



Journal
of the
Native Orchid Society
of
South Australia Inc



NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA
PO BOX 565 UNLEY SA 5061

www.nossa.org.au.

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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Front cover from an original drawing of *Prasophyllum elatum* by Robert Lawrence. Used with his kind permission.



**JOURNAL OF THE
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MARCH 2013 VOL. 37 NO 2

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**The Native Orchid Society of South Australia meets every
4th Tuesday of the months February –November**

NEXT MEETING 26 MARCH 2013

NEXT MEETING

Tuesday, 26 March at St Matthew's Hall, Bridge Street, Kensington. Meeting starts at 8:00 p.m. Doors to the hall will be open from 7:15 p.m. to allow Members access to the Library and trading table.

The March Meeting item of the evening will be a question and answer session. Write your questions of a piece of paper and drop it in the box or just ask the panel on the night. Any topic to do with Australian native orchids. **The Meeting is also the AGM.**

DIARY DATES

Sunday 24 March	Jupiter Creek CP	<i>Corunastylis</i>
Saturday 13 April	Belair NP	<i>Leporella, Eriochilus</i>

NEXT COMMITTEE MEETING

**April 9th – At the home of David & Rosemary Hirst, 14 Beaverdale Ave Windsor
Gardens 5087**

Judging results for February Meeting

Epiphytes benched

Species: *Plectorrhiza brevilabris*; *Sarcochilus eriochilus*; *Sarcochilus hirticalcar*.

Hybrids: *Sarcochilus* Velvet 'x Cool Dude' (several plants).

Terrestrials benched;

Species: *Genoplesium rufum*

Judging results

Epiphyte species Open division

1st *Plectorrhiza brevilabris*

2nd *Sarcochilus eriochilus*

3rd *Sarcochilus hirticalcar*

Grower

Kris Kopicki

Kris Kopicki

Kris Kopicki

Epiphyte Hybrid Open division

1st *Sarcochilus* Velvet

2nd *Sarcochilus* Velvet

3rd *Sarcochilus* Velvet

Kevin Western

Kevin Western

Kevin Western

Terrestrial species Open division

1st *Genoplesium rufum*

No 2nd or 3rd

Les Nesbitt

Popular vote

Terrestrial species: *Genoplesium rufum*

Epiphyte Species: *Plectorrhiza brevilabris*

Epiphyte Hybrid: *Sarcochilus* Velvet

Les Nesbitt

Kris Kopicki

Kevin Western

Plant of the night:

Plectorrhiza brevilabris

Kris Kopicki

Plant commentary on terrestrials given by Les Nesbitt & on epiphytes by Kevin Western.

February Speaker

Bodo Jensen, NOSSA Member and Botanical Gardens Guide, gave all those at the meeting a historical talk on the Botanic Gardens based on his knowledge and experience as a guide.

Initially several years went by just deciding where the gardens should be. Bodo spoke about the various Directors of the Gardens and the achievements that were made during their time

The addition of Wittunga and the Mount Lofty Botanical Gardens

Bodo also brought to our attention that another NOSSA member, John Pearce, present at the meeting, was also a guide at the Botanical Gardens.

Thanks to Bodo for an informative evening.

FOR YOUR INFORMATION - NOSSA NEWS

Upcoming Field Trips

All field trips commence at 10:00 AM

Field Trip Co-ordinator, Wendy Hudson can be contacted on 8251 2762 or 0434 863 969.

Date	Site	Orchids	Meeting Place
Sunday 24 March	Jupiter Creek CP	Corunastylis	Cnr Strathalbyn & Shepperd Road, Echunga. Travel south from Mylor on the Strathalbyn Road towards Echunga. Do not go into Echunga.
1.30pm Saturday 13 April	Belair NP	Leporella, Eriochilus	Entrance at main gate Belair National Park. Members are invited to assist with a weeding program from 10am. The NOSSA field trip will commence 1.30pm.
Saturday 19 May	Parsons Beach	Diplodium, Acianthus	Meet at Urimbirra Wildlife Park, cnr. Adelaide & Welch Roads, Victor Harbor.
Saturday 22 June	TBA		
Wednesday 3 July	Morialta CP		<i>Bunochilus, Diplodium, Urochilus, Cyrtostylis, Corysanthes</i>
Sunday 18 August	Belair NP		<i>Pterostylis nutans</i>
Saturday 31 August or Sunday 1 September	Private property, Victor Harbor		
Friday 6 & Saturday 7 September	Camp: Halbury		<i>Oligochaetochilus lepidus</i>
Saturday 14 September	Mambray Creek		<i>Oligochaetochilus Arachnorchis Prasophyllum</i>
Sunday 20 October	Scott CP - Kuitpo		Sun orchids
Sunday 16 November	Kuitpo		Duck orchids

Leaders required: If you are able and would like to lead any of the above field-trips, please email wendyhudson2@bigpond.com or telephone 8251 2762. Thank you.

Note: Tours will be led by Bodo Jensen, NOSSA Member and Botanical Gardens Guide, in the Mt Lofty Botanic Gardens on Wednesday 2 October, Monday 7 October (long-weekend) and Saturday 2 November. We have been fortunate to have Bodo's support in the past and we appreciate his ongoing help.

NEXT JUDGES MEETING

Next judges meeting will be at Les Nesbitt's place on Saturday 6th April commencing at 9.30am.

THREATENED PLANT ACTION GROUP (TPAG) WEEDING DATES

NOSSA members are invited to assist TPAG members with weeding. It is advisable to check with Tim Jury just prior to the date, or ask him to send you an email, in case weather or other factors change the event.

Tim Jury – ph 7127 4166 or tpag@ncssa.asn.au

Thelma Bridle – ph 8384 4174 or t.p.bridle@bigpond.com

Sat April 13th 9.30am Weeding of *Pterostylis cucullata* in Belair NP.

As there are 2 sites in Belair where weeding takes place, contact either Tim or Thelma Bridle for meeting place. Entry to Belair is free for this event.

Sat May 11th 9.30am Weeding of *Pterostylis cucullata* in Belair NP.

Sat June 8th 9.30am Weeding of *Pterostylis cucullata* in Belair NP.

Wed Sept 18th 9.30am Weeding of *Pterostylis arenicola* on Grange Golf Course.

Sat Oct 5th 9.30am Weeding of *Pterostylis cucullata* in Belair NP.

TPAG always greatly appreciates the assistance provided by NOSSA members.

Recall of *Dockrillia* (Den.) *teretifolia* seedlings purchased last spring..

Bring your *teretifolia* seedlings along to the March meeting for a discussion on growing methods. What worked and what didn't. Did your seedling survive the long hot summer?

How big are the best plants and why. We can all learn something.

APS Plant Sale

The APS plant sale at the Adelaide Showgrounds, **Saturday 20th April & Sunday 21st April**, clashes with the Festival of Flowers at Enfield this year. Some of our usual APS supporters have commitments at Enfield. Who is prepared to set up and staff a NOSSA stand at APS? A decision will need to be made at the March NOSSA meeting.

Entry to the Plant Sales is via Rose Terrace Entrance. There is a gold coin donation

2013 MEMBERSHIP NOTICE

Members who wish to pay 2013 Membership Fees electronically should e-mail NOSSA Treasurer on nossatreasurer@hotmail.com

You will receive banking details so that you can complete your subscription. Please remember to include in your e-mail any change of address details.

Marj Sheppard, Treasurer

Terrestrials

Repotting should be completed by now. Repotting tubers with long shoots is a tricky business requiring very gentle handling. Broken shoots and the death of some plants can result. Be aware that autumn is a time of rapid change. Day length decreases by 2 hours in the 6 weeks from the 1st of March. Our orchids respond to the longer cooler nights faster than we do. All pots should be in their growing positions for the coming winter. Increase watering in March so that by equinox on about the 21st the mix is damp right through to the bottom of the pot. It may take several heavy waterings to wet the centre of the pot where the tubers are. The early greenhoods will be showing leaves and some of the *Diplodium*'s will be showing buds & may be in flower by month end. The first *Eriochilus cucullatus* flowers are usually open by the last day of March with the majority blooming in April. Thrips love to suck on the flowers and can cause the flowers to shrivel up in a day or two. If using a pressure pack spray to kill thrips, hold the can at least half a metre away or you can freeze the flowers with the propellant. Pull out any weeds that germinate while they are still small. Greenhoods will like a little soluble fertiliser sprayed on their new leaves as they develop. Deflasking can be done after mid March. April is the best month to deflask terrestrials as it is cooler and more humid with enough sun to harden the leaves before the cold and damp of winter. Flasks are often the only way to get the slow multiplying orchids.

Epiphytes

Keep up the regular watering and fertilizing schedule in March as plants are still growing and the weather can be very dry. Water only in the morning so that the leaves dry off before nightfall. Remove extra layers of shade cloth about equinox to let more light reach your plants to harden up the new growths before winter. Stop fertilising by Anzac Day. Orchids that need a dry winter rest period must be moved under cover by that date. Best example is *Cymbidium canaliculatum* that is not watered at all until spring. Some of the hardcane dendrobiums like *Den. biggibum* and *Den. canaliculatum* are also dried off for the winter. Buds will be visible on the winter flowering hybrids.

Keep a sharp eye out for slugs and snails that get more active on the cool nights. Examine root tips and flower spikes for damage. Scale, mealy bug and aphids are more active also. Rats and mice also get hungry now that the fruit season is over. They like to chew on plump new dendrobium growths and flower spikes. (And dig up & eat tubers).

FIELD TRIP REPORT – 2nd FEBRUARY 2013by **Thelma Bridle**

Saturday 2nd February was a surprisingly cool day for summer, with a temperature of 20°C and a few light showers. But this made ideal conditions for walking in a swamp. Nine NOSSA members participated. Vegetation in Stipituris Conservation Park swamp was luxuriant, probably as a result of a wet winter, although the swamp was now dry underfoot. *Spiranthes* sp were flowering or in bud and over 80 plants were estimated. Size ranged from 15-50cm in height and were found mainly along small animal tracks through the swamp. Flowers were arranged spirally on the stem, opening successively from the bottom to the top of the spike and ranged in colour from medium pink to pure white. No pollinators were observed in the cool conditions, but would be small native bees.

S. alticola, a species described from high altitude swamps in ACT has been ascribed to these plants. The frilled white frosted labellum is broader than in *S. australis*, the former name used for SA species, but perhaps the SA form should be considered as *S. aff alticola*. Whatever the name, it does not detract from the delight of the flowers and the rarity of the plants in SA.

Coordinated flowering in South Australian native orchids Bob Bates

What does it mean: most readers will already know that sometimes there will be massed flowerings of orchid species, where all flowers of the same species open at the same time on a particular year, often following a run of several years with poor or no flowering.

What are the benefits: the coordinated flowering tends to be when conditions are optimal for strong orchid growth, larger than average flowers and with more pollinators available than usual; all of which results in greatly enhanced seed production, usually being hundreds of times more than in years of uncoordinated flowering.

What are the cues for these massed flowerings: the most obvious one is summer bushfire when gases released by burning vegetation give the signal for a massed flowering event with increased nutrients in the soil, more available light and better air movement, all inducing strong healthy plants. Curiously for many species their pollinators are also more numerous the season following a fire.

Some SA species in the fire induced flowering category include NOSSA.s orchid emblem species *Leptoceras menziesii*, *Pyrorchis nigricans* whose name means fire lover, many leek orchids and onion orchids ie *Prasophyllum elatum* and *Microtidium atratum*. You may notice that these species tend to be black at times, the '*nigricans*'; in *Pyrorchis nigricans* means black (from *niger* black) and the '*atratum*' in *Microtidium atratum* means 'dark' and yes both these species turn black after flowering (and when pressed); which impressed the taxonomists who named them.

Prasophyllum elatum which rarely flowers without fire is often melanic or darkened in bud. All of these species become more cryptic or camouflaged against blackened ground and therefore have a safer flowering.

In the northern, desert fringes of SA fires are of no benefit to orchids but Winter flooding or heavy rain are, so floods stimulate coordinated flowering in the pastoral zone yet may hinder flowering in higher rainfall country. Summer floods on the other hand will damage orchid tubers are not a cue for orchid flowering.

A desert orchid which is rarely seen except after winter flooding is *Prasophyllum* species 'Desert'. How convenient as *Prasophyllum* sp 'Desert' is one of our largest leek orchids and so flower spikes would all be eaten if they appeared in an average season. Floods cause the desert to be covered in greenery and wildflowers much more attractive to grazers than leek orchids, with veritable plagues of the orchid's pollinators. Other desert orchids with flood induced massed flowering include rufous hoods *Oligochaetochilus* of many species. I will never forget the thousands of rufous hoods flowering on the floor of Wilpena Pound after a very wet winter and early season break in the 1980's.

Other stimuli for massed flowering include laying bare the ground, ie after a plague year of kangaroos, after a drought and certainly after bulldozers. I have rarely seen a lot of the endangered *Thelymitra epipactoides*... just once in the 1960's near Binnie Well in the Southeast after 500 hectares of bush was rolled ready for cropping. The area that spring had thousands of tall multiflowered metallic sun orchids. Sadly of course to no avail as a few years later this was bare paddocks with failed crops, the millions of *T epipactoides* seedlings all destroyed.

An early season break can be a cue for coordinated mass flowering in many orchids of the super genus *Caladenia*. In 1973 after a great early April season break there were dozens of white Finger orchids *Caladenia xantholeuca* in flower in Mambray Pound in August. Since then early breaks with follow up rain have dried up and the species has all but disappeared. Think also of *Arachnorchis argocalla* and *A. gladiolata* in areas well north of Adelaide. Helmet orchids also use an early break to the season as a cue for coordinated mass flowerings.

For many species with short flowering season a built in biological clock ensures all plants begin to flower in the same week, even opening on the same day, these species don't have massed flowering but their flowering is certainly coordinated. You may doubt that they could all begin to open on the same day, but this does happen with the help of other cues. After a week of cold grey weather when flowering is held off, the first warm sunny day with northerly winds will begin a coordinated single day flowering for leek orchids; think *Prasophyllum calcicola* which has two forms in Warrenben CP each of which flower just three days apart yet it is enough to prevent any accidental gene flow from one to the other and hence allows us to think of each as separate species. (Which I am not advocating formally here but see the images in Orchids of SA!)



Silver hare orchid by June N

After a burn

Man's interference and climate change are already throwing these cues into chaos, just another death knell for some of our rarer species which no longer even have enough habitat or numbers for any 'mass' flowering.

Who can forget those cool summers when five times the usual number of hyacinth orchids, *Dipodium roseum* flowered in the Adelaide Hills, did the orchids have some kind of clue that a cool summer was coming! And why was there such a great flowering of hyacinth orchids around Talisker CP in summer 2012/13? Perhaps the Fleurieu Peninsula had better spring rainfall the Adelaide hills.

REPORT ON RESULTS OF FORESTRY SA ORCHID SURVEYS IN 2012 by Thelma Bridle

In 2012, two Forestry SA Native Forest Reserves (NFR) in the Mount Gambier region, were surveyed by NOSSA members for native orchids. GPS coordinates are recorded together with the orchid species, number of plants and life stage. This is a continuing project for NOSSA, which will eventually see all the south-east NFRs surveyed the results of which will assist Forestry SA plan future management, including burns, in these important plant refuges among the plantation pines. Honan's Scrub, a large NFR (1027ha) and Mount Lyon NFR (210ha) were surveyed in 2012. Whilst a group of NOSSA members, some from Adelaide, some country members and some from Mount Gambier surveyed orchids Bob Bates completed a full plant list.

Surveying on four occasions was required in 2012 as both NFRs contained areas of swamp and we hoped to identify the sun orchid species present, and these flower later in swamps and the slightly cooler temperatures of Mount Gambier.

The first survey, in April, recorded the autumn-flowering species *Speculartha obesa*, *Corunastylis ciliata*, *Leporella fimbriata* and *Eriochilus cucullatus*, a species not common in the area. At Mount Lyon, the swamp species *Cryptostylis subulata* was also flowering.

By August both areas were very wet, making access difficult and requiring additional walking as many tracks were too wet to drive. *Leptoceras menziesii* and *Pyrorchis nigricans*, both with a profusion of leaves and just a few developing flower buds were recorded in Honan's Scrub. The tall *Bunochilus melagrammus* was flowering along track edges and three species of helmet orchid were flowering – *Corysanthes incurvus*, *C. diemenicus* and *Anzybas unguiculatus*. The latter species is more frequent in the south-east than in the Adelaide Hills. A total of 700 GPS records were made. This number increased to 1,500 records during the October survey when sun orchids were added to the list. Unfortunately, with the wet and cool season of 2012, most sun orchids could only be recorded as *Thelymitra* spp, but *T. antennifera* and *T. rubra* were both flowering and numerous. In the south east a cream-yellow flowered *T. rubra* form is frequently recorded. *T. rubricaulis* and *T. crenulata*, both swamp species, were recorded in flower. *Calochilus* spp. were commencing flowering and both *C. robertsonii* and *C. paludosus* were present, *C. paludosus* occurring in wetter areas. *Stegastyla* aff. *iridescens*, a small bronze-flowered orchid with glistening sepals were generally scattered, but as often happens on these comprehensive surveys numbers of plants were significantly increased for the area. *Caladenia pusilla*, considered rare around Mount Gambier was recorded throughout much of Honan's Scrub. Whilst Honan's Scrub was still wet in October, Mount Lyon remained largely inaccessible, although a number of sun orchid species were recorded.

The final survey for 2012 was made in late November. Many of the sun orchids had flowered and podded by this time and therefore few could be identified to species. *Caladenia subulata*, a recently described species similar to *C. vulgaris* was located plus a few *C. congesta* and one *Diuris sulphurea*. *Dipodium* spp. were recorded but as flowers are required to differentiate species, so we decided to make a short return visit in late December.

D. pardalinum numbers were few and restricted to wetter forest areas whilst *D. roseum* was more numerous and scattered through drier forest. *Gastrodia* species are not common in the southeast. Both *G. sesamoides* and *G. procera* were recorded, but despite considerable searching, none of the tiny *G. vescula* were found. *Paracalena minor* is more common in

the South-East and a very large population of these were flowering. On our return in late December there were both flowers and seedpods on the plants.

Mount Lyon was still partly inaccessible in late November with the large population of *Cryptostylis subulata* still in 50mm water. A new population was recorded, growing in a wet ditch with thousands of *Utricularia lateriflora*, the tiny bladderwort. Again sun orchids had flowered and set seedpods. A total of 75 orchid species were recorded during the 2012 surveys.

Surveys for Forestry SA in the southeast will continue in 2013, so if you are interested in participating, please contact the Conservation Officers, Thelma Bridle or Bob Bates.



(photographs above will appear in larger size in the electronic version of this journal – Ed.)

NARACOORTE CAVES CONSERVATION PARK DIPODIUM SEARCH 2012

Thelma Bridle

The Department of Environment, Water and Natural Resources (DEWNR) requested NOSSA conduct a survey in a portion of the Naracoorte Caves Conservation Park and an adjacent, recently acquired, Heritage block for *Dipodium* species, particularly *D. campanulatum*. This survey was set up quickly, at optimal flowering time for the orchids, which varies each year depending on weather conditions. Six NOSSA members participated in the survey between Christmas and New Year.

Whilst *Dipodium* spp. numbers were not prolific in the area surveyed, all four species occurring in the South-East were recorded. *D. roseum* was recorded most frequently, but a number of *D. campanulatum*, easily identified by the bell-shaped flowers with dark pink blotches on a white ground were found. *D. pardalinum* and *D. punctatum* with a strip of dark mauve hairs on the labellum and barely recurving petals and sepals were also recorded.

Detailed reports on results of the above surveys with all GPS records have been forwarded, to Forestry SA for Honan's Scrub and Mount Lyon surveys and to DEWNR for the Naracoorte Caves Conservation Park survey.

Winners February 2013 Picture Competition
Rosalie Lawrence

We finished last year with two winners and we've commenced this year with two winners. There were six entries in all with one being a drawing of *Cryptostylis subulata*. Interesting one of the winning entries was a photograph of a *Cryptostylis subulata*. Claire Chesson's photograph of the flower with the raindrops appealed to many people.



The other winner is Doug Castle's *Caleana major*. This is always a popular orchid with its portrayal of a duck in full flight. Though common in the eastern states it is vulnerable in South Australia, with quite a restricted distribution. It can often be found in small colonies at the base of trees.

More information about our orchids can be found in *South Australia's Native Orchids* DVD-ROM, which can be purchased from the Secretary



Remember entries can be posted to the NOSSA mail box or emailed to nossaorchids@hotmail.com or nossa.enquiries@gmail.com



Spiranthes



Thelymitra rubricaulis



Genoplesium rufum



Sarcochilus

Plants benched February 2013

2

photo's D. Hirst



Sarcochilus eriochilus



Sarcochilus Velvet



Sarcochilus hirticalcar



Plectorrhiza brevilabrus

