

Native Orchid Society *of South Australia*



Thelymitra matthewsii

Photo : June Niejalke



JOURNAL

FEBRUARY
2019

Volume 43 No.1

Native Orchid Society of South Australia Journal February 2019

PO Box 14, Kensington Park SA 5068 Website: www.nossa.org.au Phone: 0439 214 106

NOSSA PHONE
0439 214 106



President

Gordon Ninnies
Email: nossa.president@gmail.com

Vice President

Robert Lawrence
Email: nossa.membership@gmail.com

Secretary

Lindy McCallum
Email: nossa.secretary@gmail.com

Treasurer

Christine Robertson
Email: nossa.treasurer@gmail.com

Editor

Marg Paech
Email: nossa.editor@gmail.com

Committee

Bob Bates	Thelma Bridle
Craig Humfrey	Rosalie Lawrence
Les Nesbitt	Marg Paech

Other Positions

Botanical Advisor

Bob Bates

Conservation Officer

Thelma Bridle Ph: 8557 6553.

Field Trips Coordinator

Michael Clark
nossa.fieldtrips@gmail.com

Librarian

Pauline Meyers

Membership Liaison Officer

Robert Lawrence
Email: nossa.membership@gmail.com

Registrar of Judges

Les Nesbitt

Show Marshall

Craig Humfrey

Speaker Coordinator

John Eaton

Trading Table - *Vacant*

Tuber Bank Coordinator

Jane Higgs
Ph: 8558 6247
Email: jhiggs@activ8.net.au

Website Manager

Rosalie Lawrence
Email: nossa.enquiries@gmail.com

The Native Orchid Society of South Australia promotes the conservation of orchids through preservation of natural habitat and cultivation. Except with the documented official representation of the management committee, no person may represent the Society on any matter. All native orchids are protected in the wild; their collection without written Government permit is illegal.

Life Members

Mr R Hargreaves†	Mr L Nesbitt	Mrs C Houston
Mr H Goldsack†	Mr G Carne	Mr D Hirst
Mr R Robjohns†	Mr R Bates	Mrs T Bridle
Mr J Simmons†	Mr R Shooter	
Mr D Wells†	Mr W Dear	

Patron: Mr L. Nesbitt

The Native Orchid Society of South Australia, while taking all due care, takes no responsibility for loss or damage to any plants whether at shows, meetings or exhibits. Views or opinions expressed by authors of articles within this Journal do not necessarily reflect the views or opinions of the management committee. We condone reprints of any article with full acknowledgment.

Contents

TITLE / SUBJECT	AUTHOR	PAGE
Housekeeping—		4
President's Report	Gordon Ninnies	5
Conservation Report	Thelma Bridle	5
Tuber Bank Report	Jane Higgs	7
Diuris behrii Report	Les Nesbitt	7
Website Report	Rosalie Lawrence	8
Working Bee Report	Lindy McCallum	8
Passing of Orchid Botanists	Bob Bates	8
New Orchid Finds	Bob Bates	9
Notes on Dipodium Species	Leo Davis	10
Terrestrial Culture—February	Les Nesbitt	12
New Orchid Finds—extra photos		13

Front cover - Photo: June Niejalke, This year the cover will feature the rare *Thelymitra matthewsii* orchid. With the focus on this rare orchid the hope is that we will all be more aware of it and will recognise it if we find it in the field.

Bulletin Board / Date Claimers

The Native Orchid Society of South Australia meets every 4th Tuesday of the months February to November at St Matthew's Hall, Crn Wellington street & Bridge Street, Kensington (just off Kensington Road). Meeting starts at 8:00 p.m. Doors to the hall open from 7:15 pm to allow Members access to the Library and Trading Table.

DATE	EVENT
February	
Tuesday 12th	Committee Meeting - 7.30pm at Lawrence's residence 4 Cleo Court, Brooklyn Park
Tuesday 26th	General Meeting - 8 pm start
March	
Tuesday 12th	Committee Meeting - 7.30pm at McCallum's residence 97 Lyons Road, Windsor Gardens
Tuesday 26th	NOSSA AGM—8 pm start Guest Speaker: Les Nesbitt Subject: Terrestrials
April	
12-14th	Australian Plant Society Show (APS)
June	
15-16th	SAROC 2019 Orchid Fair
September	
13-15th	NOSSA Spring Show and Sale

FIELD TRIP

Field trips will generally be held on the Saturday following the General Meeting each month. Don't expect one til April at the earliest.

Next Field Trip will be announced. The season will dictate. As previously, please contact The Field Trip Coordinator to book your place and get further information at nossa.fieldtrips@gmail.com

ARTICLES FOR NEXT JOURNAL

Articles / Reports must reach the Editor **no later than Thurs 7th March**. Early-bird articles - so appreciated! Please send all articles to nossa.editor@gmail.com ☺

MEMBERSHIP SUBSCRIPTION

Are your Subs OVERDUE?

All subs should have been paid by 1st January 2019. They remain the same as for 2018 - \$20 for emailed only Journal, and \$30 for mailed out journal (an emailed copy may be requested with a posted journal.)

They may be paid to the treasurer at the meeting or may be paid by EFT—email the treasurer for banking details. If paying by EFT it is really important to **add your name and membership number and add 'Membership'** so the payment can be correctly allocated.

Costs to belong to the club are very cheap – a very good investment.

GENERAL MEETING Feb. 26th - 8 pm start

Guest Speaker: Renata Faast

Renata is a Postdoctoral Fellow, University of Adelaide in the Dept of Ecology and Evolutionary Biology .

Subject: "Burning Issues': Orchids and Fire!"

Remember to bring

your orchid plants to be judged

Orchid photos for 'Winning Photograph'

Your name tag so everyone knows who you are.

VENUE:

St Matthews Hall, Cnr Wellington & Bridge St, Kensington.

NOMINATIONS

The positions of Chair, Vice-chair and Secretary are declared vacant at the AGM. Other positions are not elected positions but a new Field Trip Coordinator is required. A nomination form will be mailed/emailed out with this journal so that you can nominate yourself or someone else for the vacancies. These forms need to be returned to the Secretary—Lindy McCallum
Email: nossa.secretary@gmail.com by Tues 5th March.

NOSSA'S PHONE & POSTAL ADDRESS

Please use to contact NOSSA.

Specific contacts can be made by emailing—see list on previous page.

Mailing Address:

PO Box 14

KENSINGTON PARK SA 5068



Housekeeping

Calendars

There are just a few calendars available for those who missed out and would like a copy of our very first NOSSA calendar. If enough orders are received a small reprint may be organized. A useful tool for orchid lovers.

New series about growing orchids

Les Nesbitt will be writing monthly about growing orchids—see his first instalment on the last page of this journal.



SAROC Fair Date Change

Due to a football match at Adelaide Oval on the Saturday of the June long weekend the date of the SAROC Fair has been moved back a week to 14-16 June 2019. The football is on the Thursday night that weekend so the full parade ground will be available for orchid exhibitors & visitors from Friday to Sunday. Dates were finalised at the SAROC management meeting recently.

ANOS Conference & Show

You are cordially invited to register for the 2019 ANOS Conference and Show being held in just under 7 months' time in late August 2019 at Strathpine, Brisbane, Queensland.

Please note that **early bird registration closing has been extended to 31 March 2019.**

The conference is presented over 2½ days; Friday, Saturday and Sunday morning (23 to 25 August 2019).

The confirmed conference speakers and topics are on the ANOS Inc. website (link: <https://anos.org.au/2019-conference/>).

The registration form can be found on the ANOS Inc. website (link: <https://anos.org.au/wp-content/uploads/2018/11/2019-Registration-Form-revised-version-2.pdf>).

Sponsorship of the 2019 ANOS Conference Show Schedule [found on ANOS Inc. website (link: <https://anos.org.au/wp-content/uploads/2018/08/2019-ANOS-Conf-Show-Schedule.pdf>)] is open and offers of sponsorship or enquiries can be made to the secretary via the contact us link on the ANOS Inc. website (link: <https://anos.org.au/contact-us/>) or at the postal address:

The Secretary
ANOS Inc
PO Box 435
BUSSLETON WA 6280.

More info including registration forms—see the Editor or Les Nesbitt.



Orchid Displays placed by SA's Orchid Clubs.

Orchid and related products Raffles

Sales from Leading Orchid Growers

Horticultural Supplies

Re-potting demonstrations and FREE cultural advice from experienced Growers

Sausage Sizzle, light Lunches, Refreshments and Devonshire Teas available

Entry by \$5 donation which includes cup of Tea or coffee.

S.A.R.O.C

0438 867 443



**ORCHID FAIR
2019**

**Torrens Parade
Ground
ADELAIDE**

Fair situated inside the Drill Hall.

FREE PARKING

on the Parade Ground, enter from Victoria Drive.

Saturday June 15

9 am to 5pm

Sunday June 16

10am to 4pm

2018 President's Report

Gordon Ninnes

2018 has proved to be an interesting year for NOSSA. The Committee has had to work diligently to cope with a variety of circumstances that have arisen. The Annual NOSSA show and the NOSSA Lab were both distracting and consumed a lot of the Committee's meeting time and the Constitution review was always lurking in the background.

NOSSA Spring Show

Due to unforeseen circumstances the Annual Show was reduced to only one day. This only reduced sales marginally as Sunday is normally a quiet day. However, it was disappointing to have the second day's display time unavailable. The circumstances have been noted and will be avoided in the future.

The APS sales continue to provide substantial funds for NOSSA. However, a few more volunteers are needed to help out with this activity as it helps reduce the need for increased costs of Membership. Another 5 or 6 people turning up for a half day a year would be very helpful. It is not at all arduous and you get to meet lots of people if you choose. A large orchid knowledge is not required, just the ability to talk until a more knowledgeable person becomes available.

Terrestrial/Orchid Seed Grower's Lab

The NOSSA Lab has proved somewhat knottier. Over the last year there has been considerable time spent trying to move this project forward. However, the Committee finally decided that it was not in NOSSA's best interests to pursue this venture in the proposed circumstances and form. This meant that NOSSA reluctantly had to abandon this venture. Despite this the Committee believes that the concept should be reconsidered by the new Committee. The equipment that was purchased is in secure storage and the plants that are owned by the group are being cared for. If you feel able there are now a lot of NOSSA plants (about 1000) that could be spread around among members to take a load off the people who took them in.

Constitution

The Constitution has reached the final stages of the review process and will soon be ready for ratification by the membership. This has been a long process as the Committee has continued to find things that need to be included somewhere in the document. You will all receive the proposed document for your consideration, discussion, questions and possible amendments well in advance of the final vote.

Thank you

A big thankyou to the other members of the committee for they have worked hard with considerable extra meetings and time commitments this year. Without their efforts NOSSA would founder very quickly. Also a big thankyou to those who helped in other ways – Judges, Librarian, supper providers, people setting up and packing up and all the other myriad of volunteers.

2018 NOSSA Conservation Report

Thelma Bridle

2018 was a busy year for orchid conservation.

Great Timing!

In January NOSSA was asked to assist with a *Dipodium campanulatum* search for DEW SE. This was fortuitous in timing as DEW were about to fell a stand of Sugar Gums (*Eucalyptus cladocalyx*), having no idea that the largest population of *D. campanulatum* grew underneath the trees, and were not aware of the vital connection between mycorrhizal fungi, eucalypts and parasitic *Dipodium* species. The trees still stand.

Whilst in the SE in early January a large bushfire occurred in the Upper SE. Part of Mesent Conservation Park was burnt, so NOSSA undertook a spring survey in an area where *Thelymitra epipactoides* and *T. matthewsii* had previously been recorded. The results were terrific with 68 *T. epipactoides* and 122 *T. matthewsii* recorded along with a few other species, although not all plants were flowering.



Conservation

2018 NOSSA Conservation Report *Contd.*

A discussion on burn or slash at the *Prasophyllum murfettii* site in Stipituris Conservation Park was discussed by NOSSA members and Government representatives. An autumn burn was the result after which the site was fenced. See separate report on *P. murfettii* for further details.

Other threatened native orchid species in the Southern Lofty Block were monitored, tagged to follow progress from year to year, many caged and some weeded. Seed was collected from a number of threatened species by Dan Duval (Seed Conservation Centre). All records and information are reported to DEW at biannual meetings.

Several suitable sites for the reintroduction of *Thelymitra cyanapicata* plants, grown in cultivation by Noushka Reiter and some in Adelaide, have now been identified. Fences at some sites, caging at others will commence shortly prior to the planting.

Dr. Mark Clements (CSIRO) undertook DNA investigation of many *Calochilus* species. From this recently published work Mark was able to confirm *C. cupreus* to be a unique species. This means there is one population of about 20 plants, a non-viable number, that we must preserve and continue attempts at increasing numbers and cultivation attempts.

In 2018 there was no funding for a Threatened Species Officer in the Northern and Yorke area, a situation which will continue into 2019. Two of the nine threatened orchid species were included in surveys in 2018 – *Caladenia gladiolata* in the Southern Flinders Ranges and *Oligochaetochilus despectans* in the mid-north. Numbers of both species were found to have declined, possibly due to the very dry conditions earlier in 2018. We can only hope for an improvement in 2019.

S.E Surveys

Orchid surveys in Native Forest Reserves in the South-East were again conducted for Forestry SA. Since 2008 all NFRs in the SE pine forests have now been surveyed, with NOSSA members walking all tracks, recording all orchids 3-4 times per year to provide a full picture of species present and assist Forestry SA in its management processes.

Whilst in the SE, NOSSA members surveyed a private property near Frances, also a victim of the January bushfire. Over 40 native orchid species were recorded over two visits, providing some new records for the area and extending the range of some species. A report was prepared for DEW SE and the property owners.

NOSSA was requested to plant a few *T. epipactoides* raised by Noushka in Victoria from seed collected at Tilley Swamp. Several members managed to complete this task and cage the plants at a site difficult to access and in poor weather conditions.

Removal of Coast Wattle (*Acacia longifolia* var. *sophorae*) has been requested for a number of years at Piccaninnie Ponds Conservation Park as increasing invasion of the species is having a detrimental effect on *Prasophyllum frenchii*. DEW SE finally carried out some weeding in autumn. NOSSA will yet check if this has improved the situation for the orchid in 2019.

How we can help.

NOSSA members not engaged in conservation work are requested to not remove cages for orchid photography or interfere with any marked plants. A lot of time and effort, with frequent visits, is required for the care of rare and threatened orchid species and it is disappointing to have these plants compromised.

Thanks to all NOSSA members involved in searching, and recording orchids, careful and detailed monitoring of threatened species and the use of specialised techniques to facilitate conservation of rare and threatened orchid species. This is time consuming work and your efforts are very much appreciated.

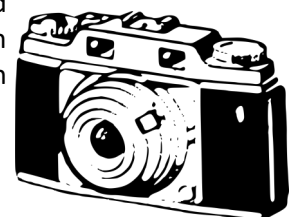
Any orchid or part thereof must only be collected under the terms of DEW collecting permits. Photographs are permitted without written authority.

If any NOSSA members are interested in participating in DEW searches in the state or searches and monitoring in the Adelaide area, please contact me. Also Dan Duval would appreciate anyone willing to assist with preparing seed for storage, propagation and care of plants. Again, please contact me:

Thelma Bridle, NOSSA Conservation Officer

t.p.bridle@bigpond.com

0423 313 604



Tuber Bank Report

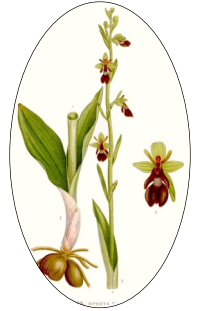
Jane Higgs

I would like to thank those people who donated tubers and also the people who purchased them and I wish everyone 'good growing' with them. Thank you also to ANOS Vic who for several years have sent me surplus tubers that have been left over from their tuber bank, which I am then able to pot on for future years. As we only have a few suppliers of tubers in South Australia, (two only this year apart from myself!) this is much appreciated.

It was a disappointing response this year as I supplied 56 lots of tubers which was nearly 34 lots less than last year, even though we had more lots on offer. There was only one lot which had to have substitutes. When the tubers are promised in November it is a bit hit and miss and you never know how the 'pots' have performed until they are tipped out – I think that most people who order tubers realize this.

No matter how few of the lots are supplied, it still means that hopefully these are able to be grown on and conserved. The money from the sale of tubers goes to conservation work so is very worthwhile, and every little bit helps.

Happy New Year to everyone, and I hope that terrestrials perform better this year than last year.



Diuris behrii Report for 2018

Les Nesbitt

Autumn 2018 was very dry. Heavy rain fell in July & August while September & October rainfall was normal. November and December were wetter than normal. The late rains delayed repotting as leaves stayed green into early December. 795mm was recorded at the nursery site for the year compared with the 14 year average of 910mm. Repotting of all the daughters & small tubers was completed on 30th December.

Large tubers were produced this year which resulted in upgrades from small tubers to daughter tubers for most clones. Some of the older daughter tubers were huge. One big tuber measured 79mm tall by 17mm in diameter. Tuber removal was carried out on the daughters of 40 clones concentrating on those clones with few daughters.



Photo: Les Nesbitt

Tuber multiplication was an improvement on the past two years although the extra tubers tended to be very small, some in clusters of 2 or 3. Natural increase was less than 2% without human assistance even under ideal nursery conditions earning the species a very slow multiplier rating of 1.02. 136 extra daughters were produced in 2018 mostly from small tubers getting larger. No daughter tubers were lost in 2018.

The Project focuses on daughters as they are convenient for tuber removal and it is daughters that are returned to the mine site each year.

152 daughter plants were returned to the mine site in 2018 bringing the total returned to 552 plants. At year end there were approximately 80 plants in mother pots, 384 daughter tubers in 100mm pots, 448 small tubers in 125mm pots and about 30 pots containing living seedlings. This gives a total of about 942 diuris tubers in the shadehouse. At the same time last year there were 948 tubers. Starting in 2012, the original 168 diuris plants have increased to 1495 in 7 years. Another 152 daughters (8 trays) should be available for replanting in 2019.

Several hand pollinated seed pods were collected for seed sowing at Easter. Only one new seedling was observed in 2018 while most of the 2017 seedlings did not reappear, possibly due to the dry autumn. The seedling pots were not repotted this year and none produced flowers. The mother pots have not been repotted for the fifth year straight and none had their tubers removed. A few mother clones have multiplied resulting in clumps of plants.

Response from the Mine...

Les received a reply from John Crocker of Hillgrove Resources to his 2018 *Diuris behrii* Report.

John Crocker reports:

"Thanks for the 2018 report." The plants you have returned to the mine and the steady multiplication of plants held at your nursery is testament to your ongoing care and perseverance. I'm happy to say that the majority of plants returned to the mine have survived and they are a great source of pride to us, particularly in our new rehabilitation areas. The additional 152 daughter pots available for replanting in 2019 will be very welcome."

Website Report

Rosalie Lawrence

Visits and views to the website were much lower than for both 2016 and 2017. This was due to the greatly reduced number of blogs posted in 2018. The numbers were particularly low in January, February and March when we were away and then moving house. September and October were still the most popular months. The majority of visitors to the website came via Facebook but that is because the blogs were shared in several Facebook groups. We averaged 79 views per day.



We continue to have a worldwide following. After Australia, the most visitors came from the USA, followed by Japan, then the United Kingdom which was the same for 2017.

The posts that received the most comment on the different Facebook groups related to orchid identification features and the plan is to continue to post similar articles for 2019. If anyone wants to write articles for the website please do! And email them to me. A wide variety of information from a range of authors is good!

NOSSA Working Bee - 19th Jan

Lindy McCallum



We had some very large orchids that needed to be divided so our intrepid group teamed up and got to work.

Is that an axe, you ask? Well not quite but it really was needed, along with some pulling and puffing to pull the 'dissected' parts apart! We did get a lot of smaller plants, some of which may be ready for the NOSSA show in September.

Thank you to all who attended the morning. [A lovely short video clip was taken but no photos, to Lindy's great disappointment. Ed.]

Passing of orchid botanists

Robert Bates

Australia lost two of its elder orchid botanists in 2018—Vale Leo Cady and Steve Clemesha.

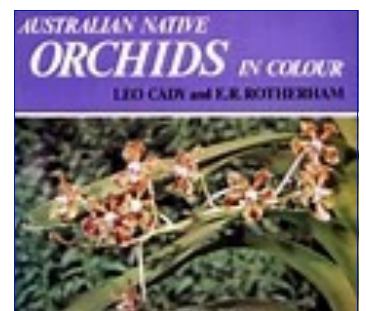
Leo Cady

Leo Cady of Kiama was born in NSW in Aug 1931. In 1970 together with Eric Rotherham he published with the book *Australian Native Orchids in colour*. He discovered several new orchid species in NSW and named the first *Plumatichilos* outside of Western Australia (as *Pterostylis plumosa*) some 40 years ago (this name is still used by eflora SA) although the more up to date NOSSA members began using *Plumatichilos* about 15 years ago.

I wrote to Leo and was invited to visit for a few days. He offered impressive hospitality for someone he had never met. Leo took me to see flowers of some of his discoveries including *Pterostylis (Diplodium) pulchella* which impressed me. It was growing by a waterfall.

In addition to being an author and taxonomist he was also a conservationist, doing his best to save the bush and discoveries. Leo was a foundation member of ANOS (Illawarra group) seven years before I joined.

Leo passed in August 2018 after 12 years of retirement.



Stephen Clemesha

Stephen was born near Coffs Harbour NSW in June 1942. He was a primary school teacher and principal, raising five children with wife Pauline. He co-named SA's *Pterostylis biseta (Oligochaetochilus bisetus)* in 1968 and was a founding member of ANOS as well as assistant editor and secretary of *the Orchadian*, providing many articles in its early years, and inspired me to do likewise.

Steve (as he preferred) was a key note speaker at the World Orchid Conference Sydney in 1969 and in several following conferences. He became an AOC judge in 1998. His botanical interests were broad enough that he co-authored a book on Australian ferns and cycads. For more details see *Australian Orchid Review* Oct-Nov 2018 or 'google' his name.

Steve passed in August 2018 aged 76.

New SA native orchids found and extension of known range in 2018

Robert Bates

Despite the drought across most of the State in the first five months of 2018 parts of the Adelaide Hills, Fleurieu Peninsula, Lower South east and Kangaroo Island had enough rain for thirty orchid species to flower by June including slender midge *Corunastylis despectans* on KI, a new record for there.

In Feb. the maroon and green midge orchid species common in SA Mallee was reinstated as *Corunastylis fuscoviridis* (once *Prasophyllum fuscoviride*).

Good rains in July saw the season improve and three new snail orchids *Linguella* spp. were photographed and Types collected in August. We had guessed they were here, but thanks to NOSSA members on Eyre Peninsula (Andrew Primer, Wendy Newbury and Shane Graves) two EP species new to science and another from Hale CP. will now be named. For 15 years *Pterostylis nana* has been accepted as a Tasmanian species not reaching SA. All our SA snail orchids (until *L. parva* was named in 2015) were un named and remain so. Seems unbelievable but at times this Century at least fifty SA orchids in ten genera were known only by tag names or ignored completely. That is about to change. In late Oct this year Shane Graves discovered a new leek orchid of the *Prasophyllum odoratum* complex near Elliston and made the first sightings of *P. nitidum* for EP.

With the help of June Niejalke and her macro photography we proved in December that what was called *Microtis oblonga* in the SL region is not that but an undescribed and vulnerable sp. which will be named in 2019, along with the new snail orchids.

After twenty years of calling the late pink finger orchid of the Adelaide Hills *Petalochilus vulgaris* studies in November proved otherwise and with the help of NOSSA friends Jan and Marg. Mahondas we plan to publish it in 2019 as new.

New species named in 2018 by David Jones (CANB) (with illustrations by several NOSSA members) include four plumed greenhoods (*Plumatichilos*) ie 1 *Plumatichilos petiolatus* (see image), recognised by its purple-brown edging on flowers and distinct-leaf petioles. This is the common plumed greenhood on EP and was previously called P. sp. Eyre peninsula. 2 *Plumatichilos foliosus* the common species in the Flinders Ranges recognised by its plump flowers and large rosettes with many broad sub-erect leaves. 3 *Plumatichilos extensus* the common species in the SE and SL regions which has a long straight point to the galea, sessile leaves with acute tips, previously known as P sp. Woodland. And 4 *Plumatichilos multisignatus* the rather stripy flowered species from our Mallee previously known as P. species Mallee. Soon after we gained our second *Urochilus* species, a Mallee red banded green hood *Urochilus arbusculus* the dwarf of the genus. Mostly on Eyre Pen and also in WA with true *U. sanguineus* being restricted to higher rainfall parts of SA.



Plumatichilos extensus

The very first SA orchid named in 2018 was *Diuris behrii* ssp *multilineatus* Jones & Bates from the Flinders Ranges.

All the new 2018 species are now in the latest version of Orchids of South Australia and we are hoping in 2019 to name another thirty or more SA species which have had tag names for over ten years.



P. petiolatus
Photo: A. Primer



Urochilus aff concavus EP
Photo: Shane Graves



Prasophyllum sp Elliston
Photo: Shane Graves



Thelymitra sp Morialta
Photo: R. Bates

Notes on *Dipodium* Species

Leo Davis

When Bates & Weber published in 1990^(2.) there was just one variable species of *Dipodium* in SA, *D. punctatum*. When NOSSA released the updated version of Bates' work in 2011, there were four species recognised, all of which can be found in the SE of the state. In the Adelaide Hills *D. roseum* is one of the few orchids flowering and so keeping field enthusiasts happy over Christmas/New Year.

Soon after *D. pardalutum* was described, in the SE and the eastern states, as distinct from *D. punctatum* (that now occurs in SA only in the SE) small populations of *D. pardalinum* were discovered in the Adelaide Hills. This year I have seen a good population at the tip of Fleurieu Peninsula and one plant in Hender Reserve.

My eyes have failed so badly that I can no longer see spotted pardalotes (*Pardalotus punctatus*) and have to rely on hearing their distinctive call. Note that it gets a double dose of 'spotted' in its name. *D. pardalinum* was once included in and known as *D. punctatum* with both specific names referring to being spotted.

I have never been fully convinced that *D. pardalutum* and *D. roseum* are separate species. . The intermediate hybrids, with stripes breaking into dots and dots merging to stripes is probably what confuses me. I've been trying to convince myself they are separate by examining flowers of both species to find differences apart from spotted versus striped labellum.

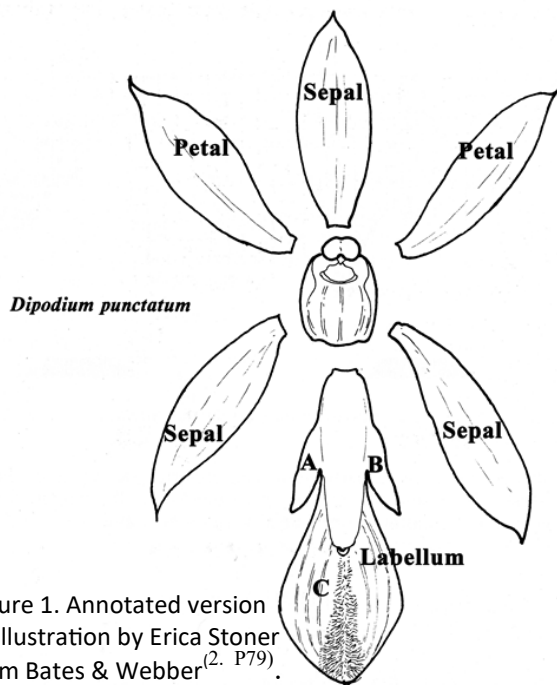


Figure 1. Annotated version of illustration by Erica Stoner from Bates & Webber^(2. P79).

My first embarrassing discovery was that I'd not been looking closely enough (I never do) at the labellum. This modified third ventral petal is tri-lobed. Look at the schematic drawing of the labellum of *D. punctatum*, (most likely actually *D. roseum*?) by Erica Stoner, in Bates & Webber^(2. P79). I have labelled the three sepals and three petals (bottom one is the labellum) with the three parts of the labellum marked A, B & C. Jones drawing of the labellum of the *D. punctatum*^(3. P270) in fact appears to me to be penta-lobed.

Why had I not noticed the extra two lobes on the labellum? First they are small. Second they clasp the horizontally directed column so closely that I took them to be column arms. You will be familiar with such structures supporting the hairs tufts on *Thelymitra* spp. flowers.

In Figures 2 & 3 I have used the letters A, B & C to label the three equivalent parts of the labellum. Note that in *D. pardalinum* (Fig 3) the lateral lobes and the column tip are often spotted.

Figure 2. *Dipodium roseum*. Carro Track, Cleland C.P. Jan 1, 2019.



Figure 3. *Dipodium pardalinum*. Dec 31, 2018.



Notes on *Dipodium* Species *Contd.*Figure 4. *Dipodium roseum*. Gate 5, Cleland C.P. Jan 12, 2019.

To complicate matters, I sometimes find the lateral lobes of the labellum free of the column and not clasping it at all. (See Figure 4.)

A trivial point is to note a difference in my observations of the colour of labellum hairs of *D. roseum*, compared to those reported by both Bates and Jones; 'sparse central band of pink hairs'^(1. P579); 'band of pink hairs'^(3. P272). Looking at many of my photos I see that the hairs are almost always white but may sometimes appear to be pink because they are being viewed with a strongly pink labellum below them or because of reflected pink light.

In some few flowers of *D. roseum* I have observed the central bands of hairs on the labellum extending back all the way to the column with two clumps/mops of hairs immediately under the column. My photo (Fig 5) is not very clear.

A commonly occurring phenomenon, with both *D. pardalinum* and *D. roseum*, is for there to be a rudimentary shoot at the base of the flower stem. Less commonly, but again in both species, two hearty flower spikes are found emerging from one spot, with generally a third rudimentary spike. (See Fig 6). These features can only be observed by removing (and, of course, replacing) a little soil around the base of the plant.

Figure 5. *Dipodium roseum*. Gate 4, Cleland C.P. Jan 12, 2019.Figure 6. *D. roseum*. Carro Track, Cleland C.P. Jan 1, 2019.

Thelma Bridle showed me a page from one of her beautifully prepared Field Diaries. It showed a drawing and a photo she'd made, years ago, of a *D. roseum* plant with five flower spikes arising from a single crown of a plant. She reminded me that the stems of flower spikes of both local species can vary from a granny smith apple green to a very dark plum, almost black. She disagrees with my observation on labellum hair colours saying they vary from white to pale pink.

1. Bates, R.J. (2011). South Australian Native Orchids, DVD Issued by the Subediting Committee (NOSSA) on behalf of the Native Orchid Society of South Australia Incorporated.
2. Bates, R.J. & Weber, J.Z. (1990). *Orchids of South Australia*, A. B. Caudell, Government Printer, South Australia.
3. Jones, D.L. (2006), *A Complete Guide to the Native Orchids of Australia*, Reed New Holland, Australia.

Terrestrial Culture—February

Les Nesbitt

The excitement is building with the new growing season about to commence. First leaves on the early species may show this month so start looking. Look with your eyes not your finger. Many a new shoot has been broken by that dastardly finger. Keep the blue tag pots moist. Blue tag orchids include *Diplodinium*, *Ptst. baptistii* and *Corybas hispidus*, all species from the East Coast of Australia.

Finish repotting as soon as possible. Many tubers start shooting this month and are easily damaged by handling. Move all pots to their growing positions for the coming winter. For local orchids adapted to a dry January-March, commence watering in the last week of February and increase watering in March. The water will run down the side of a dry pot and out the drainage holes leaving a dry plug of mix in the middle where the tubers are. Watering three days in a row should wet the pot right through. Continue light watering weekly so pots do not dry out completely again. Top up the cut sheoak needle layer on pots as needed. This is very important for the fungus dependent species which do not get repotted often.

Start the nightly visits to pick off the slugs, snails, earwigs and grubs. Hunts are more successful on cooler nights after rain or watering. If the new shoots get eaten off as soon as they appear you might not even see them and wonder why your orchids did not come up. If the names on labels are starting to fade rewrite them before the name is lost. Remember to pot up any spare tubers for raffles, stalls and the tuber bank later in the year.

The cauline group of greenhoods (*Diplodium*) from the eastern states are the first to shoot and ideally should have blue tags and have been repotted in January with watering commencing at the end of January. There are some 38 species in this group. Some come from high altitudes in NSW/Vic and start flowering there in February. They flower in March/April/May in Adelaide.



Points to note about *Diplodiums*:

- Flowering plants look different to non-flowering plants. Flowering plants have small pointed leaves on the flower stem. Nonflowering plants have a rosette of rounded leaves flat on the ground. Usually there are only a small percentage of flowering plants.
- They flower early in the growing season. Most flower in autumn with a few stragglers in winter. None flower in spring.
- The rosette plants multiply and are easy to grow in regular terrestrial mixes. New tubers form in Autumn.
- *Diplodiums* are not easy to flower in Adelaide. Flowers abort if too hot and/or too dry. Grow them in the coolest shady area there is. Keep pots shaded until late March. Local species are easier to flower as they flower in winter.
- Poor tuber development from flowering plants is common. These plants sometimes die after flowering.
- Flowering plants can be tall & slender and may need supporting with a wire cylinder. Stakes can damage the developing new tubers.



Found at Kuitpo Forest

Sue Bradstreet

Early in November the flower on the left was photographed and sent by Sue, enquiring as to what it might be.

The answer!!

Don't touch duck orchids when photographing them. It triggers the labellum and this is what you get... we've all done it.

Please email your observations or interesting experiences for this page to the editor.

New SA native orchids found—extra photos



Linguella new species found on Eyre Peninsula
by Andrew Primer

Linguella parva sharp shows sharp leaves not veined .

