative guide to the threat status of biodiversity. It uses a set of criteria to evaluate the extinction risk of thousands of species, and at present covers 84,937 Animalia species, 44,032 Plantae, 15 Chromista (e.g. brown algae) and 281 Fungi. More than 30,000 (27%) of the species that have been assessed are threatened with extinction.

IUCN has established 9 categories of status for species, namely Extinct, Extinct in the Wild, Critically Endangered, Endangered, Vulnerable, Near Threatened, Least Concern, Data Deficient, and Not Evaluated. The criteria used to assess the status of a species are: Population Reduction, Geographic Range (extent of occurrence and area of occupancy), Small population size and decline, Very small or restricted population, and Quantitative analysis of data, indicating probability of extinction in the wild. Not all these criteria are applicable to fungi, but Geographic Range (showing extent of occurrence plus area of occupancy), Small population size and decline, and Very small or restricted population, can be used.

Thirty-one species of fungi are listed for Oceania. Three of these are Critically Endangered, 19 are Endangered, and 9 are Vulnerable. Tea Tree Fingers *Hypocreopsis amplexans* is listed as Critically Endangered; it is in decline and restricted to just a few small areas. Less than a hundred individual fruit-bodies have been recorded, and no more than 42 individual fruit-bodies have been found in the largest subpopulation.

Endangered fungi in Australia include *Hygrocybe boothii*, Fischers Egg *Claustula fischeri*, *Heimioporus australis*, *Auriscalpium* sp. 'Blackwood', and *Entoloma ravinense*. The latter has been found only on Kangaroo Island, and fruits after fire. Vulnerable fungi include *Antrelloides atroceracea*, *Macrolepiota eucharis*, *Cyttaria septentrionalis*, *Sarcodon* sp. nov. "Wombat", *Austroboletus viscidoviridis*, *Amanita elongatospora*, and *Bondarzewia retipora*.

Data used to support Red-listing include Taxonomy, Distribution, Rarity, Habitat and Host preference, Number of individuals, and Trends (declines). It is essential to keep collecting distribution data, because at this stage there are very few records of most fungi. It takes years to establish the true distribution of a fungus. Fungimap records, which began in 1994, have accumulated sufficient data to calibrate rarity. For example, there are now more than 2000 records for *Amanita xanthocephala*, but only eight for *Hypocreopsis amplexans*. Tom reminded us that when photographing fungi it is important to show all characters – just photographing the top of an agaric, for instance, is often inadequate for identification purposes.

Continued p7



Auriscalpium sp. 'Blackwood', discovered at Olinda by Reiner Richter in 2019. This is only the second population of this very rare species, which is assessed as Endangered by IUCN.

Photo R. Richter.

(Continued from page 6)

Soil testing, using short DNA sequences, has contributed to distribution data about some fungi. It is interesting to note that the truffle fungus *Ulurua nonparaphysata*, initially found near Uluru, has now been detected in soil samples from northern Western Australia, the Tanami Desert and the Channel Country in Queensland, as well as from Uluru itself.



DNA data also contributes important information to taxonomy, and is becoming necessary to distinguish closely related species in many groups of fungi. DNA is also useful to detect population structure, but population genetic data are available for very few native Australian fungi. One example is the large *Laccaria* restricted to stands of *Nothofagus* (*Laccaria* sp. A), which has differences in gene markers between populations in Victoria and Tasmania.

Species distribution modelling is another tool that may assist in understanding the distribution of common species, and has potential for predicting undiscovered populations of rare species.

Actions in NSW – *Camarophyllopsis kearneyi*

Camarophyllopsis kearneyi is known only from its type locality in Lane Cove Bushland Park, Sydney. One management site has been identified for this species under the Saving Our Species program, which aims to secure threatened species in NSW. A targeted recovery strategy has been developed for this species. (Several *Hygrocybe* species in Lane Cove Bushland Park also need protection.)

Actions in Victoria – *Hypocreopsis amplexans*

Hypocreopsis amplexans was discovered 1993 in long unburnt patches of tea tree in Adams Creek Flora and Fauna Reserve at Nyora. It is a parasite on a species of *Hymenochaete*, and is sparsely distributed. It was formally named in 2007, and is listed in the *Flora and Fauna Guarantee Act*, Victoria. In 2017, a separate population was discovered at Launching Place. Aerial photographs of places where this fungus has been found show how seriously development (especially sand-mining) is encroaching on its habitat.

Protecting *H. amplexans* involves: surveys of suitable habitats; keeping an inventory of and monitoring known populations by tagging individual fruit-bodies; learning to understand the micro-environment, habitat and host species; studying the genetics of the populations, and investigating characteristics such as over what period of time each fruit-body produces spores. It is also desirable to establish this fungus in pure culture and consider how it could be rescued if its habitat is threatened by fire. One area of interest for surveys is the former Holden Proving Ground at Lang Lang, not far from Nyora, which includes significant areas of bushland. Given the small amount of native vegetation remaining on the West Gippsland Plain, it is highly recommended that this remnant is retained as bushland and conserved.

For current research on Tea Tree Fingers at Royal Botanic Gardens Victoria the following are needed: Photos and written records of *H. amplexans*; and collections of *Hymenochaete* species.

Eventually, it would be advantageous to carry out a comprehensive threat assessment across all 15,000 fungal species (including Lichens) using Common Assessment Methods. To protect both fungi and plants, it is also advisable to establish Fungibanks to complement Seedbanks, because most plants need fungi in order to grow properly.

Tom drew attention to two websites where new Australian species can be viewed:

Taxonomy Australia is collating new species described each year: <https://www.taxonomyaustralia.org.au/new-species-2019>

The National Species List for fungi can be viewed at: <https://fungi.biodiversity.org.au/nsl/services/>

In conclusion, Tom urged everyone to join or support Fungimap, and noted that Fungimap distributes a free e-Newsletter, that can be signed up for on their website (<https://fungimap.org.au/get-involved/subscribe/>).

Thank you to Tom for a very interesting and informative evening, and for help in preparing this report.

Virgil Hubregtse



Many thanks to those who helped collate and label FNN 306

Edward Brentnall
Hazel Brentnall
Andy Brentnall
Joan Broadberry

As there will be no printed editions of FNN until further notice, there will be no need for collation.

Radio New Zealand: Kakapo Files

<https://www.rnz.co.nz/programmes/kakapo-files/story/2018676703/kakap-night-parrot>

The scientific name for kākāpō means 'owl face - soft feathered' (*Strigops habroptilus*). Photo: Jake Osborne (source: <https://www.rnz.co.nz/programmes/kakapo-files/story/2018676703/kakap-night-parrot> HYPERLINK "<https://www.rnz.co.nz/programmes/kakapo-files/story/2018676703/kakap-night-parrot%20accessed%2022%20March%202020>" accessed 22 March 2020).



Lois Martin wrote:

"I would like to share my interest in natural history podcasts with other members. Perhaps listening to a podcast will fill the gap of not listening to a talk at meetings."

This series of podcasts is from Radio New Zealand and is presented and produced by Alison Ballance who explores one breeding season (in 2018 to 2019) of the endangered kakapo. There are many episodes of varying length including interviews with staff and experts in the field. There is a week by week progress report of mating, breeding and chick rearing as well as the conservation challenges at each stage. New Zealand has a reputation for innovation and excellence in the field of conservation and this program is enlightening as well as informative.

Alison Ballance has been working in this field for some of years and is the author of the book: *Kakapo rescued from the brink of extinction*.

Plants: from roots to riches

<https://www.bbc.co.uk/programmes/b048s3my/episodes/downloads>

"Kathy Willis considers our changing relationship with plants over the last 250 years – from tools to exploit, to objects of beauty, to being essential resource we must conserve"

This series of podcasts (25 fifteen minutes episodes or 5 omnibus episodes) is available indefinitely from the BBC. Based on interviews with staff at Kew Gardens in London and other experts, the series explores the history of plant exploration and discovery, the role of plants in economic development and the challenges faced in the future around genetic diversity and climate change.

It is very informative and enjoyable to listen to and alerted me to many issues and aspects of plant biology I was not aware of.

Extracts from SIG reports given at the last (Zoom) FNCV Council Meeting

Geology Group: The Geology SIG meeting on February 26th was addressed by Ruairidh Duncan, an Honours student at Swinburne University. His talk was titled *Victoria's Polar Dinosaurs of the Early Cretaceous (130–103 Mya)*. The presentation ranged further than just Victoria, encompassed all northern and southern areas which were then in arctic regions. Victoria was at that time, attached to polar Antarctica. Ruairidh gave a very comprehensive and detailed description of the many fossils which have been found in Russia, Canada and Alaska, as well as the Australian finds. He explained what the dinosaur environments and behaviours may have been like. As examples, some of the plant-eating Arctic dinosaurs had young which appear to have lived in the polar regions all year round (unlike modern migratory caribou), despite the many months of darkness they would have endured. Many who presumably didn't migrate, such as some Victorian dinosaurs, had large eye sockets to see in the dark nights of winter, or appear to have evolved to be significantly larger or smaller than their non-polar relatives. Polar Victoria included many animals no longer found elsewhere so it's conceivable that it was an isolated environment. And of course, evidence of feathers on these dinosaurs have been found. As well as Victorian fossils, those found in Queensland, NSW, New Zealand and Antarctica were also explored and some were also found in Antarctica.



The detail and graphics provided by Ruairidh were most impressive, demonstrating a thorough knowledge of and great enthusiasm for his subject. A most interesting presentation given to 36 members and visitors.

Ruth Hoskin

Juniors' Group: On the 28th February, the Juniors' had Paul Villers, who manages wind farms, speak to us about renewable energy and the environment. It was simply an amazing talk. This is a presentation that I believe should be heard by other Special Interest Groups. Twenty members attended the meeting.



On the 15th March, the Juniors were fortunate to have an excursion to Black Hill Reserve with William Terry as leader. The activities included checking nest boxes for Brush-tailed Phascogales, learning from William the most up-to-date information regarding these amazing creatures, bushwalking and sightseeing around one of the biggest boulders in Victoria. Fourteen people attended the excursion with four non-members. This reserve is truly beautiful. The children were quite happy exploring and climbing the big rocks. They also were quite excited when they spotted three echidnas during our walk.

Water testing at Blackburn Lake, a visit to Melbourne Polytechnic and Easter camp activities were cancelled until further notice. **Ed.** *The fantastic Juniors' April newsletter has been emailed to all club members. [Prepare to be amazed.](#)*

Patricia Amaya

Marine Research Group: Scheduled field-work was carried out at various locations at Corner Inlet and Port Campbell. *See pages 12-13.*



Welcome

Thanks to the editorial and layout team who put together FNN 307

Joan Broadberry
Wendy Gare
Sally Bewsher

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

Aisling Mattock, Euan Mattock, Callum Mattock, Emma Mattock, Andrew Mattock, Owen Martin, Aerial Butterfield, Cassia Shi, Lisa Jie Tan, Stephen Hall, Evan Gwilym and Suzanne Gwilym.



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

Small revegetation areas do count, (Biodiversity in my garden)

Geoff Boyes, Mansfield Vic. (All images G. Boyes)

First a bit of background. My wife and I moved into our house in Mansfield in 2001; only a small block by country standards - One acre, with lovely rural views and close to town. The front yard was pretty bare except for a few established trees (Cypress, Elm and a couple of others), which we have been gradually replacing. Having a shared love of our natural environment and growing our own produce, we talked about and then began working on our garden; a vegie garden and more fruit trees in the back yard and revegetation with locally indigenous species in the front yard, (which is roughly about a third of an acre). We began the front revegetation area by planting Eucalypts and Wattles (Candlebark, Redgum, Yellow, Grey and White box, as well as Blackwood, Silver wattle and Varnish wattle)

As we live very near Fords Ck., we tried to plant a mix of species suitable for the Ecological Vegetation Classes (EVCs) as mapped for our region, and also suitable for the hard and dry clay soils we have on the property, particularly the front yard. As the years followed, we learned which species did best and which did not. In subsequent years we have also established many understorey species, including Poa, Dianella, Burgan, TreeViolet, Silver Banksias and more Eucalypts. We very much tried to establish some varied habitat, which we were able to do.

It's also worth mentioning that the local Catchment Management Authority had recently done some revegetation work along the creek adjacent to our property (around a kilometre or so in length), around 1998. That also encouraged us to plant more habitat so the native fauna could use both revegetation areas; the creek line vegetation and our front yard, for habitat. With only 5- 50 metres between both, this would allow small birds to fly between the two areas and animals to traverse in relative safety, providing a linked and usable habitat area.

Fast forward to around 2010 -2013 - with the trees and understorey well established, we began to notice a lot more small birds using our front yard; Willy Wagtails, Grey Fantails, Superb Fairywrens, Yellow-rumped Thornbills, Silvereyes and the occasional Spotted Pardolote (yellow rumped). **Photo 1.**

That's when I first began to record bird species, both itinerant and resident. Since then, we have seen many large and small birds come and go, some very special birds, including a pair of Scarlet Honeyeaters, male and female Golden and Rufous Whistlers. So far we have recorded around thirty-eight species. It still is a joy to see new and older recorded species come into our yard; to watch some of them nest and raise young (Striated Thornbills) and I get to take some great photos without leaving home!



Photo 1. Spotted Pardolote (*Pardalotus punctatus*), gathering nesting material from a young Red Stringybark in our front yard revegetation area.



Photo 2 . Black Wallaby (*Wallabia bicolor*) next to a Candlebark in our front yard.



Photo 3. Eucalyptus Leaf Beetle (*Paropsisterna intacta*) on a Candlebark.

We've had some surprising animals come into our yard over the intervening years. We have seen five Black Wallabies at one time in the adjacent paddock and creek revegetation area and have had several of them visit our back and front yards. They mostly munch on our newly established Silver Banksias and other tasty treats! **Photo 2.**

We have also seen a koala in a Eucalypt in the creek revegetation area and over the last couple of years a small group of wombats have established themselves along the creek.

Around 2017, I began to record terrestrial invertebrate species in our garden and front revegetation area, initially for the BowerBird Citizen Science web-

(Continued on page 11)

(Continued from page 10)

site and now for iNaturalist (Atlas of Living Australia).

To date, I have recorded and photographed forty-nine different species of beetles, including: Longhorn Beetles (*Enchoptera sp.*, *Ancita sp.*, *Phoracantha semipunctata*), Spider Beetle (*Ptinus sp.*), Pintail Beetle (*Hoshihananomia leucosticta*), Eucalyptus Leaf Beetle (*Paropsisterna intacta*). **Photo 3.**

I have also recorded:

- Fourteen species of native flies including: Robber Flies (*Asilidae* family), Dagger flies (Super-family *Empidoidea*), Crane Flies (Family *Tipulidae*), Stiletto Flies (*Taenogerella elizabethae*). **Photo 4.**
- Ten species of wasps including: Gastreuptiid Wasp (*Pseudofoenus sp.*), Zebra Spider Wasp (*Turneromyia sp.*), Mud-dauber Wasp (*Sceliphron laetum*).
- One species of Damselfly and four species of Dragonflies, including: Australian Emerald Dragonfly (*Hemicordulia australiae*), Common Shutwing Dragonfly (*Cordulephya pygmaea*), Wandering Ringtail Damselfly (*Austrolestes leda*). **Photo 5.**
- Six species of bugs, including: Orange Assassin Bug (*Gminatus australis*), Jewel Bug (*Morbora sp.*), Stilt Bug (*Chinoneides tasmaniensis*), Broad-headed Bug (*Riptortus sp.*).



Photo 4. Stiletto Fly (*Taenogerella elizabethae*) on a Blackwood leaf)



Photo 5. Wandering Ringtail Damselfly (*Austrolestes leda*)

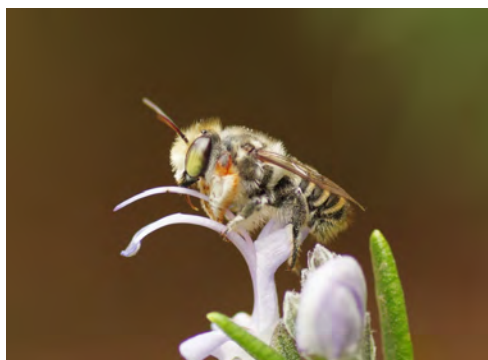


Photo 6. Six different species of native bees have been identified in the garden.

Plus several species of moths, butterflies, caterpillars, leaf hoppers, ants, lacewings, mantids, lerp, native bees, (**Photo 6**)

katydids and

grasshoppers. Oh, and microbats as well.

So, as you can see even a small area of revegetation provides habitat for a lot of species, which due to increasing habitat losses (land clearing), climate change and increased chemical use, is critical for the survival of many species and has been a valuable and very rewarding undertaking.

Geoff Boyes

Answers to Quiz 1.

1. Cassowary, Emu, Penguin or Tasmanian Native Hen.
2. About 9,800.
3. Crocodiles.
4. Silver Gull.
5. Crocodiles are reptiles, not amphibians, for several reasons. Firstly, they lay their eggs on the land, not in the water. The eggs hatch into small but fully formed crocodiles, whereas amphibians go through a larval stage. Finally, at all stages crocodiles require air to breathe, using lungs, whereas amphibians breathe through their skin as well as through lungs.
6. Bats.
7. Monotremes.
8. It is a mammal whose babies are born before they are fully developed and then continue to grow in the mother's pouch.
9. A thin membrane forming a closed sac about the embryos or foetuses of reptiles, birds and mammals containing the amniotic fluid.
10. It uses its elongated fourth finger.
11. The file snake is an aquatic snake. It gets its name from its rasp-like scales which are thought help it grip slippery fish & other prey.
12. Red and blue.
13. Blue Pincushion.
14. Gynostemium.
15. Mexico (and Central America).



How did you go? /15



Marine Research Group Survey: Corner Inlet area, 15th—19th February 2020

For our first field trip of 2020, the MRG spent several days investigating the soft sediments at Corner Inlet and Shallow Inlet, South Gippsland. The sites visited were Foster Beach, Port Welshpool, Toora Beach and Shallow Inlet, with a list of species observed compiled for each. The weather was quite challenging, with strong winds on most days and a downpour on the last. This reduced the amount of time spent at two of the sites.

Port Welshpool was the most interesting and productive site, which was also the case on our previous visits to the area. Noteworthy finds at Port Welshpool include: the large, rarely encountered sea star, *Luidia australiae*; good numbers of the Wavy Volute sea snail, *Amoria undulata*; the large sea cucumber, *Paracaudina cuprea*; an attractive and rarely encountered stalked ascidian, *Sycozoa pulchra*; a heart urchin, *Echinocardium cordatum*; a very handsome specimen of the snapping shrimp, *Alpheus villosus* and three specimens of *Sinum zonale*, a very rarely seen sea snail with a proportionately small shell and large foot. I suspect this was a highlight of the trip for many, as most members of the group had not seen *Sinum zonale* before. The shell of an interesting mussel, *Modiolatus victoricae*, was also found at Port Welshpool. A report by Joan Hales about this can be found in FNN No. 306.

At Foster beach we found several medium sized, mottled anemones attached to sea grass and at Port Welshpool a few small, bright orange anemones were seen – both appear to be un-named. Corner Inlet is apparently the Victorian stronghold for *Thaliota conica* and good numbers of this sea snail were seen at Foster Beach. The nocturnally active bubble shell, *Bulla quoii*, was seen at several sites and was much more common than usual. *Ebalia crassipes*, a small pebble crab with a minutely scabrous shell, was also seen at several sites. This was a new species for me. The use of a bait pump enabled us to find three species of callianassid shrimps: *Biffarius arenosa*, *Biffarius ceramicus* and *Trypaea australiensis*, all of which burrow into the soft



Luidia australiae (Sea star) Photo: John Eichler



Echinocardium cordatum (Heart urchin) Photo: J. Eichler

Continued page 13



Sycozoa pulchra (Stalked ascidian) Photo: John Eichler



Sinum zonale (Sea snail)

Photo: Leon Altoff

*Ebalia crassipes* (Pebble crab)

Photo: John Eichler

(Continued from page 12)

sediment. For me the highlight of our visit to Shallow Inlet was a single specimen of the pink, Frilled Venus bivalve.

John Eichler



Left and above: MRG members surveying under the Port Welshpool pier and near the channel markers.

Photo: Joan Broadberry



Surveying at Shallow Inlet Photo: Joan Broadberry

*Bassinia disjecta* (Frilled Venus) Photo: John Eichler

From the editor April 2020 seems exactly the right time to pen my first *From the Editor*. I began a members' page many years ago and have received wonderful contributions from our 'regulars'. However this month my inbox has been overflowing with natural history notes from many more readers. Your contributions have astonished me with their breadth and depth. Thank you for responding so magnificently to my plea for a way to keep FNN alive. FNN 307 has been produced using members' observations and nature notes in the order in which they have arrived. There are several more pages of material ready to slot into FNN 308, so don't worry if you do not see your work in this issue. There will be a long stretch ahead of us.



We no longer have speakers and excursions, but instead have a unique opportunity to share our knowledge and learn from each other. I have already made many interesting natural history discoveries and taken photos on my own local walks, some of which I hope to include in future issues. I have had to adapt to working at home and have been on an almost vertical learning curve. There have been many positives. I have had to problem-solve, learn new technologies and win (or lose) battles with wifi.

I want take this opportunity to pay tribute to Max Campbell for his efforts, over several days, training the FNCV Council to use the Zoom app. His persistence and patience will never be forgotten. We call it turning "Baby Boomers into Baby Zoomers". Wendy Gare, always a tower of strength to FNN, has guided me through many tech minefields. A huge thank you also to Sally Bewsher for her superb 'distance proofreading. My final message, is **please continue sending in your fabulous observations.**

Use my home email: joan.broadberry@gmail.com

Keep safe and busy. Cheers, Joan