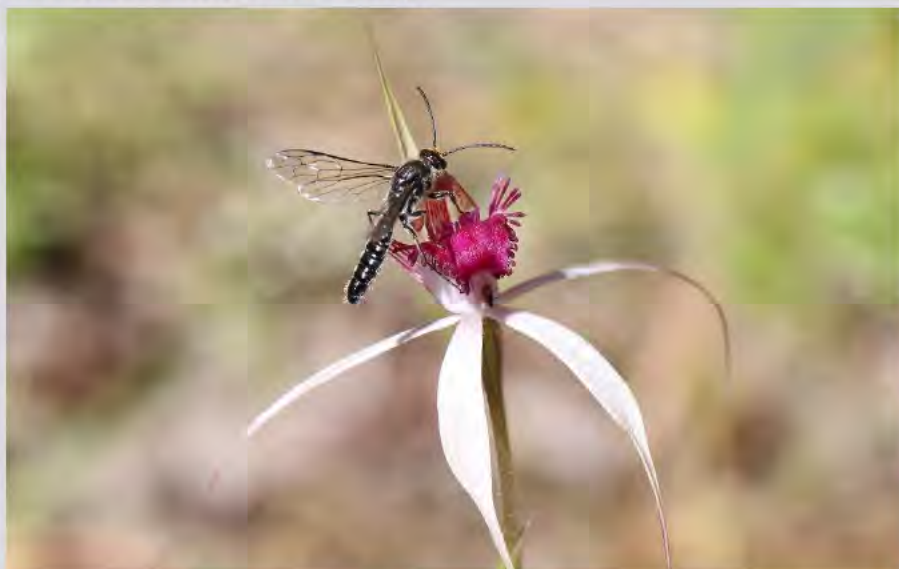




Spring With a Cherry on Top

Well just like that, September is over! Does anyone else feel like they blinked and the month just disappeared? With the distinct absence of early spring rains, this has meant that many people have noticed generally fewer flowers this year and earlier finishing times in the heat. Despite the shorter season for many species, there still has been much beauty around to be seen and there are still all the October flowering orchids yet to enjoy. This month we were treated to a presentation on Orchids of Madagascar by French Orchid Society President Jean-Michel Hervouet. This presentation was well attended by members and I concluded that after watching Jean-Michel's adventures on the Mountain of the Dead, that our orchids are a little too easy to find! September has indeed been a good month. Having just returned from the Capes Field Trip, we decided to spend our last day with a quick drive down to Scott River to find our first *Caladenia gardneri* after three years of searching for them. So just like that, September was short and sweet but finished with a cherry on top!



Cherry Spider Orchid (*Caladenia gardneri*) with pollinator

IN THIS ISSUE:

- Pollination in Action
- Beauty on the Laterite
- ADORP News
- Membership News
- Spotlight on Kojonup
- Capes Field Trip
- SRG Field Trip
- Your Orchid Story
- Metro Field Trips
- Question Time

Next General Meeting:

Kings Park Administration
Wednesday October 16th 2019

The Committee:

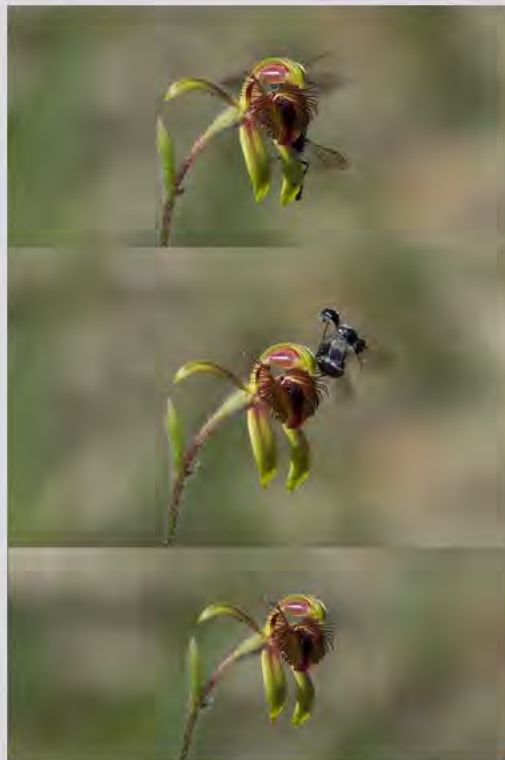
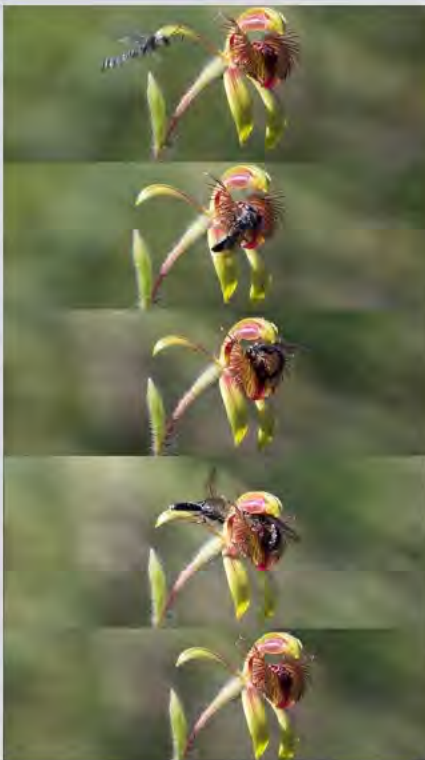
President – Ramón Newmann
Vice President 1 – Jon Warren
Vice President 2 – Ian Puddey
Secretary – Pat Richards
Treasurer – Jay Steer
Committee Members – Margaret Petridis, David Lawson, Kevin Uhe, Debbie Proudfoot, Andrew Brown

“Pollination in Action” By Pat Richards

Our native terrestrial orchids occupy narrow ecological niches in our bush environment, most of them surviving in very poor soils that provide them with minimum nutrients, a fact that may appear to give them an advantage over other native flora that require more fertile soils. On the other hand, many orchids rely on specific mycorrhizal fungi in the soil to provide them with nutrients to make up for the nutrient shortfall. In addition, they may also rely on one specific insect species to pollinate them in order to ensure development of their seeds to contribute to the next generation.

This reliance on very specific fungal and insect partners might seem to doom them to long odds of survival, however many orchid species have a sneaky trick tucked away in the depths of their flowers. In order to attract their particular insect pollinator, they exude an aroma that mimics a pheromone by which the female insect of the species attracts her male partner. The male insect finds the aroma irresistible and his natural sex drive leads him to try to mate with several in the population of that orchid species. In the process of his amorous attentions to the orchid's flower, the visitor may be daubed with the orchid pollen then, when he visits the next orchid to continue satisfying his natural urges, he deposits some of his pollen load. Thus, the orchid is pollinated and its seeds can develop to carry on the species to the next generation.

On a recent outing to a Perth metropolitan reserve, I and another member accompanied Mark Brundrett who had brought two potted native orchids as bait with a view to attracting their respective pollinator wasp species. These “bait” orchids were a dancing spider orchid (*Caladenia discoidea*) and a carousel spider orchid (*Caladenia arenicola*). Once the baits were deployed, we readied our cameras. *C. discoidea* quickly became the centre of attention for male wasps of its pollinator species and a couple of scuffles took place as competing males vied for access to the source of the irresistible pheromone. Eventually, a wasp with a noticeable lump of pollen adhering to its back arrived at the *C. discoidea* bait and burrowed into the flower's depths before departing with a noticeably smaller pollen lump on its back; dancing spider fixed! On this occasion, *C. arenicola* went unvisited, but Mark indicated that he later visited an adjacent reserve where the carousel spider's pollinator (another species of wasp) had turned up on cue.



Caladenia discoidea being pollinated by a wasp – Images by Pat Richards

The Committee 2020 – By Pat Richards

With the orchid season in full flow it's easy to forget that the end of the year is fast approaching and with it a reminder that we need to have plans in place for next year. Consequently, we need to be mindful of the fact that the smooth operation of WANOSCG is in large part due to the dedicated input and experience of the group's officers on the committee. The committee meets once a month throughout active months of the group year (March to November) with a major planning meeting taking place in February ahead of the main season.

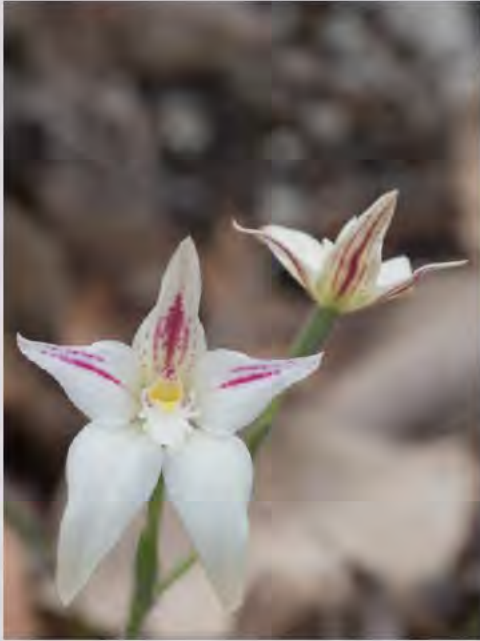
The committee is made up of ten members, five of those members holding formal office positions, i.e. president, two vice-presidents, the treasurer and the secretary, plus five ordinary committee members. In addition to their designated committee positions, most of the ten also hold subsidiary positions. Committee membership is a requirement for some of the subsidiary positions, e.g. - ADORP leader, membership administrator and database administrator must also be committee members, but it is not mandatory for the Bulletin editor, metropolitan field trip coordinator, etc, to be on the committee.

Some of the committee members are now looking to stand down. These include in particular your president, Ramón Newmann, who played an enormous role in navigating the treacherous waters leading up to registration of our group under the new Associations legislation, Margaret Petridis, long-time committee member and enthusiastic field trip leader, and vice-president, Jon Warren, who also fulfilled the subsidiary membership administrator position interviewing prospective new members and keeping track of their details. These officers have put in several years of dedicated and enthusiastic effort in shaping WANOSCG and are now looking to pass the baton to their successors. The subsidiary role of conservation officer has not been filled this year, with the group instead relying on various members around the state to monitor particular locations from a conservation point of view. Christine Lock, who has coordinated small groups visiting reserves in the Perth metropolitan area has also tendered her resignation for that position.

Thus, we are looking for upcoming and enthusiastic members to fill these vacancies and are inviting expressions of interest from members to fill various positions on the committee for 2020. If any members feel they can provide input to the ongoing success of our group by stepping up to fill any of the committee and/or subsidiary positions as appropriate, please seek information from Ramón Newmann or a member of the committee directly or by email to wanoscg@gmail.com.



“Beauty High on the Lateritic Plateau” - By Lyn Alcock



On September 18th, I was privileged to be part of a group to visit a site which is relatively inaccessible in the south-west where Professor Kingsley Dixon discovered two apparently new species of orchids some time ago.

Caladenia rosea and *Caladenia lateritica*, as he has named them, grow together and appear to be stable species. There are likely several thousand over the area, a most unlikely site for orchids...high on a lateritic plateau. Sadly, this area is at high risk from mining and clearing, despite its inaccessibility.

Both species resemble hybrids of *Caladenia flava* possibly subspecies *sylvestris*, however we did not sight a single normal *C.flava*. *Caladenia lateritica* is a very clear white with distinct red markings and *Caladenia rosea* displays all forms of pink, red and white combinations. They grow together and seem to happily co-exist.

Kingsley has published a paper describing these and naming them, but as with so much in the orchid world, this is not universally accepted. Purely from an unqualified point of view, I certainly hope this naming becomes accepted, as they seem to be well naturalized in the area and stay true to form. *C.rosea* is amazing in its many colour combinations and a spectacular orchid to see. Spider and Donkey orchids continue to be described, separated and named (much to the frustration of many of us), so why not these? Looking forward to seeing developments regarding this lovely find.



Images of the proposed new species *Caladenia lateritica* and *Caladenia rosea* by Lyn Alcock

ADORP News by Kevin Uhe

ADORP surveys are now well and truly underway in many cases and it is pleasing that a few new populations have been discovered this year despite the dry conditions being experienced in most areas.

Whilst in most cases plant numbers are down this year most populations are still recording reasonable numbers and in a few cases an increase in plants.

Some ADORP teams have been assisting DBCA Conservation Officers with surveys of Threatened species and gives a greater degree of co-operation between both organisations. Thanks to those teams who have spent time assisting DBCA in these surveys.

Octogenarian Night

The October general meeting has traditionally been dedicated to celebrating our long-time members who have reached the grand age of 80 and beyond, i.e. who are “octogenarians”. At last count we had 15 such octogenarians in our group (at least one of whom is actually a “nonagenarian”). All our members are therefore invited to join us at the general meeting on the 16th October when, following the formal parts of the meeting and the presentation by Chris French, those most senior of our members who attend will be fêted with a special cake.

The WANOSCG Award

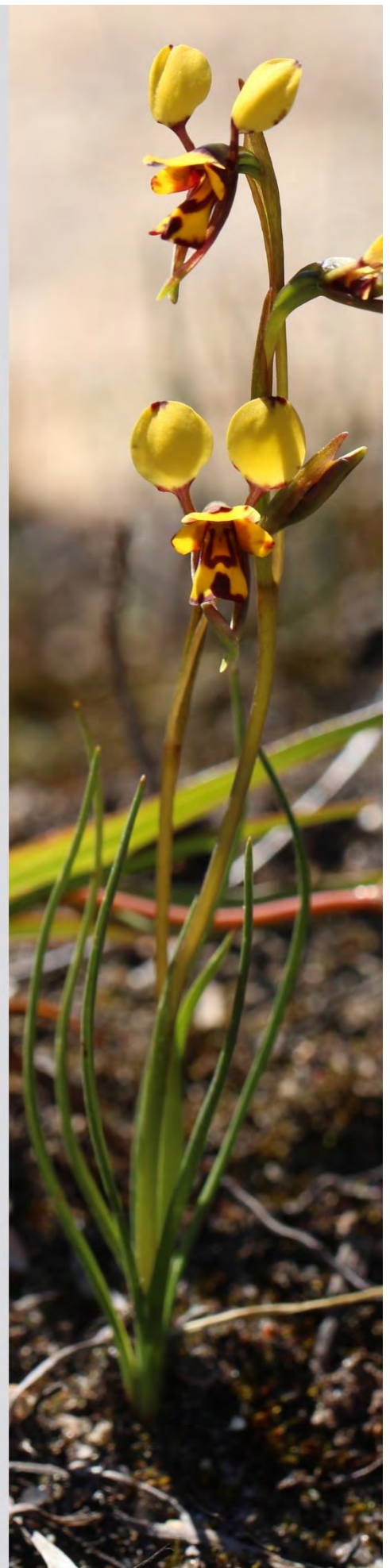
Those of you who have been with our group for some years will be aware that we have from time to time singled out a particular individual for recognition as having contributed in an exceptional way to the ongoing success and purpose of our group. Award winners in past years have been noted as having gone above and beyond in their dedication to furthering the study of our native orchids and their conservation. Therefore, if you feel you know a shining star who fits these criteria, please take a little time to speak to Ramón Newmann or a member of the committee with a view to nominating the member for such an award.

Membership News with Jon Warren

Two new members have joined us over the past month.

The first is **Monica McMichen** who has a lot of history with orchids going back to her work in Columbia managing a private collection and then time at Kew gardens. The second is a **Nathan Piesse** who is a pretty good photographer of all things nature especially birds and orchids.

Interesting fact - The club currently has 226 members with 103 of those members from outside the Perth metropolitan area including 20 from eastern states and two from overseas.

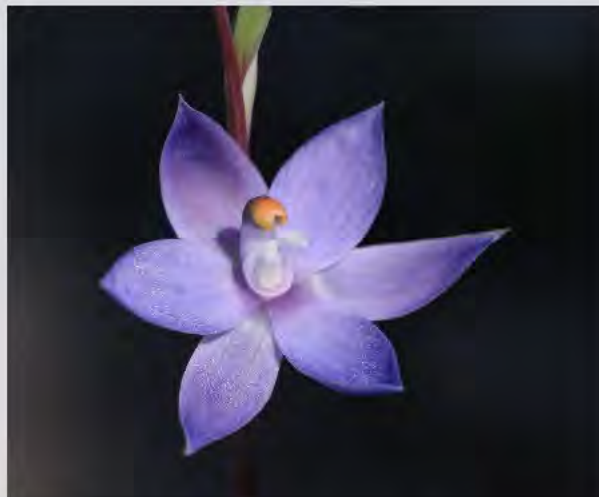
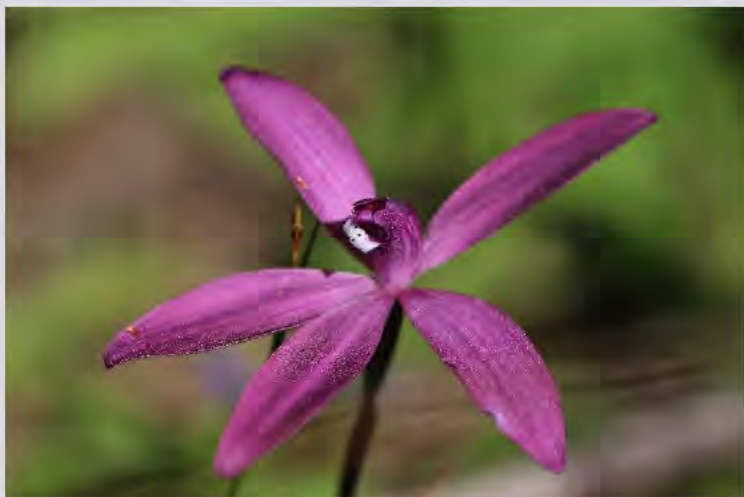


“Spotlight on Kojonup” by Rachel Halls

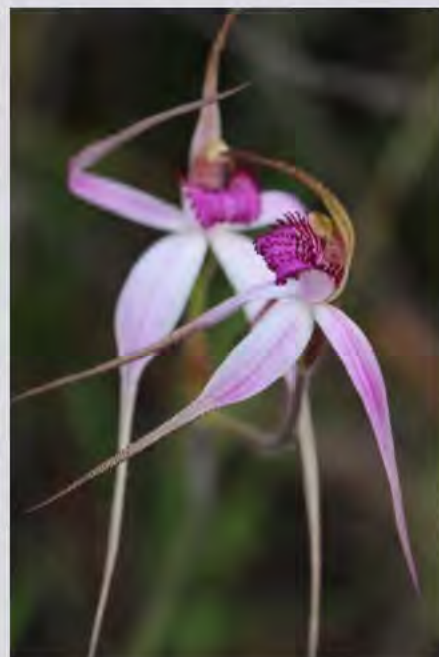
This month the spotlight is on Kojonup, continuing the feature of Western Australian small towns that are worth a visit during wildflower season. Kojonup is three hours drive south of Perth and there is plenty of bush worth exploring over a weekend visit.

For many members, the name Kojonup is synonymous with “Pink Silkies” as the town is famous amongst orchid lovers for the incredible pink colour variant of *Cyanicula sericea* (Silky Blue). Kojonup is a special place to me personally as it is the first place I attended a WANOSCG field trip in 2016 as a very inexperienced guest and met many welcoming members who were happy to share their knowledge and teach me all about native orchids. I was completely overwhelmed with the volume of orchids, with massive clumps of Blood Orchids (*C. filifera*) as well as the variety of species on offer, all within a 40km radius of the town.

Myrtle Benn Flora and Fauna Sanctuary is within the townsite on the outskirts and is worth exploring both the walk trails and the nearby former tip site for orchids. At this site, webs of Blood orchids (*C. filifera*) are tangled through the grass and across the rocks. Some grow alongside Primrose Spiders and intermingle with some displaying shades of red on their petals and sepals. Other orchids that can be found include, *C. ensata*, *E. saccharata*, *C. longicauda*, *C. falcata* and many species of *Pterostylis* including Snail orchids and other Greenhoods.



Images by Rachel Halls: Silky Blue pink variant - *Cyanicula sericea* (left) and Shy Sun - *Thelymitra graminea* (right)



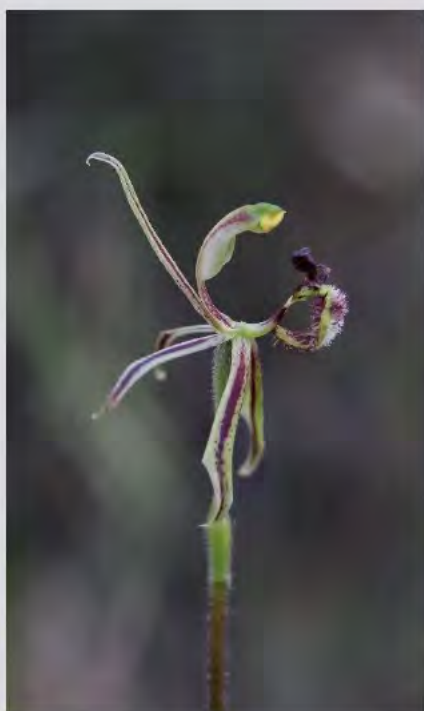
Left to right:
Wheatbelt Spider (*Caladenia x Cala*)
Pale colour form of Green Spider (*C. falcata*)
Tinged Spider (*Caladenia x suffusa*)

Spotlight on Kojonup Continued...



Images from left: Protruding Spider (*Caladenia x exserta*), Giant Donkey – *Diuris amplissima*, Stumpy Spider (*Caladenia ensata*)

Farrar Reserve to the south west of town is full of beautiful orchids and many hybrids with the White Spiders. You could easily spend an entire day at this reserve finding hidden treasures. Both Northern Darting and Darting Spiders are known to occupy this reserve as well as Dragon Orchids (*C. barbarossa*), Green Mantis (*C. falcata*), Pink and Purple enamels, Stumpy Spiders (*C. ensata*), Zebras (*C. cairnsiana*), Western Wheatbelt Donkeys, Vanilla Suns (*Thelymitra anteniferra*) and Rabbit orchids (*L. menziesii*) to name a few. The diversity of species at this site is owed to the varied habitats that change throughout this reserve from Sheoak country to mossy granite in some spots. Don't forget to take a selfie at the fence line with the strutting ostrich that comes to say hello on the adjacent private property.



Images from left: Common Dragon (*C. barbarossa*), Primrose Spider hybrid (*C. xantha*), Joseph's Spider (*Caladenia polychroma*)

Spotlight on Kojonup Continued...

Along the Kojonup-Darkan road heading west just over 20km is the unmarked Changerup Reserve. This spot is easily recognizable by the fields of White Spiders easily seen from the car when travelling greater than 90km/hour. Look for hybrids with Pink Candies at this site as well as the occasional Joseph's Spider (*C. polychroma*).

North of Kojonup is a special spot called Birdwood Reserve. This is a beautiful Wandoo woodland and you could easily think you are stepping through the Wandoo National Park at times. Fields of vanilla suns, cowslips, Shy suns, Green spiders and White spiders covered the ground. Many Wheatbelt Spider (*Caladenia x cala*) can be found at this site.

These are only a few of the many bushland reserves that have been protected around Kojonup and given more time, you could easily pick several more to explore and be rewarded with great finds. A small reserve within 6km of our favourite Farmstay in Kemminup resulted in seeing a lutea Green Spider (*C. falcata*) within 15 minutes of being there at sunset.

At the Visitor's Centre you can pick up a self-drive wildflower tour pamphlet with 3 days worth of suggested wildflower sites to explore with directions to all the aforementioned sites. Given the three hour driving time from Perth and the sheer amount of places to explore, I recommend staying a night at the least.



Images from left: Green Spider (*C. falcata*), Blood Spider (*C. filifera*) and Zebra Orchid (*C. cairnsiana*) and White Spiders below



“Capes Trip” by Kevin Uhe

FIELD TRIP REPORT - SEPTEMBER 28th – 30th

Members met at Sugarloaf Rock carpark on the Saturday morning and received maps and instructions for a self-drive trip on Saturday. This was done to avoid running convoys along very busy roads and proved a successful way of providing an interesting number of locations to visit. People could choose as to how long they spent at each location.

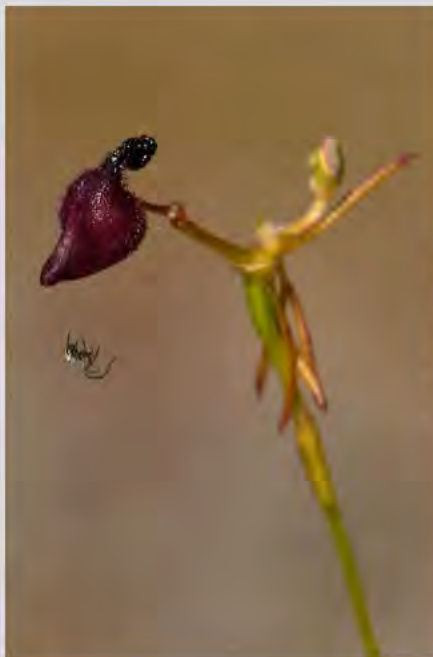
Near Sugarloaf Rock a number of Exotic Spiders (*Caladenia nivalis*) were seen and throughout Saturday the main orchids seen were the Forest Mantis (*Caladenia attingens* subsp. *attingens*), Swamp spider (*Caladenia paludosa*), Chapman's Spider (*Caladenia chapmanii*), Rusty spider (*Caladenia ferruginea*), Diamond Spider (*Caladenia rhomboidiformis*), Scott River spider (*Caladenia thinicola*), Dunsborough Donkey (*Diuris jonesii*), Purple enamel (*Elythanthera brunonis*), Flying duck (*Paracaleana nigrita*) and many hundreds of cowslips (*Caladenia flava* subsp. *flava*).

Sunday saw the group meet at a member's private property where they were treated to an array of hammer orchids including the King-in-his-carriage (*Drakaea glyptodon*) and the Warty hammer (*Drakaea livida*). A number of Flying ducks were also seen along with many Dunsborough donkeys, Forest mantis and cowslips. A nice morning tea was provided for the group after looking around the property.

The group then continued south to Moses Rocks and spent time helping David Cumming to count hundreds of Exotic spiders before moving as a group further south where a nice display of Diamond spiders, Margaret River spider (*Caladenia citrina*), including a cross between the two and some nice surprises in Merritt's white spider (*Caladenia longicauda* subsp. *merrittii*), Funnel web spider (*Caladenia infundibularis*) and blue and white forms of the Silky Blue orchid (*Cyanicula sericea*). A few bird orchids (*Pterostylis barbata*) were seen in late flower.

The group then split up and continued on a few optional self-drive locations where the Narrow-lipped hammer (*Drakaea thinniphila*) was added to the species seen. Most of the group headed back to Perth on Monday morning while a few met near Yallingup and surveyed more Exotic spiders with a frustrating number of Granite suns in bud.

Over all the weekend, the group found close to 40 species of orchids and thanks to all who participated and helped to make the weekend a successful one.



Images left and middle by Ian Puddey: Albino form of *Cyanicula sericea* and *Drakaea glyptodon* with friend

Images right by Rachel Halls: *C. citrina* and *C. nivalis*

“Cranbrook Area” by Lisa Wilson

FIELD TRIP REPORT: SOUTHERN RIVERS GROUP – SEPTEMBER 14th

Mosquitos everywhere!

The day started at the Cranbrook Café for a coffee for early arrivals. At the first stop, the group was greeted by the sight of spectacular clumps of *Caladenia longicauda* subsp. *eminens* (Stark White Spider) around the trees in the parking bay. The weather was overcast after the 2mm of overnight rain leaving water droplets on the flowers. We stepped carefully around the flowers and buds of *C. polychroma* (Joseph’s spider) of all shades from cream to ruby red. Many *C. vulgata* (Common Spider), *C. flava* subsp. *flava* (Cowslip), *Pterostylis vittata* (Banded Greenhood), *Thelymitra antennifera* (Vanilla Sun), and *C. falcata* (Fringed Mantis) were dotted throughout the area. *T. vulgaris* (Slender Sun) was shut tight in dull morning light. *C. ensata* (Stumpy) and a little way on, a pair of hybrids with unmistakable *C. ensata* x *redacta* parentage were also in flower. Other sighted orchids included *Pt. recurva* (Jug), and *Diuris porrifolia* (Small Flowered Donkey). A delicate *C. polychroma* lutea form was particularly beautiful.

Our second stop north east of the town we added *D. decremента* (Common Bee), *Cal. x cala* (Wheatbelt Spider), *Prasophyllum gracile* (Little Laughing Leek), *C. hirta* subsp. *rosea* (Pink Candy) and *D. brachyscapa* (Western Wheatbelt Donkey). A single *Pyrorchis nigricans* (Red Beaks) was flowering amongst an extensive patch of leaves.

The next stop further along the road added *C. cairnsiana* (Zebra), *C. straminichila* (Tenterden Spider), *Cyanicula gemmata* (Blue China) and *Cy. sericea* (Silky Blue). The final official stop was on a steep hill side. We were serenaded by Carnaby Cockatoos and found several *C. nana* subsp. *nana* (Little Pink Fan), *D. longifolia* (Purple Pansy) and *Lyperanthus serratus* (Rattle Beaks) in bud. A very quick stop just in case there was another orchid for the list, added *C. filifera* (Blood Spider) making many people very happy.

Everyone on the trip agreed that the day had surpassed all expectations. We had found our target orchids and more, twenty-seven different species in total.



Images by Lisa Wilson – *Caladenia longicauda* subsp. *eminens* (top left) and Members in the field (right)

Image by Mick Hurdus – SRG Field Trip Photo

“Your Orchid Story” with Mick Hurdus

How many years have you been a member of WANOSCG?

As half of Mick and Lisa, I have been a member since June 2018. Whilst working at a high school in Albany, Lisa was introduced to Anna De Haan, convener of the Southern Rivers group (A subspecies of WANOSCG!) who invited us to join.

How did you first become interested in orchids?

After visiting WA in the eighties, we took an interest in the wildflowers. Then, when we came to live here in 2010, we slowly became aware of orchids whilst bushwalking on our holidays. Then we bought Bob Liddlelow’s book and soon orchids became the main focus of our trips.

Which orchid is your favourite and why?

I don’t have one particular favourite orchid. Top of them all for me are the Sienna Suns, Mustards, Lazy spider, Blood spiders and recently, the Rufous Greenhoods. I just love the colours and shapes of these particular ones.

Are there any orchids left on your bucket list to find and if so, which one(s) are you most interested in finding?

There are still many orchids I haven’t seen. Many, many still on my bucket list- all of the Sienna Suns apart from Jacksons and Chestnuts and several spiders for example Pinks.

What’s the furthest distance you’ve driven in a day or on a trip to see a particular orchid?

A ridiculous amount of kilometres we don’t really count, except to ensure there is time for a return journey, even though dinner might be late!

Do you have a favourite memory from any group or personal field trips that you would like to share?

A trip in which we saw Red-lipped Bunnies which later ended up on the side of Mount Melville where we had cheesecake to celebrate ten years anniversary of the SRG with a nice view of the Albany coast in sunshine.

As a member of WANOSCG, what’s your ultimate goal for the organization or is there anything in particular you hope to see achieved over time?

I hope the society can go a long way to help conserving orchids in the natural environment. Promoting wider interest in conserving native flora and continuing the work of ADORP.



Images by Mick Hurdus from left – *Thelymitra villosa*, *Caladenia granitora*, *Caladenia herberleana*

Metro Field Trips by Christine Lock

The following are proposed trips and subject to changes. If you are interested in any of the following trips, please contact at [redacted] for dates and details.

DATE (Week beginning)	LOCATION	FIELD TRIP LEADER
Monday 7 th October	<i>Caladenia huegelii</i>	John Ewing
Monday 22 nd October	<i>Thelymitra campanulata</i> species	
Monday 5 th November	Yardarino Bushland	
Monday 7 th December	<i>Spiculaea</i> , <i>Paracaleana brockmanii</i>	



Caladenia gardneri – Image by Patrick Garnett



Caladenia integra – Image by Joanne Harley

General Meeting Rosters

Meeting	SUPPER ROSTER	RAFFLE PRIZE	SPEAKERS
16-Oct-19	David Lawson	David & Janeanne Cumming	Chris French – “New and Undescribed Orchids in WA”
20-Nov-19	Ian Puddey	David Lawson	Photo Competition

***T. variegata*, Lindley; variegated.**

“LEOPARD ORCHID”

Stem 1 ft. high or more. Leaf often spirally twisted about the base of stem. Flowers 2 to 4, large, purple, spotted. Lateral lobes of column orange-coloured, hornlike, oblong, erect, curved, toothed. In a note accompanying his description of a new species, *Thelymitra d'Altonii*, Dr. Rogers states that this Victorian variety is “evidently a near relation of *T. spiralis*, Lindl., and *T. variegata*, Lindl., two ill-defined and possibly composite West Australian forms. . . . The name *variegata* implies a character (presumably in the flowers) which receives no reference in either of the original descriptions.” (Transactions Royal Society of S.A., Vol. LIV., 1930). Dr. Rogers adds that Bentham retained only *T. variegata*, expressing doubt as to the wisdom of uniting these species, a point to be settled only after examination of a plentiful supply of material.

W.A.: Applecross, Canning Bridge, Gosnells, Northam, South Perth, Wanneroo, Warren River. August-December.

Extract of interest sent in by Bill Gaynor: From the book, “West Australian Orchids” by Emily Pelloe. Published in Perth back in 1930. Note that the Queen of Sheba may have existed in some people’s backyards in the locations listed at the bottom!

“Koondoola Bush” by Geoff Foley

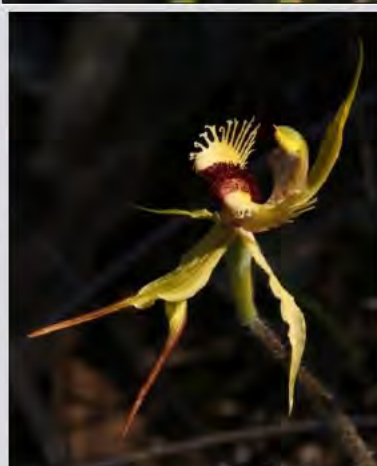
METRO FIELD TRIP REPORT: SEPTEMBER 9th

On Monday 9th September, a group of six WANOSCG members explored the burnt areas around the reservoir in Koondoola bush where Geoff and Robyn had scouted. A number of orchids were photographed including the Common Donkey orchid (*D. corymbosa*), Carousel spiders (*C. arenicola*), Tuart Spiders (*C. georgei*), Cowslips (*C. flava* subsp. *flava*), Red Beaks (*Pyrorchis nigricans*), Yawning Leek (*Prasophyllum hians*), Greenhood (*P. vittata*) and Jug (*P. recurva*). One Dancing Spider (*C. discoidea*) was also found and Scented Suns (*Thelymitra macrophylla*) were seen through the fence into the reservoir.

The group then drove about 3 km north to Hepburn Reserve. Geoff was able to show his previous find of an Arrowsmith Spider (*C. crebra*). A large group of Carousel Spiders (*C. arenicola*) were in this location as well as a few Shirts (*T. campanulata*) and Purple Enamels (*Elythranthera brunonis*). Further along a number of Jug orchids (*P. recurva*) were also seen plus a large group of Slender Suns (*T. Vulgaris*). Also found Cowslips (*C. flava* subsp. *flava*), Donkey (*D. corymbosa*), Greenhoods (*P. vittata*), Snails (*P. crispula*), Autumn leek (*P. parvifolium*), one flowering Shirt (*T. campanulata*) and a large bud of Blue Lady (*T. crinita*).

Photos

1. *Caladenia georgei* (Image top right)
2. *Prasophyllum hians* (Image bottom left)
3. *Caladenia arenicola* (Image middle right)
4. *Thelymitra campanulata* (Image bottom right)
5. *Caladenia crebra* (Image bottom middle)
6. *Pyrorchis nigricans*
7. *Thelymitra vulgaris*



FIELD TRIPS 2019 by Margaret Petridis

Proposed field trips as follows:

OCTOBER: No field trip scheduled due to lack of suggestions from members.

NOVEMBER: Suggestions invited for a location to hold the final break-up field trip for the year.

Register for field trips by text to Margaret: or Email:

“Beeliar Regional Park” by Matz Dahlkamp

METRO FIELD TRIP REPORT: SEPTEMBER 4th - Hope Road

I had the pleasure of being the leader for the metropolitan field trip on 4th September to the Beeliar Regional Park, Hope Road.

Five members of the Orchid Club met opposite the Native Ark building on Hope Road to have a look what could be found on orchids behind the fenced “bushland”.

We found in the 2-3 hours we were looking the following species:

Caladenia arenicola = Carousel Spider.

Caladenia georgei = Tuart Spider.

Caladenia flava = Cowslip.

Caladenia latifolia = Pink Fairies

Caladenia longicauda subsp. *calcigena* = Coastal White Spider.

Diuris corymbosa = Common Donkey.

Diuris magnifica = Large Pansy.

Pterostylis ectypa = Murdoch Snail.

Hybrid: *Caladenia arenicola* and *calcigena*

and an almost Albino *Caladenia flava* subsp. *flava*



Drakaea glyptodon - Image by Robin Parsons

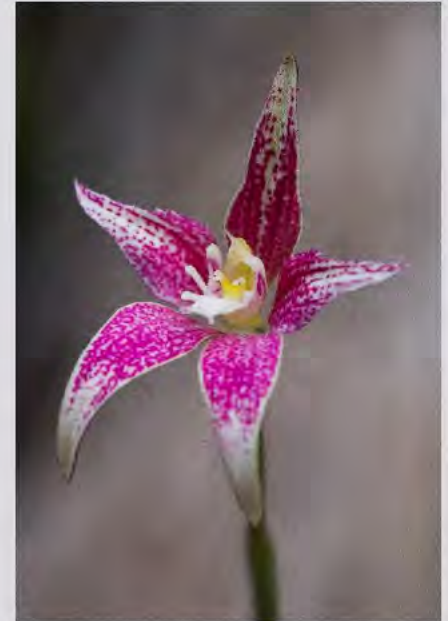
Whilst we saw a good number of *C. arenicola*, the people who know this area were disappointed in one particular spot, where one normally can find 40 or more of Carousels. This year there were only a few to be seen.



Caladenia swartziorum – Image by Joanne Harley



Caladenia arrecta – Image by Patrick Garnett



Proposed *Caladenia rosea* – Graeme Walker

“Ken Hurst Park” by Michael Lee

METRO FIELD TRIP REPORT: SEPTEMBER 18th

Myself and five members had a lovely walk (even though it rained) and counted 42 flowering *C. huegelii* and 14 others (budding, non-flowering or chomped).

There were also plenty of other species around including:

Caladenia flava subsp. *flava*

Caladenia longicauda subsp. *calcigena*

Caladenia longicauda subsp. *longicauda*

Caladenia discoidea

Caladenia arenicola

Pterostylis recurva

Diuris magnifica

Elythranthera brunonis

Diuris longifolia

Some budding sun orchids too.

Thelymitra crinita, *Thelymitra benthamiana* and *Thelymitra vulgaris*. We also found a possible hybrid *C. huegelii* x *C. arenicola*. Due to this species being Threatened flora I have completed a TPRF form in relation to *C. huegelii* (featured in images by Michael Lee below) for submission to the DBCA. Central image – *C. longicauda*.



The 2019 November Hybrid Special Issue

For next month's issue, I've decided that all the photos featured outside of the main articles will be hybrid orchids that member's have found. So please email in any hybrids that you have photographed whether it is because they are beautiful finds or interesting combinations. Ideally, they should be from the 2019 season however if they are a pretty special flower from a previous season then feel free to send them for inclusion in the bulletin. Please include the suspected parent species in your email details and I will endeavour to fit as many hybrid photos into the issue as possible. Email: wanoscg.newsletter@gmail.com.

Image right by Robin Parsons: Hybrid *C. citrina* x *C. rhomboidiformis*



Question Time!

Last month's question:

What is the relationship between orchids and fungi and how does orchid mycorrhizae provide nutrients to the plant?

Answer:

Orchids have a well-known symbiotic relationship with mycorrhizal fungi known as orchid mycorrhizal fungi (OMF). Throughout their life cycle, orchids depend on OMF for growth and nutrition as their seeds are incredibly tiny and have minimal food sources of their own, particularly in *Caladenia* species due to the limited root system. OMF degrade the natural external habitat of the orchid including leaf litter and bark and provide carbon sources of energy necessary for germination. There are greater than 370 known OMF species for *Caladenia* in Australia and it's thought the more specialized the OMF, the more threatened the orchid species may be as they have narrower specificity for fungi and both the orchid and the particular fungi must be present in the habitat to survive.

References:

1. Differences in carbon source utilisation by orchid mycorrhizal fungi from common and endangered species of *Caladenia* (Orchidaceae). S. Mehra, PD Morrison, F. Coates, AC Lawrie. Mycorrhiza 2017. 27:95-108.
2. Geographical range and host breadth of *Sebacina* orchid mycorrhizal fungi associating with *Caladenia* in south-western Australia. R. Phillips, M. Barrett, E. Dalziell, K. Dixon and N. Swarts. Botanical Journal of the Linnean Society. 2016. 182: 140-151.

This month's question:

How do orchids self-pollinate?

Please send any questions / responses to wanoscg.newsletter@gmail.com. Looking forward to your contributions!



Images by Gail Reed: *Thelymitra crinita* (Blue Lady) and a nicely coloured blue sun orchid

Bulletin Articles

Please send Bulletin contributions to the Editor – Rachel Halls at wanoscg.newsletter@gmail.com

COPYRIGHT

All articles and images appearing in the Bulletin remain the property of the Western Australian Native Orchid Study and Conservation Group (Inc.) or the original owner. WANOSCG is happy for any of the articles, items or images to be used by another orchid society for a non-profit purpose providing the society acknowledges the source and the author.

ARTICLES: All articles come from the author as stated and not WANOSCG.