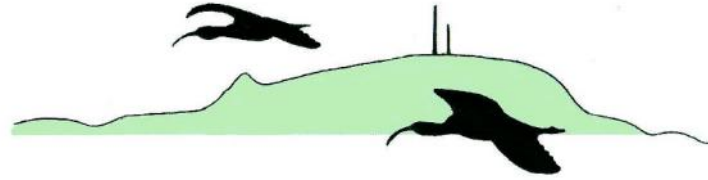


**ORANGE FIELD NATURALIST AND CONSERVATION SOCIETY Inc**



**NEWSLETTER SEPTEMBER 2023**

**NEXT MEETING**

**Thursday 14<sup>th</sup> September, 7.30 pm.**  
**The NSW Biodiversity Conservation Trust  
& its role in private land conservation.**

*Speaker - Tiffany Mason,  
BCT Senior Ecologist.*

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

**Excursion**

**Sunday 17<sup>th</sup> September**  
**‘Mirrambeena’, a private land conservation  
property near Cumnock.**

**Next Meeting**

**Thursday 14<sup>th</sup> September, 7.30 pm.**  
**The NSW Biodiversity Conservation Trust  
& its role in private land conservation.**

*Speaker - Tiffany Mason, BCT Senior  
Ecologist.*

Tiffany will outline the role of private land conservation in the landscape and its contribution to the National Reserve System. She will talk about how the Biodiversity Conservation Trust assists landholders achieve conservation outcomes, the range of programs on offer from the BCT and how to get involved.

Tiffany’s talk is part of the LLS’s Biodiversity Month. OFNCS members don’t need to book.

**Next Excursion – Sunday 17<sup>th</sup> September,**  
**A visit to ‘Mirrambeena’, a private land  
conservation property at Baldry.**

As a follow-up to Tiffany’s talk on the Biodiversity Conservation Trust the excursion will be to a property to see private land conservation in action. At ‘Mirrambeena’ 1,142 ha is under a conservation agreement and no stock are allowed to graze in it. The property is at Baldry, near Cumnock, and is adjacent to the eastern boundary of the Currenbenya section of Goobang National Park.



*Lisa McCann walking home after a wander through the BCT protected part of the property at Baldry. Click on the link [Mirrambenna](#) to see the BCT video where Lisa talks about her philosophy and the conservation measures she is implementing.*

Most of the vegetation in the protected area is Western Slopes Dry Sclerophyll Forest, dominated by Mugga Ironbark and Black Cypress, with some areas of Inland Rocky Hill Woodland. In the unprotected area, where some cattle graze, there is Blakely’s Red Gum along a creekline, and some White Box in the valleys (Western Slopes Grassy Woodlands).

Lisa has an extensive list of flora and fauna, but some of the more exciting/recent sightings include Glossy Black Cockatoos, a flock of around 70 Plum-headed Finches, breeding Diamond Firetails and Pink-tailed Worm-lizard. Fingers crossed there will be some orchids out in September!

Meet at Orange High bus bay at 9am to organise car-pooling. We will travel via Molong to Cumnock and stop there for a toilet break as there will be no access to toilets at the property. It will take about a further 35 minutes to get to the property through Baldry. We will meet Lisa at the farmhouse, park our vehicles and walk to the protected area. There will be some walking up hilly slopes so wear covered walking shoes and long pants. It will be a full day excursion so please bring your lunch, all your own supplies, including plenty of water and sunscreen as it will be hotter than in Orange.

**Last Meeting – Thursday 10<sup>th</sup> August.**  
**A window on the lives of the CSU Peregrines**  
- the story of a nest box in a water tower.  
*Speaker Dr Cilla Kinross.*  
*Report by Alison Ford and Cilla Kinross.*  
*Photos from Cilla Kinross.*

Peregrine falcons, an uncommon but not threatened species in the Central West, were first noticed using the Charles Sturt University (Orange) water tower as a launching pad to catch galahs etc in 2007. It was thought by Cilla Kinross and some colleagues that the window in the tower might suit a nest box. One was installed and it has been a breeding site since 2008. The birds have been observed since then, with systematic study beginning in 2012.



*Cilla inside the tower working on the nest box.*

There have been two breeding females (Swift and Diamond) and three males (Beau, Bula and Xavier). The first pair got their names as the project's first sponsor was the **Beaufighters Squadron** whose motto was 'Strike **Swiftly**'. Bula was the second male and Bula is Wiradjuri for 'two'. Xavier was the closest name to Saviour. He arrived as the chicks were just starting to hatch in 2016 after Bula disappeared, presumed dead. Diamond (named for the pattern of spots on her neck) went three days without food and when the first chick hatched, she went hunting and then suitors started turning up, including a very young male and a female, all turned down! Xavier was the third and was accepted, thus saving the season.

The pairs have had three eggs every year except in 2008 (1) and 2012 (2) and nestlings have successfully fledged in 13 out of 15 years. Eggs are laid in September and the young

fledge in November. After receiving hunting training, they usually leave the area after about six to eight weeks. The males are more reluctant to leave their childhood home than the females, one staying until the following August!



*Migii, the very first chick in 2008.*

There are two cameras inside the nest box allowing close-ups 24/7, 365 days per year, whatever the weather and, since 2021, one outside. Originally using surveillance recording software to observe activities, since 2020 Cilla has been using 'citizen science'. This was achieved via volunteers on the live-stream 'chat' function collecting data on breeding and other behaviour and diet. She has found people more reliable than machines!

Results have shown that there is a large difference between male and female use of the nest box and tower throughout the year, with females spending most of their time resting on the nest box ledge. Pair bonding and courtship behaviour occurs year-round but increases in winter leading up to egg-laying in mid to late August. Females do most of the incubation and almost all the brooding of chicks, but it varies with individuals. Xavier and Bula were attentive fathers; Beau was rather slack by comparison.



*Peregrines pair bonding, which increases in winter such as in July this year.*

During the study the falcons have caught over 4,000 prey items: approximately 3,500 birds, four microbats and 500 insects; (they love

cicadas). Prey items usually arrive tail-less, headless, wingless and featherless so identification to species level is a challenge. Cilla is getting quite good at recognising species by their feet! Where the species remains a mystery, Cilla can usually measure the torso (on the screen) and classify each prey by size.

Over half the species are identified, however, and 32% of prey are starlings, with eastern rosellas, other parrots, pigeons and large honeyeaters also commonly taken. They seem to be quite opportunistic, taking birds as small as pardalotes and as large as galahs, but Diamond, the current female, does not like starlings for reasons unknown! This question of selectivity can be tested by comparing the local avifauna with the prey assemblage and this work is ongoing.

Cilla is collating her results and writing three articles on the peregrine project: breeding, general behaviour and diet. The first article on breeding has been accepted by Corella, the journal of the Australian Bird Study Association, and is in press.

In her talk Cilla presented a summary of the breeding results:

- Mean clutch size 2.8
- Mean incubation 35 days
- Hatching success 62%
- 1.7 young fledged per clutch
- 87% nest success (fledglings 13 years out of 15)
- Male incubation 19% (daylight hours), with 0% incubation by males at night
- Male < 1% brooding/standing over eggs or chicks/feeding
- Temperature had no effect.

More information about the project can be found at <https://science-health.csu.edu.au/falconcam>.

Members can contribute to the project by following the livestream, participating in the 'chat', becoming moderators and helping collect data. Local people are also needed in November to help look for and rescue lost fledgelings and undertaking bird surveys in the local area throughout the year. All offers of help are welcome. Contact [cilla.kinross@csu.edu.au](mailto:cilla.kinross@csu.edu.au).

### **Last Excursion – Sunday 13<sup>th</sup> August.**

#### **CSU Peregrines and a visit to Cilla's bird survey sites in the bush on her property on Ophir Road.**

*Report by Helen Croke, with additions by Cilla Kinross.*

John, Swee, Cilla and I arrived at CSU with the opportunity to observe the falcons. It had rained lightly though the morning and the clouds that were around caused us to consider being prepared for some precipitation.

Cilla came equipped with a telescope and binoculars and we set up on the grass to view the inhabitants of the water tower. Our first sighting was of the female, Diamond, perched up on top of the tower. We could sense her awareness of us.



*Diamond on top of the tower. Photo J Zimmer.*

Within minutes of our arrival, but not yet quite set up to photograph or record, Xavier, the male, flew in and landed on top of the female to mate. From the cameras, Cilla knew the male had already visited his partner, several times that day.

Xavier the smaller falcon, then landed on the opposite side of the tower, sat there, looking quite unkempt and ruffled and ignored his partner. True to their species, they stayed apart. As mentioned at the talk, falcons are solitary creatures. They keep their distance and rarely go into the nest together.

We observed them through the telescope, and we could see the lovely markings on the birds and their incredible eyes that can spot things from such a distance. John came up with the idea of putting the phone cameras on the scope which allowed us to photograph even greater detail of their plumage and stature. They really are magnificent birds.



*Swee Chuak, Helen Croke and John Zimmer mastering the technology. Photo Cilla Kinross.*

We walked around the indigenous garden, Girinyalanya, and listened to the various bird calls that Cilla recognised so confidently. There were Red Wattlebirds, White-plumed and Yellow-faced Honeyeaters, Magpies and a Crimson Rosella. We watched the little wrens ahead of us on the path, trying to determine if they were male or female with either their blue or brown feathers. In our determining we were warned not to be confused by the brown moulting feathers of the male.

When we came to a bit of a clearing we witnessed Xavier taking on a Magpie, swooping at him in midair. Cilla commented on the fussiness of Diamond not liking the starlings. It was unlikely but perhaps he was thinking about Magpie for lunch.

It was such a privilege to see these beautiful birds up close and personal and congratulate Cilla on all she has done to protect and educate us on the *Falco peregrinus*.

Unfortunately, I was unable to continue the morning with the group who went to Cilla's property. I'm sure that like our experience at the tower, it was an educational one. Thanks Cilla.

Cilla continues....

As we were leaving CSU, we bumped into Hai and he joined myself and Swee to visit our property at Third Crossing, Ophir Road. There we walked through the 65-hectare property, and I explained how we were managing the land to improve it for biodiversity by planting natives and removing pest plants and animals. Hai said he was impressed by the way Cilla manages her side of the creek with all the native grasses.



*The quiet Summer Hill Creek where Hai hoped to see a Platypus but no luck. Photo Hai Wu.*

It was cold and we didn't see many animals, but a pair of White-faced Herons startled us with their guttural cries and we also heard other birds such as Grey Shrike-thrushes and Fan-tailed Cuckoos. Along the path some of the spring flowers, such as the lovely purple vine Hovea (I think *H. linearis*) were starting to flower, and we also had a look at some of the plantings along the riverbank.



*Spring flowering Hovea. Photo Hai Wu.*

### **OFNCS Committee News**

OFNCS joined with ECCO, the Ploughmans Wetlands Care Group, Central Tablelands Landcare and the Biodiversity Conservation Trust to participate in the Biodiversity and Art pop-up at the South Court near the Orange Library on Saturday 2<sup>nd</sup> September. Organised by Local Land Services, it was one of the first of the activities that are spread through September for National Biodiversity Month.



*The Biodiversity pop-up. Photo R Stapleton.*

This was a chance to showcase some of Field Nats activities and potentially attract new members. As Nick King said, *'It is always good to have an opportunity to engage with the public'*. We had conversations about the biodiversity, threatened species and places we must treasure in the local area. It was also good to talk with people from the other organisations and catch up with some familiar faces from them.

The display was adjacent to the chalk art flight of Superb Parrots on the steps and the fascinating Australian Museum's Birds of Australia STORYBOX. The animated STORYBOX brings to life the iconic bird illustrations of John and Elizabeth Gould together with First Nations storytelling and knowledge. A lady from the Australian Museum, who was here to oversee the STORYBOX, said she was impressed with the "great visual impact" of our displays. She was keen to learn more about the Orange area and was encouraged to visit the mountain to see where some of the threatened species live.



*Part of the OFNCS display. Photo Jenny Medd.*

While some helpers wore more than one hat, OFNCS was officially represented by Rosemary, Sandra, Jenny and later Helen, with Nick and Neil being the spokespeople for ECCO. Thanks to everyone for your ideas, resources and willingness to spread the word about biodiversity and threatened species.

### **October Talk and Excursion**

#### **Thursday 12<sup>th</sup> October. Exploring Orchid Pollination with Dr Col Bower.**

Col started exploring orchid pollination in the 1990s. He spent most of his spare time collecting the pollinators of sexually deceptive native orchids throughout south-eastern Australia and identifying that many orchid

species had specific pollinators. Col has published over 20 scientific papers on orchids and pollination. He is always willing to share his extensive knowledge so this is sure to be a fascinating and informative talk.

#### **Sunday 15<sup>th</sup> October – Calula Range – exploring orchid pollination in the field.**

Col will lead us to a location in the Calula Range, an offshoot of the northern Mullion Range, which he finds is the best place to study orchid pollinators. He will give a demonstration of the field pollinator choice tests that he has used to distinguish various orchid biospecies from each other.

#### **Book Launch**

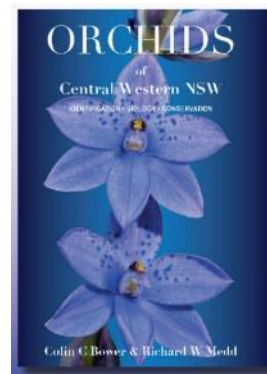
#### **Orchids of Central Western NSW**

**Tuesday 17<sup>th</sup> October, 5.30pm – 7pm.**

#### **Orange City Library, 147 Byng St, Orange.**

Come along to the launch of Col and Dick's fabulous new orchid book. The attached flyer, with a pre-release order form, gives a taste of what you will discover in the book.

You can book for the launch at <https://www.eventbrite.com.au/e/orchids-of-central-western-nsw-book-launch-at-orange-city-library-tickets-706442046177>



The book will be for sale at the launch for \$35, cash only. Either at the launch or afterwards financial members of OFNCS will be able to purchase **1 copy** at the wholesale price.

#### **CWEC Report**

*Rosemary Stapleton,  
OFNCS CWEC Rep.*



At the CWEC meeting on 6<sup>th</sup> August the results from the Mining Meeting that had been organised in Orange by CWEC were discussed. It played a part in the establishment of a Parliamentary Inquiry into 'Current and potential impacts of gold, silver, lead and zinc mining on human health, land, air and water quality in New South Wales.' Submissions

close 5 September and it is probable that the committee will hold a hearing in Orange and Mudgee. Many letters have been written resulting in meetings with NSW Ministers, Parliamentary Secretaries and politicians being held or organised.

Proposed extensions to 3 major coal mines around Mudgee have resulted in environmental groups joining with Lock the Gate Alliance to undertake an extensive social media campaign called Mudgee Coal Alert. These mines are on the headwaters of the Goulburn River. The campaign will initially focus on climate change but later biodiversity, water etc.

Two 500kw transmission lines proposed for the Central West Renewable Energy Zone are likely to result in destruction of large areas of Grassy Box EEC and impact on threatened species and agricultural land. The EIS is due for release later in the year. After objections, including from BCCAN, the proponent of the Yetholme pumped hydro project withdrew, which is good for Wambool Nature Reserve.

In relation to water issues the proposal to raise the level of the Macquarie re-regulating weir at Gin Gin has been dropped. Groups are waiting for news on the raising of the wall of Wyangala Dam and it is anticipated the project will not go ahead, largely because of the cost.

The meeting acknowledged the good news of the dual naming of Gaanha bula Mt Canobolas.

### **Gaanha bula Mt Canobolas Update**

The mountain is slowly emerging from winter with some vibrant displays of Acacias. If you look closely there are the purple of *Hardenbergia violacea* flowers and orange shades of *Pultenaea* (*below*). Leaves of some orchids are emerging and Col Bower has done his first measurements of the season for the tagged *Caladenia fitzgeraldii* locations. Soon the other species of heath will add much more colour.



*Pultenaea*. Photo R Stapleton.

Note that the Lonely Mountain Ultra marathon will be held on Gaanha bula Mt Canobolas on 14-15 October. This includes races that are from 34km to 104km long. The qualifying time for the longest race is over 19 hours so parts of the mountain may be off limits for the rest of us on those days.

### **Dates for your Diary**

#### **September – Orange Biodiversity Month.**

Central Tablelands Local Land Services have organised a range of events in September that focus on threatened species and biodiversity. Details and bookings at these links:

- [ORM Talks: Dr Ross Crates - the regent honeyeater](#) - Friday 8 September
- **Walk, talk and plant: Ploughmans Wetland Care Group tree planting and wetland tour - Sunday 10 September**
- [Understanding the impact of feral cats and pest animals on rural properties](#) - Tuesday 12 September
- [Understanding private land conservation](#) - Thursday 14 September (**the OFNCS talk**)
- [Waratah Wetlands school holiday environmental workshop](#) - Monday 25 September
- [Creatures of the night: Spotlighting at Gosling Creek](#) - Friday 29 September

Local organisations involved are the NSW Biodiversity Trust, Central Tablelands Landcare, Orange Field Naturalist and Conservation Society, Orange Regional Museum, The Australian Museum, ECCO and Ploughmans Wetlands Care Group.

#### **Cowra Archibird photography competition**

will be open from **18th September to the 15th October**. There are some details [here](#) but there are more details to come. Time to get out and get photographing. 🐦

Submit your photographs of native birds and don't forget photos have to be taken within 100km of Cowra. There will be categories for Youth, Teens and Open as well as prizes for a Waterbirds category and a Threatened Species category. Keep an eye on the Cowra Council website and the Natural Resource Management Committee Facebook page for entry details.

#### **2023 Cowra Woodland Bird Survey dates**

are October 14/15, and February 17/18, 2024. Contact Sue Proust for more information or to register for surveying at [sueproust@bigpond.com](mailto:sueproust@bigpond.com).

## **Saturday 21<sup>st</sup> October - Picnic for Nature.**

Picnic for Nature is an initiative of the Nature Conservation Council. The environmental groups in Orange have decided to host a picnic at the Federal Falls Picnic Area. The picnic is about celebrating the natural beauty of our area and connecting with community. It's also a chance to get together and talk about what we can do to protect nature and act on climate change. Details will be in the October Newsletter.

### **Sightings around Orange**

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

### **Plants**

*Acianthus collinus*, the Inland Mosquito Orchid, and *Diplodium nanum* (*Pterostylis nana*) or Dwarf Greenhood previously known as Hairy Snail Orchid (!) were flowering at Tracee Burke's property near Conimbla in early August.

Nigel Hobden spotted a cluster of tiny orchid flowers in the Mullion area at the beginning of September. Dick and Col commented that it was intriguing and very unusual. They have confirmed they are *Caladenia fuscata*, which is apparently a very variable species both in flower size and colour.



*Caladenia fuscata* group. Photo N Hobden.

Nigel wondered if the orchid flowers were small as the Mullion area was very dry. A few days earlier on a slope above Summer Hill Creek Col also saw tiny *C. fuscata* flowers growing among Blue Fairies, *Caladenia caerulea*. They were also on the small side and he wondered if this had something to do with the season.

### **Things with Wings**

**Scarlet Robins** have been wintering at Brian Williams place 'Carcolla', near Vittoria. He has also been seeing **Varied Sittellas** and **Brown-headed Honeyeaters**. On September 1 he noted that a pair of **Little Eagles** had returned to their nest, hopefully to breed.

A pair of **Brown Goshawks** have been flying around the woodland on Cilla's property this week, perhaps staying to nest. **Crested Shriketits** are still being seen more often than usual. Cilla has had a pair in her garden for a week and she hopes they may nest (below).



**Australian Reed Warblers** were heard in the last week of August at local wetlands, such as Ploughmans. They are summer breeding migrants and will depart again by April.

A **Common Bronzewing** was seen and heard by Hai along The Falls Track in the Mullion SCA on September 3. He was pleased to finally identify the bird call that he had been hearing at the Botanic Gardens.

### **News on Parkes Sewage Treatment Plant** *Report by Murray Fletcher.*

On August 1<sup>st</sup> Vicki and I had a day out enjoying the warm sunny weather. We stopped at Bumberry Reserve to see what was about and there were lots of **White-throated Treecreepers** buzzing around us along with a **Varied Sittella** and **Olive-backed Oriole** - along with all the usual birds. As we headed into Parkes, we decided to drop into the Sewage Treatment Plant (STP) to see what was happening. You will be aware that they have installed a new high tech STP system opposite the old settling pond area but as we approached, it looked like the pond area had been cleared for housing or something. We went through the gate to have a look anyway and there have been considerable earthworks, not to flatten the area but to sculpt what looked

like canals and ponds. There was also a large area where they had done a lot of planting. There were no birds because there was no water. We dropped into the Parkes Visitors Centre after lunch and asked what was happening out there and they told us that they are developing a constructed wetland and it should be finished by September. This is something we should keep our eye on to see if the birds respond because it could become a really attractive area for birdwatchers.

We came home via Gum Swamp where there weren't many unusual species although we saw a **Hoary-headed Grebe** and a single **Shoveler** amongst the **Pink-eared Ducks**, **Pacific Black Ducks** and **Grey Teals**.

### Fauna

A **Shingleback Lizard** pair (below) were photographed by Hai at the Falls Track, Mullion SCA. Last month it was mating Echidnas and this month it is mating reptiles! The Australian Museum website says 'Shingleback Lizards live alone for most of the year, but between September and November reunite as monogamous pairs' for breeding.



**An Echidna Story.** After the last Creature of the Month on echidnas Malcolm Stacey related this story from Oak Tree Village, *'on Ploughmans Lane. A neighbour close to the back gate on Bowman Ave came and said she was concerned about the next-door neighbour's dachshund's continual barking and a couple of other dogs breaking free and wanting to get into her backyard. I went and had a look and there was an Echidna in her yard, which had burrowed into the garden. I knew I couldn't move it. I rang Wires and they said the dogs could pick up its scent. So, the message was to get the dogs away, and in a couple of days unthreatened it would just go. I spoke to the neighbours and asked them to keep the dachshund away and told all dog owners in the village to keep away from that corner of the village. Sure enough after the second night it*

*was gone! So, echidnas must sometimes stray into suburbia'.*

### Rankin Springs Biodiversity Survey.

*Report and photos by Nigel Hobden.*

From the 8 - 12 August I participated in a biodiversity survey for the Riverina Local Lands Service (LLS) which was organised by Nella Smith from Narrandera. The survey was located on a rural property called the 'Acres' which has macropod exclusion fencing around much of the property and including Pulletop Nature Reserve. Within the macropod exclusion fenced area there is 54 ha of Mallee vegetation community that has been fenced with feral animal proof fencing since 2018. The area inside the feral fence has been cleared of ferals (cats and foxes) and one sole Swamp Wallaby exists within the enclosed area.

The aim of the survey was to record flora and fauna, 4 years since the first flora and fauna survey was undertaken. Malleefowl have been released within the enclosure which contains some 20 trail cameras. The cameras have detected the Malleefowl, as well as the Swampy and many other occupants.

Over the four-day period of the survey, both pitfall and Elliot traps were used; 20-minute bird surveys were undertaken as well as flora surveys to record vegetation species. The pitfalls were aimed at surveying both mammals and reptiles.

The number of participants was small with apart from Nella and myself, Lucy a young lass from the LLS and Sue Wakefield and her partner Jim. The group split into two teams to set up Elliots (20 in two transects each), and Lucy and I also had five pitfall traps to set up and monitor.

Over the course of the week, as would be usual, I wandered the 50ha looking and photographing anything that piqued my curiosity. Looking for orchids, birds, reptiles and unusual plants. Only two species of orchids were found, Dwarf Greenhood (*Pterostylis nana*) and Midget Greenhood (*P. mutica*).

Vehicles have been excluded from driving through the Mallee, however there is a slashed area about 12 metres wide between the feral exclusion fence and the Mallee vegetation which has remained intact for the period the



farm has been in the current owner's family; the current owner is around 60 years of age. Within this slashed area vehicles are permitted to be driven. The first 3 nights of Elliot trapping were uneventful for both groups; one morning a pitfall trap received a Common Dunnart (*Sminthopsis murina*) below.



*The Common Dunnart that didn't get away.*  
Photo Lucy Wright.

I led a spotlighting walk one evening and it was noted that there was a stark lack of arboreal nocturnal fauna life. Question to be answered: is this normal for Mallee vegetation? My torch and keen eyes spotted eye reflection in the feral animal fence flaring at ground level, and as the others gathered around it was identified to be that of a Common Dunnart. I pounced, capturing the Dunnart in my right hand. As I adjusted my hold, I opened a pinky finger a fraction too wide and quick as a flash the Dunnart ran up my arm and leapt into the darkness. Gone! The following and last morning both groups recorded Common Dunnart with Lucy and my Elliots containing 3 and one house mouse (*Mus musculus*) which was ethically disposed of.



*A Common Dunnart in a pitfall trap.*  
Photo Nigel Hobden.

Other highlights were the range of Honeyeaters, including Yellow and White-plumed, Striped, Singing and Spiny-cheeked as well as Yellow-throated Miners. Eastern Yellow Robin, Striated Pardalote, Red-capped Robin and Splendid Fairy Wrens were also birds of interest. The latter two were often observed around the campsite.



*Male Splendid Fairy Wren.* Photo N Hobden.

Shingle-backed Lizards (*Tiliqua rugosa*) were one of the few reptiles observed as the days had not warmed up enough for other reptiles to become active.

The biodiversity survey was a thoroughly enjoyable event, and it will be interesting to see how the flora and fauna of the site is managed and what species colonise the site over time. Nella showed me a few orchid spots that I could drop into on my way home. Sims Gap was one with many Blue Fingers (*Caladenia caerulea*), white and pink Caladenias were also observed along with Dwarf Snail Orchid (*Pterostylis nana*) and the flower stem of a Rusty Greenhood (*Pterostylis* sp).



*Some beautiful Blue Fingers (Caladenia caerulea).* Photo Nigel Hobden.

### A blast from the past.

Murray Fletcher writes ...I am currently scanning the Australian Entomological Society's News Bulletins from 1965 to 2012 after which electronic versions were available. I have been coming across the odd thing of interest, such as the photo and caption below.



PHOTOGRAPHIC PRIZE PRESENTATION:  
Jenny Davis and John Sandow congratulate Col Bower (R) on taking first and equal third prizes in the transparency section.

CATEGORY 1 - SEM and Microphotography  
- no entries

CATEGORY 2 - Macrophotography

SLIDES - 52 entries

<u>First</u>	C. Bower	Sawfly protecting larvae
<u>Second</u>	D. Rentz	Startle display in katydid
<u>Equal Third</u>	G. Tribe	Paropsis <i>geographica</i> with her eggs
<u>Equal Third</u>	C. Bower	Crane fly

### Creature of the Month

*Dodonaea viscosa*, Sticky Hop Bush.

Report and photos by Rosemary Stapleton, with information from The Australian National Botanic Gardens website

<https://www.anbg.gov.au/gnp/interns-2007/dodonaea-viscosa.html> and PlantNET. Accessed on 28 August 2023.

Dodonaeas are members of the Sapindaceae family. One of the species on Mt Canobolas is the subspecies *Dodonaea viscosa* subsp. *angustissima*, also known as subsp. *attenuata*. It is commonly called 'Sticky Hop Bush'. Another hop bush species, *D. boroniifolia*, the Fern-leaf Hop Bush also grows in the SCA. *Dodonaea viscosa* can be found across Australia and is a highly variable complex, consequently no fewer than seven subspecies are recognised. Each subspecies has a distinct habitat with the major differences of the sub-

species being in distribution, form and leaf characteristics.

Towards the end of every month I take a drive to Mt Canobolas SCA to see what seasonal changes have happened since the last newsletter. In mid-August I stopped part way up Old Canobolas Road. Rather than looking for bryophytes or orchid leaves my eyes were drawn to shiny red spots on one of the shrub species growing beside the road. I knew it was the common Sticky Hop Bush which never seems very interesting. It was only when I looked at my photos and did some research on the net that I begin to realise how fascinating the flowering of hop bushes was.

Species of *Dodonaea* are dioecious, i.e., the flowers are male and female and usually occur on separate plants. The red spots I had seen were the anthers of the flowers on the male plants. The female flowers, on other plants, have a relatively long style and stigma with the ovary covered by the calyx, probably until pollination occurs. The pollen, from the male plants, is dispersed by the wind. When touched these plants produced clouds of pollen and there were pollen grains all over the flowers and leaves of the surrounding plants. The flowers are described as inconspicuous, with no petals and are less than a centimetre in size. The shrubs along Old Canobolas Road had male flowers 3-4mm long and female flowers of around 5mm, so the following photos are 'larger than life'. Pollinated flowers develop into winged seed capsules 2cm in size, however fertilisation does not need to occur for the capsules to develop. To begin they are a green or cream colour and over time change to a rich red which are much more noticeable than the flowers.

*Dodonaea viscosa* subsp. *angustissima* is a spreading or erect shrub to 4m. Leaves are simple, linear to narrow oblong, 1-7.5 cm long and 1-6 mm wide. The leaf margins are irregularly sinuate. *Dodonaeas* are extremely hardy species that are able to resprout or reproduce from seed. They like well drained soils and can tolerate dry conditions and grow in woodland, chiefly in semi-arid or arid areas.

*Dodonaea* are known as hop bush as early European Australians used them to make beer. *D. viscosa* was traditionally used by Aboriginal Australians to treat toothache, cuts and stingray stings.

*Dodonaea viscosa* subsp. *angustissima* flowering along Old Canobolas Road. Photos taken during August 2023 by Rosemary Stapleton. Note photos are enlarged.



Male flower buds, with sepals splitting to reveal anthers.



'Open' male flowers with rich red anthers. Note the tiny spider in the centre of one flower.



Male flowers where anthers of one flower have split open to shower pollen on the other flowers.



Spent male flowers with shrivelled anthers and fully opened sepals.



Unopened female flower buds and several where sepals have been split by an emerging style.



'Opened' female flowers with 'extended' style and stigma with green ovary visible on one flower where sepals have spread.



Pollinated flowers where the style has fallen off and the winged seed capsules are developing and sepals are spread.



Winged seed capsules of *Dodonaea boroniifolia*, the Fern-leaf Hop Bush. This is the other hop bush species found on Mt Canobolas. These capsules are similar to those of the Sticky Hop Bush.



*John Zimmer, Helen Croke and Swee Chuak, spotting the Peregrine Falcon (the tiny dot on the right and note also the square hole of the box) on the water tower at CSU. Photo Cilla Kinross*

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

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