



Native Orchid Society Of South Australia Inc.



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA

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The Native Orchid Society of South Australia promotes the conservation of orchids through the preservation of natural habitat and through 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.

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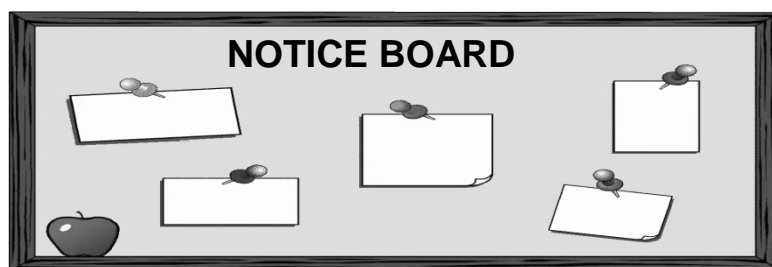
PATRON: MR L. NESBITT

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 the reprint of any articles if acknowledgment is given.

Front cover from an original drawing of *Pterostylis cucullata* ssp. *cucullata* by Thelma Bridle. Used with her kind permission. *Pterostylis cucullata* ssp. *cucullata* is a rare, short-statured species of Leafy Greenhood which grows only in coastal regions. Thought to be extinct in SA, a NOSSA member discovered a large population in 2013, growing in the lower South East close to the Victorian border.





The Native Orchid Society of South Australia meets every fourth Tuesday of the months February to November at St Matthew's Hall, Bridge Street, Kensington. Meeting starts at 8:00 p.m. Doors to the hall open from 7:15 pm to allow Members access to the Library, Trading Table and Grower's Forum.

Date	Event
June 24 th Tue	General meeting – Speaker: Jane Higgs ~ Orchid Microclimate: How I Grow My Orchids
June 28 th Sat	Field Trip – Warren CP <i>Diplodinium</i> – bookings essential
July 1 st Tue	Committee Meeting 7:30 pm at the home of John and Lorraine Badger
July 4 th Fri	Articles for Journal to reach the editor by this date. Nossa.editor@gmail.com
July 16 th Wed	Field Trip Morialta Conservation Park – Meeting 10 am - details below
July 22 nd Tue	Working Bee at Seven Hills Cellars – Meeting 10 am – details below
July 22 nd Tue	General meeting - Speaker: Doug Bickerton

WELCOME TO NEW MEMBERS

Paul Beltrame of Rostrevor
Glenn Dean of Murray Bridge

FIELD TRIPS:

Bookings:

nossa.membership@gmail.com OR
phone: 8294 8014

Saturday June 28, Warren CP - *Diplodinium*

Meet 10 am at Kersbrook Public Car park, Scott Rd near corner of Kent Rd.

Wednesday July 16, Morialta Falls

Meet 10 am at Car park at the end of Morialta Falls Road (Woodforde)

WORKING BEE - Seven Hill Cellars

Tuesday July 22nd

Meet 10 am at Sevenhill Cemetery

BBQ at 12.30 pm after 2½ hours of weeding in *A. argocalla* habitat (white beauty spider).

Contact Erica Rees for more information on 0408 812 677

GROWERS' FORUM

Les Nesbitt's growers' forum meets before monthly meetings in the side room from 7.15 pm to 7.45 pm. Everyone is welcome to attend. You will get your questions answered, and learn a little about growing native orchids. You may bring along a plant for discussion.

AOF ESSAY COMPETITION DUE DATE

30th June – see p. 43 in last month's journal.

NEXT COMMITTEE MEETING

Tuesday 1st July at the Badger's – Craighburn Farm. Address TBA

WEEDING AT BRENTWOOD CEMETERY

Replanned for **July 5th** - 10 am at Cemetery.

As lunch will be provided need to register attendance prior to June 30th by contacting Deborah Furbank on 0421 617 155

SOUTH EAST ORCHID SURVEY

July - For further information contact Thelma Bridle t.p.bridle@bigpond.com or 8384 4174

FUTURE DATES:

NEXT JUDGES MEETING

Saturday 2nd August – details TBA

ANNUAL SPRING SHOW

Saturday Sept 20, & Sunday Sept 21

NOTE: In urgent need of a show marshall. All other tasks have been allocated – just need someone to keep things in order.



FROM THE PRESIDENT

ROBERT LAWRENCE

It has been a busy month since the last Journal and these are some of the highlights.

WORKING BEE

I want to thank the NOSSA members who came to the working bee to organise the storage of NOSSA materials at the shed of Warradale Uniting Church. There were 14 of us there for a pleasant morning of work and socialising. It was good to free the garages, carports and homes of material that members have been kindly keeping.

NOSSA STORAGE

It is possible that there are still NOSSA items being stored by members and we hope that they will take the opportunity to free up space in their homes. It also enables us to keep NOSSA materials together on an inventory and insured. Please contact us if you have material so that we can organise storage.

PLANNING FOR SPRING SHOW AND OTHER EVENTS

We had a discussion after the working bee and allocated tasks in order to manage the upcoming Spring Show but we still need a Show Marshall.

I would like to ask members to consider being Show Marshall just for the three days of the Spring Show. Growers and judges are committed already for the day, so we need somebody with some skills in organising people to help coordinate displays and the smooth running of the event. No experience is expected because those with experience are already committed. Please contact a member of the management committee if you are interested.

NOSSA LIBRARY

A cupboard has been purchased for the NOSSA library books which will be set up ready for the next general meeting. Thanks to Fred Meyers and John Badger for organising this. Members are encouraged to make use of the Library at the general meetings.

COMMON ORCHIDS OF ADELAIDE REGION POSTER

Work has continued on the education side with a poster of Common orchids of the Adelaide region. Photographs have been selected from those supplied by members and we thank those members who contributed. It was quite a task to go through them all. We look forward to seeing the final result sometime in June.

MEETING WITH STAFF OF STATE HERBARIUM

Rosalie and I had a meeting with three senior staff at the State Herbarium. We are keen to work with the herbarium in setting up a website-based interactive identification key to the orchids of South Australia. They are keen for NOSSA members to make records and photographs to document the distribution of the various species of native orchids because it is generally not appropriate to collect specimens.

With the lack of any plan to update the Flora of South Australia in relation to orchids, the proposed website will be an important tool for possible citizen science. We identified the following three areas for NOSSA participation:

- Collect data on the distribution of each species of orchid. This could include density and abundance estimates.
- Phenology: study of the timing of the lifecycles of orchids. This would include recording flowering times, studying dormancy and observing orchid pollination.
- Documenting the variation of plants within a species. This could include measuring and recording features such as the size of bracts on *Thelymitra* species, for example.

We plan to work with the staff of the Herbarium to produce protocols for the collection of observations and the taking of photographs in order to gather scientifically useful information.

The vital issue of security of information was discussed. Everyone knows that the location of rare orchids is sensitive information because there are unscrupulous and careless people who remove orchids from the wild. Systems are

now in place to round data so that locations cannot be obtained from the Atlas of Living Australia in enough detail to locate plants.

We talked about the naming of native orchids. They are quite happy for us to have our own preferred approach to nomenclature as long as there are clear links to the names currently used by the herbaria in Australia. We could call these Field Botanical Names or another appropriate term.

GRANT FROM AUSTRALIAN ORCHID FOUNDATION

Over recent months we have been in contact with the New England Wild Flower Society about

adapting the format of their Go Botany website for the native orchids of South Australia. Since we began our correspondence, the North American Orchid Centre has launched its Go Orchids website with the support of the New England Wild Flower Society, demonstrating that the technology can be adapted from another organisation. The framework for the website is available freely, but we need technical support to get started. In order to reimburse them for their time I sought a grant from the Australian Orchid Foundation and this has been approved. The work begins.

NOSSA WORKING BEE

LORRAINE BADGER



LETTERS TO THE EDITOR

In reference to last month's journal article "Field trip to Hindmarsh Falls and Knott Hill" reprinted from 1981, where I pointed out that there were obviously plant name changes that I had not caught up with, Robert Lawrence has come to the rescue with the following information.

"It is not hard to find the new names for the orchids in the article from 1981. You can find these on the [eFlora](#) site which has the updated Census of South Australian Plants, Algae and Fungi. The South Australia's Native Orchids DVD also has a list with all of the synonyms with updated segregate genera.

Pterostylis obtusa is now *Diplodium bryophilum*, although the census still has this as *Pterostylis bryophila*.

Lyperanthus nigricans is now *Pyrorchis nigricans*.

Acianthus exsertus is *Acianthus pusillus*.

Acianthus caudatus is now *Nemacianthus caudatus* (although the Herbarium still uses the old name).

Acianthus reniformis is now *Cyrtostylis reniformis*, but could also include *Cyrtostylis robusta*, which was not recognised until 1987 (see the [Australian Plant Name Index](#))."

Robert Lawrence

Editor: Thanks Robert for this information. I am sure that this will be a great help to others who are new, or not so new, when determining changes in plant terminology.

MAY MEETING

LORRAINE BADGER

The speaker for the evening was Les Nesbitt who presented a pictorial history of the conservation and propagation of the *Diuris behrii* project which he has undertaken. Sponsored by Hillgrove Resources. This project commenced in 2011 with the aim of saving plants in the Kanmantoo mine area for their eventual reintroduction to rehabilitate the site. Les has witnessed great success with the initial group of



plants which were rescued. This is in large part thanks to Les's knowledge gained over many years which was obvious as he shared his methods for culture of these plants. As he talked, his devotion and intense work with repotting, dividing tubers and seed collection became obvious as can be seen in the accompanying photos. The left photo shows the initial plants whilst the right photo is a recent one. As the project may run for 10 years Les predicted that there may be several thousand plants by that time.



BANANAS TRIGGER FLOWERING

LES NESBITT

Some native terrestrial orchids only flower in the season after a bushfire. They are stimulated by the hot gases given off during the fire. One of those gases is ethylene. Bananas are shipped down from Queensland to the southern states of Australia as green bananas to stop fruit fly outbreaks. On arrival they are put in sealed rooms and exposed to ethylene gas. The bananas ripen a few days later. Traces of ethylene remain in the banana skin. Overripe fruit also emits ethylene gas. Orchid flowers do not last long if ethylene is present in a closed glasshouse.

We know that dormant tubers exposed to ethylene often flower the next season. The best

example is the Hare orchid, *Leptoceras menziesii*. In summer I put dormant tubers in a small dish in a plastic bag with a banana skin and seal the bag with a rubber band. The skin may go mouldy so should not touch the tubers. I leave the bag inside my shed for about 2 weeks then remove the tubers and pot them up. The exposed plants make leaves almost twice as large as normal tuber leaves. This procedure should not be carried out with the same plants the following year as they may get exhausted and die out. I have found results with other shy flowering species are not so reliable. Maybe they need a stronger dose of ethylene.



MAY 25 FIELD TRIP TO MT BILLY AND HINDMARSH FALLS CONSERVATION PARKS.

LEO DAVIS

About 175 km and 8 hours, almost to the minute, door to door was my version of the venture to the southern Fleurieu Peninsula. Great outing. Perhaps the long drive put some off because just 6 folks turned out, with Jenny and Robert being debutantes. It was a good small number for the sake of hard to spot orchids not being trampled



With no designated leader we were so lucky to have Marg Paech to step into the role with her local knowledge and expert eye. At Mt Billy CP she led us to three spots in which we found many more Mossy Shell Orchids, *Pterostylis* (*Diplodinium*) *bryophilum* - the name means "moss loving" - than we expected. Somebody said "I thought they were rare" and we had to remind ourselves that we were seeing perhaps a large proportion of the specimens that exist in the world. But the tally of plants in bud, flower and seed was very encouraging and greater than seen on some visits in recent years.

Other *Pterostylis* ssp. rosettes were plentiful. Mosquito Orchids, *Acianthus pusillus*, were abundant, though not all were yet fully in flower.

Marg was keen to search another site she knew of for more *P. bryophilum* but a look at the clock sent our party, now down to 3, for various reasons, to the north of the park to sandy soils, in search of Fringed Hare Orchids, *Leporella fimbriata*. We found plenty of their leaves, the majority being double leaved, but not a hint of a flower. Perhaps we were too early. Leaves of the Fire or Undertaker Orchid, *Pyrorchis nigricans* were plentiful but still small, averaging the size of a 10 cent piece. There were a few *Thelymitra* ssp. leaves, a few Spider (*Arachnorchis* sp.) leaves, some Waxlip or Purple Cockatoo Orchid, *Glossodia major* leaves and many *Pterostylis* (*nutans*? *pedunculata*? *nutans*?) rosettes. None of us was confident to sort out the species as some others of our members would have been able to do easily.



Fig.1 *Pterostylis bryophilum*



Fig. 2 *Pterostylis bryophilum*. (note bicoloured labellum).

Three of us lunched at Hindmarsh Valley Falls CP then went on to view the falls and have a really lovely ramble and cross country bush bash, including bottom slides down an embankment, risking \$7 co-charges, had it been later in the year. Extending our search interests we included *Goodenia* ssp., *Wahlenbergia* ssp., *Correa* ssp, *Astroloma* ssp. (Flame and Cranberry Heaths) and more, even lizards, reflecting the wide ranging interests and knowledge of the group. The only orchids found in flower were Mosquitoes but we saw massed beds of *Pterostylis* ssp. rosettes more extensive than I'd ever seen but which Marg assured us were normal in the southern Fleurieu.

Editor's note: Like the NOSSA group we found no flowers earlier in the week. Due to a communication mix up the designate leader awaited the group at the lower gate. Whilst no NOSSA group appeared at his location he was able to show another couple more than leaves: for plants were flowering at the lower gate.

NEW SPECIES WORLDWIDE 2013

ROBERT J. BATES

The Advertiser, May 24th 2014, tells how about 18,000 new species were named worldwide last year. Top of the list was a new treetop carnivorous raccoon from the Andes. The most popular Australian find was a gecko camouflaged to look like a bunch of leaves. My own reading shows that at least a dozen new orchids were named for Australia in the last year or so, most of them from Western Australia. The last South Australian orchid named was *Thelymitra corrugata* from the Adelaide Hills, discovered and named by NOSSA members.

Our own NOSSA journal indicates that several new species were discovered in SA since 2011 and are now waiting to be published.

How hard is it to find these new species? Considering that almost 50% of SA has never been botanised due to inaccessibility it is quite easy. On my own trip to Mintabie in May this year I collected both a new *Goodenia* sp and a new love grass *Eragrostis* species, both ephemeral plants which I hope to see named by the end of this decade.

NEW THREATS TO SOUTH AUSTRALIAN ORCHIDS:

ROBERT J. BATES

A surprising number of new threats to our native orchids have arisen in the last twenty years. After 150 plus years of habitat destruction put many of our orchids at risk of extinction new processes have begun which threaten all species.

Several species of tiny sap sucking, pollen eating insects known as thrips have been introduced into SA in the last fifty years are now in plague proportion every springtime through an ever increasing area of the state's orchid distribution. They are their worst in dry springs

which are becoming the norm due to ever shortening wet seasons. These thrips cause abortion of flower buds, malformation of flowers and loss of orchid pollinia and lily seed production, eventually causing extinction.

Climate drying really set in about twenty years ago causing orchid distributions to contract due to drought stress and ever shorter growing seasons.

The new fire regime set up by government agencies means an increasing area of native orchid habitat is being burned during the orchid's growing season, preventing seed production, weakening or killing plants and preventing orchid tuber production.

When I was young these burn offs as we called them took place in late November and December at the end of the orchid flowering season. In 2013 they took place between April and early November coinciding with the cool orchid growing season. We have already seen orchids disappear en masse in local national parks. All of the above are compounding the problem as climate change extends the bushfire season throughout southern Australia.

In more recent times River Murray water has been pumped into rivers and reservoirs of the Mt Lofty Ranges throughout summer thus reversing the old flooding and drying regime and causing extinction of many life forms which depended on the old regime, including many orchid species.

Crazy use of herbicides was something not seen twenty years ago but today road reserves everywhere are being blanket sprayed with poisons every springtime, destroying all native orchids. Most government agencies are now using continuous use of herbicide along fence lines; once a refuge for flowers of rare orchids but now a death trap. Wherever herbicides are used the long term result is a profusion of annual weed grasses which dry out every late spring to attract firebugs. Instead of making us safer, the process increases the likelihood of fires.

Forestry SA now use aerial spraying over large areas of orchids before planting pines. Millions of orchid plants are killed each time this happens. Management of forest reserves these days includes encouraging old tracks to overgrow thereby removing ideal orchid habitat and making it difficult to access large areas of parks to fight fires, weeds and feral animals. The process is quite the opposite to what we had before.

Previously low birth rates prevented population explosions which put pressure on the environment. That is no longer the case.

Then there are new threats which include feral deer, unheard of twenty years ago but now in thousands in orchid areas.

Where is all of this going to end?

MELBOURNE ORCHID SPECTACULAR

OSCOV - ORCHID SHOW & SALE

22, 23 & 24 August 2014
Boxhall Pavilion, KCC (State Dog Centre)
655 Westernport Highway, Skye, Victoria

A few brochures will be available at next meeting or

- contact: secretary@oscov.asn.au, or
- check website: www.oscov.asn.au or
- find them on facebook



MAY WINNING PHOTO

ROSALIE LAWRENCE

This month it was a 'State of Origin' competition with three photos from Western Australia and three from South Australia. The awards went to Western Australia led by Pauline Meyer's flamboyant Queen of Sheba. Lorraine Badger's *Caladenia cairnsiana* (2nd) and *Thelymitra campanulata* (3rd). Helen Lawrence's *Dipodium roseum*, David Mangelsdorf's *Arachnorchis behrii* and Marg Paech's *Calochilus robertsonii* all represented South Australia.

Pauline's photo was taken at Eneabba, north of Perth and identified by a local as *Thelymitra variegata* but in consulting the books it would appear that it is the Northern Queen of Sheba, *T pulcherrima*. There are three species known as Queen of Sheba orchids in Western Australia - *T variegata*, *T pulcherrima* and *T speciosa*.

T variegata was originally named in 1839 by John Lindley but under the genus *Macdonaldia*. In 1865 Ferdinand Mueller moved it to *Thelymitra*. Later people began to separate it out to three different species but it wasn't until 2009 that Jeff Jeanes described *T pulcherrima* and *T speciosa* as distinct species from *T variegata*.

All three species have a single thin spiral leaf and showy multi-coloured flowers.

T pulcherrima and *T speciosa* differ from *T variegata* as follows:

- *T speciosa*, begins flowering earlier, is a slightly shorter plant with fewer flowers (one, rarely two). Although the flowers are similar in size to *T variegata* they are even more colourful with the petals and sepals of distinctly different colours.



Thelymitra variegata Queen of Sheba

- *T pulcherrima* is similar in height to *T variegata* but has smaller flowers with yellow, red, purple mauve sepals and pink purple mauve petals. It also begins flowering earlier than *T variegata*.

They are located in distinctly separate locations as reflected in the common names: Southern Queen of Sheba (*T variegata*), Eastern Queen of Sheba (*T speciosa*) and Northern Queen of Sheba (*T pulcherrima*).

Finally another similar species is Cleopatras's Needles, *T apiculata*.



	Thelymitra pulcherrima	Thelymitra speciosa	Thelymitra variegata
	Northern Queen of Sheba	Eastern Queen of Sheba	Southern Queen of Sheba
Distribution	North of Perth between Lancelin and Dongara	Between the Stirling Range and Condingup	Between Perth & Albany with disjunct populations near Hyden
Flowering	late June - early September	late June - September	August to September
Flower numbers	1 to 5	1 to 2	1 to 5
Flower height	150 – 350	100 – 200 mm	100 – 350 mm
Flower size	25 – 35 mm	30 – 50 mm	30 – 50 mm
Sepals	Yellow, red, purple & mauve	Yellow, red, purple & mauve	Deep pink purple blotched
Petals	Pink or purple and mauve	Pink or purple and mauve	Deep pink or purple and blotched darker purple

I would also like to say thank you to Andrew Brown of Western Australia for his kind help

Images can be found at:

<http://www.retiredaussies.com/> or <http://orchids.chookman.id.au/thelymitra/variegata.html>

References:

Brown, Andrew et al (2013) Field Guide to the Orchids of Western Australia pp. 425 - 427

BENCHED ORCHIDS FOR MAY 2014

EPIPHYTES: OPEN DIVISION

Species:

- 1st Den. bigibbum ssp superbum Bodo Jensen
 2nd Dendrobium bigibbum Bodo Jensen
 3rd Dockrillia bowmanii Chris Kopicki

Hybrid

- 1st Den. Hilda Poxon 'Maggi' M & L Guy
 2nd Den. Teresa – Doran Bodo Jensen

TERRESTRIALS: OPEN DIVISION

Species:

- 1st Pterostylis truncata Kris Kopicki
 2nd Pterostylis collina Kris Kopicki
 3rd Pterostylis sanguinea Les Nesbitt

Hybrid

- 1st Pterostylis X toveyana Les Nesbitt

POPULAR VOTE:

Epiphytes - Open – Species

Dendrobium bigibbum Bodo Jensen

Epiphytes - Open – Hybrid

Den. Hilda Poxon 'Maggi' M & L Guy

Epiphytes - Second Division – hybrid:

Den. Jesmond Sparkler 'Greg Hall' Jan Adams

EPIPHYTES: SECOND DIVISION

Species: no representations

Hybrid:

- 1st Den. Jesmond Sparkler 'Greg Hall' Jan Adams
 2nd Den. Avril's Gold Jan Adams
 3rd Den. Anne's Rainbow Surprise Jan Adams

TERRESTRIALS: SECOND DIVISION

None

BEST ORCHID FOR NIGHT

Den. Bigibbum ssp. superbum Bodo Jensen

Terrestrials - Open – Species

Pterostylis truncate Kris Kopicki

Epiphytes - Open – Hybrids

Pterostylis X toveyana Les Nesbitt

3 *Dendrobium Teresa-Doran*4. *Dendrobium bigibbum*5. *Dockrillia bowmanii*6. *Dendrobium bigibbum ssp lithicola*7. *Dendrobium*
Avril's Gold8. *Dendrobium Hilda*
Poxon 'Maggi'9. Den. Jesmond
Sparkler 'Greg Hall'10. Den. bigibbum
ssp superbum11. *Pterostylis obtusa*12. *Pterostylis x toveyana*13. *Pterostylis sanguinea*