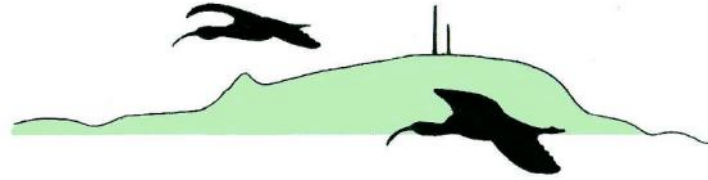


**ORANGE FIELD NATURALIST AND CONSERVATION SOCIETY Inc**



**NEWSLETTER JUNE 2022**

**NEXT MEETING**

**Thursday 9<sup>th</sup> June, 7.30 pm.**  
**Nguluway Ngurang Senior Citizens Centre**  
**North Room**

(Opposite side of carpark to Harris Farm)

**Nature Photography with an emphasis on birds.**  
**Speaker – John Cooper**

**Committee Meeting 9<sup>th</sup> June, 6.30 pm.**

**Note: South Room**

**EXCURSION**

**Sunday 12<sup>th</sup> June.**

Mystery location – details to be decided at the meeting.

**Thank you to OFNCS Volunteers.** May 16<sup>th</sup>-22<sup>nd</sup> was Volunteers Week. Many members of Orange Field Nats volunteer with the Society or other environmental organisations in Orange and beyond. Thank you for your commitment to protecting and enhancing the environment and may your efforts be successful in the coming year.

**Next Meeting – Thursday 9<sup>th</sup> June, 7.30 pm.**  
**Nature Photography with an emphasis on birds. Speaker – John Cooper.**

John is a well-known bird photographer from Cowra. You may have seen his calendars and gift cards. He will talk about how he first became interested in nature photography, show some macro images, and then talk about the art of bird photography.

**Next Excursion – Sunday 12<sup>th</sup> June.**

The location and details of the excursion will be finalised at Thursday's talk. Remember this is the Sunday of the June long weekend. Meet at Orange High Bus Bay at 9.00 am.

**Last Talk - Riccia: research, adaptation, and diversity in a remarkable liverwort.**

Speaker – Dr D. Christine Cargill

Text by Dick Medd, photo by R Stapleton.

The Society was indeed privileged to have Dr Christine Cargill, Australian National Herbarium, present a further insight into the fascinating world of bryophytes. Her presentation dovetailed nicely with information Alison Downing of Macquarie University kindly shared with us last year of this fascinating class of biota.

After briefly recapping on the makeup and classification of bryophytes (mosses, hornworts, and liverworts) and their distinguishing features, Chris reemphasised their important ecosystem function in forming biological soil crusts (biocrusts).

Having been captivated by bryophytes during her undergraduate studies, Chris has made a career studying them as a taxonomist. Her special research interest has been liverworts, particularly of the genus *Riccia*. After collecting members of the genus in northern Australia she quickly realised the inadequacy of available identification tools. That set off a stream of detailed research endeavours, including tracing the history of *Riccia* and digging into fossil records. Parallel morphological and molecular studies eventually resulted in the naming of new species and development of new identification keys. As she articulated using an old Chinese proverb: "*Wisdom begins with putting the right name on a thing.*"



*Close up showing the diversity of Riccia species found in Mt Canobolas SCA during Chris Cargill's recent visit. Photo R Stapleton.*

Scientific studies of the genus can be traced back to the early 17<sup>th</sup> century, no doubt

stimulated by the development of the first microscopes around that time. The skill of those early taxonomic pioneers never ceases to amaze me. They relied almost entirely on their own powers of observation and intellect. One has also to consider their insightful work achievements with minimal relevant literature and under the restrictive travel and communication networks of their times.

Illustrated using an amazing and stunning array of images Chris went on to explain the diversity among liverworts, and *Riccia* in particular. Descended from ancestors in watery environments, bryophytes have remarkably adapted to land. Short life cycles, spore dormancy, anatomical changes to become drought tolerant and the ability to near fully desiccate and recover, being just some of their evolved survival tricks. Thus, they have successfully colonised even the driest environments on earth, and hence are widely distributed across Australia.

An innovative arm to her research, in its infancy, involves the use of artificial intelligence to identify images of *Riccia*. The irony of Chris making herself redundant to computers wasn't lost on Dick during his vote of thanks!

**Mount Canobolas SCA under the Microscope - Bryophyte Activities on Friday 20<sup>th</sup> & Saturday 21<sup>st</sup> May. Text by Dick Medd.**



*Bryophyte surveyors getting up close to plants. L to R. Standing - Cory Mosen, NPWS, Dick Medd. Kneeling - Alison Downing, Chris Cargill, and Jack Fry, NPWS. Photo R Stapleton.*

Leading scientists specialising in mosses, liverworts, hornworts, and lichens, engaged by

the OFNCS, recently came to research species occurring in the Mt Canobolas SCA. The scientists from the Australian National Herbarium, a part of the Centre for Australian National Biodiversity Research (a joint venture between Parks Australia's Australian National Botanic Gardens and the National Research Collections Australia at CSIRO) and from Macquarie University and Sydney University undertook the field work over two days.

With permission from NPWS we ventured to some of the more inaccessible far-flung corners of the SCA to examine this little-known component of biota. Finding these fascinating, miniscule plants, literally means getting down on haunches with noses to the ground.



*The sub-alpine Riccia liverwort species that Chris Cargill was excited about finding in the SCA. She thinks it is the same species recently found and described, by her, from only two other Australian locations. Photo R Stapleton.*

The favourable seasonal conditions certainly spawned good results. Besides confirming new areas across the mountain for already recorded species, the scientists found at least 15 species that had not been recorded in the SCA before. Many of the new finds were of liverworts along with a couple of hornworts. Lichens are more difficult to identify in the field, but at least one can be added to the existing records, along with some mosses. Many collections need closer examination back in their laboratories, so we look forward to the final records as they emerge.



*A species of black lichen, possibly *Ephebe lanata*, one of the species not recorded in the SCA before. Identification to be confirmed. Photo N Hobden.*

An interesting general comment confirmed that while some of the known species weren't apparent at present, some of the additional species are regarded as pioneers. The 2018 fire, ensuing drought, followed by the current favourable seasons has stimulated these early pioneers. In turn, these will more than likely give way over time to others, due to successional pressures.

Take a look at some ABC media on the visit: <https://www.abc.net.au/news/2022-05-23/microorganisms-under-threat-canobolas-scientists-concerned/101087192>

**Arboreal Mammal Survey in Mt Canobolas SCA.** *Text by Dick Medd, images by Judy and Peter Smith.*

Having read of the devastation to the Greater Glider populations in the Blue Mountains due to fire and global warming, Dick Medd identified the need to learn more of local populations.

Gliders of various species are known and recorded for Mt Canobolas SCA from various accounts, but there has been no systematic survey. What was needed is a set of baseline data from designed surveys which can be replicated over time to measure the effects of events as they impact.

With the support of OFNCS, Dick contacted the experts P & J Smith Ecological Consultants, specialists in arboreal mammal surveys, to work up a proposal to formally survey in the Mt Canobolas SCA. That proposal was approved and funded by NPWS, and an initial survey recently took place.

The impressions the Smiths gained from their work is that Greater Gliders are present in low numbers within the SCA. The population of ringtails appears more robust. As prior records are scant, the gliders however appear not to have been drastically impacted by the 2018 fire, ensuing drought, or climate change [to date].



*Judy and Peter Smith on the job.*

Of great concern however, is that the population size of gliders is low and the species is isolated in the landscape. Hence the survey protocol used has been designed so that it can be repeated in the future to allow more confidence about changes, one way or the other. We look forward to their report in due course.

### **Fungi Forays organised by Liz Davis, Central Tablelands Local Land Services**

A few members of Field Nats went along to the training sessions with Alison Pouliot and found them very worthwhile. Many others, who had done the training last year, joined in one of the fungi forays, especially those in Mt Canobolas SCA. Tony Caine and Penny Todman have written a report and their photos show some of the fungi diversity on the mountain. Their report will be emailed out with the newsletter.

Liz mentioned that the survey in Grassy Box Woodland at Cowra, with Mid-Lachlan Landcare, revealed many more species than expected. On Sunday 29<sup>th</sup> May the fungi foray was in the Curumbenya Section of Goobang National Park with Little River Landcare. At the wrap up of this survey Jordan Bailey commented that the diversity of fungi species found was greater than on Mt Canobolas. Jack Fry explained that this section of Goobang, off the Renshaw McGirr Way, was the most undisturbed in the park as it had not been logged and had had no recent fires.

Thanks to Liz for organising the foray program and to the experts who shared their knowledge.



*Reviewing finds at Goobang NP fungi foray. Photo R Stapleton.*

### **OFNCS Committee News**

A detailed submission was made on the Orange City Council's Draft Community Strategic Plan, budget, and associated documents. A letter was also written to Deputy Premier and Mining Minister requesting that the government

not approve any new coal mining applications or extensions to existing mines. This was as a follow-up to the Climate Rally held in Bathurst last month.

A report on the Central West Environment Council meeting held on 1<sup>st</sup> April will be in the next newsletter.

### **Mt Canobolas Update**

Like everywhere the mountain is wet and the bryophytes and fungi are responding with new growth and recovery from the fire.



*Fungi study from Nigel Hobden.*

Something is enjoying the flowering eucalypts as there are leaves and blossoms along the roads below these trees. The cream flowered *Melichrus urceolatus* is flowering in some places and in others the *Indigofera australis* is now tall enough not be eaten and is covered in buds. The flower show in spring is likely to be stunning.

As part of the Conservation in Action Conference over 50 people visited Mt Canobolas SCA to hear about Aboriginal cultural heritage from Wiradjuri Elders. Greg Ingram, from the LLS, also talked about cultural burning practices.

The Summit continues to be closed for the NPWS redevelopment. If you have visited recently, you will have noticed that Towac Way has been resealed up to the Federal Falls Picnic Area.

### **Canobolas Conservation Alliance Update**

*Report by Jenny Medd.*

May was a busy month with Federal elections keeping many members elsewhere engaged. Meanwhile various activities on the Mountain, although organized



by Dick Medd for visiting scientists on behalf of OFNCS and NPWS or by LLS for fungi forays and other engagements, added to the demands on some of our committee who are active in dual organisations.

Considerable time was spent compiling a comprehensive CCA submission to Orange City Council on their draft Community Strategic Plan and associated documents.

Our website continues to be updated regularly and a Facebook presence maintained. Important liaison with the Gaanha-bula Action Group and local Elders is also on-going.

Once again, no news had been gleaned regarding OCC's current or future plans for the SEARs document issued back in early February, or their pursuit of the Mountain Biking Trail Network.

### **Goobang National Park**

Please note that all fire trails in the National Park will be closed until Thursday 30<sup>th</sup> June 2022 to allow essential upgrades with heavy equipment. This has been made possible through the RFS Fire Access Fire Trail (FAFT) program. During this time the Wanda Wandong and Greenbah campgrounds and associated walking tracks will be closed. It is a good idea to check the alerts on the NPWS website when planning a visit to a park or conservation area.

A new NPWS Goobang National Park brochure is available from Tourist Information Centres.

### **Great Inland Glossy Count Results - 84 volunteers spot 100+ Glossies**

*Report by David Kellet, Senior Land Services Officer – NRM, Central West LLS.*

More than 100 Glossy Black Cockatoos were observed during this year's Great Inland Glossy Count. The counts were completed across three main sites including Pilliga National Park and forests, Goonoo National Park and surrounding reserves, Goobang National Park, surrounding state forests, crown land and private properties.

The Great Inland Glossy Count is an annual count of the threatened Glossy Black Cockatoo as part of the project 'Making Central Inland Glossies Great Again', funded by the Environmental Trust and the Saving Our Species program. The seven-year project is an important collaboration across land tenures, led by Central West Local Land Services in

partnership with NSW National Parks & Wildlife Service, North West Biodiversity Conservation Division, the Forestry Corporation of NSW, Dubbo Field Naturalists and Conservation Society, the Australian Wildlife Conservancy, and the Central Inland Glossy Black Cockatoo Working Group. They are implementing conservation strategy actions across these three areas that will enable community involvement and on-ground action in Glossy Black Cockatoo conservation.

This year 84 volunteers assisted the project team in completing the counts at over 50 sites across these areas, contributing 378 volunteer hours to the project. While the numbers seen were down compared to the height of the last drought, the results were comparable to last year with 55 Glossy Black Cockatoos observed in the Pilliga, 40 at Goonoo and 7 at Goobang. The lower numbers being counted is likely to reflect the good seasons we have been having with their favourite food, *Allocasuarina sp.* or She-oaks, which are fruiting well and there is plenty of water around, resulting in the flocks being well dispersed across the landscape.

For more information, please contact Project Manager, David Kellett on 0456 757 438.



*One of the Glossies seen at a nest hollow by the Stapletons. Photo Catherine Stapleton.*

### Dates for your Diary

**18 June 2022 - Conserving Threatened Plants Workshop.** 12.00 – 4.30 pm, Orange Botanic Gardens.

Central Tablelands LLS is hosting this workshop in conjunction with the Friends of the Orange Botanic Gardens, Australian National Botanic Gardens and the Department of Planning and Environment. [Booking essential.](#)

**21-22 June 2022 – Listening to the Lachlan Conference, Forbes.** The program is now available on the website and is varied with some

excellent speakers. Take a look and register here: <https://listeningtothelachlan.com.au/>

### **2022 Cowra Woodland Bird Surveys,**

Dates for 2022 are 23/24 July; 15/16 October.

Julian Reid is now the contact at

**0405 922 505** or [julian.reid@anu.edu.au](mailto:julian.reid@anu.edu.au)

**2022-2023 dates for Snipe counts** are

September 24, November 26, and January 14.

### Sightings around Orange

If you see anything interesting, please email [orangefieldnats@gmail.com](mailto:orangefieldnats@gmail.com) or post it on Facebook.

### **Carbon Capture, or not, in Orange?**



*Tree clearing at Bloomfield Park.*

### **Orchids**



*Hairy Snail Orchid - *Linguella clavigera* (Fitzg.) = *Pterostylis nana* or an even newer name. Photo Rosemary Stapleton.*

Single rosettes and dense groups were along a bank in the Bumberry section of Goobang National Park. Leaves of the other species that have been seen there were also found. The

lichens and moss were looking very fresh and healthy.

### 'Things with Wings'

#### **Tawny Frogmouth**



During one of her regular bird surveys **Cilla** Kinross spotted this bird in the same tree on the CSU campus (possibly the same branch!) where it was photographed by Chitra Shanker (a visiting Indian academic) a few years ago!

**Wedge-tailed Eagles** - the pair on the mountain were watching us on both days of the bryophyte surveys. The visiting scientist stopped their collecting to watch them watching us.

**Fungi, fungi, fungi!** Lots of reports of fungi. Here are a few.



**Catherine** found these in the Bumberry section of Goobang NP, along with orange coral fungi.



On 28<sup>th</sup> May, whilst walking his dog Jedah in the Botanic Gardens **Nigel** came across this

extremely fresh, i.e., popped up out of the ground before his eyes, Cage or Basket Fungus from the Stinkhorn group (*Ileodictyon gracile*). It was in the Roseaceae collection area. He said the slimy brown matter is the spore bearing mass, the gleba, has a rotting meat smell to attract flies for spore dispersal.



**Hai** spotted the fungus in a burnt hollow on one of the trails in the SCA. He suggests it is a weeping polypore, *Ryvardenia campyla*, and is waiting for confirmation. He has also seen Coral fungi in the SCA and other species out in the Mullion Ranges at The Falls.

#### **Creature of the Month** - Magpie Moth (*Nyctemera amicus*)

*Text and moth photos supplied by Jenny Medd.*



Intrigued by this specimen (never seen previously) which I'd found beside the road. I sent these photos off to the Australian Museum's "Ask an Expert", having been unable to even work out if it was a Wasp or a Moth. I was delighted to receive the following response:

“You were on the right track - it is a moth with the colouration of a wasp! Your photo is of a Magpie Moth (*Nyctemera amicus*), also known as the Senecio Moth. These moths belong to the subfamily Arctiinae which includes the well-stripped tiger moths. The bright striped colouration is known as **aposematic colouration**, which means patterns and colours used to signify they taste terrible to predators.



As their name suggests, the caterpillars feed on *Senecio* species which contain toxic substances, and thus the caterpillars and moths will taste awful and can even sicken and kill birds; predators steer clear of them.”

The following additional details and photo I found at: <http://lepidoptera.butterflyhouse.com.au/arct/a/micus.html> :



Photo: courtesy Merlin Crossley, Melbourne, Vic.

“This caterpillar is hairy and dark blue with orange stripes. It has two prominent hair pencils on the head like a pair of hairy horns. The pupa is formed in a loose cocoon amongst the twigs of the foodplant or in ground debris. The final shed skin of the caterpillar is attached to the end of the pupa. The adult moth is black except for a broad fragmented white band across each forewing, and a large white patch on each hindwing. The body has alternate black and yellow bands.”

You can see the locations they are found and more images here: <https://bie.ala.org.au/species/urn:lsid:biodiversity.org.au:afd.taxon:56e85231-a01d-4db9-b0d7-89481f09f3e6#overview>

#### **July talk and excursion**

Jayden Gunn and Tracee Burke will speak about their partnership between Birdlife Australia’s Woodland Birds on Farm Project and Mid-Lachlan Landcare. The excursion will be to some of their monitoring sites around Cowra.

To join please send your cheque or money order made out to "OFNCS" to the Hon. Treasurer, Dr Dick Medd, OFNCS, PO Box 369 Orange NSW 2800.

EFT payments to: BSB 802 129: Account 100014678: O F N & Cons Soc Inc.

Please be sure to identify payments with your name and send confirmation to [orangefieldnats@gmail.com](mailto:orangefieldnats@gmail.com)

#### **Subscription rates:**

Single member – \$25

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Each additional family member – \$5

Concession rate (printed newsletters) – \$25

Note: concession rate is for *bona fide* pensioners and students only

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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.*

Orange Field Naturalist & Conservation Society, PO Box 369, Orange, 2800

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