

NEWSLETTER JULY 2024

Next Talk

Thursday 11 July – 7.30pm Spice, trade and botanicals: A tour of the Malabar Coast, India

Speaker - Murray Fletcher.

Postponed Committee Meeting – 6.30pm

Face to face at Nguluway Ngurang Senior Citizens Centre North Room (Opposite side of carpark to Harris Farm)

Excursion Sunday 14 July Cookamidgera Precinct of the South West Woodlands Nature Reserve

Meet at Orange High School Bus Bay at 9am.

Next Meeting

Thursday 11 July, 7.30 pm - Spice, trade and botanicals: A tour of the Malabar Coast, India with Murray Fletcher.

India is a fascinating country with an ancient history, beautiful wildlife and flora, loads of people and cows. Twelve months ago, Vicki and I joined a Jon Baines organised tour visiting botanic gardens, national parks, universities and other institutions undertaking botanical research in the SW corner of the subcontinent. Our small tour group, comprising Carolyn Fry (tour leader), two sisters from the UK and five Australians, was able to access areas not generally available to the general public. Along the way we enjoyed fabulous Indian cuisine (including a street food tour of Madurai) and visited palaces, temples and historical sites using every mode of transport that Prince Charles could arrange for us.

During his talk Murray will reveal details of the natural world they saw as well as the where and what of this photo from their trip.



Photo Vicki Glover.

<u>Next Excursion</u> – Sunday 14 July Cookamidgera Precinct of the South West Woodlands Nature Reserve.

The Cookamidgera Precinct is north-west of Eugowra off the Parkes-Eugowra Road and west of the Bumberry section of Goobang National Park. Cookamidgera was a State Forest until January 2011 when it was declared part of the South West Woodlands Nature Reserve. It is 547 hectares and has no recorded history of fire. Usually, it is very dry but with the recent wet seasons it will probably be in good condition.



Wooded area of Cookamidgera Precinct, 6 July 2021. Photo Rosemary Stapleton.

The area contains a range of vegetation communities including Semi-arid woodland, Dry Woodland and Open-forest, Mugga Ironbark and White Box – White Cypress Pine

Woodland as well as Grassy White Box - Kurrajong Woodland. In July last year several Acacia species were flowering along the road north of the reserve so they may be out this year. There is usually no vehicle access to the reserve however a key has been organised so we will be able to drive through the reserve along the central fire trail.

Please bring water, lunch and any other food or drinks that you need. Please wear sturdy footwear, long sleeve shirts and pants.

Meet at Orange High bus bay at 9.00am to organise car-pooling. 4WDs preferred. It will be a full day excursion as the reserve is over an hour away from Orange via Eugowra.

<u>Last Talk</u> – Thursday 13 June Woodland Birds on Farms – rescuing Regent Honeyeaters in the Central Tablelands with Viv Howard and Beau Palmer, Senior Land Services Officers, CT LLS. Report by Rosemary Stapleton.

The reality of species extinction, not just in local areas but of a species, was brought home by Beau and Viv during their talk on Regent Honeyeaters. And it may not be in 20 to 30 years' time but in the next 10-15 years. However, it wasn't all doom and gloom as they outlined the measures being taken to save this critically endangered species as well as recent research findings that are informing their work. Regent Honeyeaters are a striking yellow and black medium sized honeyeater. They are nomadic and move around different habitats in the landscape looking for flowering eucalypts as they are primarily nectar feeders. Long riparian areas with River Sheoaks are also needed and flowering Needle-leaf Mistletoe, in the River Sheoaks, is also an important food source.

There are reports from 1838 to 1909 of flocks of thousands of Regents. When the Woodland Birds on Farms Program started 5 years ago it was estimated there were 500 birds. Now there are probably only 250 birds in the wild. It is hard to estimate numbers as they are not seen for many months of the year, and they are too small for satellite trackers to be fitted to them. Beau showed that their historic range was along eastern Australia from Brisbane to Adelaide. This has contracted to three mostly isolated populations with the strongest being in the Blue Mountains. Those west of Armidale and at Chiltern in Victoria are now less than 50

birds each which is considered unviable as a breeding population.

Regent Honeyeaters breed in pairs from August to October. When breeding they are aggressive and though protective of trees that are flowering are no match for the more aggressive Noisy Miners. The Noisy Miners are now listed as a key threatening process and one recovery strategy in the Capertee is to remove the miners from areas where breeding is occurring. Possums also predate nests, so collars have been attached to trees with nests. The habitat they use is Box Gum Grassy Woodlands and the decline is largely due to habitat clearing for cropping and other agriculture. Only 0.2% of these woodlands are now in a suitable condition for Regents. One of the recovery strategies is planting more habitat but it will only be suitable in 50 to 80 years' time. The plantings in the Capertee, done by BirdLife Southern NSW and locals, are a good start but they have only been done in the last 30 years. A lesson learnt from some of the early plantings of eucalypts is that they are attractive to Noisy Miners, so they have been thinned and augmented to make more suitable habitat. This work also benefits other woodland species.



Captive bred Regent Honeyeater showing leg rings. Photo Beau Palmer.

The strengths of the Recovery Program are the partnerships. The Difficult Bird Research Group, from Australian National University, has done modelling to help identify the best ways to intervene to prevent extinction. These include:

• Increase the carrying capacity of the landscape by improving the structure and extent of suitable habitat in priority locations. This is in partnership with

- Landcare and the LLS has funds to work with private landholders.
- Protect nest sites and breeding habitat to increase the rate of successful nests and the number of birds born in the wild. At a landscape scale the birds tend to return to the same sites, but nests are hard to find.
- Captive breeding and modelling the best timing for release.
- Increase the ID skills and woodland/habitat management amongst landholders and the community.



Community planting day in the Capertee. Photo Beau Palmer.

The captive breeding occurs at Taronga Western Plains Zoo. While breeding success is poor in the wild Regents breed well in captivity, but not enough birds can be bred to replace the decline in the population. Twenty birds have been released in the Capertee in the last 4 years and Viv and Beau have been excited to find them breeding. Over a longer period 285 captive breed birds have been released at Chiltern. Released birds can be identified by the metal and coloured rings placed on their legs. Initially it was found that captive breed birds had not learnt their song when young, so females were unable to find males and pair up for breeding with wild birds. Near some nest sites the Program has provided supplementary feeding.

Regent abundance is higher when mistletoe is in the landscape because of their preference for large Sheoaks with Needle-leaf Mistletoe. A new strategy being trialled is the inoculation of trees with mistletoe seeds. We watched videos of how the seeds, with their gooey surface, are wiped onto the branch of a tree, which imitates what a Mistletoe Bird does. However, it must be done quickly as the seeds deteriorate soon after they are picked.

Viv explained the monitoring that has been done. This has included systematic surveys for birds and habitat at 335 sites across the Regents range for the last 10 years. As there are so few birds it has been difficult to find any and in some cases the researchers have found the habitat has gone at some of the sites. Monitoring of the nine nest sites found last year was done with motion sensor cameras. The program is also recruiting a 'Black and Gold Army' of community people to look for Regents and report any they find. In August 2023 three wild birds were reported which resulted in follow-up searches finding a total of 30 birds and nine breeding pairs. They are also keen for people to report Needle-leaf Mistletoe on iNaturalist. A 2-day training workshop is planned in August for a small number of people. Maybe they will be lucky like someone in the Hunter who saw 12 Regents with some Swift Parrots last week. A birding Jackpot!



Viv and Beau at a community information day. Photo Viv Howard.

Viv and Beau's talk showed how lucky the Regent Honeyeaters were to have such committed workers and researchers trying to save them from extinction. Their work will continue with the Program being funded from the National Heritage Trust until 2028. You can do your bit by learning the Regents call and keeping your eyes open for the birds and report any you see.

What to do if you see a Regent Honeyeater - BirdLife Australia

- Include the location of the bird (coordinates or address)
- Include photographs of the birds (if you can get one)
- Describe the leg colour band combinations
- Specify the number of birds observed
- Document the behaviour of the birds
- Include any other relevant information.

<u>Last Excursion</u> – Sunday 16 June 'Koolewong Arboretum', Chris Pratten's **Bush Block at Amaroo** with Michael and Jenny Pratten.

Report by Jenny and Dick Medd.

Our excursion on June 16th was not the Society's first visit to "Koolewong", Borenore, home to the late Chris Pratten's Arboretum. now affectionately known as "Dad's scrub". There has been quite a gap since the first excursion there back in September 1975, followed by others at the end-of-year Christmas barbeques in 1976 and 1977, and further trips in October 1980 and 1991. Rain stymied the last planned excursion in July 2010; so, it was pleasing to be greeted by a crisp but sunny winter's day to re-visit this rather special place. Some of the OFNCS members who gathered at the bus bay for the visit had memories of those early days. However, everyone had a chance to be impressed by the early photographs that Chris's daughter, Jenny, who joined us at the site, had brought along to share.

Our very generous and enthusiastic host Michael Pratten, Chris's son, proudly shared a wealth of knowledge as he led us through the scrub, identifying the plantings that his father had instigated. Chris had brought in a wide range of native plants (trees, shrubs, and ground covers), some sourced locally, some from further afield, but almost all now flourishing and many self-propagating. Michael mentioned his Dad did regret not having been more discerning with his choice of species and wished he had chosen only species of local provenance.

The abundance of existing Stypandra glauca plants reinforced why this part of the property had originally been identified as "Bluebell Hill". Lots of hard work and care went into the extensive early plantings and Michael made a special point of showing off some of Chris's special favourites: Spotted Gum (Corymbia maculata), Lemon Scented Gum (Corymbia citriodora), Red Flowering Gum (Corymbia ficifolia), Scribbly Gum (Eucalyptus rossii), Sugar Gum (E. cladocalyx) and several others including a beautiful weeping Allocasuarina, a Callitris and a Banksia. Although the trees planted 40-50 years ago have attained a substantial height, one could not fail to be impressed by the remaining, older Eucalypts -simply handsome remnant specimens!



The country before the arboretum. Pratten family photo.



The regeneration area in 1978. Pratten family photo.



In the midst of the arboretum, 16 June 2024. Photo Jenny Medd.

What had once been just another roughly 200 acres of open, grazed grassy woodland, is now a delightful, somewhat eclectic, area of bush supporting a wide range of native vegetation - a true "arboretum". While not a lot of plants were flowering, we identified many of the Acacias (A.fimbriata, A.baileyana, A.vestita, A.cultriformis, and A. podalyriifolia), as well as Rusty Spider Flower (Grevillea floribunda), Hakea decurrens, the pale pink-flowered Rock Isotome (Isotoma axillaris), a beautiful and locally unusual purple-flowered Kangaroo Apple (Solanum aviculare) and another Solanum that Michael and Dick quibbled about. Michael later conceded his mistake

about it being the weed, Apple of Sodom, and accepted Dick's identification of Narrawa Burr (Solanum cinereum)! The many mats of the Hairy Apple Berry (Billardiera scandens) particularly struck Dick, the likes of which one rarely sees in local remnants. Many of the shrub plantings are regenerating, with one or two promiscuously volunteering within the arboretum; Chris badgered Michael to thin them out ... but Michael is equivocating. However, it was obvious that Michael holds a passion for this arboretum, passed on from his father, that will see its conservation into the future. Moreover, he is continuing to plant elsewhere on the property to build corridors to link with the arboretum.



Jenny beside her Dad's favourite Spotted Gum (Corymbia maculata). Photo R Stapleton.

Fungi also featured, and some eyes peeled for orchids spotted two different patches of greenhood leaves, what looked like a leaf of the Waxlip Orchid (*Caladenia major*) and possibly a few Thelymitra leaves. Bryophytes also featured, with one possible *Riccia* sp. sighted.

After scratch marks up the trunk of a eucalypt were noticed Michael spoke about the arboreal mammals that have been seen. This included Brushtail Possums as well as Sugar Gliders, including one rescued after it had been caught in a fence. As is evident throughout regional remnant lands, the arboretum now also acts as a refuge for the local macropod population which has grown to somewhat unmanageable numbers. Their sheer "physicality" concerns Michael because of their noticeable impacts upon the bush. Rabbits remain a problem but are basically held in check by waves of *calicivirus*.



Michael (right) explaining an aspect of the arboretum. L to R – Dick Medd, Bruce Hansen, Helmut Berndt, Jenny Pratten, Sandra Chrystall, Helen Croke, Michael Pratten. Photo Jenny Medd.

As well as discussions about the botanical issues, being treated to some explanations about the geology of the site from Dick and Peter provided Michael with information he'd not previously understood. The rocks on his hill were not just sedimentary material, a few million years old, but seriously old (probably around 400 million years) sandstone that had underlain the supercontinent Pangea.

Following our tour through the bush we enjoyed lunch together, sitting in the sunshine around the campfire (very expertly stoked by Nigel) with barbecued sausages generously provided by Jenny and Michael. It had been an excursion worth waiting for and Dick offered a resounding vote of thanks and appreciation to both Jenny and Michael. A group photo is at the end of the newsletter.



The view south from the arboretum to Gaanha bula Mt Canobolas. Photo R Stapleton.

OFNCS Committee News

Welcome to new members Yvette Black and her family.

The June committee meeting was postponed due to the Deep Listening to Nature Talk by author Andrew Skeoch at the library. By all accounts it was fascinating, and his book is a unique read and listen.

The committee will be considering several ideas that have been suggested to celebrate the 50th anniversary of the Society. We are looking for volunteers to help with organising the celebration. If you would like to help, please let one of the committee know or email orangefieldnats@gmail.com

Thanks to those members who commented on Orange Council's budget papers and the proposal to allow lure and fly fishing at Spring Creek Reservoir.

August Talk and Excursion

Talk – Thursday 8 August - Conmurra Wildlife Sanctuary and its fauna. The sanctuary is at Walang, 21km east of Bathurst and owned by Andrea and Joel Little. Joel will tell us about the development of the sanctuary and what we can expect to see on the excursion.

Excursion - Sunday 11 August -

Sunset walk at Conmurra Wildlife Sanctuary. On this guided walk you may see endangered Bettongs, Potoroos, Bandicoots and Parma Wallabies or a glimpse of the elusive Rock-wallaby. Conmurra also operates an Airbnb if you wish to stay https://www.conmurra.com.au/

Or you could look for other accommodation through the <u>Bathurst Visitor Information</u> <u>Centre</u> if you don't wish to drive back to Orange in the dark.

Gaanha bula Mt Canobolas Update

No snow yet but plenty of water in the landscape. The frogs can be heard calling, especially along Mt Canobolas Road where the water backs up along the roadside.

Congrats to NPWS for all the work done recently to improve and repair walking tracks and other infrastructure in the SCA. The Spring Glade Carpark has been upgraded with gravel and stone bollards. Many of the walking tracks were closed for a few days in mid-June. If you were on the mountain you would have heard

and seen a helicopter skilfully ferrying gravel to points along the tracks. I imagined the work being done below to spread the gravel. The fence at Orange View has also been repaired.



The helicopter delivering a bag of gravel (circled) to the Summits Track on Young Man Canobolas. Photo Rosemary Stapleton.

<u>International Day of Caves & the Subterranean World, 6 June.</u>

Several members celebrated this day with local speleologists Sandra, Denis and Glen at Borenore Caves. Despite it threatening to rain in Orange it was fine and quite pleasant at the caves.



The group on the way back from the Arch Cave. Photo Penny Todman.

We walked to the Arch Cave where aspects of its formation were explained. The barbeque, biscuits and cakes were enjoyed by all. Sandra was creative with cave creature biscuits and the cakes from Ronda Marsh were delicious. The resident Kookaburras came looking for a feed and one was not keen to share with a Magpie.

Dates for your Diary

2024 Cowra Woodland Bird Survey dates are July 27/28, and October 19/20. Contact Rhonda Vile for more information or to register for the July surveying at rhonda.vile@birdlife.org.au

Dubbo Field Naturalist and Conservation Society - Tuesday 17th September at 7pm **Col Bower will be speaking on 'Orchids of Central Western NSW'** in Dubbo. DFN hopes to visit Orange the following Sunday, 22^{nd} September, to look at orchid locations around Orange.

Biodiversity Month is September.

Central Tablelands LLS are again organising activities for Biodiversity Month. Field Nats is involved in some of the activities with ECCO and Orange Council. **Backyard Biodiversity** is on 1st **September** at the Botanic Gardens. **Spotlighting** nights are planned for 6th and 20th **September**, with one at the Botanic Gardens and the other at Gosling Creek/Hinton Reserves. More details of other activities will be released closer to September.

Sightings around Orange

If you see anything interesting, please email <u>orangefieldnats@gmail.com</u> or post it on Facebook. It has been a quiet month.

Things with Wings

An exciting sighting of **8 Swift Parrots** near The Common at Cowra was made on 6 June by surveyors Jenny and Bob. They were ground truthing updated Cowra survey maps and directions.

Nigel Sethack photographed this juvenile **Brown Goshawk** (below) at Spring Creek Reservoir on 17 June. The other raptor he captured on his camera was a **Whistling Kite**.



An adult **Brown Goshawk** (below) was seen and photographed by Cath Stapleton at the intersection of Ploughmans Lane and Stirling Avenue on 14 June. It had trouble flying off with its prey after other cars stopped. Best guess at the prey was a Crested Pigeon.



And to stay with raptors on 21 June a **Black-shouldered Kite** was again perched high on the willow at Ploughmans Wetland, however this time with what appeared to be a rat in its talons. It was seen again the following day carry what was left of the rat.

A flock of about 50 **Yellow-tailed Black Cockatoos** were seen flying northwest from Wentworth Golf Course on 16 June by Cath and Rosemary Stapleton. A much larger flock than we usually see in the area.

Fungi



This fungus was found by Hai at Koolewong during the excursion. It has been identified as *Drechmeria gunnii* or dark vegetable caterpillar.

In the last few weeks Hai has spotted some unusual fungi on his walks on the mountain. Hai and Nigel have agreed to

feature them as the August Creatures of the Month.

Bryophytes



Liverworts seen in the Pratten Arboretum. Photo Rosemary Stapleton.

Creature of the Month

Fossombronia – a liverwort that looks more like a green caterpillar or a nudibranch!

By Alison Downing, School of Natural Sciences, Macquarie University, with thanks to Dr D. Christine Cargill, Australian National Herbarium, Canberra.



Photo Alison Downing.

In general, *bryophytes* are *tiny*, they don't have the internal water and nutrient conducting systems found in ferns, conifers and flowering plants, nor do they have roots, but they do have root-like anchoring structures called *rhizoids* that are usually colourless in liverworts and hornworts and brown in mosses. Moisture and nutrients are absorbed directly from the environment into stems and leaves. They reproduce by *spores*, not by seeds, and the spores are produced in capsules at the top of long stalks (*setae*).

This unusual liverwort, *Fossombronia*, stands out, bright light green, in stark contrast to the conservative sombre greys and khaki greens of the Australian bush. In some ways it's rather like the difference between Kurrajong trees (*Brachychiton populneus*) and eucalypts. Liverworts are closely related to mosses, and together with *hornworts* are classified as *bryophytes*.



Fossombronia capsules have translucent stems (setae) and spores are produced in black, globular structures at the top.
Photo: R J Oldfield.

There are two main groups of liverworts: thallose liverworts and leafy liverworts. Leafy liverworts can be confusing as they look very similar to mosses. Their leaves are well developed, but never have a costa (that's a structure that is somewhat similar to a midrib, not a presenter in Gardening Australia), and they are usually flattened, with three rows of leaves, one down each side of the stem, and a third on the underside of the stem. In contrast, thallose liverworts are a bit like lichens, flattened and leafless. In some species, the thallus can be many cells thick, in others just one cell thick. Liverwort capsules are usually globular, dark in colour and unlike mosses, split open to release their spores almost instantaneously. The capsule stalks (setae) are colourless fragile and short-lived. Spore morphology – the shape and patterns of the spores – is an important factor in identification so it may be necessary to grow on collections of Fossombronia until sporecontaining capsules are produced.

So, is *Fossombronia* a *leafy* or a *thallose* liverwort? This can be confusing, but *Fossombronia* is a *thallose* liverwort even though its bright green structures look like *leaves*, almost like those of miniature lettuces, in fact, they're crisped and corrugated, thin, upright *leaf-like lobes* inserted into a fleshy stem. And as if this were not enough, the *rhizoids* are bright crimson.



A leafy liverwort Photo: R J Oldfield.



A thallose liverwort. Photo Alison Downing.

Fossombronia species can be abundant and widespread. The genus is often an important component of biological soil crusts which may comprise varying combinations of cyanobacteria (bluegreen algae), bacteria, algae, fungi, lichens, mosses and liverworts. Soil crusts play an important role in minimising soil erosion, both by wind and water, particularly in semi-arid and arid regions of Australia, and also on the skeletal soils overlying rock on Mount Canobolas and in Nangar National Park.

This, of course, is only a very brief introduction to *Fossombronia* and you may like to read further:



Viewed under a microscope, sculptured spores of Fossombronia are necessary for identification. Photo: R J Oldfield.

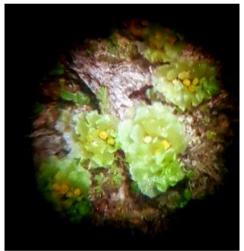
Australian National Botanic Gardens, Canberra:

https://www.anbg.gov.au/bryophytes

Meagher D, Fuhrer B. 2003. *A Field Guide to the Mosses & Allied Plants of Southern Australia*. ABRS, Canberra & FNCV, Melbourne.

Ohlsen D. *Fossombronia* in: VicFlora (2024). Flora of Victoria, Royal Botanic Gardens Victoria. (accessed on: 15 Jun. 2024)

https://vicflora.rbg.vic.gov.au/flora/search?q=%2aFossombronia%2a



Yellow sperm-containing antheridia from within the axils of the 'leaves' (from Mount Nangar). Photo A Downing.



Fossombronia intestinalis. Photo Alison Downing.

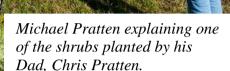


A Field Nats excursion to Mt Nangar on 27 June 1981 after the summit was cleared. As Helmut says 'it's all come back nicely over those 40+ years'. Sally Berndt and son Richard are at the front right. It was a different scene when we visited last month. Photo Helmut Berndt's archives.

Koolewong Excursion Extras *Photos by Helmut Berndt.*

Michael Pratten welcoming visitors out in the paddock beside the arboretum.

L-R: Peter Toedter, Alison Ford, Dick Medd, Jenny Medd, Michael Pratten, Sandra Chrystall, Hai Wu, Helen Croke.



L-R: Nigel Hobden, Peter Toedter, Glen Griffiths, Sandra Chrystall, Bruce Hansen, Hai Wu, Alison Ford, Jenny Pratten, Dick Medd, Michael Pratten

Dick Medd with some of the seriously old (probably around 400 million years) sandstone.

L-R: Kerri McGann, Dick Medd, Glen Griffiths, Michael Pratten.

> Our hosts Michael and Jenny Pratten holding a photo of the paddock taken before the arboretum was planted. Glen Griffiths is in the background.



Enjoying the barbeque at Koolewong beside the bush block. L to R: (seated) Helmut Berndt, Glenn Griffiths, Sandra Chrystall, Jenny Medd, Helen Croke, Patsy Nagle, Kerri McGann and Alison Ford (Jane Paul, who joined us for lunch, was seated off to the right); (standing at back) Peter Toedter, Nigel Hobden, Hai Wu, Bruce Hansen, Jenny Pratten and Michael Pratten. Photo Dick Medd.

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Orange Field Naturalist & Conservation Society acknowledges the traditional custodians of the land, including the people of the Wiradjuri Nation, and we pay our respects to Elders past, present and future.

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