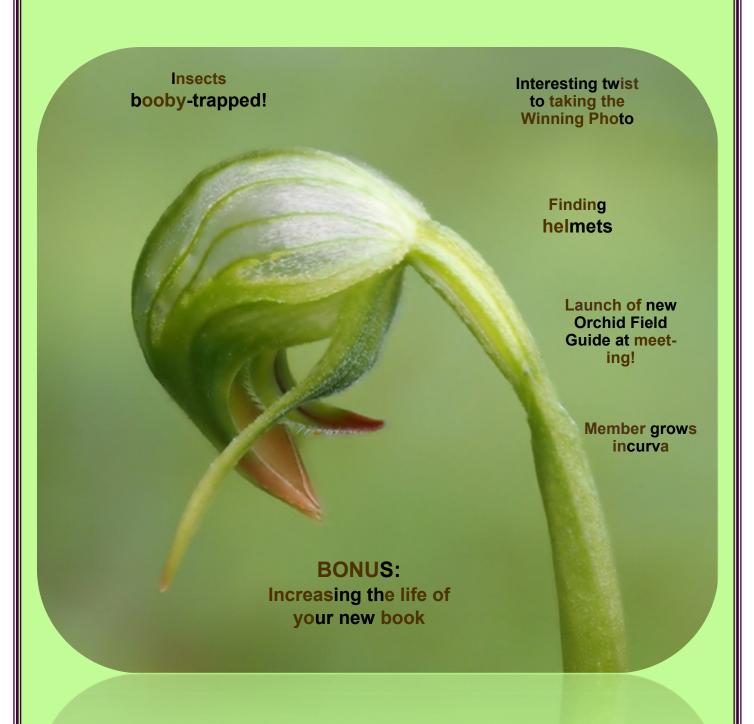
NOSSA

Native Orchid Society of South Australia



JOURNAL

AUGUST 2022

Volume 46 No.7

Booby-trapped!

AG STAFF

Orchids are known for their deception and trickery in order to attract their pollinators. The unwitting pollinators become trapped by the orchid's unique method of triggering when touched, sending the insect into the chamber where the pollen is. As the pollinator struggles, it becomes covered in pollen, eventually escaping and achieving the orchid's aim by spreading pollen to other orchids.



The sexually deceptive orchid, Pterostylis cycnocephala, attracts gnat with the fake 'perfume' of a female gnat.

Image credit: Tobias Hayashi

A new study has described how a sexually deceptive orchid, *Pterostylis cycnocephala*, exploits the sexual preferences of their male pollinators to achieve pollen transfer.

This orchid attracts its pollinator, the male gnat, *Bradysia* (Diptera: Sciaridae), with the 'perfume' of a female gnat and a black appendage that looks like a female gnat. The male then courts the apparent female with wing fanning and abdomen curling, before clasping the flower with its genitalia and rotating 180° as they attempt to assume their regular mating position. This movement triggers a 'booby trap' where the plant snaps shut, and he must climb out becoming covered in pollen in the process, says one of the study's researchers, PhD candidate Tobias Hayashi.

After the male is caught in the flower, it can take as long as 38 minutes to escape, the study found.

"This strategy of sexual deception, apart from a couple of exceptions, is unique to orchids," adds another of the study's researchers, Dr Noushka Reiter from Royal Botanic Gardens Victoria (RBGV).

"Fortunately for the male, he can escape," says Tobias. "With some other orchids, and with carnivorous plants, getting trapped can mean death."

After becoming trapped, the gnat typically forces its way through the column wings, past the anther (the male part of the plant) where it is covered in pollen and escapes through the front of the galea (the helmet-shaped part that protects the reproductive parts from rain, wind, or unwanted visitors).

The study found that male gnats located flowers hidden from view, suggesting long-range attraction is primarily due to floral odour. It also found that male gnats displayed reduced copulatory behaviour when the labellum appendage was inaccessible, suggesting that appropriate morphology (ie. the shape of the plant) may be required to elicit the copulatory behaviour needed for pollination.

The study is the first detailed investigation of sexual deception of male Sciaridae in Australian orchids and represents an example of convergent evolution with some Neotropical *Lepanthes* orchids, which also sexually deceive male *Bradysia*. Convergent evolution is where distantly related organisms independently evolve similar traits to adapt to similar necessities.

The study was conducted by researchers at RBGV, Australian National University and La Trobe University.

Reference: Sexual deception: orchid tricks and traps gnat in pollen den - Australian Geographic

Front cover photo - Pterostlis nutans Photo: Leo Davis

Th field trip once again is the source of the cover photo. Nutans are fairly common on the Fleurieu. P. nutans forms large colonal colonies of both flowering and non-flowering rosettes, with a high percentage of rosettes flowering. Masses of nodding flowers can be seen in places where it does well - shady gullies and damp woodland in leaf litter.

Orchids are interesting

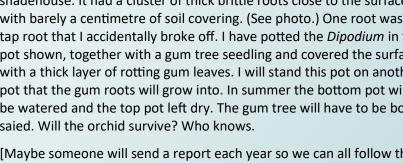
Bare-rooted Dipodium

Les Nesbitt

I have been collecting a sample of the orchids for NOSSA from my collection.

Today's effort was a Dipodium roseum that was growing in the shadehouse. It had a cluster of thick brittle roots close to the surface with barely a centimetre of soil covering. (See photo.) One root was a tap root that I accidentally broke off. I have potted the Dipodium in the pot shown, together with a gum tree seedling and covered the surface with a thick layer of rotting gum leaves. I will stand this pot on another pot that the gum roots will grow into. In summer the bottom pot will be watered and the top pot left dry. The gum tree will have to be bonsaied. Will the orchid survive? Who knows.

[Maybe someone will send a report each year so we can all follow the progress of this experiment. Ed.]



Marg Paech

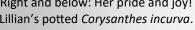


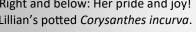
Eriochilus sericeus seems to be particularly prone to

forming clones where I have seen them on Yorke

I have attached a picture with four leaves coming

If you have a photo of interest, a story or a potted orchid (Australasian), please send it in to the Editor to share with our members. Most people enjoy seeing what other orchid enthusiasts get up to! It can be a source of inspiration as well.





Right and below: Her pride and joy!

Lillian's potted Corysanthes incurva.

What's in a name?

Lillian Camphausen

Lillian Camphausen

In an email exchange, Lillian told me something I did not know! And it seemed interesting such that I thought I'd share it with you, the readers. I had always wondered why some names ended in 'us' and some in 'a'.

from the same spot.

Peninsula.

She wrote: Corybas is masculine therefore incurvus. Corysanthes is feminine therefore *incurva* . (The emphasis is mine. Ed.)

Since that exchange I have seen it written since—the ending is according to the gender of the name. I have probably read it lots of times but only now have taken notice.

She sent in photos of her potted orchid with the note: "Only this weekend did I finally have time to look at the orchids I have in pots, and was very pleased that the little "slug" I saw a week ago has opened out to this amazing flower!"



Got Your Helmet On?

The theme of the field trip as planned by Lisa was to see a variety of helmet species. Our group of 15, which consisted of three new NOSSA members and a visitor from Canada, met at the corner of Range Road and Waitpinga Road on the Victor Harbor end on Saturday 30th July.

We visited two quite different sites. Waitpinga Beach which was both uphill and very rocky, as well as sandy with boardwalks (and limited phone coverage!) was our first destination. It had mostly scrub bush and a great view of the sea (despite the overcast sky). In contrast, Nixon-Skinner Conservation Park was reasonably flat and grassy with Xanthorrhoea (grass trees) and Eucalypts (and no problem with phone coverage).

At Waitpinga, after a short climb from the car park Lisa showed us some colonies of Corysanthes despectans (shy helmet orchids) - fortunately they were numerous and scattered, so we there wasn't much waiting time for photographers. I also saw, in the sandy section of the site, three Caladenia latifolia (pink fairy) leaves with buds. Continuing onto a more open and rockier section, we spied a very young sleepy lizard. Leo picked it up to check whether it had ticks! (it didn't.) We then found some Cyrtostylis (gnat) and Acianthus (mosquito orchids) amongst the low-lying growth. The view of the coast with Parsons Beach and a series of headlands jutting out in the distance was magnificent.

















Lindsay Ames

Native Orchid Society of South Australia Journal August 2022

We then travelled to Myponga to have lunch. We sat next to Myponga Reservoir - it was *really cold and windy*! A hot drink was welcome. After lunch we car-pooled to the nearby Nixon-Skinner NP because it had limited parking spaces.

At Nixon-Skinner we had no trouble sighting the *Corysanthes diemenica* (veined helmet orchids) – they were in huge patches all along the side of the main track. The group then veered off the track into the bush. The sight of a small colony of nodding greenhoods in flower excited us all, in particular a pair next to each other but facing in opposite directions, like shy lovers trying to avoid each other's glance - all quite unexpected. There were also many *Nemacianthus* (mayfly orchids) nearby in a variety of early stages of flowering.

Then came the highlight of the day - Lisa and Lindsay led us to a small colony of *Anzybas unguliculatus* (pelican helmet orchids) in full flower. There were 10 of them in a single small patch. A little later on Tony excitedly came across anoth-

er colony of seven flowering *Anzybas* mixed with a *Nemacianthus* colony some 100 m or so away. We were so pleased, as the *Anzybas* orchid is a relatively uncommon orchid. To top off the day, on the way back to the parking area Lindsay pointed out a *Pyrorchis* (fire orchid) that was in bud.

A very tired but contented group of members car-pooled back to Myponga and then home. What a trip. Thank you so much to Lisa and Lindsay for planning and arranging such a fantastic field trip.





July's Winning Photo - Thelymitra x Macmillanii Lindsay Ames



In September last year Marg and I were shown around Bullock Hill by Wendy Ness and her grandkids. It was a fun day exploring the prescribed burn area that was bouncing back after the rather hot fire which seemed to have decimated everything in sight except for the hardy *Xanthorrhoea* (grass trees) and the skeletal remains of *Eucalypts, Acacia* species and tea-tree. The bush in the unburnt patches was impenetrable so it was an opportunity not to be missed to see what would germinate after the fire.

Wendy had recorded waypoints for many of the orchids that we saw that day and we added several other finds with all the extra pairs of eyes scanning the ground. The most exciting orchids were the leeks (*Prasophyllum elatum*), typically 900mm

tall, both dark reddy-brown and bright green types. They were everywhere, typically popping up through or around *Xanthorrhoea* leaves, well known for only flowering after fire.

There were also many *Thelymitra* species flowering that day. It was warm and humid with a thunderstorm brewing in the west. We happened upon what I thought was *Thelymitra* rubra (salmon pink sun orchid) but there was something different about it. The colour was a rich deep pink. Later on we decided it had to be *Thelymitra* x macmillanii "Crimson hybrid sun orchid", which based on other *Thelymitra* species found in the vicinity, must have been a cross between *T. antennifera* and *rubra*. It was stunning. It was one of 14 different species that we recorded flowering on that day.

Unfortunately the day did not end well. I lost my iphone (slipped out of my pocket when I was squatting down photographing orchids with my DSLR camera) and so ensued a frantic search by Marg and me to find it before the storm hit. We never found it. My wife Jane and I went back the following day and did another detailed search but couldn't locate the iphone. I went back into the area a month later and again could not find my phone.

Fast forward to April this year and Wendy and Pete went out to Bullock Hill looking for Leporella. Wendy rang me and asked if I would like to meet them at Bullock Hill to see the Leporella. I agreed to drop what I was doing (which wasn't important) and said I would meet them in 30 minutes. Meanwhile Wendy and Pete had gone back into the scrub around the vicinity of where we were last year and guess what, Pete found my phone! Even more astounding was the fact that it was still working once I charged it up!!





"Do you know any good Fat &

Skinny jokes?"

This entry was from Chris Davey from Yorke Penninsula



22nd Australian Orchid Council

Conference & Show

'For the Love of Orchids'

EVENT PARTNER
FLIGHT CENTRE

31 August - 4 September 2022

Conference registrations are still available - single day registrations are available for those who would like to attend for one day only. A fee of \$150 gives you access to all lectures for that day, plus access to the Show and Vendors' Area.

Register at Forms — AOCC 2022 To find out more information click on: JUNE AOCC conferenceUpdate May 2022.pdf

Some of the highlights:

Bus Field Trips: Follow the link at Field Trips — AOCC 2022

Orchid Show: The Orchid Show will showcase both orchid and foliage displays, benched orchids and an Arts Section. Being an open show, any orchid society member from around Australia and overseas is eligible to enter. Applications for the Section 4 Arts Section close on 16 August 2022. Registration at https://aocc2022.org/forms.



Meeting Orchids

All photos on this page by David Hirst

Terrestrial Species

(First place) Corybas dilatate Grower: Les Nesbitt





(2nd place) Pterostylis repandum Grower: NOSSA

Hybrid Terrestrials

Pterostylis Nodding Grace

Grower; NOSSA —(a sales pot which was sold after the

meeting.)

74.2%

Epiphyte hybrid

a large well flowered plant Dendrobium Hilda Poxon Grower: Leo Davis

How do I always seem to find the plants without the will to live?

It was decided that several NOSSA sales plants will be put on the trading table each month to help raise funds for the Oakden facility.

Some of the other plants on display:

Corybas diemenica

Les Neshit



Some interesting statistics presented at the July Meeting.

Of our 143 current membership, 89 have recorded 'interest' information.

(We only began collecting this information in 2015.) Color key:

No Response recorded

64%

32.6%



47.7%

What an interesting snapshot of our membership and their interests.

70.8%

Page 80 Volume 46 Number 7

Launch of New Orchid Field Guide

John Eaton

While the primary purpose of the July General Meeting was for the approval of funding for the Les Nesbitt Native Orchid Propagation Facility at Oakden, the evening commenced with an informal and celebratory launch of member, June Niejalke's large and beautifully illustrated volume on native orchids: "Native Orchids of SA – a Field Guide".

Last year, June spoke to us about her orchid photography and how she uses "stacking" to improve depth of field in orchid macro photography. June's photography throughout the book show-cases her expertise as a photographer of native orchids. A YouTube link to June speaking about her photography, macro photography and stacking can be found at: https://m.youtube.com/watch?v=4Yr4jK5elQ4

This launch took the form of a conversational interview between Rosalie Lawrence and June, during which members were invited to ask questions. June began with a lesson on *book care* - how to open her book correctly so that it lasts longer. Rosalie used this PowerPoint slide with links to videos demonstrating this. [Definitely worth checking out. Ed.]



Increasing the Life of June's Book

How to open a book without damaging the Spine

https://www.youtube.com/watch?v=dneJXmy8r-4&t=47s

How to Break in a New Book

https://www.youtube.com/watch?v=6cgQiykhkog

No More Cracked Spines! How to Break in Books

https://www.youtube.com/watch?v=1aTFKechuuY

As the conversation progressed, members learned how - and when - June's passion for native orchids developed. Members also discovered June's favourite orchid and what orchid she considers to be the most difficult to photograph. This helped explain the front cover of June's book and other unique aspects that distinguishes it from other books about our native orchid species.

June concluded her presentation by showing members how to use the book effectively - including the *novice-friendly* orchid ID finder which uses photos of the major orchid groups to identify which of the major orchid groups an orchid belongs to and includes colourcoded pages for precise orchid identification.

Information on how to purchase the book is on the NOSSA website: https://nossa.org.au/about-us/native-orchids-of-south-australia-a-field-guide/

June Niejalke—author of the new field guide.

Photo: David Hirst



Future Direction of NOSSA

Following the launch of June's book, the focus of the evening turned to the question of the Oakden facility and our future direction as NOSSA. There was much feedback generated by the NOSSA survey, coming in the form of suggestions and comments, with most in favour of NOSSA continuing in the current direction. The feedback was presented to the meeting - much hard work was done behind the scenes by a few to see that it was presented methodically and completely, giving a fair report of what was received in the lead-up to the meeting.

The meeting ended with overwhelming consensus and goodwill amongst members for the Oakden initiative. A complete, official report on this part of the meeting will be in the next journal.



Book Launch L-R: Rosalie Lawrence, June Niejalke

Thank you to all who responded and who attended the meeting.





June signs and sells copies

Leo Davis

Please note that the September field trip which was to be held on 1st October has been moved to September 24th.

Members' Update

Field Trip Update

Field trip dates for the rest of 2022

Saturday 27th August

Saturday 24th September - new date

Note 1st October - CANCELLED due to long weekend

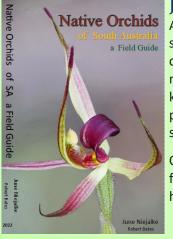
Saturday 29th October

Saturday 26th November



NOSSA Spring Show - September 17th & 18th

Help will be needed to stage this so if you can spare a few hours or are able to help in any way contact one of the committee or our Secretary, Lindy, who will get you in touch with the relevant person who can coordinate your involvement.



Iune's Book

A 'must have' for the serious terrestrial orchid hunter. So much shared knowledge, lots of photos and very considered layout.

Check our website for instructions on how to purchase.

June Guest Speaker link

One of our newest members, David McConachie from New Zealand was guest speaker at the June NOSSA general meeting. This link takes you to his talk about Escapee orchids—the ones that made it across the vast waterway from Australia to New Zealand. https://www.youtube.com/watch? v=udLpDkslVaE&authuser=0

Guest Speakers

On 23rd August, Michael Burrell will speak on 'The Biodiversity of Gulf St Vincent'. Mike is a member who has come along to a number of field trips.

On 27th September Anita Marquart will be speaking about how to breed the good insects to fight the bad ones.

At the 25th October meeting, Steve Howard will update us on his growing, field observations and photography.

A very interesting line-up!!

NOSSA

Lisa Incoll

Native Orchid Society of South Australia

SPRING SHOW

September 2022

Saturday 17th 10:00am - 4:00pm Sunday 18th 10:00am - 3:00pm

Uniting Church Hall cnr Township Rd & Church Cres Marion

Native Orchids for display & sale, DVDs, Books & Advice on identification, growing & conservation



GOLD COIN DONATION

www.nossa.org.au, 0439214106 nossa.secretary@gmail.com

New Members

The following people have joined NOSSA since last month's journal.

Janet Harris of Aldgate

Philip Bell of Mitchell Park

David McConachie of Lower Hutt, New Zealand

Wendy White of Inman Valley

We look forward eagerly to what you might

bring to our society and sincerely hope that you will find membership of NOSSA a rich and rewarding experience, finding new friends with like interests.

Bulletin Board / Date Claimers

The Native Orchid Society of South Australia generally meets every 4th Tuesday of the months February to November at St Matthew's Hall, Cnr Wellington Street & Bridge Street, Kensington (just off Kensington Road). Meeting starts at 7.30 pm Doors to the hall open from 7:15 pm to allow Members access to the Library and Trading Table.

CALENDAR

DATE	EVENT			
August				
9	Committee Meeting			
23	General Meeting			
27	Field Trip			
	31st Aug—4th Sept See p. 78			
	'For the love of Orchids'			
Sept				
13	Committee Meeting			
17, 18	NOSSA Spring Show			
24	Field Trip (note changed date)			
27	General Meeting			

Contents

TITLE / SUBJECT	AUTHOR	PAGE
Booby-Trapped		74
Orchids are interesting		75
Got your helmet on? Field Trip Report	Ros & Tony Miller	76
July Winning Photo	Lindsay Ames	78
July Photo competition information		78
August Photo Competition		79
Meeting Orchids	Les Nesbitt	80
Statistics presented at Meeting	Lindy McCallum	80
Launch Native Orchids of SA Field Guide	John Eaton	81
Future Direction of NOSSA		81
Members update - Guest speakers	John Eaton	82
- Spring Show		
Bulletin Board		83
Information and CONTACTS Page		84
More Field Trip Photos, Species list		

'MEMBERS ONLY' WEBSITE PAGE

If you need a password for the 'Members Only' page of the website please contact NOSSA Enquiries Email:nossa.enquiries@gmail.com
or the editor nossa.editor@gmail.com

FIELD TRIPS

If you want to find out further information about the next field trip and/or wish to be put on the field trip email list (so that you find out the location of the field trips once they are finalized), please contact Lisa



on $\underline{nossa.fieldtrips@gmail.com}.$

Next trip 27th August Do you know a suitable place to see orchids? Let Lisa know on the email above. Some changes - see p82

PROPAGATION DAY

Propagation day is held on the second Saturday and 4th Sunday of each month. Contact John Agnew on



nossa.seeds@gmail.com

All members welcome.

Remember to book in for the propagation workshops.

GENERAL MEETING August 23rd

To contact the secretary about the meeting,



7.30 pm start

Discussion on the future direction of NOSSA.

If you have orchids flowering, bring them along for all to share your joy. It can be surprising what you may learn about your plant when others see it.

ARTICLES FOR NEXT JOURNAL

Articles / Reports must reach the Editor by Wed 31st August 2022
to nossa.editor@gmail.com to ensure a place in the September journal.

Don't forget

Thank you to all who send in things *as they happen* for the journal. ☺

COVID REMINDER

Any events staged by NOSSA need to follow guidelines for social distancing and complete wellness.

Native Orchid Society of South Australia August 2022



The Committee

President

Gordon Ninnes

Email: nossa.president@gmail.com

Vice President

Robert Lawrence

Secretary

Lindy McCallum

Email: nossa.secretary@gmail.com

Treasurer

Ros Miller

Email: nossa.treasurer@gmail.com

Ordinary Committee Members

Craig Humfrey

Rosalie Lawrence

Tony Miller

Editor

Marg Paech

Email: nossa.editor@gmail.com

Conservation Officers

Thelma Bridle Ph: 8557 6553

Email: nossa.conservation@gmail.com

Other Positions

Field Trips Coordinator –Lisa Incoll

Email: nossa.fieldtrips@gmail.com

Librarian

Pauline Meyers

Show Marshall

Craig Humfrey

Speaker Coordinator

John Eaton

Trading Table - Craig Humfrey

Tuber Bank Coordinator

Les Nesbitt

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.

If you are collecting orchids it is a LEGAL REQUIREMENT: you MUST carry a paper copy of the permit, should you be asked to produce it. YOU also must be named as a collector on their permit.

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 John Eaton
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.



PRIVATE FACEBOOK PAGE

This is open to any of our NOSSA paid-up members but not your non NOSSA friends. It is a place for discussing orchid issues and photos, and allows for more detail than we would share openly for the general public. Email:nossa.enquiries@gmail.com to join.

BANKING DETAILS



Account no 073 181 741

Add your name and NOSSA Membership number for correct allocation of funds, particularly when paying membership.



INFORMATION AND MAKING CONTACT

All contact details including who to contact in our NOSSA team are in the panel on the left. If you don't know who to direct your enquiry to, send it to the Secretary who will re-direct it if necessary.



MOBILE PHONE

0439 214 106

Leave a message and someone will return your call.

MAILING ADDRESS

PO Box 14 **KENSINGTON PARK SA 5068**

Just \$20 for

12 month's membership

WEBSITE:

NOSSA.org.au

More photos from the field trip



Species List for Waitpinga beach and Nixon-Skinner CP 30th July

Botanical Name	Common Name	Growth Stage	
Acianthus caudatus	mayfly orchid	buds	NS
Acianthus pusillus	mosquito orchid	flowers, mostly finishing seedpods	WB, NS
Anzybas unguiculatus	pelican helmet orchid	flowers	NS
Arachnorchis sp.	spider	leaves	NS
Caladenia latifolia	pink fairies	leaves, buds	WB
Corysanthes despectans	shy helmet	flowers	WB
Corysanthes diemenica	veined helmet	flowers	NS
Cyrtostylis robusta	large gnat orchid	flowers	WB, NS
Glossodia major	purple cockatoo	leaves	NS
Linguella nana	dwarf snail orchid	rosettes	WB
Pterostylis nutans	nodding greenhood	flowers	NS
Pyrorchis nigricans	fire orchid	leaves, 1 bud	NS

WB = Waitpinga Beach

NS= Nixon Skinner

More photos from the trip:



"The outing was very well planned and prepared. Clearly much time and thought were involved. You managed affairs with patience and wisdom. Well done and thank you."



For a few more weeks, a range of South Australian natives @ \$4.00 (\$2.50 for TFL members) is available to the public at the TFL nursery.

Email <u>jbamford@treesforlife.org.au</u> to make an appointment to visit the nursery.

For a species list, email lillianmay2016@gmail.com

Volume 46 Number 7 Page 84b