

NEXT MEETING

Thursday 14th April, 7.30 pm. Nguluway Ngurang Senior Citizens Centre North Room (Opposite side of carpark to Harris Farm)

Continental Odyssey – a journey to Africa and return. Speaker – Nigel Hobden.

Committee Meeting 14th April, 6.30 pm. Note: South Room

EXCURSION Sunday 17th April (Easter Sunday), 9.00 am. Exploring Ophir Reserve.

Details below

<u>Next Meeting</u> – 14th April, 7.30 pm. Continental Odyssey – a journey to Africa and return. Speaker – Nigel Hobden.

Nigel will take us on a journey to Africa and Western Australia's Cape Naturaliste with some fabulous images. Given our inability to travel overseas in the last two years this is your opportunity to get a bit of foreign nature and adventure!

From July 2018 Nigel spent 8 weeks volunteering at Imire Rhino and Wildlife Conservation Park, Zimbabwe. This included working in local communities with schools and village sustainable/permaculture gardens. He also visited Botswana and Chobe National Park.

Note: the rooms at the Senior Citizens Centre have just been painted so there may still be some lingering paint smell. You need to be Covid safe so please distance and wear a mask if you are concerned about your safety. Please do not attend if feeling sick or if you have been a close contact in the week beforehand. Next Excursion – Sunday 17th April.

Exploring Ophir Reserve. The excursion will be guided by Denis Marsh who is a member of the Ophir Reserve Trust Board and knows the reserve well. We plan to traverse several rough 4wd tracks to access the river, keeping a look out for the resident Peregrine Falcons, ending at the picnic area for lunch.

Meet at 9.00am at Orange High School Bus Bay. The excursion will be for 4 hours so bring morning tea and lunch (optional). Wear sturdy footwear and long pants as there will be some rocky, uneven terrain. 4 x 4 required. If you carpool it is up to the driver and passengers to agree on travelling together and whether masks need to be worn.

You will be responsible for the Covid safety of yourself and others who come along. Please do not attend if feeling sick or if you have been a close contact in the week beforehand.



Blast from the past - 1982 OFNCS excursion to Ophir Reserve. Anyone recognise Col? Photo from Jennifer Kenna.

Change of Date for May Excursion

The focus of the May talk, and excursion will be cryptogams, which are tiny and ancient organisms like lichen and bryophytes. While the talk will be on the second Thursday of the month as usual (12th May) there will be no excursion on the following Sunday. All the action will be happening in the next week. On Friday 20th and Saturday 21st Dick Medd has organised for a group of scientists to visit with the aim of collecting cryptogams within the Mt Canobolas State Conservation Area. Further details will be in the May newsletter.

Fungi then becomes the focus with activities organised by Liz Davis, from Central Tablelands LLS on the weekend of 21/22nd May. A fungi foray in Mt Canobolas SCA will be on Sunday 22nd May. Members who have done any training with Alison Pouliot are encouraged to register for the foray when details are released.

Last Speaker: "Mt Canobolas: Origins, history and physical volcanology." *Text by Dick Medd.*

Those able to join the Zoom presentation by Assoc. Professor Derek Wyman, School of Geosciences, Sydney University, on "Mt Canobolas: Origins, history and physical volcanology" will certainly go to the mountain with a new perspective on how volcanic rocks form. From the outset Derek put forward a 'new' theory about the origin of the intraplate volcanoes in eastern Australia, of which Mt Canobolas is the youngest. The textbook mantle plume theory has now been superseded by the 'big wedge' subduction model, whereby magma instead of coming in plumes from near the earth's outer core is instead formed by volatiles which destabilise, melt, and mobilise the surrounding mantle at much shallower depths. I imagined it as 'rock recycling.' You'll need to research it if you want to understand it or enrol in geology at Sydney University!

Interpreting what one now sees in formations on and around Mt Canobolas needs stepping back in time to 10 or 12 million years ago when all the action took place in three main episodes of volcanic activity. What we now see is just the bottom half or so of the finished product, after eruptions ceased and erosion ensued. Or to express it another way, we are now looking at what formed during the mid-life of the volcano. The top, youngest layers of several hundred metres and much in-fill are long gone, having been eroded away leaving few traces of the youngest, mainly third episode outpourings.

Derek spared us from too much heavy geochemistry, revealing just enough to help explain the different alkali-rich magma plumes and resultant lithologies. His fascinating explanations of the pushing and shoving of successive events intrigued me. During building, magmas continually evolve and are not only outpouring onto the surface but pushing from below into pre-existing buried flows, seams, and structures. So, what type of structure results depends on the degree of melting, cooling and where the magma ended up: on the surface exposed to air. or buried within previous lavas where much metamorphism is evident. Columnar structures are quite common, but he also illustrated other 'intrusives' from several sites including Lake Canobolas, The Pinnacle and of course around the summit. Nigel's 'Dog Rock' served beautifully to further illustrate suites of activity as opposed to uniform mafic structures, of which there are also many examples to be seen.

The Society feels very privileged to have such a scientific expert give up his valuable time to enlighten us, so we are most grateful to Derek for his expertise and effort.

Thank you again Derek.

<u>Last Excursion</u>: Exploring the Volcanic Features of Mt Canobolas.

Text by Dick Medd, images by Helmut Berndt.

A dozen or so folk turned out on a balmy autumn morning to join Max Rangott, Principal of Rangott Mineral Exploration Pty Ltd, who kindly accompanied and assisted with the excursion. The intention for this excursion was to illustrate some of the features explained by Derek Wyman in his presentation on "*Mt Canobolas: Origins, history and physical volcanology.*" Recent closure of the summit meant a rejigging of the planned itinerary to explore other sites.



Viewing the columnar structures that can be seen below the dam wall at Lake Canobolas.

At the first stop below the wall at Lake Canobolas Dick briefly overviewed the history of the volcano, focussing on the impressive columnar structures visible at both the base of the dam wall and in the nearby quarry. Max and others enlightened us on the finer geological details of what was in view. The quarry also exposes the intrusive nature of the columnar basalt which sits below an older geology capping. Quite some discussion ensued about this without reaching any resolution!

At the Mitchells Way intersection on Mt Canobolas Road, we then examined what Derek explained in his presentation as another intrusive feature in the exposed rock wall. Max scoured the rocks with his hand-held magnetometer. It detected slight variations in magnetic field strength between the metamorphosed 'slaty' material at the interface of the intrusion and of its body, but apparently nothing too convincing!

After a brief stop at Federal Falls Picnic Area for morning tea, Max led a discussion regarding the lava flow forming the falls. We also contemplated a rock sample containing obsidian [volcanic glass formed when lava cools rapidly with minimal crystal growth], before moving on to a nearby dyke remnant. How many times have you driven by this sentinel on Towac Way? On close inspection it is both fascinating and perplexing, with clear evidence of intrusives sitting on a 'conglomerate looking' pyroclastic breccia basement.



Examining the dyke on Towac Way.

The final stop at Towac Picnic Area likewise alluded to a complex and violent volcanic history, generating much discussion about what went on all those millions of years ago. Max came up with a general consensus that what we were looking at was probably flow breccia. Peter kindly offered the following explanation ... *"Flow breccia is common as a part of volcanic flows and occurs when a new flow or pulse of lava breaks the crust of a previous flow* (*but of the same event*) which has solidified, and *the broken bits are welded together by the still* fluid parts of the next flow but overall, the same event. The flow breccia is included in the general flow banding. Flow banding is caused by layers which vary slightly in composition (mineral make-up, crystal size or colour). The banding can be planar or contorted as in turbulent flows."



Max (centre) leading the discussion on breccia flows at Towac Picnic Area.

So not ejected breccia bombs, or hydrothermal precipitates as I wrongly interpreted. Better stick to plants Dick!

Being in a conservation area, Peter was frustrated by not being able to whack the rocks with his geology hammer. For a geologist this is constraining "*a bit like telling a doctor he can't use his stethoscope*" he relayed.

In winding up Dick thanked Max for sharing his valuable time and insights and commented that the mountain will still be keeping many of its secrets long into the future. Definitely several opportunities remain for PhD studies. And wouldn't it be great to have some volcanologist's expertise from Geological Survey of NSW involved in unravelling events; not to mention potential here for a 'geotrail.'

OFNCS Committee News

There was no committee meeting in March however, Dick Medd has been busy working behind the scenes (see below), and we've been delighted to welcome new members Jake, Andrew, and Denis.

Mt Canobolas Update

Text by Dick Medd and Rosemary Stapleton.

Arboreal Mammal Survey

Instigated by Dick Medd through the OFNCS Committee, NPWS have announced funding for a survey specifically of arboreal mammals in the SCA. This is to be undertaken by experts, Judy and Peter Smith Ecological Consultants, during early May. The survey will establish baseline data of the diversity and abundance of arboreal mammals in the reserve and provide a framework for future monitoring, possibly by members of OFNCS. However, there won't be any opportunities for OFNCS members to participate in the initial survey as the consultants prefer for it to be conducted by themselves.

Erection of Lichen Wall

OFNCS was a party to the concept for a feature Lichen Wall to be built as a part of NPWS redevelopment works at the Mt Canobolas summit. Due to budgetary constraints NPWS funding for the proposal and associated signage had to be cancelled.

OFNCS Committee felt this was such an important and timely opportunity that it has agreed to fund the erection of the wall and signage so that the work could be undertaken as part of the current redevelopments.

The Lichen Wall will be a living interpretation of the rare and endangered *Xanthoparmelia* Lichen community and promote awareness of the 100 or more lichen species recorded for the Mount Canobolas SCA. NPWS have agreed to implement a plague on the wall acknowledging the contribution from the Society.

Assets of Intergenerational Significance (AIS)

Dick has also been very involved in nominating *Prostanthera gilesii* as a species that should be recognised as an AIS. It is a critically endangered endemic species found in the SCA.

In early March, the Deputy Secretary for National Parks and Wildlife Service adopted the first 8 Conservation Action Plans (CAPs) for Assets of Intergenerational Significance under section 153G of the NSW *National Parks and Wildlife Act 1974*. It is good to know that *P. gilesii* was one of the eight. It involves 423 ha however the exact location has not been revealed for security reasons. Information on the adopted CAPs are available at the <u>Environment, Energy and Science website.</u>

NPWS Activity

The Summit continues to be closed for the NPWS redevelopment. Please note that until Friday 29 April 2022 qualified contractors and trained NPWS staff will be conducting herbicide application to control weeds. Do not pick or eat any Blackberries when in the SCA.

Nature is not the only thing that can be found in the SCA. Recently Nigel Hobden found the old sign below while walking the Fern Gully Trail.



Sign showing the by-laws and prohibited activities on Mt Canobolas when it was part of the Canobolas Regional Parkland Trust.

Canobolas Conservation Alliance Update

Report by Jenny Medd.

A third Newsletter to keep members informed was distributed in late March. It can be accessed on <u>our</u>



website by anyone else who might be interested. We were extremely pleased to welcome Tony Caine to the Committee as our website manager. He has very quickly uploaded the media reports from the end of 2021 and continues to add any new material without delay, for which we're all very grateful.

The CCA Committee held its most recent meeting on March 14th. Since then, President Andrew Rawson has delivered presentations to Friends of the Orange Botanic Gardens and the Canowindra CWA, both of which were really well received and have resulted in new members signing up to the Alliance.

It has been pleasing to see so many members renewing their membership this year, despite the campaign being a little subdued as we wait to see just how the new Orange City Council (OCC) plans to proceed. We continue to monitor OCC activities.

Yellow-tailed Black Cockatoos in the Pilliga

Following John Hansen's report last month on the Glossy Black Cockatoo Count in the Pilliga there was a query about John's sighting of a pair of Yellow-tailed Black Cockatoos. It was thought to be an unlikely or out-of-range sighting of the species. A check of Birdata and eBird showed that they do occur in that area but very infrequently. John was able to confirm his and Jake's sighting with Jake's photo of one of the birds.



Yellow-tailed Black Cockatoo at Merebene Bore Dam, Pilliga Forest. Photo Jake Hansen.

This is a good reminder to us all that seeing birds we are familiar with when in a new location is worth a check as it might turn out to be an unusual sighting. John agreed to add the sighting to Birdata.

Peregrine News

Cilla has shared some unusual peregrine activity. Diamond, the female peregrine, recently brought into the nest box what is probably a female Koel....and at midnight! Whether she caught it at midnight or brought it from a tree cache is not known. This unusual behaviour caused hours of discussion on the online chat. Cilla said *'it's unusual for Diamond* to bring a prey in at midnight. Why would she do that?'

This is the second Koel caught in the last month because Cilla found some tail feathers near the nest the other day, which at first were thought to be from a bird of prey. However, after looking it up and some discussion it was decided that it was a Koel. This species has not been recorded as a prey item for the CSU peregrines before, which made it of interest and being at midnight even more so.

Alison Ford reports that the juvenile Koel has disappeared from her garden. I wonder if it has

fallen prey to the peregrines or just migrated north.

Take a look at the link that Cilla shared of news of an <u>unusual prey item</u> caught by a peregrine in Canberra. Cilla said '*it was a juvenile* (*perhaps a one-year-old*) peregrine falcon with an Australian white ibis. Cilla suspects it was a female falcon, so about 890 g. With ibis varying from 1.4 to 2.5 kg it was a pretty amazing catch, especially for a young bird. Cilla assumes that if caught in the breeding season, an adult bird would have to break the ibis up in order to carry bits to the nest as the whole bird could not be carried or even cached anywhere.'

Dates for your Diary

2022 Cowra Woodland Bird Surveys,

Dates for 2022 are 23/24 April; 23/24 July; 15/16 October. Julian Reid is now the contact at **0405 922 505 or julian.reid@anu.edu.au**

Postponed AGAIN to 21-22 June 2022 – Listening to the Lachlan Conference, Forbes. Details <u>here.</u>

Conservation in Action Conference; climate, bushfire and nature. Orange, 2,3, 4 May 2022. http://www.cwcewa.com.au/conservation-inaction

Mycology in May in the Central Tablelands

Liz Davis writes the Central Tablelands Regional Landcare Network is partnering with Local Land Services to host fungi events annually in May:

'This year we'll be launching the program on **20 May with a discussion panel at Café Champignon** including: <u>Alison</u> <u>Pouliot</u> (ecologist & author), <u>Walter Jehne</u> (soil microbiologist), <u>Richard Cornish (food writer</u> <u>& author</u>) and <u>Sapphire McMullan-Fisher</u> (fungi ecologist). We hope you can join us.

There are also fungi forays/surveys happening across the region:

- 21 May Mid Lachlan Landcare & Biodiversity Conservation Trust Fungi survey in Cowra (morning or afternoon)
- 22 May Local Land Services Fungi survey on Mt Canobolas
- 27 May Watershed Landcare Fungi survey in Rylstone area
- 29 May Little River Landcare Goobang National Park
- 10 May Lithgow Oberon Landcare Fungi survey Hassans Wall Lithgow

- Central Tablelands Landcare is hoping to confirm a food session with Richard Cornish on 20 or 21 May in Orange.
- 18 & 19 May Fungi ID workshops for those who have not yet attended training and intend to be on surveys.'

For more info contact Liz Davis at 6363 7872, 0427 452 662 or <u>liz.davis@lls.nsw.gov.au</u>

Snipe count dates for 2022-2023 are

September 24, November 26, and January 14.

Sightings around Orange

If you see anything interesting, please email <u>orangefieldnats@gmail.com</u> or post it on Facebook.

'Things with Wings'

Blue-billed Duck breeding record at Spring Creek Reservoir.

On 6th March Nigel Sethack sent this photo of Blue-billed Ducklings taken at Spring Creek Reservoir. He did so as he met another bird enthusiast there and they were discussing Blue Bill Ducks and whether they are breeding on the dam or not. He took this photo on 30/1/22 but hasn't seen them recently, although he saw a number of adult birds on the 6th.



Blue-billed ducklings. Photo Nigel Sethack.

Little Black Cormorant breeding record at Spring Creek Reservoir.

Nigel S has also managed a photo of a very full nest of Little Black Cormorants at Spring Creek Reservoir.



Musk Lorikeets. Hai has been watching birds (his photo below) in the Botanic Gardens at dusk and has reported up to 50 roosting birds.



Plumed Whistling Ducks – Cath Stapleton spotted well over 60 beside the sewage treatment works on the Eugowra Road at Canowindra on 2nf April.

Nankeen Night Heron – juvenile still at Ploughman's Wetland as it flew from the reeds on 4th April.

<u>Frogs</u>

Litoria verreauxii, Whistling Tree Frog, recorded in a rockery on Bowman Avenue.

What frog is this?



Nick King was sent this photo of an unusual frog found at Canobolas Public School. He wondered if someone could identify it. Is it a species of Bell Frog?

Hopefully, the school will have sent the photo to the Frog ID scientists at the Australian Museum. Their app is easy to use so why not download the app and record frogs calls whenever you hear them. This is especially important in the local reserves where they will help give a picture of biodiversity.

The third annual release of FrogID data is now available to advance frog ecology and

conservation in Australia. <u>https://australian.museum/blog/amri-news/the-</u>frogid-dataset-30/.

Check out local sightings on the Atlas of Living Australia.

<u>Plants</u>

Diplodium aestivum. After the excursion on 13th March Nigel Hobden went for a wander on the mountain. He found a group of flowering Greenhood orchids (photo below). Col Bower has identified them as *Diplodium aestivum* even though the long drooping sepal arms had him thinking *D. laxa* initially.



More recently Nigel H found some Greenhood rosettes which Col also felt were *D. aestivum*. Col commented 'the giveaway was the very glossy, rather dark green and somewhat leathery leaves. Also, the habitat, which is Snow Gum / Silver-leaf Candlebark \pm Mountain Gum.'

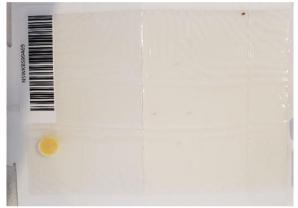
<u>Creature of the Month</u> - Pantry Blitz

Text and photo Rosemary Stapleton.

Rather than a specific creature this month the recent DPI Pantry Blitz is featured. Did you take part to see what was hiding in your pantry?

The biosecurity aim was to find any unwanted insect pests in homes and businesses. These can be brought in as stowaways on a wide range of cargo including plastic beads, nuts and bolts, timber flooring, foodstuffs and white goods then make their way into homes and offices. I was intrigued to know if there were any of the hundreds of different kinds of pantry pests in my pantry. Would I find one of the most common insects such as rice weevils; grain moths; grain weevils; drugstore beetles; Indian meal moths; cigarette beetles; and confused flour beetles? What fabulous names!

All you needed to do was register to be sent a trap and then download the MyPestGuideTM Reporter app. You were asked to place the pheromone lure onto the sticky pad of the trap, fold it and place it in your pantry. People were also encouraged to put the traps where they store food for their pets. Each week for four weeks you were asked to unfold your trap, photograph it, and upload it to the app.



My unfolded Pantry Blitz trap after 4 weeks showing the pheromone lure, Cigarette Beetle (top right) and a minute insect (centre) that was possibly a small fly or fungus gnat. Photo Rosemary Stapleton.

Feedback from the DPI on 3rd March noted *Cigarette* beetles are an introduced commercial/domestic stored product pest. They attack a wide variety of foods and dry material of vegetable origin including flours, dry mixes, pastry, herbs and spices, tea, cured tobacco and/or dried flower arrangements, wheat filled heat packs, rat baits and snail pellets. In searching for suitable material to consume they *will chew through thin plastic and/or* aluminium foil and tin sheets. Foods items with only minor infestation can be cold- or heattreated to ensure that any undetected stages are killed. Heat treatment can be repeated at 3-6 month intervals.'

The DPI report on 11th March said 'Our insect ID specialists are finding lots of critters, especially in the traps near pet food storage. The most common pest we are finding is the Cigarette beetle, Lasioderma serricorne (Coleoptera: Ptinidae) and in some cases almost 100 of these small beetles. Interestingly it was also the most common pest found by our West Australian colleagues in the Blitzes in their state. We are also finding a variety of pantry moths and cockroaches as you would expect but also quite a number of very small insects such as Booklice and Mothflies. Some of these insects are so small Blitzers haven't realised they had them on their traps – all the more reason to make sure you include at least one picture of the whole trap laid out flat' For more info go to the link <u>Common pantry</u>

insects.

Acknowledgments

MyPestGuideTM Reporter was designed by the Department of Primary Industries and Regional Development, Western Australia (DPIRD) and engineered by ngperceptive. Pantry Blitz is a surveillance activity developed in 2016 by DPIRD and is a new collaboration between the NSW Department of Primary Industries Khapra Beetle Program and DPIRD.



Rainbow at Nashdale. This stunning rainbow was photographed by Andrew Rawson on 31st March from his front garden at Nashdale.

Please note Annual Subscriptions are now due. Thanks to those who have already paid.

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

Subscription rates:

Single member - \$25Concession rate (emailed newsletters) - \$12.50Each additional family member - \$5Concession rate (printed newsletters) - \$25Note: 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.

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