ISSUE 6 - AUGUST 2019

WANOSCG

Official Bulletin of the Western Australian Native Orchid Study & Conservation Group

ADORP on the National Stage

In June of this year, WANOSCG founding member [redacted] gave a presentation entitled, "The Western Australian Adopt an Orchid Project – A Collaborative Program Between Community and Government" at the 2019 Orchid Conservation Symposium in Victoria. [redacted] presented a talk put together with [redacted] (WANOSCG ADORP Coordinator) which outlined the threats to many Western Australian species, the history of ADORP, some of the priority species that are currently being monitored by ADORP as well as the achievements of the project since its inception in 2011 when it was initiated by [redacted] and [redacted] with [redacted] from a concept they had developed in 2010. This talk was given to an esteemed audience of researchers and conservation enthusiasts from around the country. [redacted] has reported that it stimulated interest from several attendees with hopes of starting similar projects in other states. This presentation was an important means of promoting ADORP and the work of nearly 100 volunteers (many of which are members of WANOSCG) on the national stage of conservation.

Priority 1 Species: *Thelymitra magnifica* – Crystal Brook Star

IN THIS ISSUE:

Next General Meeting:

Kings Park Administration
Wednesday August 21st 2019

The Committee:

President – [redacted]
Vice President 1 – [redacted]
Vice President 2 – [redacted]
Secretary – [redacted]
Treasurer – [redacted]
Committee Members – [redacted]

ADORP on the National Stage continued...

Many long-term members would know of the history of ADORP and possibly have been involved as a volunteer in the project. However, for those newer members and those less familiar with ADORP, the following is a summary of project from its initial concept to current day achievements. This account has been adapted from the presentation given by at the 2019 Orchid Conservation Symposium. provided participants with a comprehensive handout of the talk co-authored with . A PDF of this handout is available to interested members to download from the WANOSCG website and contains more information than could be included within the scope of the bulletin. For any members who have any questions or are interested in being a part of ADORP, please contact .

"Western Australia's Adopt an Orchid Project (ADORP)"

By and

Background – Diversity, threats and rarity:

- With an estimated 711 genera and 5710 plant species, the south-west of Western Australia has one of the world's most diverse and unique floras and is considered a major biodiversity hotspot. Almost 80% of the native plants in this area are endemic.
- Western Australia has been subject to extensive human induced change which threatens the survival of many of its native plant species
- Threats include clearing for pasture or housing, water drawdown, dieback disease, salinity, frequent burning, climate change and weed invasion
- These threats, both individually and combined, have led to large population declines of many orchid species in south-west Western Australia and it is not surprising that some orchids that were once common are now rare

Threatened Flora:

- Under Western Australian legislation, the *Biodiversity Conservation Act 2016* provides for the protection of plant species that are under threat of extinction, are rare or are in need of special protection
- Termed Threatened Flora, such species may not be removed or collected from any lands (including private land) without the permission of the Western Australian Minister for the Environment
- As at June 2019, 427 plant species including 41 orchid species are listed as Threatened Flora

Priority Flora:

- In addition to those plant species that are protected by legislation there are many other potentially rare or threatened plant species that do not currently receive any formal protection
- These species are known from few sites and may potentially be rare or under threat, but cannot be declared as Threatened Flora until proper assessments have been undertaken
- The Department of Biodiversity, Conservation and Attractions (DBCA) lists these plants as Priority Flora as they are a high priority for monitoring and assessment for listing as Threatened Flora
- There are currently 3182 Priority Flora in Western Australia, 66 of which are orchids
- Priority Flora are placed into one of four conservation categories with Priority 1 species thought at most risk of population decline and Priority 4 species at least risk

Caladenia dundasiae
Priority 1

Cyanicula ixioides subsp. *candida*
Priority 2

Thelymitra jacksonii
Priority 3

Diuris recurva
Priority 4

ADORP on the National Stage continued…

ADORP Background:

- DBCA is the Government agency responsible for the protection of our flora. Limited staffing means that the Department is focused on implementing programs for Threatened Flora over Priority Flora
- Many Priority Flora species are likely to be genuinely rare and potentially could be highly threatened but, as little is known about their distribution, population sizes and the threatening processes affecting them, their conservation status cannot be accurately assessed
- This information is essential if these species are to be nominated for listing as Threatened Flora and is also required for the development and implementation of on ground protective measures
- A way to address the huge task of assessing the conservation status of such a large number of Priority Flora is to enlist the services of volunteers who can each adopt a species and undertake monitoring and surveys
- An initiative by and in 2010 led to WANOSCG taking up the challenge to monitor and survey Priority orchids and ADORP began in 2011 as a collaborative program between WANOSCG and DBCA
    - At that time 21 participants in 10 groups covered 11 Priority orchids
- ADORP has grown substantially and currently has 74 participants in 23 groups covering 31 Priority orchid species found between Kalbarri in the north and Esperance in the east
- ADORP's aim is to obtain a better knowledge of the biology, ecology, distribution, abundance and threats to Priority Orchids in Western Australia so as to accurately assess their conservation status in the wild

ADORP Processes:

- Small groups (max. 6 people) managed by WANOSCG and DBCA coordinators adopt a Priority Orchid species which they monitor and survey
- Groups monitor known locations and search potential habitats and record finds in report forms
- Information obtained is disseminated to relevant DBCA staff through the DBCA Coordinator. This information is also added to the DBCA Threatened and Priority Flora Database and the WANOSCG ADORP Database
- Following assessment, highly threatened orchid species may be nominated as Threatened flora and, if required, appropriate protective and recovery actions implemented

ADORP volunteers in the field

Example of an ADORP species – *Thelymitra magnifica*:

- The species is confined to a small geographic range along the western edge of the Darling Scarp east of Perth, growing in dense heath in association with *Eucalyptus wandoo*
- Over seven years, apart from one small subpopulation, no new populations have been located and just five populations containing a combined total of 58 flowering plants are known
- Much of the orchid's former habitat in the Darling Range has been lost to quarries and residential development and threats to extant populations are numerous

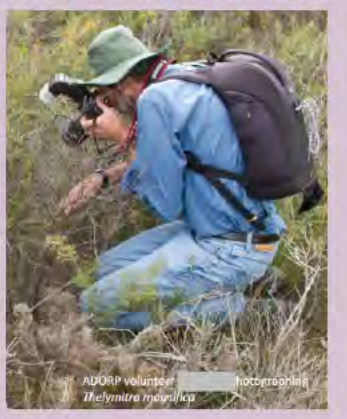
ADORP on the National Stage continued...

Example of an ADORP species – *Thelymitra magnifica*:

- Fuel reduction burns coincide with the growing, flowering and seed set of the species and are likely to be detrimental to its long-term survival
- Inappropriate recreational use of bush reserves, including illegal track construction by trail bikes, dirt bikes and cars also impacts on orchid habitat
- Grazing by rabbits and kangaroos is also a problem
- And finally, over-visitation by orchid enthusiasts is becoming an increasing problem for this iconic species due to trampling of associated vegetation and pruning of protective native plants to get a better photograph
- These negative environmental factors, together with the trend towards a drier climate, suggest that this magnificent orchid may struggle to survive long-term without intervention

Positive outcomes:

- A walk track has been realigned to avoid a population of the orchid, discussions have been undertaken with land managers to avoid burning plants when in active growth and the owners of private property populations have agreed to protect plants where possible
- The species has been nominated as Threatened Flora which, if endorsed, will offer it legislative protection



ADORP Achievements:

- After running for eight years the ADORP program has obtained important population and threat information on Priority Orchid species that would not have otherwise been available, resulting in a better understanding of their conservation status in the wild
- Over 100 Priority Orchid populations have been visited and monitored
- Monitoring and threat information obtained through ADORP is being progressively put into the DBCA Threatened and Priority Flora Database
- Populations of many Priority Orchid species have been found to be larger than previously thought and new populations have been located
- Conversely, some Priority Orchid species have been shown to be genuinely rare and potentially highly threatened, therefore meeting criteria for nomination as Threatened Flora. Two former Priority Orchid species have now gone through this process
- In addition, ADORP groups have undertaken (or have assisted in) a number of other activities. These include, in corporation with land owners and land managers:
    - Instigating recovery actions including rubbish removal, weed control, exclusion from prescribed burning, signage and protective fencing
    - Undertaking or assisting in research projects including pollination studies, genetics, fire studies, water table monitoring and monitoring the effects of rising salinity
    - Assisting in taxonomic studies
- For participants, the experience has been fun and rewarding, seeing rare orchids in the wild and working as a team with other dedicated orchid enthusiasts and conservationists
- There has also been a feeling of achievement when new populations are located or existing populations have been subject to recovery actions resulting in improved conservation
- This collaborative program is proving immensely valuable, enabling the public to make contributions to conservation efforts in partnership with government, land owners and land managers

"Orchids of the Mandurah-Peel District" –

For most people, Mandurah is a place you 'pass through' when you're looking for orchids. Hopefully by demonstrating the richness and diversity of the orchid flora in this region, it may inspire you to 'stop by' rather than 'pass through'.

I have roughly designated the Mandurah-Peel region as an area bound by Serpentine to the north, Dwellingup to the east, Waroona to the south and the Indian Ocean to the west.

My interest in orchids of this region started when we acquired a property at Melros on the northern boundary of the Yalgorup NP around 20 years ago. This is in close proximity to some of the orchid hotspots of the region including Island Point, Kooljerrenup NR, Austin Bay NR, Carrabungup NR, Nine Mile Lake NR, Johnson Rd and Yalgorup NP. Over the 20 years, I have found in excess of 90 different species and this is by no means an exhaustive list.

The first orchids to flower, as in most of the southwest, are *Eriochilus dilatatus* and *Leporella fimbriata* in April-May. The region's first claim to fame is that it is the most northerly location of the Leafless orchid, *Praecoxanthus aphylla*, found in the Nine Mile Lake region south-west of Pinjarra. In June-July the first greenhoods appear with *Pterostylis aspera*, a common orchid in the Yalgorup NP. One large colony (100+ plants) is found in Island Point Reserve. Whitehills Rd (Yalgorup NP) is a good location for many of the Pterostylis species including the rare *Pt. frenchii*. In spring, *Caladenia longicauda* subsp. *calcigina* and *Cyanicula gemmata* are commonly found there. After a burn you might find *Prasophyllum giganteum*. Peppermint trees are dominant and soils typically calcareous. At the end of this road you may be lucky to spot *Corybus recurvus* in the dunes. They flower in August.

Pterostylis frenchii

Cyanicula gemmata

Prasophyllum giganteum

Island Point Reserve is a rich orchid habitat with up to 50 species. Common orchids include *Caladenia reptans, Caladenia discoidea, Caladenia arenicola, Cyanicula sericea, Leptoceras menziesii* and *Pterostylis recurva*. Less common are *Caladenia attingens, Caladenia huegelii* and the Island Point spider, *Caladenia swartsiorum*. I have been monitoring *C. swartsiorum* at Island Point for many years now, in fact it is one of my ADORP orchids. The numbers have been fairly constant ranging between 50 on ordinary years, to up to 100 on good years. About three years ago, I found *C. swartsiorum* on the other side of the Harvey estuary at Kooljerrenup NR and each year we have found more. Island Point is at its best in October when the enamel orchids and the sun orchids are in full flower.

Orchids of the Mandurah-Peel District Continued…

Kooljerrenup NR, like Island Point is an orchid hotspot in the Mandurah-Peel district. Whilst there is much similarity with the orchid flora in these two areas, there is also some difference. Each year, at a site off Heron Point Road, a colony of *Caladenia cairnsiana* flower. Nothing unusual in the lower south, but anywhere north of Bunbury, *C. cairnsiana* generally only appear the year following a summer burn. With some members of WANOSCG, we have been involved with DBCA in monitoring the *Caladenia huegelii* and other orchids for the past two years in this reserve. Offset funding from Banksia woodland clearing on the proposed Perth-Darwin Highway has enabled this survey work and has contributed to finding more sites of both *C. huegelii* and *C swartsiorum*. About three years ago I had an exciting find at Kooljerrenup, the first recorded siting of the endangered hammer orchid, *Drakea elastica*. Since then a few more sites have been found. *Paracaleana hortiorum* often grows close by. Many sun orchids are found here including *Thelymitra crinita, T. macrophylla, T. graminea* and a beautiful pink variant possibly of *T. macrophylla*. Late in the orchid season, *Caladenia serotina* and *Microtis alba* grow in close proximity.

Caladenia huegelii

Drakea elastica

Caladenia swartsiorum

DBCA Group and volunteers at Kooljerrenup Nature Reserve

Orchids of the Mandurah-Peel District Continued...

Heading south near the banks of the Harvey River, grows *Caladenia occidentalis*. At this site a small number of plants appear each year. A few years ago after a burn, there were far greater numbers, including one clump of at least 20 flowers. *Diuris cruenta* is found close by and is prolific after a burn. It appears to have two colour forms. Further south at Johnson Rd, a good selection of orchids can be found. *Caladenia nobilis* is reasonably common, particularly after the Yarloop fires, as is *Caladenia hirta* subsp. *hirta*. This is one of the first areas south of Perth where *Caladenia speciosa* is abundant. Nearby, an unusual magenta coloured hybrid possibly between *T. benthamiana* and *T. macrophylla* is found each year.

Caladenia nobilis

Thelymitra macrophylla X benthamiana

Caladenia occidentalis

Diuris cruenta

Caladenia denticulata subsp. *denticulata*

Elythranthera brunonis

Yalgorup NP is home to a variety of orchids; one of the less common is the rare *Diuris micrantha*. An unusual find near Lake Clifton is *Caladenia barbarossa*. I have only seen it once around 12 years ago and despite revisiting the site numerous times since, it has never reappeared.

Opposite the Lakes cemetery near Mandurah town in a small patch of bush, I've found *Ericksonella saccharata*. This orchid is relatively uncommon on the Swan coastal plain. Nearby is a small wispy spider orchid that flowers in good number each year. It is smaller than both *C. nobilis* and *C. vulgata* and as yet I don't have a good ID for it. It flowers early September.

Other good orchid locations in the Peel-Mandurah region are both Carrabungup NR and Austin Bay NR. Carrabungup is great Drakea country and is where [redacted] and some members of WANOSCG have been involved in the *Drakea elastica* study. The late flowering *Diuris drummondii* is also found here. Nearby, Austin Bay NR is home to *Caladenia radiata*, possibly the most northerly location for this orchid. Both types of enamel orchids and many sun orchids are prolific here.

Southeast of here at Meelon NR in wandoo woodland, both *Caladenia denticulata* subsp. *denticulata* and *Caladenia denticulata* subsp. *rubella* are found. Some of the late flowering orchids can be found in the Darling Scarp. These include *Diuris setaceae* and *Prasophyllum brownii.*

As you can see the variety of habitats in the Mandurah-Peel region, provides a rich orchid flora that compare favourably with other orchid rich areas in the south-west of our state.

"Stirling Ranges" by

FIELD TRIP REPORT: SOUTHERN RIVERS GROUP – JULY 20th

It's true. The Kamballup Hall has been removed. Where to? We don't know...yet. The hall had morphed into a bare gravel patch. No use using the hall corners today to locate specific orchid patches like in previous years. Careful searching and a cuppa enabled us to locate a range of orchids and leaves. In flower were *Caladenia hiemalis* (Dwarf Common Spider), *Pterostylis vittata* (Banded Greenhood), *Pt. dilatata* (Robust Snail) and *Diuris littoralis* (Green Range Donkey) whilst *Pt. recurva* (Jug Orchid) was still in bud. Leaves of *Pyrorchis nigricans* (Red Beaks), *Cyrtostylis robusta* (Large Gnat), *Cal. flava* subsp. *flava* (Cow Slip) and *Leporella fimbriata* (Hare) were also sighted.

Our second stop only had Red beak leaves. So further north we drove to an old parking bay. Success, as we added *Pt. sanguinea* (Dark Banded Greenhood) and *Pt. concava* (Cupped Banded Greenhood), *Cal. reptans* subsp. *reptans* (Dwarf Pink fairy) and *Pt. angusta* (Narrow Hooded Shell). We were too early in the season at our fourth stop so drove to the lunch spot, out of the wind and with great views.

Much time was spent at the next picnic site. Here we had some great finds with most of the previously mentioned orchids in good numbers. *Corybas recurvus* (Common Helmet) and the Robust Snail were also found in limited numbers. The group then dispersed to find their own way home. However, two cars went due east to find a single *D. brumalis* (Winter Donkey), the first of many still to flower.

Although there was a constant cold wind, the sun was warm and no rain fell during stops. Back in Albany it had been cold, windy and wet. 18mm of much needed rain had fallen.

ADORP News by

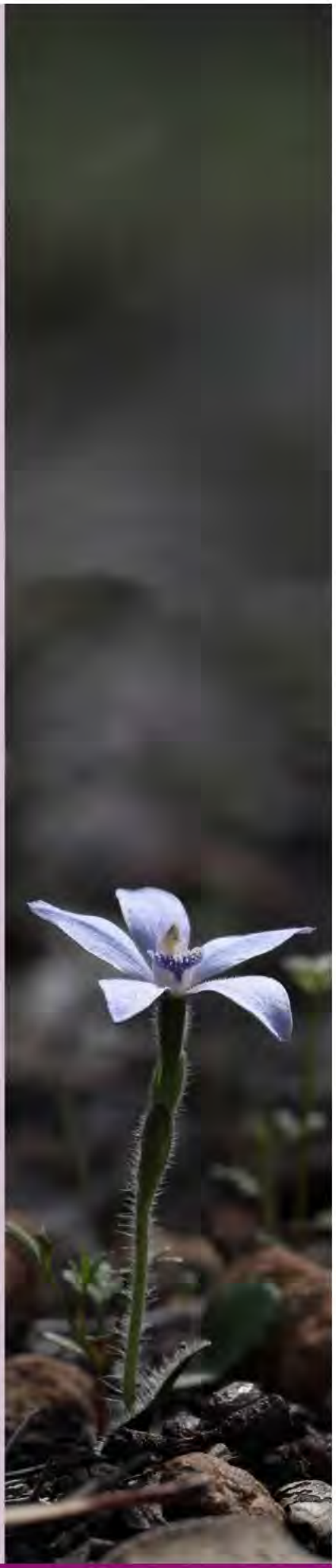
Welcome to who recently joined WANSOCG and has joined the ADORP program and will be helping with the Granite Ducks team. Also welcome to who is keen to take on *Caladenia nivalis* which was recently elevated to Priority two.

With the close of DBCA books for the 2018/19 financial year, the total number of volunteer hours for the ADORP project was a very impressive 5,244 hours. This compares with the previous financial year total of 2,446 and the total number of hours contributed by ADORP members since the project inception in 2011 to June 30 2019 is 13,139 hours.

A successful meeting was held at DBCA Kensington at the end of July between a number of ADORP members and officers from DBCA. It enabled the DBCA officers to meet many ADORP members and explain how the information gathered by ADORP groups is used by DBCA for a number of internal uses.

The first of the ADORP surveys has commenced with group undertaking surveys of *Caladenia exilis* subsp. *vanleeuwenii*. By chance the recent WANSOCG field trip to the Moora area was able to survey a couple of well-known sites, thus leaving Robs' the opportunity to explore other locations.

Whilst this species is not currently listed as Priority flora, information is being gathered as to population sizes and range given its restricted range and location in a highly cleared landscape. This information will be used to assess whether this species should be listed as a Priority orchid in the future.



"WANOSCG Sightings Database" by

Recently there have been various discussions and articles on different orchid sightings databases and some Members may not fully understand how they all fit in or relate to each other. This short article is an attempt to shed some light on this area.

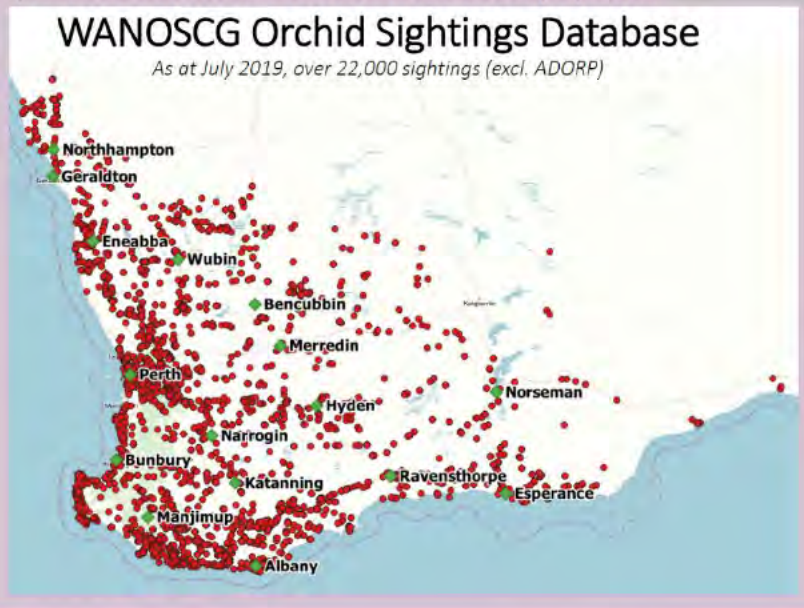
WANOSCG keeps 2 databases – the main **WANOSCG Members' Sightings Database** which has over 22,000 records and the **ADORP Database** (Adopt an Orchid Project) managed by . The main WANOSCG database has had contributions from 26 members since 2015 and a range of other members (notably) prior to that. Though the sightings, particularly the early records, did not originally all have GPS readings, those that didn't now have GPS readings added based on the location descriptions. This means that the data can be plotted on to a map (see picture) with various filters applied as required (e.g. genus, species, region, dates etc).

On request, reports from the WANOSCG database are available to Members who typically use them for organising Group Field Trips, Conservation work including road clearing objections and for orchid studies. In 2018, 13 such reports were requested and provided and 7 have gone out so far this year. No GPS or Threatened Species locations are provided, except under special circumstances.

The ADORP data comes from the Threatened and Priority Flora Report Forms (TPRFs) filled in by the various ADORP study groups. The TPRFs are then added to the Department of Biodiversity, Conservation and Attractions (DBCA) **Threatened and Priority Flora database (TPFL).** This database is used by various sections of the Department when internal management decisions are made or for determining the conservation status of species and are referenced when, for instance, external land clearing applications are made. Location information in turn is added to DBCA's **NatureMap** which can be accessed, with some limitations, by the general public. NatureMap includes the distribution of Western Australia's flora and fauna based on information from the WA Herbarium, the WA Museum, Consultant reports, the old Orchid Atlas Project and the TPFL. This includes historical data going back the 1800s, so the data source and dates should be considered when using it. For the most accurate species identifications and records it is best to filter out the Consultant reports and the old Orchid Atlas records.

The above databases are all WA focused. For sightings or distribution data based across the whole nation, there is the **Australian Living Atlas** (ALA) which has aggregated biodiversity data from multiple sources (75 million records; 117,000 species) with (depending on sources) mixed degrees of reliability. In terms of the listing of orchid species, the **Checklist of Australian Orchids** includes orchids from across the country and is contributed to by experts in the different regions, such as for Western Australia. The WANOSCG database includes the orchid species name, their distribution, flowering times and conservation status which is updated as new information becomes available from DBCA and other regional experts such as and .

If you would like any further information, including requests to access records related to the WANOSCG database, please do not hesitate to contact me directly by email



Thelymitra variegata
Image courtesy of

"Your Orchid Story" with

How many years have you been a member of WANOSCG?
25+ years - maybe it's getting close to 30 by now? Long enough to know better anyway.

How did you first become interested in orchids?
From the WA perspective (I'm an Eastern-stater), it was stumbling across my first *Caladenia discoidea* while wandering about the ridge top at Greenmount, near my Dad's place. I can still see the labellum waving in the warm breeze, as tempting as a siren's call.

Which orchid is your favourite and why?
They are ALL my children, but I do love an unexpected find, such as my serendipitous find of x *Cyanthera glossodioides* (Mauve Rare Orchid) near the Bluff Knoll car park back in 2001 (car park since expanded over the spot). I only knew what it was because had included a pic of it in some slides he kindly showed me just a few days earlier. Thanks .

Are there any orchids left on your bucket list to find and if so, which one(s) are you most interested in finding?
I don't have a bucket list as such. I rarely go out to specifically see a particular species these days - I just aim for a good day in the bush.

What's the furthest distance you've driven in a day or on a trip to see a particular orchid?
To minimise my embarrassment, I'll again limit this response to WA. Hmmm, is it the day trip I did from Perth to the Stirling Ranges in the mid-90's, only to be turned back because the whole region was flooded (I had no idea). No, I think it's the 2001 trip when I started in early Sept around Esperance, but then dashed to Kalbarri to catch all the lovely endemics in that area before they finished.

Do you have a favourite memory from any group or personal field trips that you would like to share?
That's easy - the first field trip I did with WANOSCG in 2001. I joined a weekend trip in the wheatbelt and was fantastically welcomed by the group. By Sunday afternoon I felt like I'd known most of the group for years, and have been friends with many on that trip ever since.

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 have no lofty ambitions for the group - I like to keep the basics in sight. So, I just hope WANOSCG continues to foster an environment where members can learn, share and enjoy native orchids.

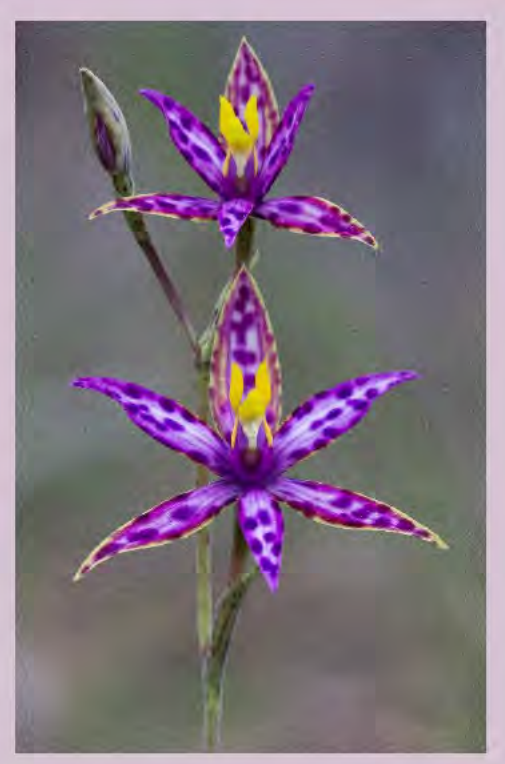
X Cyanthera glossodioides
Photo courtesy of

"Recovery Plans for *Thelymitra variegata*" by

Through the Adopt an Orchid Project (with approval from the DBCA, the Bunbury Shire) and working with instructions from , a small group of WANSOCG volunteers including myself are putting a plan together for the recovery of the threatened orchid *Thelymitra variegata*. For this reason, we would please like members of our club not to visit the only known site this year.

I know that this will not prevent others searching but the biggest threat to this orchid at this time is probably people. There will be cameras placed in the area to help prevent the threat of theft.

At this stage I will not go into the plan details but with only a handful of plants remaining and despite many searches over the last few years, no other viable populations have been found.



Thelymitra variegata - Image courtesy of

Proposed Joint ANOS (Vic) and WANOSCG Trip –

Seeking expressions of interest to visit Victoria's High Country

In recent years, the orchid seasons in Victoria's High Country have been very poor. Early signs are that this year's spring/summer orchid season could be good. If that is the case, there is opportunity to arrange a joint trip to the High Country that includes West Australian members of WANOSCG and in doing so, return the hospitality shown to the many Victorian members who visit Western Australia. It is envisaged the trip would take place sometime in the last week of November and the first week of December (with the opportunity for WA members to extend their stay before and after that period) and that Victorian members would provide some assistance with travel and accommodation. To gauge the interest in such a trip and to allow us to plan for it, could any members that might be interested please register their interest with by email to and when doing so, give an indication of their level of interest (eg: reasonably definite, or maybe). Those registering will be kept informed about seasonal conditions and trip planning.

2 species likely to be seen:

Caladenia hildae

Caladenia montana

Question Time!

This is an open question section in the bulletin to allow members to ask any questions they have in regards to orchids and give an opportunity for anyone (expert or enthusiast) to provide a reply that will be published in the following issue. Hopefully this will facilitate sharing of knowledge and generate some member involvement throughout the year.

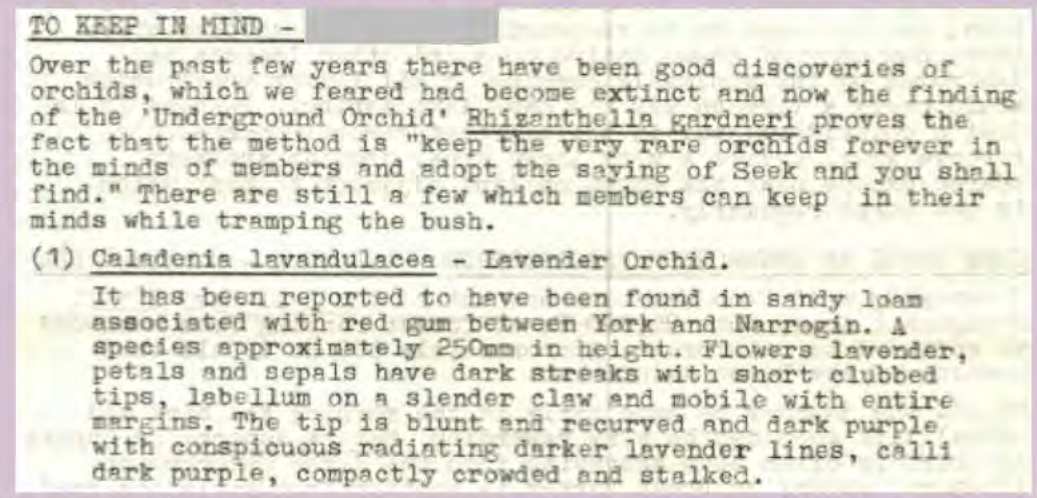
Last month's question:

How do you tell the difference between Pterostylis vittata (Banded greenhood) and Pterostylis orbiculata (Small banded greenhood) when you are out in the bush? What are the obvious key differences and are there green to brown variants in both species?

	Pterostylis vittata	Pterostylis orbiculata
Distribution	Wide distribution in the higher rainfall South-west. Most common between Albany and Perth and replaced by the closely related Pterostylis sp. 'northern' to the north of Perth	Predominantly more Northern distribution in lower rainfall areas from Geraldton to Bunbury, isolated areas in Mount Barker and Ravensthorpe. Comprises the orchids previously known as P. sp. 'small bands' and P. sp. 'coastal'
Flower numbers	2-20 (more rarely to 25)	2-12 (more rarely to 20)
Flower colour	Light green, translucent flowers usually with prominently green and white striped sepals	Reddish-brown, greenish brown and dark green flowers, usually with sepals lacking prominent stripes. North of Mogumber, the labellum is often brown, south of Mogumber it is usually the same colour as the sepals
Flowering Period	April to August (more rarely to September)	June to early September (more rarely to late September)
Flower and plant size	Slightly longer flower but narrower width. Plants are generally taller (200-500mm)	Slightly smaller length, but larger width. Plants are generally smaller (100-350mm)
Flower shape	Relatively narrow, often cupped lateral sepals	North of Mogumber the sepals are flattened, broad and rounded (these representing the type form of the species) and south of Mogumber they are slightly cupped, not as broad and less rounded. Although they are currently placed together it is possible that these represent a different species
Habitat	Forest, woodland and heath	Shrubland, woodland, forest, occasional granite outcrops

This month's question:

Sourced from the archives, an article published In July 1979 edition of the bulletin by [redacted] (the first official Bulletin editor 1974-76, as well as a past president) referred to the Lavender Orchid. Does the Lavender Orchid exist?



TO KEEP IN MIND -

Over the past few years there have been good discoveries of orchids, which we feared had become extinct and now the finding of the 'Underground Orchid' Rhizanthella gardneri proves the fact that the method is "keep the very rare orchids forever in the minds of members and adopt the saying of Seek and you shall find." There are still a few which members can keep in their minds while tramping the bush.

(1) Caladenia lavandulacea - Lavender Orchid.

It has been reported to have been found in sandy loam associated with red gum between York and Narrogin. A species approximately 250mm in height. Flowers lavender, petals and sepals have dark streaks with short clubbed tips, labellum on a slender claw and mobile with entire margins. The tip is blunt and recurved and dark purple with conspicuous radiating darker lavender lines, calli dark purple, compactly crowded and stalked.

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

Metro Field Trips by

Metro field trips have commenced for the year at the Boya burn area and Shenton Park Bushland. reports that at the Boya burn site, a solitary Winter Donkey and a Fringed Leek were found. More leeks appeared to be on the way as well as leaves identified for Thelymitra and Caladenia flava. At Shenton Park Bushland, Greenhoods and Blue Beards were in flower. Signs so far indicate that orchids in the metro area are a bit behind due to the dry autumn.

If you are interested in any of the following trips, please contact at for dates and details.

DATE (Week beginning)	LOCATION	FIELD TRIP LEADER
Monday 5th August	Kenwick Wetlands – Alton Street and Brixton Street	
Monday 12th August		
Monday 19th August	Inglewood Triangle – 8th Avenue	
Monday 26th August	Helena Valley – Hudman Quarries (burn area January 2019)	
Monday 2nd September	Hepburn Heights Conservation Area, Pinaroo Bushland – Shepherds Bush Drive (burn Woodvale 2018)	
Monday 9th September	Landsdale Bushland (burn Spring 2018)	
Monday 16th September	Winthrop – Piney Lakes	
Monday 7th October	Caladenia huegelii	
Monday 14th October		
Monday 22nd October	Thelymitra campanulata species	
Monday 5th November	Yardarino Bushland	
Monday 7th December	Spiculaea, Paracaleana brockmanii	

Unusually coloured *Pheladenia deformis*
Image courtesy of

Corybas recurvus
Image courtesy of

Thelymitra uliginosa
Image courtesy of

General Meeting Rosters

Meeting	SUPPER ROSTER	RAFFLE PRIZE	SPEAKERS
21-Aug-19			– King's Park research
18-Sep-19			President of the French Orchid Society Jean-Michel Hervouet
16-Oct-19			– "New and Undescribed Orchids in WA"
20-Nov-19			Photo Competition

"Mogumber to Moora" by

FIELD TRIP REPORT - JULY 27th

The proposed field trip to the Cataby area was cancelled due to our inability to find plants of *Thelymitra pulcherrima*, Northern Queen of Sheba during the previous two weeks. Members who had registered for the trip were contacted and offered an alternative, which 16 of them accepted. We changed the trip to focus on finding and counting the Moora spider, *Caladenia exilis* subspecies *vanleeuwenii* and the Mini donkey, *Diuris recurva*, as well as recording any other orchid species found.

We met at the Mogumber Hall where we found *Pterostylis orbiculata*, Small Banded Greenhood (this is the type location for this orchid), *Pterostylis platypetala*, Broad-petaled Snail and *Diuris refracta*, Dainty donkey.
We headed north and stopped near Gillingarra where we found and counted the Moora spider and recorded flowers of the three previously seen orchids plus *Pheladenia deformis*, Blue Beards. Buds were also found of *Caladenia flava*, *Pterostylis recurva* and a large *Caladenia longicauda* subspecies.

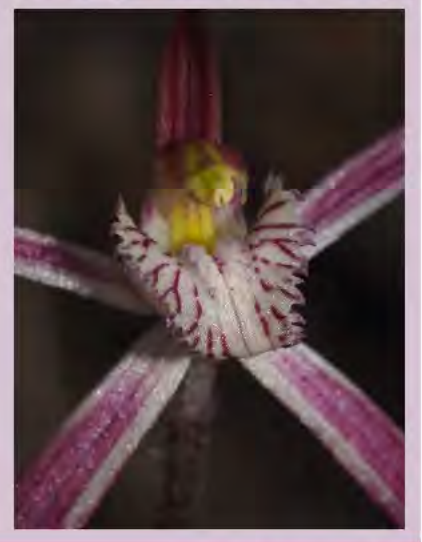
Around lunch time we visited the Koodjee NR where we found all of the above species except the Moora spider, plus buds of *Thelymitra antennifera*, *Caladenia reptans* subspecies *reptans* and a rufous greenhood.
In the afternoon we visited the well-known Candy's reserve near Moora and counted a large number of spider orchids (over 200) which were mostly (we think) Moora spiders, *Caladenia exilis* subspecies *vanleeuwenii*. Later examination of photos revealed considerable variation in labellum fringing and calli, so we think there is some hybridisation happening in the reserve. Larger spider orchids were ID at the time as *Caladenia pendens* subspecies *talbotii* and other orchids found were *Diuris recurva*, *Pterostylis scabra* and *Pt. setulosa*.

It was pleasing to have three new members attend the field trip where hopefully they learnt some tips on identifying the different orchid species. Thank you to all of the members who attended the trip. It was a wonderful sunny day and we saw a wide range of orchids with some in big numbers.

(FTL/FTC) and (FTL)

Clockwise from left:
Diuris refracta
Pterostylis platypetala
Possible hybrid
Caladenia exilis subsp. *vanleeuwenii*
Caladenia pendens subsp. *talbotii*

Images courtesy of



Current Threatened and Priority Orchid Species

Threatened	*Caladenia barbarella*	*Caladenia hopperiana*	*Diuris purdiei*
	Caladenia bryceana subsp. *bryceana*	*Caladenia huegelii*	*Drakaea concolor*
	Caladenia bryceana subsp. *cracens*	*Caladenia leucochila*	*Drakaea confluens*
	Caladenia busselliana	*Caladenia lodgeana*	*Drakaea elastica*
	Caladenia caesarea subsp. *maritima*	*Caladenia luteola*	*Drakaea isolata*
	Caladenia christineae	*Caladenia melanema*	*Drakaea micrantha*
	Caladenia dorrienii	*Caladenia procera*	*Microtis globula*
	Caladenia drakeoides	*Caladenia viridescens*	*Paracaleana dixonii*
	Caladenia elegans	*Caladenia wanosa*	*Pterostylis sinuata*
	Caladenia excelsa	*Caladenia williamsiae*	*Rhizanthella gardneri*
	Caladenia graniticola	*Caladenia winfieldii*	*Rhizanthella johnstonii*
	Caladenia granitora	*Calochilus pruinosus*	*Thelymitra dedmaniarum*
	Caladenia harringtoniae	*Diuris drummondii*	*Thelymitra psammophila*
	Caladenia hoffmanii	*Diuris micrantha*	*Thelymitra stellata*
Priority 1	*Caladenia bigeminata*	*Caladenia pholcoidea* subsp. *augustensis*	*Eriochilus sp. Roleystone*
	Caladenia caesarea subsp. *transiens*	*Caladenia uliginosa* subsp. *patulens*	*Paracaleana gracilicordata*
	Caladenia cristata	*Caladenia validinervia*	*Paracaleana granitica*
	Caladenia denticulata subsp. *albicans*	*Caladenia* × *hopperi*	*Prasophyllum paulineae*
	Caladenia dundasiae	*Calochilus* sp. Boyup Brook	*Pterostylis elegantissima*
	Caladenia evanescens	*Cyanicula sp 'Esperance'*	*Pterostylis hadra*
	Caladenia longicauda subsp. *extrema*	*Didymoplexis pallens*	*Pterostylis macrocalymma*
	Caladenia longicauda subsp. *insularis*	*Diuris eburnea*	*Pterostylis* xeramplina
	Caladenia longifimbriata	*Drakaea andrewsiae*	*Spiranthes sinensis*
			Thelymitra magnifica
Priority 2	*Caladenia ambusta*	*Caladenia swartsiorum*	*Paracaleana parvula*
	Caladenia applanaae subsp erubescens	*Caladenia ultima*	*Paracaleana* sp 'Laterite'
	Caladenia erythrochila	*Corybas* sp 'Peat'	*Pterostylis frenchii*
	Caladenia longicauda subsp. *minima*	*Cyanicula ixioides* subsp. *candida*	*Pterostylis* fuglinosa
	Caladenia nivalis	*Diuris brevis*	*Pterostylis heberlei*
	Caladenia perangusta	*Diuris heberlei*	*Pterostylis zebrina*
	Caladenia pluvialis	*Eriochilus scaber* subsp. *orbifolius*	*Thelymitra pulcherrima*
	Caladenia postea	*Liparis habenarina*	*Thelymitra* sp. Ongerup
	Caladenia startiorum	*Paracaleana alcockii*	*Thelymitra variegata*
Priority 3	*Caladenia abbreviata*	*Eulophia bicallosa*	*Thelymitra jacksonii*
	Corybas abditus	*Pterostylis echinulata*	*Thelymitra yorkensis*
	Cyanicula fragrans	*Pterostylis faceta*	
	Eriochilus dilatatus subsp. *orientalis*	*Pterostylis virens*	
Priority 4	*Caladenia integra*	*Corybas limpidus*	*Microtis quadrata*
	Caladenia interjacens	*Cyanicula ixioides* subsp. *ixioides*	*Thelymitra apiculata*
	Caladenia speciosa	*Diuris recurva*	
	Caladenia ×*triangularis*	*Microtis pulchella*	

Pheladenia deformis
Image courtesy of

Caladenia crebra
Image courtesy of

Caladenia sigmoidea
Image courtesy of

Mystery of the Shy Spider Orchid by

The Shy Spider orchid, AKA Caladenia x triangularis, is a hybrid between *Caladenia longicauda* subsp. and *C. flava*. Of particular interest to me is to understand, as much as possible, why the occurrence is so sporadic even though the parents are commonly found together over South-west Western Australia from Kalbarri area, south and east.

I would like to investigate whether this is due to some genetic/morphological feature of the different species, something to do with the pollinators or some other factor. In addition, develop some overview of the distribution and occurrence of this hybrid. To this end, I would like to find out how and where this hybrid occurs as well as how often it flowers, which forms of *C. longicauda* and *C. flava* are involved, as well as other species (larger forms of Caladenia) which produce a similar looking hybrid although technically speaking they would not be Caladenia x triangularis.

I would appreciate any feedback on plants people know of. Of course, I would also appreciate investigating individual plants if people are willing to provide details, including any that have flowered recently or are flowering this year. Particularly if they are within a couple of hours of Perth so I could visit on several occasions. Or, if more distant occurrences feedback on what species/forms were involved, including photos if possible.

All requests for confidentially will be absolutely respected. Overall, hopefully this will lead to a better understanding of this most interesting hybrid. Thanks in advance for any feedback. Any questions please feel free to contact me.
can be contacted at or on

FIELD TRIPS 2019 by

Proposed field trips as follows:

AUGUST 31st: New Norcia Day Trip
FTL:
Members will be able to visit the Carrah Wildflower Park, Callingiri West Rd, Old Plains free of charge if they decide to stay in the area overnight. Information regarding the New Norcia day trip and the Wildflower Park will be sent to registered attendees the week before the trip. Register from August 1st.

SEPTEMBER 7th-8th: Corrigin area
FTL: and
Register from 7th August to

SEPTEMBER 28th-30th Long weekend: Dunsborough and the Capes
FTL: and (by default)
We are planning to organise a self-drive tour with maps for each day in order to reduce congestion on the roads and in the locations. Any suggestions of locations to visit would be very welcome. Registrations from August 10th as members need to organize own accommodation.

OCTOBER: No suggestions or FTL volunteers have been forthcoming from members so far, so no field trip is proposed for this month as yet. Please contact the FTC if you have any suggestions or would like to lead a field trip (one day or longer).

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

Register for field trips by text to or Email:

Pterostylis sargentii
Image courtesy of

Caladenia x coactescens
Image courtesy of

Caladenia reptans subsp. *reptans*
Image courtesy of

2019 WANOSCG Photography Competition

Members are invited to submit a pair of photos for the November photo competition which show:

1. An orchid in its natural habitat showing both the orchid and its surrounding habitat (trees, shrubs, rocks, swamp, logs etc).
2. A closer shot of the exact same orchid.

The rules:

- The photos must have been taken between November 2018 and October 2019
- Printing size - up to 10" x 8" or A4, unmounted and not framed.
- Please include your name and the date the photo was taken to be written on the back of each photograph.

Bulletin Articles

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

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