

Western Australian Native Orchid Study and Conservation Group



JUNE 2017 Bulletin

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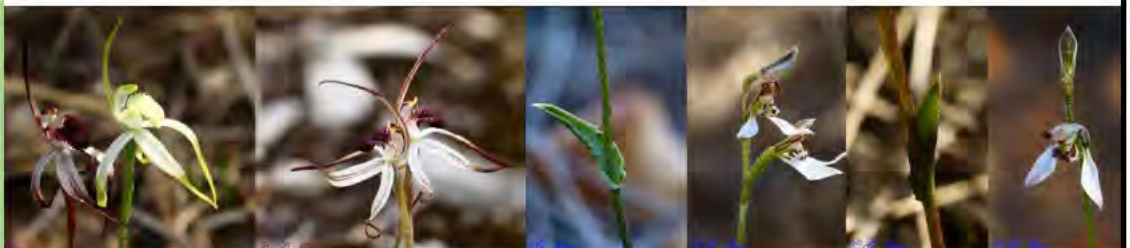
REMINDER: JUNE GENERAL MEETING SPEAKER

Hans Lambers
Professor of Plant Biology University of WA & Member of Kwongan Foundation
Subject: Western Australian bush Habitat

Resolving orchid names for *Caladenia* and its relatives –

Mark Brundrett

There has been a recent trend for plant taxonomists to define plant species, genera and families using scientific evidence such as DNA sequence data to define a family tree for a group of plants. These new classification schemes, which are based on the phylogeny (ancestry) of species, are expected to be more reliable and stable in the long term. Older classifications based on the structure, chemistry and development of plants have been validated by DNA-based data in many cases. However, in other cases dissimilar looking plants have been shown to be more closely related than expected, resulting in the loss of familiar families and genera. Examples of families lost in the latest angiosperm classification include the Chenopodiaceae, which is now in the Amaranthaceae, and the Sterculiaceae, which is now part of the Malvaceae, (APG III 2009). Some proposed changes have yet to be adopted by the Western Australian Herbarium and may not be, but you need to be aware of them if accessing other data sources. You can see a summary of recent changes in the names of plants used by the Western Australian Herbarium on the FloraBase website under the Themes menu (see florabase.dpaw.wa.gov.au/articles/sequence). Plant species names are also commonly affected by taxonomic studies using DNA sequence data, which can show that similar looking species belong to a single genetic entity in some cases or are more different than expected in other cases. **(Continued Page 2)**



Northern Orchids – Gail Reed

Have had a few trips this month but everything is so dry and what orchids I have found are very, very tiny with most going over very quickly.
Much rain is needed

A trip on May 24th found winter spider orchids just starting at Yandanooka. Mingenew West also has winters and Beth Teale and I found a nice population out at East Yuna NR.

A trip on June 1st proved to be very exciting given it is so dry out there this year. At Depot Hill White bunny orchids in flower where found as well as *Diuris perialla* with buds however they are only about 5cm high and with quite a lot of leaves still to bud.

Next Burma NR produced Crinkle Leaf bunnies just starting to come into flower with some snail rosettes just starting to show in various places.
East Arrowsmith has a lot of Hare Orchids in flower and the odd Blunt Leaf Bunny around as well as some nice healthy Greenhood shoots.

Grigson's Lookout, Greenhead showed nothing at all on June 2nd with not even any Kalbarri shell rosettes to be seen.

Resolving orchid names for *Caladenia* and its relatives Continued from page 1

If we focus on iconic West Australian orchid genera, we have many cases where it has been proposed that genera should be split based on previous taxonomic studies. However, most of these proposed new genera were not recognised by the Western Australian Herbarium (genera within *Caladenia* and *Pterostylis* were only recognised by some Australian herbaria). This approach has since been validated by the study by Janes et al. in 2010 which shows the 16 separate genera that could be recognised within the greenhood orchids (*Pterostylis*) were not well supported by genetic data. Recent research by Clements et al. (2015) has also shown that there is a lack of scientific evidence for splitting the spider orchids in *Caladenia* into multiple genera such as *Arachnorchis* and *Drakonorchis*. However, this paper goes one step further and recommends a broader definition of *Caladenia* that includes its sister genera *Elythranthera*, *Glossodia*, *Pheladenia* and *Ericksonella*. In some ways this makes sense, because these orchids were originally included in *Caladenia* and have a complex history of name changes (Hopper and Brown 2014). The blue china orchids (*Cyanicula*) originally included three morphologically dissimilar groups of blue orchids and may still not form a single natural group, even after the blue beard orchid was separated into its own genus (*Pheladenia*).

Perhaps the most perplexing proposed name change would be to merge the enamel orchids back into *Caladenia*. This is because the enamel orchids look very different from spider orchids due to the glossy surface of their tepals and the pair of strange elongated calli next to a very small lip (see photo G). However, both of these unique features are likely to be recent adaptations to attract native bees that buzz-pollinate similar looking flowers (rapid changes in flower morphology are often not reflected in genetic data).

Another genus to be lost would be the waxlip orchids of eastern Australia (genus *Glossodia*), which are very closely related to our two enamel orchids. The waxlip orchids are less glossy and have a lip that is intermediate in shape, so may well provide a missing link between *Elythranthera* and *Caladenia*. A similar situation concerns our iconic flying duck orchids. These small orchids are worth a closer look, as they have a unique lip which rapidly closes into a pouch-like lip when triggered. These orchids rival our triggerplants and greenhood orchids, as one of the fastest plant actions on earth (Brundrett 2014). A paper published by Miller and Clements in 2014 proposes that all of the flying duck orchids belong to one genus. Thus all our western species in genus *Paracaleana* would become species of *Caleana*, a very similar genus from eastern Australia (most species of flying duck orchids occur only in WA). At this stage the Western Australian Herbarium has not decided to accept this change, but the national flora census may well do so.

What needs to be done to resolve the quandaries summarised above? The WA Herbarium will eventually need to decide if it will continue to recognise separate genera for the flying duck orchids, as well as spider orchids and their close relatives. However, before that happens, some discrepancies in published data should to be resolved (e.g. trees based on genes in the chloroplast seem not to agree with those using genes in the nucleus). Some of these issues are being investigated in an honours project by Katie Elder, supervised by Ian Small at the University of Western Australia and Mark Brundrett at the Department of Parks and Wildlife. This project aims to resolve the shape of branches at the base of the *Caladenia* family tree using additional genetic and structural data. This new information should provide a more accurate assessment of what orchids should be included in the genus *Caladenia*.



From a public perspective, people may be concerned when iconic generic names that have been in use in Western Australia for decades are lost (assuming you could spell and pronounce *Elythranthera*). My feeling is that botanists will eventually abandon small genera such as *Cyanicula* (perhaps subgenera within *Caladenia* would remain). This would result from the complexity of historic taxonomic changes to these orchids, some of which have been moved into a new genus three or more times, as well as a new understanding based on better family trees. I recently published the book "Identification and Ecology of Southwest Australian Orchids" (available through the Wildflower Society, West Australian Naturalists Club and selected bookshops) and you may be wondering what will happen to these orchids in the next edition of this book. As it happens, the orchids likely to be merged back into *Caladenia* were already grouped together in the same chapter of my book, because I put similar-looking orchids close together to aid identification. Consequently the names of orchids may change but their order in my book will not. Have a look at the photographs illustrating these orchids provided below and see if you think they should be merged into one genus or not. Unfortunately, taxonomists make decisions based primarily on their own opinion as well as scientific facts and there has been great difficulty in standardising orchid names for Australia in the past.

References

- APG III. (2009). An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG III. *Botanical Journal of the Linnean Society* 161: 105–121.
- Brundrett M. 2014. *Identification and Ecology of Southwest Australian Orchids*. Western Australian Naturalists' Club Inc.
- Clements, M. A., Howard, C. G., & Miller, J. T. (2015). *Caladenia* revisited: Results of molecular phylogenetic analyses of Caladeniinae plastid and nuclear loci. *American Journal of Botany* 102: 581-597.
- Hopper, S. D., & Brown, A. P. (2004). Robert Brown's *Caladenia* revisited, including a revision of its sister genera *Cyanicula*, *Ericksonella* and *Pheladenia* (Caladeniinae: Orchidaceae). *Australian Systematic Botany* 17: 171-240.
- Janes, J. K., Steane, D. A., Vaillancourt, R. E., & Duretto, M. F. (2010). A molecular phylogeny of the subtribe Pterostylidinae (Orchidaceae): resolving the taxonomic confusion. *Australian Systematic Botany* 23: 248-259.
- Miller, J. T., & Clements, M. A. (2014). Molecular phylogenetic analyses of Drakaeinae: Diurideae (Orchidaceae) based on DNA sequences of the internal transcribed spacer region. *Australian Systematic Botany* 27: 3-22.

Figure caption. Examples of genera closely related to spider orchids (genus *Caladenia*). A. Pink fairy orchid (*Caladenia latifolia*). B. Leafless orchid (*Praecoxanthus aphylla*). C. Sugar orchid (*Ericksonella saccharata*). D. Silky blue orchid (*Cyanicula sericea*). E. Blue china orchid (*Cyanicula gemmata*). F. Blue beard orchid (*Pheladenia deformis*). G. Pink enamel orchid (*Elythranthera emarginata*). H. Waxlip orchid (*Glossodia major*).

Weed Control in Orchid Habitats – Shannon Murphy

Impact of weeds on orchid habitat and spraying methods that may affect orchids: an article to provide knowledge of weed control techniques to members so if inappropriate weed control is spotted it can be reported to the conservation officer and hopefully save orchids from depletion.

Before spraying commences a training exercise is carried out to ensure all new/ less experienced members understand the difference between native and non-native species and know their equipment to prevent chemical spill accidents. Understanding the times of the year to spray is also important to not only maximise the weed killing effect but also to minimise impact on the native plants. Generally speaking, the people out spraying have either environmental science degrees or conservation and land management certificates so they have some interest and some prior knowledge before starting and are enthusiastic about the overall health of the bushland.

Chemical application is the main form of weed control in most management programs but many also employ hand weeding to ensure areas are less damaged by chemicals. This method does work but is a lot more time consuming. Many friends groups assist with hand weeding larger areas of bushland.

Chemicals are applied in several different ways; vehicle mounted spray rig, knapsack spray tank or direct painting. The vehicle mounted spray tanks have adjustable pressure which minimises spray drift. The knapsack spray tanks are fitted to the sprayer and have hand pumps which do not spray at high pressure. Painting is applied to large weed trees or to weeds that are harder to spray such as gladiolas.

Some of the chemicals that are used in bushland areas are Glyphosate, Quizalofop, Metsulfuron and Triasulfuron.

Glyphosate is a non-selective herbicide applied to the leaves of the plants to kill both broadleaf plants and grasses. The way glyphosate works is by preventing plants from producing proteins required for plant growth, mainly the shikimic pathway. Glyphosate binds to soil and as such can persist in soil for up to 6 months depending on climate and soil type.

Although glyphosate is generally applied in May/June it can remain in the soil for a long period and thus creating the possibility it could affect the growth and development of orchids. Many councils are stepping away from using glyphosate for steam sprayers which kill the weeds instantly and leave no residue in the soil apart from water. In most situations glyphosate is generally sprayed at very low pressure meaning it's a lot safer than at high pressure which increases the risk of spray drift.

Quizalofop is a systemic herbicide applied to grasses when they are actively growing and before seed set, usually around July-September. As this is a selective herbicide targeting grasses it does not affect orchids.

Metsulfuron and **Triasulfuron** are selective herbicides for the control of brush and broadleaf weeds. This chemical is mainly used to eradicate bulb species of weed such as fumitory, clover, freesias and gladiolas etc. They are normally sprayed in the later part of the year from August to November. As orchid species are starting to seed by this point there is minimal impact to orchids. Like glyphosate though they are persistent in soil for a long period of around 14-180 days.

NB Tap the screen and click the grey circle with the white square in the centre to stop the recording. It is not necessary to keep recording continuously. As long as you start, mark, name and hit stop each time.

To delete a recording touch the three horizontal lines then the trip you want to delete. Tap the garbage bin icon



Step 4 – To see your saved GPS locations touch the three horizontal lines. Tap a date/location or name and it will highlight it in blue. To close this location simply touch the blue highlight area and it will close. To delete tap the bin icon.

Choose the small map icon on the bottom left and tap then the round blue target and your named orchid will appear. Touch the name e.g. Bunny's on rock and the GPS details will appear.



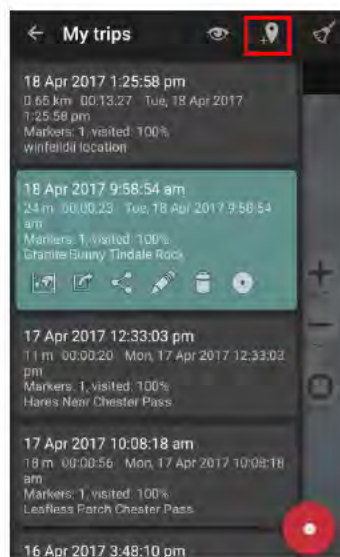
GEO TRACKER – GPS tracker – Rob Van Oosten

Step 1 - Download the Geo Tracker – GPS tracker App to your Android mobile phone then touch this icon



Step 2 – To record a location start by tapping the red circle at the bottom right. You will see a white dot on a red circle (if you lose the red dot click on the centre of your screen). Your trip will start recording.

Step 3 – Touch the GPS marker icon when you find an orchid or you want to record your location or starting point e.g. your car. Type in your orchid name e.g. Caladenia flava or location of your car where it says "POINT on MAP". At this point it is very important to click the ADD button at the top right of your screen.

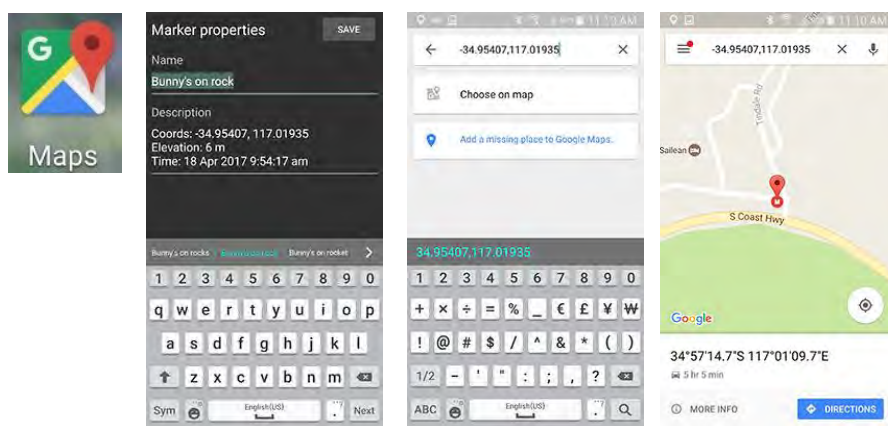


This screen will also allow you to edit the marker and description. If editing the description type your information in front of the Co-ordinates and date otherwise the date will be deleted. To get back to the map click the back button on your phone.

NB: If you get lost at any time tap the centre of your screen to get back to your menu. Geo Tracker uses a lot of power so stop your recording after you have recorded your point or track.

NAVIGATING WITH GOOGLE MAPS – Rob Van Oosten

Using co-ordinators from the Geo tracker – GPS tracker App or WikiCamps App. enter them into Google Maps as if you were entering a street name. See the centre image below. Tap the magnifying glass icon at the bottom of the screen.



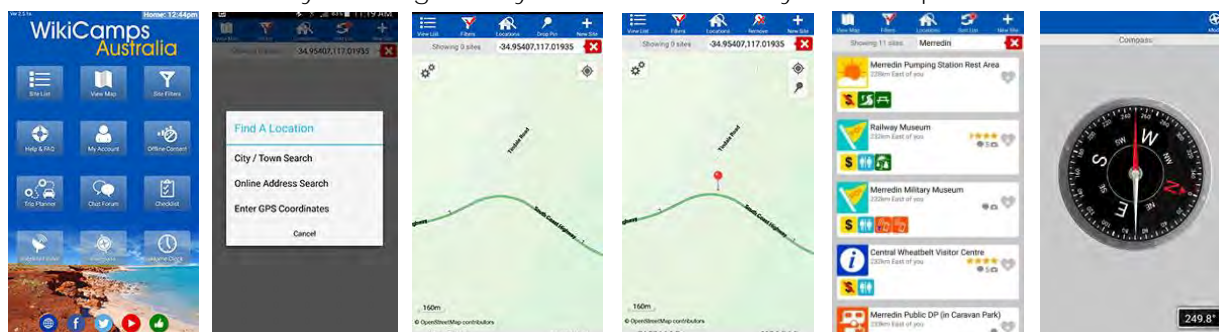
Finding GPS locations using WikiCamps AU App

Download the WikiCamps App to your mobile phone then touch this icon.

WikiCamps is useful for finding a campsite, finding your location or an electronic compass.



Open the WikiCamps App and the menu will appear. Tap 'View Map' on the right hand side is target icon. Tap this target and your current position will be shown by a blue dot. The GPS will be at the bottom of the screen. Record this GPS by entering it into your note book with your description.



To find a campsite on WikiCamps simply go to the site map top left of the home screen type in e.g. Merredin into the site name top right. Tap e.g. Merredin Tourist Park and it will show you a map with co-ordinates at the bottom. You can navigate here with the get directions button at the bottom. At the top you have comments and prices. You don't need service for this app except for the price and comments. Prices and comments can be downloaded with off-line content.

Through the eyes of a photographer – Member's photography



ABOVE: MAGGIE WHITTLE = PTEROSTYLIS DILATA



ABOVE: GAIL REED – C.DRUMMUNDII (WINTER SPIDER)
INCLUDING LUTEA FORM BOTTOM



ABOVE: DEBRA WALKER - AUTUMN LEEK
SP.EARLY

BELOW: DEBRA WALKER - COMMON
BUNNY...ERIOCHILUS DILATATUS MULTIFLORUS



Club Field Trips – May / June

On the Merredin Field Trip last weekend (June 3rd – 5th) we managed to find our target orchid, *Caladenia drummondii*, the Winter Spider, in 3 known locations. They were in lower numbers than previous years. Also found *Pterostylis scabra* and *P. sp. 'inland'* in bud, *Thelymitras* and *Diuris* sps. in leaf. It is so very dry and in desperate need of rain!!

Margaret Petridis

Imagery courtesy Rob Van Oosten / Adrienne Saunders/Margaret Petridis



UPCOMING CLUB FIELD TRIPS –

JUNE	From Christine Lock (FB) I have decided to cancel the club trip for next week. It appears from all reports the bunnies have finished and the hares over their best, with several Pterostylis in bud or leaf in the metro area. All these are in small numbers. Please remember to check out your local reserve week Monday 26th June.
JULY	Metro trips will probably be held during the week, possibly a weekend half day trip will be done after the Kalamunda trip if Caladenia hiemalis is found. It is suggested if you are going out to your favourite areas and wish to conduct a small group tour, post to Facebook or advice at the next General Meeting.
AUGUST	The August trips are looking decidedly unsure with the lack of rain, and will be decided on by end of July. We may have to focus mainly down south this year if the rainfall around Perth and further east and north does not happen."
SEPTEMBER	There is potential to extend the long weekend trip over a week or so if members want to go down to the Walpole/Denmark area during the week before or stay a few days afterwards. Please advise Margaret Petridis



MEMBERSHIP CORNER

Jon Warren



New Members

WANOSCG warmly welcomes the following new members

Margaret Nash - Southern Rivers Group

Russell Stanley - Charlton, Victoria

Andrea Endacott - Denmark

Please make them feel welcome if you come across them at our meetings or field trips. Russell, a member of ANOS, will be visiting WA this winter/spring and hopefully will keep us posted on his whereabouts via Facebook so you may have a chance to show them your patch.

Mentoring of new members

In order to assist new and not so new members learn about the club function and our beautiful terrestrial orchids it has been decided to trial a mentoring program to connect these folk with more experienced members. You don't have to be an expert to mentor just have some experience at locating orchids and their likely habitats as well as some basic understanding of identification processes plus be prepared to share a few personal trips and your knowledge.

A list will be provided at the meeting for members to nominate to be mentored or be a mentor or you can send an email to wanosca@gmail.com with Attention Jon Warren - mentoring in the subject line.

MEMBERSHIP FEES FOR 2017

All members are reminded that annual subscriptions are now due.

The annual single or family membership fee is \$30. Payment can be made:

- to the Treasurer in person
- by mail with cheques made out to WANOSCG and sent to: WANOSCG PO BOX 323, VICTORIA PARK, W.A. 6979
- by electronic transfer to the club's bank account:
Bank name: Bankwest
BSB: 306044
Account number: 5492468



WANOSCG

General Meeting Minutes

Wednesday, 17th May 2017

Meeting held at: BGPA Boardroom, Kings Park
Meeting opened: 7:30 pm
ATTENDANCE: Visitors: 0 Number of members present: 34

APOLOGIES: Lyn Alcock, Sarah Atkinson, Justin Brown, Noel Clark, David Cumming, Janeanne Cumming, Robyn Foley, Tim Hodgkins, Mary Hoffman, Adrienne Saunders, Andrew Simpson, Donna Wajon

CIRCULATION OF REPORTS: The Attendance Book and copies of the Conservation report was circulated to the members.

RAFFLE: Prize donated by Ross and Margaret Fox

1. PREVIOUS COMMITTEE MINUTES

Members asked if they have any amendments to the minutes of 19 April 2017 General Meeting that appeared in the May bulletin.

It was moved by Stuart Gale and seconded by David Lawson that the General Meeting Minutes of 19 April 2017, as published in the May 2017 bulletin are a true and accurate record of that meeting.

2. BUSINESS ARISING FROM THE PREVIOUS MEETING

2.1 Discussion of business arising was moved to general business.

3. TREASURER'S REPORT

There was no Treasurer's report as the finance documentation is still with the auditor.

4. CORRESPONDENCE 20 April 2017 – 17 May 2017

Electronic or hard copies of newsletters and bulletins have been received over the period from: Conservation Council of WA, Urban Bushland Council WA, ANOS Illawarra, OSWA, EMRC, CCWA, ANOS Sydney, NOSSA. Correspondence covered a range of topics. Inward emails to the WANOSCG Web site and members of the committee:

Date	Sender	Topic
20-Apr-17	Conservation Council of WA	Reiterating invitation to participate in Eco May.
20-Apr-17	Invasive Species Council	Drawing attention to recently published study on threats to native animals and habitat loss posed by feral animals and introduced diseases.
21-Apr-17	Nick Wheeler, Cedar Woods Properties	(Forwarded to WANOSCG by Tim Hodgkins) Responding to WANOSCG offer to survey land for orchids ahead of Bushmead residential development and suggesting meeting be arranged.
26-Apr-17	John English	Request for help in identification of some native orchids for a wild flower website.
3-May-17	Barry Duff	Querying whether WANOSCG has a field guide to the location of various species.
3-May-17	Urban Bushland Council WA Inc	Invitation to first general meeting for the year.
9-May-17	WALGA	Notice of Banksia Woodland Management Workshop

Date	Sender	Topic
10-May-17	Stephen Garrett	Visitor from Scotland requesting local orchid contact in Walpole region. (Followed up by members in the area.)
10-May-17	Western Australian Regional Achievement and Community Awards	Inviting nominations for awards.
15-May-17	Eddy Wajon	DER ICMS Report 41876 - Clearing of native vegetation in the road reserve of Borden Bremer Bay Rd, Nalyerlup

Business arising from Correspondence:

The following matters were mentioned to members:

- Meeting with Cedar Woods Properties to be arranged.
- Urban Bushland Council of WA invitation to members for follow-up by those interested.
- Eddy Wajon summarised the DER ICMS Report for the members present, stressing that there was a push to amend legislation to allow for local authorities/DER to fine those responsible for illegal clearing rather than taking them to court.

5. FIELD TRIPS

An outline for field trips in 2017 was circulated with the May 2017 Bulletin. Also circulated was a list of suggested short field trips to various venues in the Perth metropolitan area with limited numbers of participants and volunteers invited to lead those trips.

Upcoming Field trips

- 3-4 June - Merredintargeting *Caladenia drummondii* and *Eriochilus dilatatus* subsp *undulatus*
FTL: Margaret Petridis; [REDACTED]
[REDACTED] this trip is fully subscribed)
- July A difficult month but Margaret Petridis suggested that it might be appropriate to run a half-day trip to the Perth hills to look for *Caladenia hiemalis*.
- 19-23 August potentially an extended trip to the Perenjori/Charles Darwin reserve/Wubin area but very dependent on rainfall prior,
FTL Ian Greeve
- 19 August potential visit to Brookton Highway (*Prasophyllum* sp Brookton Highway), FTL Kevin Uhe (not yet finalised)
- 21-23 August Orchid surveys at Eurardy Station, North Coastal Highway, FTL Ben Parkhurst, Eurardy – contact 0448 999 948 ben.parkhurst@bushheritage.org.au
- 26 August potential trip to Kemerton, FTL Graeme Walker (mainly snail orchids)

Personal Field Trips: (Please use common names and full names)

Members are requested to fill out the personal field trip report form on the front table and send electronic Orchid Sighting sheets to the Registrar (Ramon Newmann - newmann@bigpond.net.au). If you don't have a copy of the report or sighting sheet then send an email to the Secretary (Pat Richards – [REDACTED]) and she will provide you with an electronic copy.

The following personal field trips were reported at the meeting:

- Margaretha Roepen reported having seen swamp bunny orchids in Kenwick.
- Andrew Brown reported an undescribed *Diuris* species flowering in Ongerup.
- Eddy Wajon has been keeping track of leafless orchids in the area near his home where flowering has been erratic year to year with some groups flowering every year for the past three years and other spots flowering some years but not others.

6. CONSERVATION

The Conservation report was circulated with the attendance book and summarised by Ramón Newmann and, in the absence of the Tim Hodgkins, Conservation Officer: It was moved by Tom Burbidge and seconded by Marina Karyagina that the Conservation report as circulated be accepted. Carried.

In addition the following conservation matters were raised:

- Eddy Wajon mentioned that there appeared to have been some excessive roadside clearing in the vicinity of Nine Mile Lake.
- In relation to plans for a ranger's house to be built on Bluff Knoll Road, Peter Hartley, who is based in Albany, has completed a survey for *Caladenia bryceana*, a threatened species. As a result of the survey, the location of the proposed house has been moved. In addition, a DPaW representative will be present on site during the clearing.
- The Water Corporation was reported to be planning to undertake work on drainage in the wetlands near Busselton. As there are threatened orchids in the vicinity, the proposal has been escalated to the Commonwealth. WANOSCG needs to monitor this matter and Eddy Wajon will forward the details to Tim Hodgkins.
- In a matter not directly related to orchids it was reported that a type specimen of *Dryandra* (now reclassified as *Banksia*) located near Albany had been cut down.
- In relation to the York-Quairading roadside vegetation clearance, Eddy Wajon will be meeting with the Minister for Transport, following up on an earlier meeting with the Minister for the Environment. It is expected that the clearing regulations will be reviewed. In addition, Eddy will be meeting with the RAC later this week.
- Several roads are scheduled to be upgraded to carry heavy vehicles, mostly in the northern Wheatbelt. Planning so far has not reviewed anything to do with the impact on vegetation.

7. GROWER'S TABLE

- Nothing tabled.

8. GENERAL BUSINESS

8.1 Rosters for 2017: Supper rosters tabled and members asked to sign up.

8.2 Speakers for 2017 – speakers for the next few meetings have been arranged but are still being sought are still being sought for September and October.

- Hans Lambers from the Kwongan Foundation will speak in June on habitat in general
- Those with suggestions for speakers should contact Ramón Newmann or a committee member.

8.3 Any outstanding fees are due.

8.4 WANOSCG Photographic Competition for 2017: Please let the committee known of any suggestions for the 2017 competition..

8.5 Safety: First Aid Boxes and General Safety:

- Rob van Oosten has provided some whistles to be made available to field trip participants.
- The committee is looking at sourcing some high-vis vests for use by field trip participants who don't already have them.
- Personal GPS location methods for field trips are encouraged and Stuart Gale will add an article on options for this in the next Bulletin.

8.6 Current Website:

- Stuart Gale demonstrated the updated interface for the website, which has been designed to be primarily visual aiming to educate
- Included is a section on species that may be flowering in the current month
- Stuart requests feedback on the website and suggestions for material to be included.

8.7 Facebook: Any members wishing to obtain access to the WANOSCG closed Facebook page should log into Facebook and search "WANOSCG: and lodge a request to join.

8.8 First Aid Training: (cancelled due to lack of interest)

- Jon Warren has negotiated a cheap rate for first aid training, probably on 11 or 18 June.
- Cost to members will be \$60 with the balance being subsidised by WANOSCG.

- Members interested in being trained and certified in first aid should add their names to the list tabled at the meeting indicating their preference for date along with location north or south of the river.

8.9 New members:

- New members wishing to be mentored by more experienced members were encouraged indicate their desires on the lists tabled at the meeting. Volunteers for this purpose from among those more experienced were invited.
- New members are encouraged to participate in field trips.

8.10 Thanks to Paul Winthrop: Jay Steer, incoming Treasurer, thanked Paul for his support in his former position of Treasurer and during Jay's recent absence while travelling.

8.11 WANOSCG booklets: Attention was drawn to the booklets available for purchase, one the 40th Anniversary booklet and the other Andrew Brown's book on Eremophilas.

8.12 ADORP: It was noted that DPaW will continue to support this initiative after Andrew Brown's forthcoming retirement. Volunteers will need to register with DPaW.

8.13 Strategic Plan: WANOSCG continues to develop study groups and further details of the groups were covered in the presentation as noted following.

PRESENTATION: Margaret Petridis and Kevin Uhe – Study Groups
RAFFLE DRAW: Kevin Uhe drew the raffle, the prize being won by Noel Hoffman.
MEETING CLOSE: 9:12 pm
NEXT MEETING: 7:30 pm Wednesday 21 June 2017 BGPA Boardroom, Kings Park



Conservation Officer Report

Tim Hodgkins – June 2017 General Meeting

1. **Clearing Notices:** From the last month's notices in the West Australian newspaper, there are no new matters.
2. **MRD, Bowelling curves:** This proposal would involve clearing about 35 Ha potentially with threatened orchids and other flora. A level 2 Flora survey has been carried out. We have received a reply from the Dept of Environmental Regulation stating: "Main Roads will liaise with the WA Native Orchid Study and Conservation Group Inc regarding the potential timing of clearing to allow the group to relocate orchids in the project area. This will be subject to the requirements of the DPaW."
3. **Warwick Hockey Stadium:** Damage to the bushland caused by stormwater overflowing out of the site, has been reported to the Joondalup Council through Friends of Warwick Bushland. Boundary fence repairs are due to be completed soon.
4. **New site reported by members:** Residential development is taking place at Bushmead on the site of the former Rifle range. The Developer is Cedar Woods Ltd. The plan of the area in question shows that about 60% will be retained as bushland and this has been confirmed by Project Manager Nick Wheeler, who has stated that there are strict environmental conditions that his Company are working through at the moment with the assistance of DPaW. He welcomes the input of WANOSCG and has extended an invitation to members to meet him on site as a start of cooperation together. The likely date of this meeting will be June 2017.
5. **Investigation of Kemerton Buffer Zone:** thanks to member input we now have more detailed maps of the area and overview plan for future development. Further conversations with local members of WANOSCG and possibly DPaW will follow to determine the best way forward.
6. **Highview Park, Alexander Heights:** Site meetings have resulted in the City of Wanneroo parks personnel visiting the site advising about the program of weed control for the bush and adjacent recreation areas.
7. **Projects under watch:**
Meelup Regional Reserve – Mountain Bike Trail.

Orchid Taxonomy

Kevin Uhe

In the latest edition of the Australian Orchid Review David Jones and Chris French have published a paper naming another two Western Australian Orchids. These being *Uriochilus atrosanguineus* and *Uriochilus orbiculatus*.

As this genus is not recognised by the WA Herbarium it will not be officially recognised under this name here. In order for the WA Herbarium to list the species name they will need to be formally placed in *Pterostylis*. In the meantime, these species will continue to be recognised under the current phrase names.

U atrosanguineus has the current phrase name of *Pterostylis* sp 'crowded' and is found from Wongan Hills to Katanning. It is named after the Latin *ater* (dark) and *sanguineus* (red) referring to the dark reddish to blackish brown flowers.

U orbiculatus interestingly combines *Pterostylis* sp 'coastal' and *Pterostylis* sp 'small bands' together as one species. This has extended the range from north of Geraldton to Bunbury with scattered occurrences between Mt Barker and east of Ravensthorpe and can also be found up to 150km inland. It is named from the Latin *orbiculatus* which means circular in relation to the circular synsepalum.

Photo Submissions:

Please note that a new email address has been setup to send your Orchid photography for the WANOSCG website.

Please now send through to [REDACTED] along with the Orchid name, Location (General if specific location not to be disclosed) and date photo was taken.

BULLETIN ARTICLES

Please email any Bulletin contributions to the Editor at wanoscg.newsletter@gmail.com Items for the next Bulletin need to be submitted by 5th July 2017.

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reading,
Until next month.
Happy Orchid
Hunting*