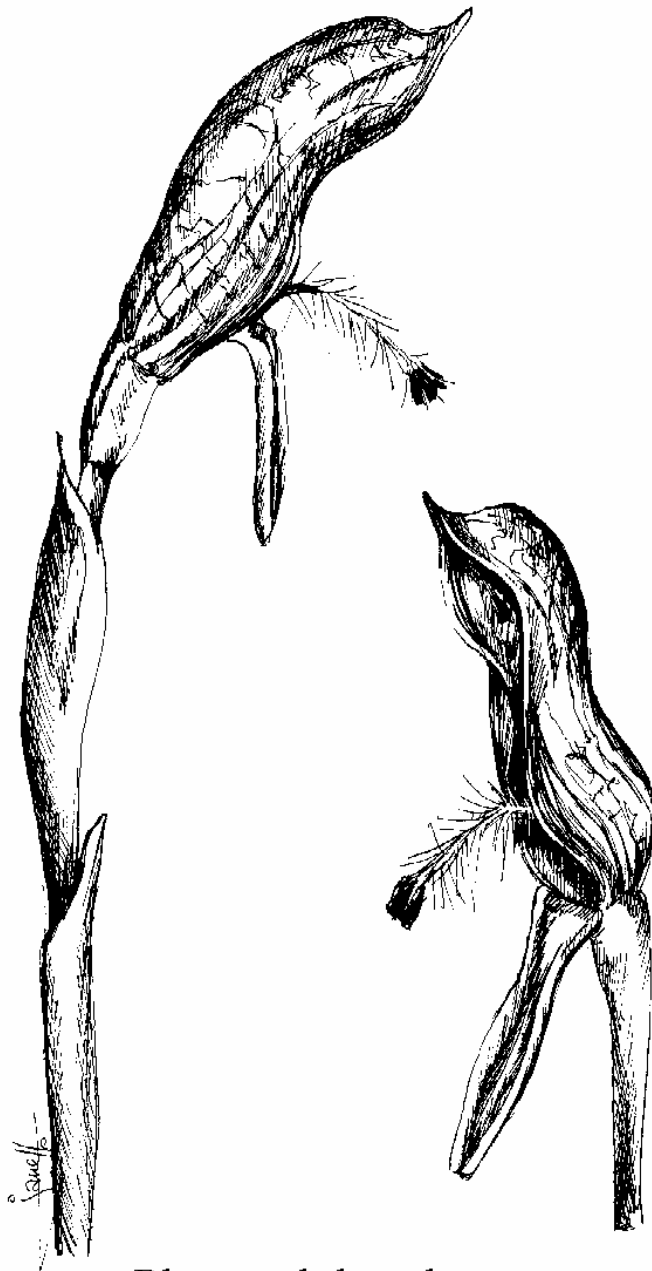




Journal  
of the  
Native Orchid Society  
of  
South Australia Inc



*Plumaticilos plumosum*

**NATIVE ORCHID SOCIETY OF SOUTH AUSTRALIA**  
**POST OFFICE BOX 565 UNLEY SOUTH AUSTRALIA 5061**

[www.nossa.org.au](http://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.*

**PRESIDENT**

Bob Bates:  
Telephone 8251 5251

**SECRETARY**

Cathy Houston  
telephone 8356 7356

**VICE PRESIDENT**

Bodo Jensen

**COMMITTEE**

Malcolm Guy  
John Bartram

Brendan Killen  
Bill Dear

**EDITOR**

David Hirst  
14 Beaverdale Avenue  
Windsor Gardens SA 5087  
Telephone 8261 7998  
Email [hirst.david@saugov.sa.gov.au](mailto:hirst.david@saugov.sa.gov.au)

**TREASURER**

Peter McCauley  
**ASSISTANT TREASURER**  
Bill Dear  
telephone 8296 2111  
mobile 0414 633941

**LIFE MEMBERS**

Mr R. Hargreaves†  
Mr H. Goldsack†  
Mr R. Robjohns†  
Mr J. Simmons†  
Mr. L. Nesbitt

Mr D. Wells  
Mr G. Carne  
Mr R Bates  
Mr R Shooter  
Mr W Dear

**Conservation Officer:** Thelma Bridle

**Registrar of Judges:** Les Nesbitt

**Field Trips Coordinator:** Susan Secomb phone 0409 091 030

**Trading Table:** Judy Penney

**Tuber bank Coordinator:**

Malcolm Guy telephone 8276 7350

**New Members Coordinator:**

Malcolm Guy telephone 8276 7350

**PATRON Mr L. Nesbitt**

*The Native Orchid Society of South Australia, while taking all due care, take 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*

**Journal Cost \$2. per issue. Family or Single Membership with subscription \$17.00**

Front cover from an original drawing by Jane Hutchinson. Used with her kind permission.



**JOURNAL OF THE  
NATIVE ORCHID SOCIETY  
OF  
SOUTH AUSTRALIA INC.**

**JULY 2006      VOL. 30 NO 6**

**CONTENTS THIS JOURNAL**

| <b>Title</b>   | <b>Author</b>                | <b>Page</b> |
|--|------------------------------|-------------|
| Diary Dates  |                              | 46          |
| June Meeting   |                              | 47          |
| For Your Information – NOSSA News                                |                              | 48          |
| How it is Done   | Reg Shooter                  | 49          |
| A Walk on the Queen's Birthday Holiday: Morialta C.P. field trip |                              |             |
|  | Susan Secomb & Cathy Houston | 50          |
| Rediscovery of <i>Pterostylis bryophila</i> at Hindmarsh Falls   | Joe Quarmby                  | 51          |
| Undescribed South Australian species of <i>Linguella</i>         | Bob Bates                    | 52          |
| The Orchids and the Heath  | Louise Lawrence              | 53          |
| Guyana 150 Expedition. Part 2                                    | Edda Viskic                  | 55          |

**NEXT MEETING 25 JULY 2006**

**Tuesday, 25 July**, 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 Meeting will be preceded by a New Member Meeting, 7 – 7.45 pm, on Taxonomy of the South Australian Orchidaceae with Bob Bates

The speaker for the meeting is Associate Professor Christopher Daniels, University of Adelaide; Bio City. Copies of Prof. Daniels book may be available to purchase.

**DIARY DATES**

|  |   |
|--|---|
| <b>Monday 24<sup>th</sup> -Friday 28<sup>th</sup> July</b>   | Gawler Ranges   |
| <b>Saturday 29<sup>th</sup> -Sunday 30<sup>th</sup> July</b> | Lofty Block- <i>Oligochaetochilus despectans</i> monitoring |
| <b>Sunday 3<sup>rd</sup> Sept</b>                            | Parrakie & Sherlock   |
| <b>Sat. &amp; Sun. 16-17th Sept</b>                          | Spring Show   |
| <b>Sunday 26<sup>th</sup> November</b>                       | Xmas BBQ  |

**NEXT COMMITTEE MEETING**

**Wed, 2<sup>nd</sup> August** at the home of **Bodo Jensen**. Meeting commences at 7:30 p.m.

## JUNE MEETING

### Plants Benched

**Epiphyte species:** None benched

#### Epiphyte hybrids

*Dendrobium* Awesome; *Dendrobium* Hilda Poxon; *Dendrobium* Rutherford Golden Sun; *Dendrobium* Val Peck x Hilda Poxon; *Dendrobium* Warrior Toffee; *Dendrobium* Wasyl.

#### Terrestrial species

*Acianthus exertus*; *Acianthus pusillus* (three plants- one green); *Chiloglottis reflexa* (Vic.); *Corybas* aff. *fimbriatum* (NSW); *Diplodium* (*Pterostylis*) *reflexum*; *Diplodium robustum* (two plants); *Taurantha collina*; *Taurantha concinna*; *Urochilus* (*Pterostylis*) *sanguineus* (two plants).

#### Terrestrial hybrids

*Pterostylis* Ruckman x Goblin; *Pterostylis* x Toveyana; *Taurodium* x *furcillatum*.

### Judging results

#### Epiphyte hybrid

- 1<sup>st</sup> *Dendrobium* Hilda Poxon grown by Malcolm Guy
- 2<sup>nd</sup> *Dendrobium* Wasyl grown by Russell Job & Edda Viscik
- 3<sup>rd</sup> *Dendrobium* Rutherford Golden Sun grown by Russell Job & Edda Viscik

#### Terrestrial species

- 1<sup>st</sup> *Acianthus pusillus* grown by Peter McCauley
- 2<sup>nd</sup> *Diplodium robustum* grown by Les Nesbitt
- 3<sup>rd</sup> *Diplodium reflexum* grown by Malcolm Guy

#### Terrestrial hybrids

- 1<sup>st</sup> *Pterostylis* Ruckman x Goblin grown by Les Nesbitt
- 2<sup>nd</sup> *Pterostylis* x Toveyana grown by Les Burgess
- 3<sup>rd</sup> *Taurodium* x *furcillatum* grown by Malcolm Guy

#### Plant of the night

*Acianthus pusillus* grown by Peter McCauley

#### Popular vote results

##### Terrestrial species

(two plants scored equal points)

*Diplodium robustum* grown by Les Nesbitt

*Acianthus pusillus* grown by Peter McCauley

##### Terrestrial hybrid

*Taurodium* x *furcillatum* grown by Malcolm Guy

##### Epiphyte hybrid

*Dendrobium* Rutherford Golden Sun grown by Russell Job & Edda Viscik

Commentary provided by Reg shooter (Epiphytes) and Les Nesbitt (Terrestrials)

## JUNE SPEAKER

**Jan Forrest** of the South Australian Museum and representing the Butterfly Conservation Group presented a Powerpoint presentation on how to attract butterflies into suburban gardens with planting of appropriate host plants. This has been carried out along streets in some Council areas. Other tips included refraining from using pesticides. Many of South Australia's butterflies were shown on the screen and it was surprising how many species there were, though most are small.

## FOR YOUR INFORMATION - NOSSA NEWS

### Field trips summary to date:

After a booming start to the field trips for this year, the weather has cast a little gloom over the next few planned outings. A report on the Morialta trip is in this journal.

The trip to Yorke Peninsula was called off as a group outing because our contact person was overseas. This did not deter a few members who collected a map at the last meeting and had Cathy and others mark out the sites of interest for them to explore on their own. I look forward to a report from them in a future Journal.

A number of the regular field trippers are tripping in other directions, so at this stage, the Gawler Ranges trip is being discussed by only three intrepid individuals. We shall have to wait to hear back from them about whether and where they went.

Our president, Rob has assured us that the lack of rainfall at Bimbowrie means this is also a not a feasible trip. This leads us up to September. Although the Mallee around Parrakie is pretty dry, we still should have lots to see under the native pines, so look in the next journal for details about where we're staying on this trip. We will try to pack in a visit to several sites over the weekend to make up for the earlier cancellations, so put the weekend in your diary.

Happy orchid spotting; **Susan Secomb**

### JUDGES MEETING

The next judges meeting will be held on Saturday 5<sup>th</sup> August at the home of Les Nesbitt commencing at 9:30 am.

### N.O.S.S.A. PROMOTIONS

N.O.S.S.A. takes the opportunity to promote native orchids at a variety of venues and functions. The latest was at the Australian Plant Society Sale in April at the Show Grounds. We thank all our members who made themselves available to "man" the display. We are normally represented at the **O.C.S.A. Show during the Royal Adelaide Show**, followed by our **own Show in September**. The latter will be upon us very soon and some thought should now be put into preparation for this. It is our best window of opportunity towards fostering an interest in native orchids.

In October we will have a busy program of events to attend. **The Australian Plant Society Flower Show and Sale will be held on the 7<sup>th</sup>, 8<sup>th</sup> October**. We have plants for sale at this venue. **From 13<sup>th</sup> to 15<sup>th</sup> October the Festival of Garden Living will be held at the Veale Gardens, South Terrace**. N.O.S.S.A. is having a display at this function.

Then on the **21<sup>st</sup> and 22<sup>nd</sup> October State Flora (State Nursery at Belair National Park)** are celebrating "120 years ... and still growing". We will have a stall at this event and will be selling plants once again. This is going to be quite an entertaining event with children's rides and activities, special guests, book signings, workshops, food, wine, jazz, string quartet and more! So get your plants growing and put aside some time to promote our Society.

## New Member Activities

### New Member Meetings

7 – 7.45 pm

|           |           |   |
|-----------|-----------|---|
| 25 July   | Bob Bates | Taxonomy of the South Australian Orchidaceae            |
| 22 August | Bob Bates | The process of actually getting an orchid species named |

### Field Trips

New members are encouraged to participate in the NOSSA Field Trips. More experienced members are only too happy to share their knowledge and experience and help new members to find and show how to identify the orchids which are growing in the bush. This is the best way to learn how to find and identify native orchids. None of the Field Trips involve arduous or lengthy walks. Check with the Field Trip coordinator – Susan Secomb – if you have any concerns.

The first field trip to Morialta Falls was a superb walk from 10 am – midday, excellent sightings of *Acianthus pusillus*, *Cyrtostylis reniformis* (leaves) *Diplodium alatum* and *D. robustum*. The trip to Potters Scrub was just as enlightening and we expanded the vocabulary to include the “aff” orchids.

### John Bartram

### How it is Done

### Reg Shooter

Only a few epiphytes were benched at this meeting but the numbers were made up with the fine display of terrestrials.

The orchid of the night was a terrestrial, a beautifully grown specimen pot of the species *Acianthus pusillus* benched by Peter McCauley. Cultivated to perfection in a 175mm squat pot containing 55 flowering plants on tall 100-125mm stems carrying an average of 10 flowers per stem giving an overall flower count of around 550 flowers arising from clean green ground hugging leaves. The judges, in addition to flower of the night, also unanimously awarded Peter a NOSSA cultural Certificate.

It is a sobering thought that if these plants had not been saved from a rescue dig at Kuitpo Forest a few years ago they would have gone under the bulldozer, lost forever. Thanks Peter for bringing them to the meeting for the members to enjoy.

The judges had a more difficult job deciding the best epiphyte as although there were only six plants benched they were of an even standard. Malcolm Guy was successful in winning with a nice plant of the ever popular *Dendrobium* Hilda Poxon cultivar ‘Jeanie Little’. This particular clone was interesting in that most of the flower racemes arose from a keiki (a keiki is an Hawaiian term, used by orchid growers to describe an offshoot from the plant). The flowers on different clones of *Den.* Hilda Poxon are very variable depending upon which variety of *Den. speciosum* & *Den. tetragonum* were used to make the cross, sometimes the flowers are small and numerous or large and not so numerous, they vary in colour from pure yellow to creamy yellow some have a few magenta markings whilst some have 50/50 yellow and magenta colours. It is a very rewarding and easy *Dendrobium* to grow and will produce flowers spasmodically throughout the year although the main flowering period is in spring.

No special treatment is required to successfully grow Hilda Poxon, it will grow quite happily in a shadehouse with 50% shade throughout the year with ample water and occasional fertilising during the warmer months and kept a little on the dry side during winter. If you wish to show your plant it is a good idea to bring it under some covering to protect the flowers. An alsynite roof or similar is ideal. Not so long ago it was a difficult orchid to obtain but as time passes it has been more readily available from nurseries and even on trading tables.

**A WALK ON THE QUEEN'S BIRTHDAY HOLIDAY: MORIALTA C.P. FIELD TRIP**  
**Susan Secomb & Cathy Houston**

In spite of it being overcast and the coldest day since July 2005, NOSSA's first field trip for this year was well attended. Eleven members arrived in various guises – the serious bushwalkers in boots and with walking poles, the family group with 3 bright eyed youngsters surging ahead and spotting those leaves in the grass, the passionate photographers with amazing camera lenses and an amateur with a sketch pad and pencil.

The walk, described as a “get fit” exercise, started late because Yours Truly, the new field trip coordinator got lost. I hadn't been to Morialta Falls for nearly 40 years! My street directory gave the right map for the Falls, but not for the road leading to them – and there are no signs off St. Bernard's Road, so if you'd like to follow in our footsteps one day take Moules Road from Saint Bernard's Rd. where there is signage further along. The lower car park was teeming with activity, something we soon found to be matched on the walking trails; eager people passing us on the narrow tracks as if we were going nowhere.

We were very pleased to see masses of flat roundish orchid leaves hiding in the grasses; *Cyrtostylis reniformis* was perhaps the most numerous orchid seen. With its patterned bluish-green leaves and tiny red dots for buds they were readily identified by all by the end of the walk. Displays of little mosquito orchids (*Acianthus pusillus*) were holding their flowering spikes proudly amongst the sticky Sundews (*Drosera* sp.) and lily leaves. *Pterostylis pedunculata* was another numerous orchid, with collections of leaves in the ditches of the banks beside the trails wherever it was moist. These would not be flowering until spring. On a narrow track only so many of the group can cluster around one flower, so those behind contented themselves with pulling Boneseed seedlings. It was then that they discovered there were Helmet orchids (*Corybas* sp.), complete with buds, just peeping through on the bank right in front of them; another lot of flat roundish leaves.

Several types of green and white striped Greenhoods were holding their elegant blooms for us to find and admire. These were the main object of our attention at this time of year. *Pterostylis* (*Diplodium*) aff. *alata* was seen in colonies with few flowers to each, all along the tracks. A couple of *P. (D.) robusta* colonies were seen, the first showing only buds, the second with mainly flowers. It was interesting to note the differences between the two species as we had both flowers about a metre apart. It became even more involved when our leader declared that a certain number of flowers were obviously hybrids between the two; they exhibited features from both species. One could see the hybrid vigour in one large, tall flower with extra flaring on the petals, leaves intermediate between the robust ones of *P. robusta* and the fine, almost insignificant ones of *P. aff. alata*. The stems were tending to be taller and finer, following the *P. aff. alata* parent. It was also of interest to note that hybrids were seen in two places and on neither occasion were they with the other species, always a short distance removed from them.

Last year's Sun Orchids (*Thelymitra* sp.) seed pods indicated where to look for this year's new leaves. Many more species were discovered by our enthusiastic seekers, including the hairy leaves of spider orchids *Caladenia* (*Arachnorchis*) *tentaculata*. Questions were numerous from those wanting to learn more about the different features of each species. More experienced members explained what they were seeing to newer chums, showing for example, the differences between the red base and fold of a *Thelymitra* leaf and the tubular green leaf of an onion orchid (*Microtis* sp.).

Photos were taken, lists compiled, a sketch started and a good time was had by all. I hope to see you on future trips.

## REDISCOVERY OF *PTEROSTYLIS BRYOPHILA* AT HINDMARSH FALLS

Joe Quarmby

The nationally threatened orchid *Pterostylis bryophila* (syn. *Diplodum bryophilum*) Hindmarsh Valley Greenhood was rediscovered at Hindmarsh Falls Reserve in May 2006. A small population of *P. bryophila* was previously known from the reserve but was thought to be extinct, having not been seen for five years.

NOSSA President Rob Bates made the exciting discovery during a search of the site with Tim Jury (Threatened Plant Action Group), Barb and Ken Bailey (NOSSA) and Joe Quarmby (Department for Environment and Heritage). A total of seven flowering plants were found (2 buds and 5 flowers). The rediscovery has rekindled hopes for the survival of this threatened orchid population.

Restoration of the site has been undertaken by TPAG, NOSSA and DEH since 2000, which has contributed to the survival of the population. Minimal disturbance weed control has improved the condition of the habitat, however there is need for follow-up, including weeds such as Montpellier Broom (*Genista monspessulana*) Watsonia (*Watsonia bulbifera*), Phalaris (*Phalaris aquatica*), Quaking Grass (*Briza maxima*), Hare's Tail Grass (*Lagurus ovatus*), Ribwort Plantain (*Plantago lanceolata*) and Clover (*Medicago* sp.). Other potential threats to the population include trampling, inappropriate management activities, lack of pollination, herbivory, and inbreeding.

This survival of this population is of high importance to the conservation of the species. *P. bryophila* is endemic to Fleurieu Peninsula and is currently known from only one other population in Mount Billy Conservation Park and Hindmarsh Reservoir (estimated to contain approximately 1,130 mature plants). *P. bryophila* has become extinct in numerous locations in the region over the last fifty years due to habitat clearance, stock grazing, and weed invasion. The main population is under serious threat from weed invasion, including Bridal Creeper (*Asparagus asparagoides*), Watsonia, and Sweet Pittosporum (*Pittosporum undulatum*).

*P. bryophila* has recently been nominated as Critically Endangered under the Commonwealth *Environment and Biodiversity Conservation Act 1999* (EBPC Act). A draft recovery plan is currently being prepared for the species under the Lofty Block Threatened Orchid Recovery Project.

The Lofty Block Threatened Orchid Recovery Project is responsible for the management of 12 species of nationally threatened orchid species, including *P. bryophila*, in the Mount Lofty Ranges, Mid North and Yorke Peninsula regions of South Australia. NOSSA has worked in partnership with the project since 1998, assisting with the implementation of surveys, monitoring, weed control, and other site management activities.

For more information contact Joe Quarmby on 8222 9423 or [quarmby.joe@saugov.sa.gov.au](mailto:quarmby.joe@saugov.sa.gov.au)

WANTED – Caterpillars of any sort (for photographing). Bring them in to the meeting with a small piece of whatever they were feeding on (unless it was your favourite orchid) to the Editor.



## Undescribed South Australian species of *Linguella*

Bob Bates

**Introduction:** the author has been studying undescribed South Australian *Linguella* since 1974.

Live material has been sent to DL Jones (CBG) since 1988, resulting in over forty manuscript species of *Pterostylis* based on SA material. However few of these have been published, for reasons unclear but probably due to Jones and Clements intended publication of segregate genera in *Pterostylis*. Unfortunately because of Szlachetko's (2002) paper usurping their paper the publication of all these species has been set back further.

What makes the study of S.A. *Pterostylis* even more difficult is the fact that the bulk of collections has been on loan to CBG for 15 years.

Many undescribed SA *Pterostylis* are treated in the new electronic version of Orchids SA including the *Linguella* species listed below.

All available collections of undescribed SA *Pterostylis* at AD have been separated from the main collection and total some 40+ species in separate folders.

Some have appeared in the 2005 census, but most have not been published.

Each has been given a tag name and those belonging to *Linguella* are listed below.

### **Linguella**

| <b>Tag name</b>   | <b>Notes</b>   | <b>regions</b>                     |
|---|--|------------------------------------|
| L. 'Coastal nana' <i>RB</i> 15008.  | Restricted to coastal calcareous soils. A large flowered species with pointed crenulate leaves.  | EP,YP,KI,SE                        |
| L. 'Hills nana' common form <i>RH</i> Edge <i>sn</i> , <i>AD</i> 9910347. | The most common species in wetter, non calcareous areas. Identified by the rounded smooth leaves and white cilia on stems  | FR,EP,NL,MU,YP,SL,KI, SE, Vic etc. |
| L. 'Hills nana' wheat-belt form. <i>FJ</i> <i>Badman</i> 4808.            | Similar to the previous but with a flat, fleshy leaf rosette and no sterile stem bract. Common   | FR, EP, NL, MU                     |
| L. 'Hills nana', desert form, <i>RB</i> 28737                             | Similar to previous but all parts thin textured, restricted to pastoral zone on granites. Plate in Orchids SA.   | GT, EP, FR northern                |
| L. 'Mallee nana' <i>ENS</i> <i>Jackson</i> 5627. In ms with DL Jones      | A species with pointed crenulate leaves and laterally compressed flowers. Common in mallee   | EP,NL,MU,YP,SL,KI,SE Vic etc       |
| L. 'Veined leaf' <i>RB</i> 58791. In ms with DLJ                          | The name <i>Pterostylis</i> 'Hale' refers to the rare mountain form which DLJ believes a separate taxon. Both this and the widespread sand-plain form are recognised by the strongly veined glaucous leaves. | EP, MU,SE<br>Hale form SL.         |
| L. 'Tod' <i>RB</i> 61015  | Only known from southern EP and possibly a relict species related to mallee nana   | EP                                 |
| L. 'Warren' <i>RB</i> 33950. In ms with DLJ                               | Recognised from the fleshy smooth leaves and flowers, Relict species from Warren CP area.  | SL endangered.                     |

## The Orchids and the Heath

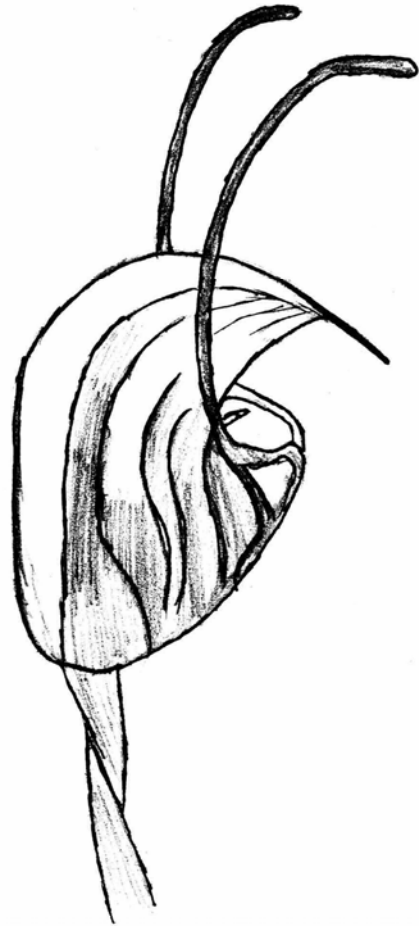
(Written after a trip in June 2006 to Morialta looking for orchids)

The steep path zigzags  
up the side of the hill  
where spindly bush grows wild.  
Grasstrees stick out stiff strips  
of paper-like leaves. Their roots  
grip the dry brown soil.  
Eucalyptus leaves, tossed carelessly  
onto the ground, create  
a warm covering, a blanket  
for the new seedlings.

Little quaint rosettes  
of small dark green leaves,  
maroon stems with tiny  
white jewel-like flowers,  
and greenhoods standing straight  
and upright yet their heads are bowed;  
these orchids are hidden  
in nooks and niches along  
the winding track.

The hills are clothed with thick  
dense undergrowth of the bush  
and across the deep yawning gully  
she-oaks shroud that opposite hill  
in a mist of olive green  
mingled in with the dull orange  
of male she-oak blossom;  
but on this side, all is an  
overwhelming mass of spiritless  
green

The trail, clinging close to that  
steep hillside, winds its way  
below and above the invincible bush.  
The lookout is precariously balanced  
on a pile of old stony grey  
building blocks of rock  
which began the creation of these hills.  
From these hills, the city can be seen  
in its soft hues of blue and pale yellow.



*Diplodinium robustum*

common green  
shell-orchid

Held

Scarlet-coloured flame heath  
 sigh sadly and wistfully  
 for a kind word or some  
 sympathizing glance from a passer-by.  
 Modest little flowers they are  
 for they do not ask  
 but just dream and hope  
 for some kind attention.

The bells of the common heath  
 dance gaily in gowns of  
 pure white and candy pink  
 out onto the path  
 hearing music in the breeze  
 as the leaves of the towering  
 gums do when they rustle  
 in the zephyr which brings  
 music unheard except  
 by the most attentive listeners.

The little orchids hiding  
 and the heath dancing in the bush  
 are very attractive  
 The she-oaks sighing and the gums  
 rustling their leaves are not equal  
 to the delicacy and daintiness  
 of the tiny orchids and the dancing heath.



*Diplodium  
 robustum*  
 common green shell-orchid  
 Joseph Lawrence

**Louise Lawrence**

*NOSSA's younger members, Louise (14yrs) wrote the poem in free verse whilst Joseph (13yrs) and Helen (11yrs) did the drawings which were copied from a photograph taken on the Morialta CP field trip by their father, Robert.*

To those newer Members who have not yet attended a meeting there is the opportunity to buy plants (usually young or small plants) or other items at the Trading Table and a raffle is held with the prizes usually including two or three plants. Join in with the New Members Group when this is on the agenda. There is time for meeting other members and enjoying the Terrestrial and Epiphyte plants displayed on the bench or the occasional Poster/photographs that may be on display. Plants benched are judged and a commentary given which often includes some useful growing tips. The Library offers a good selection of books for perusal or loan. Coffee/Tea & biscuits is available following the meeting. Talks are usually of ¾ hour duration. There's more to life than sitting home watching TV! [Ed.]

Our tour of Georgetown emphasised the many beautiful wooden buildings displaying Demerera shutters, a local invention. Many structures were set on stilts with classic tropical architecture. Overnight accommodation at the Heritage Listed Cara Lodge was a graceful delight as it was to meet our botanic guide Benter Well. In The Ballet room we had dinner and listened to the Iwokrama Forest Reserve speaker Dr. Singh. Flying by Guyana Airways to Lethem, on the border with Brazil was a small plane experience and we had no sooner arrived, when a two hour downpour of midday rain welcomed us to Amazonia.

We met Duane De Freitas and his partner Alan who drove the 4WD vehicles. We began our travels over the savannah, south towards Saddle Mountain Ranch. We encountered pockets of thick vegetation around creeks and river crossings where local Amerindians bathe. Vehicle tracks in the savannah lead in all directions, some ending at thatched huts and some at ranches. Green fireflies lit our way under a starry moonless sky as we arrived to be welcomed by Tommy and Joy and their wonderful hospitality. Their garden was interestingly raised one metre above the ground growing shallots for the kitchen free from scratching pests. Other crops were peanuts, squash, and beans. Wild boars and chickens roamed freely about.

The main remnant vegetation consisted of Sandpaper Fig trees stunted by years of successive burning to encourage new grass pasture growth. Many interesting plants were discovered in these harsh areas including a terrestrial orchid with a creamy flower and rosy marks on the labellum. Brilliant magenta flowers of *Tibouchina aspera* contrasted with orange *Heliconia psittacorum* flowering in early October as were the yellow pea blooms of *Crotalaria retusa*. The dainty yellow and purple flowers of two *Utricularia* species of Bladderworts grew low near the ground, as did the tiny rosette red leaves and also green leaves of two *Drosera* species of Sundews.

As the morning sun rose over mount Shiriri at 3000 ft. the highest point in the savannah, we realized the heat of the thermals being ridden by the King Vultures, Hawks Eagles and Kites. Water courses were marked by stands of palms both spiny like *Astrocaryum vulgare* or smooth trunked like *Bactris major*. Black Caracara stood on sand islands in the rivers and collected in groups of twenty or more, making for a "Carrion or is it Carryon of Crested Caracara". Tiny sedges grew like tussock grasses moulded by the wind.

Changing our transport to rivercraft we met our crew of Jerry and Justin and the boatmen and transferred into 5 boats onto the Scabunk River. Our skilled river men steered us through the cataracts and rapids to safely ride the silver waters while white tailed swifts flashed past like shafts of moving light. Long spined Cacti *Cereus hexagonus* were growing in stands along the edge of the littoral forest where *Achmea bromeliifolia* grew in the sand. The main river trees were *Ceiba pentandra*, bottle shaped trunk and buttress roots *Jacaranda obtusifolia* and *Tabebuia aurea*. Some were flowering like the starry *Terminalia guyanensis*, *Clusia savannarum* and *Cassia sp.*

Our first night in a hammock camp set up by the Sawariwau riverside was exciting and once again the fireflies spread their orange intermittent lights around the gallery forest as we

attempted to sleep in the heat of the star spangled night. Early sunrise meant 5.30a.m. starts where breakfast was shared under the riverbank canopy.

As we walked for a few hours along the bank botanising, the boats went on ahead to meet us upstream.

A huge tree containing a Jabiru stork and its nest were sighted as a good omen.

Yellow hibiscus flowers of *Pavonia paniculata*, red candlelike flowers of *Costus guyanensis* and a *Vanilla pompona* green strap growth with alternating flat leaves climbing up the trunk of a forest tree were great finds as was a sleeping orange and brown patterned boa constrictor snake in the leaf litter. Stuart spotted the interesting mottled leaves of the Orchid *Oeceoclades maculata* growing in the sandy high riverbank just as we were reboarding the boats. The terrestrial orchid had roots with white velamen similar to epiphytic orchids. We remembered this taxon from a sandy island near Rio De Janeiro.

An initiation into the Secret Jungle Business ensued. Thank you Alaph, *Laughing Falcon*.

Meeting the Takutu River meant we were now on the border with Brazil and passing close to the Kanuku Mountains where we encountered numerous sandbanks growing river Guava, *Psidium persoonii*. The large trees lining the banks included Guyana rubber trees, *Hevea guyanensis*, several Mimosa leafed specimens like *Acacia polyphylla*, *Albizia barinensis*, *Calliandra comacea* and *Inga acrocephala* completed the canopy cover.

Somewhere between the Sawariwau and Takutu Rivers, the first epiphytic orchid sighting was made on a well formed tree overhanging the water. The pretty pink flowers of *Dimerandra elegans* (Dressler) made it easier to see through binoculars while the erect green foliage grew on alternate leaved pseudobulbs with *Epidendrum* like stems. This was amazing, solitary sequential pink *Cattleya* like flowers on Epi stems, a missing link or an evolutionary transition remnant. Without adjacent ferns the long flowering season maximizing the chance sprouting on the host tree bark. It too was unique in the healing ability of the bark to recover from severe damage from falling Liana vines. There was a white circle on the labellum and the clumps of plants were about 40cm tall and locally abundant on the host tree along with another orchid that had pencil leaves hanging down and could possibly be *Brassavola martiana*. Even though humidity was high, ferns and Tillandsias were scarce. This was extremely fierce country. There was a mat of Peperomia cohabiting the branches. That night we slept in hammocks under that tree and celebrated Richard Schomburgk's birthday with fond memories from Ian Schomburgk, his great grandson who accompanied us and shared some family history.

The junction of the Takutu and Mahu rivers had brought tannin staining to the water and extra moisture into the air so the epiphytes grew more profusely including *Epiphyllum phyllanthus*, the strap leaf night blooming cactus. Porpoises swam the swirling waters and *Cercropia sp.* grew with *Mora excelsa* and *Mayaca fluvuatilis* along the riverbank. We saw a procession of ten capybaras, like giant guinea pigs following along a track just above the flood line. Muddy wallows at the water's edge had been evidence of their previous presence. Another hammock camp night was enjoyed as the sunset over the Amazon under a symphony of stars and nightjars and we reflected on what had made the footprints in the sand next morning, possibly a jaguar and cub. Big, big, meows in the distance were heard several times that night as the Ocelots kept within communication distance of each other.

Surprisingly the Birthdays kept coming as Stephen, David , Rusell and others in the crew celebrated in turn. A kind of international Libran fest with Sir Richard, the great Leader.

Along the Tukutu River, we were still on the border with Brazil and saw the beginnings of a controversial Bridge. The ferry at Lethem was busy as ever, transferring goods and freight across the river. The birds, herons, kingfishers, eagles, egrets and osprey were hunting stretches of the river as the gallery forest unfolded its botanical flowering and fruiting treats. Laughing Falcons and 120 other species identified in 3 days! This was GREAT STUFF. Finding, collecting, naming, locating on GPS (positioning satellite), photographing, pressing and recording became the daily rituals for a number of Adelaide Botanic Garden Staff including David Forwood, Stuart and Andrew, supervised by Stephen and photographed by Bruce. Not only were our intrepid young Amerindian guides asked to collect orchids and flowers but also birds' nests for artist Fiona Hall who was using them as part of her Project.

During the wet season, the tall trees right on the edge of the flooded river get their roots washed and become exposed, eventually falling into the water as the soil is eroded from around them. Kingfishers dart in the cool shady overhanging branches to dive for fish and return to perch again. Lapwings scurry along the sandy banks and fly up to return and skim again. Snakebirds spread their wings to dry after diving for fish. Overhead perky green parrots chase over the jungle treetops tasting the nectar of red sprays of vines blooming in sunshine so strong. Velvet black Ani birds laugh clustering in river trees that make huge monkey pots for their seeds.

Belinda and Shirel provided us with the most delightful food variations and keep us all healthy and happy for breakfast, lunch and dinner. They had their own supply boat and travelled at the end of the river train. When the Pirara Creek flowed into the Ireng River, there was a lagoon lined with palms and *Cedrela odorata* and *Gustavia gigantophylla* trees which were flowering, attracting the Glittering Throated Emerald Humming bird. The laughing falcon was heard as we set up for the last night in the hammock camp. This was a mixed blessing in that there was an incredible lightning show for three hours after midnight followed by three hours of thunder and rain while swinging in a hammock trying to find sleep. Others dozed under a protective tarpaulin, some under tables. Then the distant gangs of howler monkeys started to howl.

Looking for Moco Moco village enabled us to investigate the headwaters of the Pirara Creek where the first mossy tree trunk was sighted, perhaps an indicator of more epiphytic life possibilities. Remains of an old fort were evident and the ground was covered with small red gibber stones of iron and igneous origin, part of the ancient Guyana Shield Geological Formation of this dissected Savannah. *Himatanthus bracteatus* became an unusual plant of this region making hands of long finger seedpods. *Philodendron* sp. climbed trees and *Cassytha filiformis* spread its strands over the lower bushes. Some small epiphytic orchids had been seen including *Pleurothallids*, *Maxillaria* sp. and *Epidendrum* sp. Passionfruit vines sent tendrils climbing upwards to become tangles of liannes doubling and thickening to reach the canopy. The edge of the forest was immediately grassed and we found annual residual swamps and ponds containing endemic white miniature water lilies and their attendant frogs and dragonflies.

*To be continued.....*



*Acianthus pusillus*  
photo: R Lawrence



*Acianthus exsertus*  
photo: R Lawrence



*Acianthus pusillus*  
photo: R Lawrence



*Acianthus pusillus*  
photo: R Lawrence



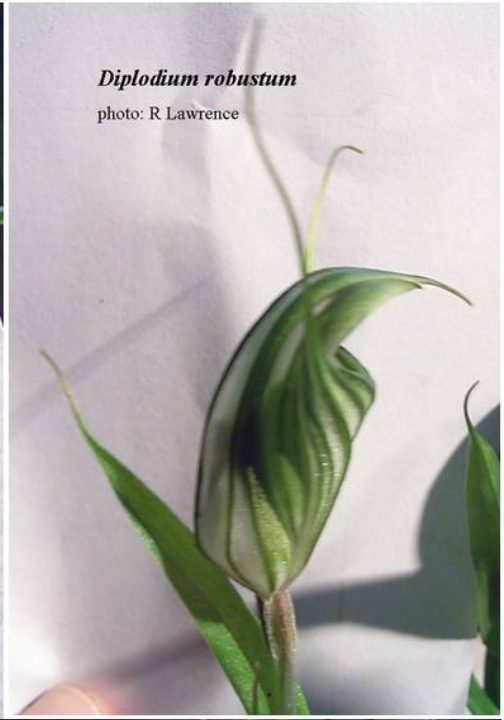
*Corybas aff. fimbriatum*  
photo: R Lawrence



*Chilodactylus reflexa*  
photo: R Lawrence



*Diplodium robustum*  
photo: R Lawrence



*Diplodium robustum*  
photo: R Lawrence



*Urochilus sanguineus*  
photo D Hirst



*Diplodium robustum*  
photo: R Lawrence



*Taurantha collina*  
photo: R Lawrence



*Taurantha collina*  
photo R Lawrence

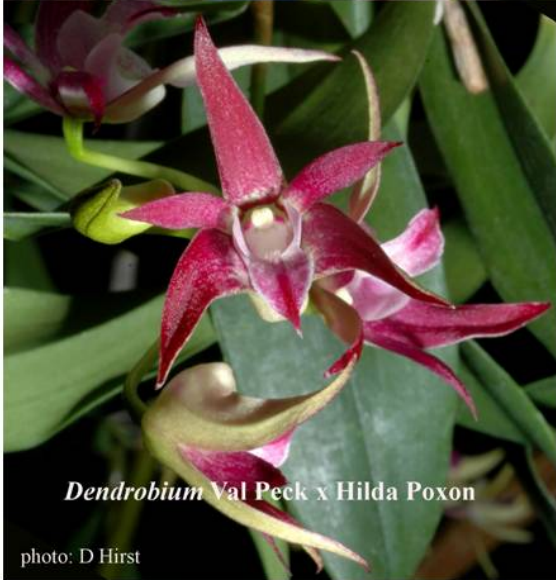




*Dendrobium Wasyl*  
photo: R Lawrence



*Dendrobium Rutherford Golden Sun*  
photo: D Hirst



*Dendrobium Val Peck x Hilda Poxon*

photo: D Hirst



*Dendrobium Awesome*

photo: D Hirst



*Dendrobium Hilda Poxon*

photo: D Hirst



*Dendrobium Warrior 'Toffee'*

photo: D Hirst