



BULLETIN
OF THE
**WESTERN AUSTRALIAN NATIVE ORCHID
STUDY AND CONSERVATION GROUP
(INC)**

(1974 – 2003)

MAY 2003

Registered by Australia Post Publication No WBH 1240

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CONSERVATION COUNCIL REPRESENTATIVE (1)	Eddy Wajon	
CONSERVATION COUNCIL REPRESENTATIVE (2)	Wayne Merritt	

OBJECTIVES OF THE GROUP

- To promote interest in and preserve Western Australian indigenous orchids.
- To learn the best means of cultivation and do all things possible for the conservation of native orchids in their environment.
- To learn their habitats and keep records.
- To have field days and learn to recognise the different genera and species.
- To hold meetings for the exchange of knowledge and furthering of interest in Western Australian orchids.
- To affiliate with kindred organisations.
- To make rules for the governing of the Group's domestic affairs.
- To do all such other lawful things as are incidental to or conducive to the attainment of the above objectives.

Note: The opinions expressed by contributors to this Bulletin are not specifically endorsed by this group.

POSTAL ADDRESS OF GROUP: PO Box 323

Vic Park 6979

WANOSCG E-mail address:

Web address:

Web Master Don Ward E-mail:

Web:

NEXT COMMITTEE MEETING

Wednesday, 21 May 2003 at 7.00 p.m. at the Lecture Theatre, Kings Park Administration Office.

NEXT GENERAL MEETING

Wednesday, 21 May 2003 at 8.00 p.m. at the Lecture Theatre, Kings Park Administration Office.

GUEST SPEAKER

Ron Heberle - "A little about a lot".

FORTHCOMING MEETINGS

21 May	General meeting.
31 May	Field trip to Secret Harbour.
18 June	General meeting.
22 June	Field trip to Cataby
6 July	Field trip to Williams
16 July	General meeting.
16/17 August	Field trip to Eneabba
20 August	General meeting.
24 August	Field trip to Culbin
17 September	General meeting.
27-29 September	Field trip to Tenterden
15 October	General meeting.
19 November	General meeting.

ANNUAL GROUP MEMBERSHIP FEES

MEMBERSHIP FEES ARE NOW DUE

The Group's financial year commences on 1 February.

Annual fees are \$25.00 for singles & families. New membership joining fee is \$10.00 and if joining after 30 June membership fee is adjusted pro rata.

BULLETIN CONTRIBUTIONS

Contributions are needed for every edition of the Bulletin. Articles should be sent to Noel Clarke. The article submission deadline for the next issue is 1 May 2003. Country members, we would love to share your orchid adventures (or misadventures). Many private field trips are undertaken, how about sharing them with the membership via the Bulletin.

SUPPER COST

Each month our supper is generously donated by group members (per list on the back of the Bulletin), while the group supplies the tea, coffee, sugar and milk. To recoup some of the cost of these supplies, a modest fee of \$1.00 applies. This can be left on the supper table and will be collected by the Treasurer at the end of the evening.

Also please rinse out your cups when you have finished with them.

SUPPER & RAFFLE ROSTER

There are no volunteers for either the supper or raffle roster for September, October or November and the supper roster for August as well. Please consider helping out.

WANOSCG ORCHID SIGHTING FORMS

Keep them rolling in.

FOR SALE

Rufa Trip Report \$10.00.
Caladenia flava Badges \$4.00 members, \$5.00 non-members.
Name Badges \$10.00.
Orchids of WA (2nd Ed) \$9.00.
Orchids of SW Australia \$45.00.
Orchid Flowering Times \$5.00.
Colour guide to Spring Wildflowers by Eddie Wajon \$ 18.00 each.
Part 1: Kalbarri & The Goldfields.
Part 2: Perth & The Southwest.
Part 3: Esperance & The Wheatbelt
Car Stickers \$1.50.
Pat Dundas Cards \$8.00.
Bush Survival Kit \$4.00.
History of WANOSCG \$3.00.
Group wineglasses \$7.50 each.

WINE GLASSES

Following a request from some members group has purchased wine glasses with *C. flava*, WANOSCG and 2003 etched on them. The price is \$7.50 each.

PTEROSTYLIS REVIEW BOOK

You can still order this book from the Secretary, phone [redacted]. The price is \$26.00 each.

NAME BADGES

Group name badges can be ordered from the Treasurer. The cost is \$10.00 each.

CAR STICKERS

Additional stickers may be purchased for \$1.00 from the treasurer.

SUPPER & RAFFLE ROSTER

A glance at the back page shows three vacancies for the supper roster & four vacancies for the raffle roster. If you can help out please don't feel shy to volunteer your services. The roster book will go round at the next meeting, or you can tell the secretary.

FIELD TRIP PROCEDURES

Remember the rule, keep the following vehicle in sight. If it falls behind then slow down till it catches up.

Most importantly when you turn, stop at the turning point till you are sure the following vehicle is going to turn.

No participant in a field trip is exempt from these two important rules.

A new procedure is to be trialed this year. The trip leader will ask you to enter your name and a contact name and phone number on a piece of paper in case of an emergency. The paper will be destroyed at the end of the trip.

FIELD TRIPS

Please ensure you have sufficient fuel to get you through the field trips.

Please advise the Field Trip Coordinator, phone [REDACTED] or the field trip leader, if you intend participating.

It is important that you advise the Field Trip Coordinator because then you can be advised of any change of plans, etc.

The field trips listed are proposed and are subject to change if needed.

Please consider car pooling, particularly on metro trips.

Accommodation for weekend trips is your own responsibility.

FIELD TRIP SATURDAY 31 MAY TO SECRET HARBOUR

Meet at Mandurah Rd heading south opposite Anstey Rd, Secret Harbour at 10.00 a.m. The area had a summer fire. Christine Lock is the trip leader. Please advise Christine if you are attending.

FIELD TRIP TO CATABY SUNDAY 22 JUNE

Meet at the second (Caltex I think) roadhouse at 10.00 a.m. The trip is to see *Pt aff sanguinea* pg 360 & *Pt aff nana* pg 348 & anything else we can find. Noel Clarke is the trip leader. Please advise Christine Lock if you are attending.

FIELD TRIP REPORT 12/13 APRIL TO WALPOLE by MATZ DHALKAMP

As everyone knows Walpole and the area around are very beautiful, but when it rains! The weatherman had forecast a wet, windy, miserable weekend but come rain, hail or shine I was determined to make the trip. Even though it was raining, I had a good trip down on Friday. During that night I thought the Motel would be blown away, as the gusts were so severe, but come morning the weather

had cleared, though some dark clouds were still floating around.

I arrived at our meeting place first, but was soon joined by Gloria (the official guide for the day), Dallas and Graham. I was the only non-local; luckily for me I got the "royal treatment" with three guides to myself.

I was taken to Railway Parade and, as it so often happens, the orchids were at the car's door. Greeting us were a number of *Leporella fimbriata* and a few metres into the bush were *Praecoxanthus aphyllus*. It is really amazing seeing such a thin stem carrying that size flower.

From there we went to Broke Inlet Rd and I was shown *Eriochilus pulchellus*, *E dilatatus* ssp *multiflorus* and *magnus*. To my dismay one of the clouds off-loaded onto us and we dashed back to the car. Our next stop was Mandalay Beach Rd where there was *E dilatatus* ssp *dilatatus*. Then I was taken to Sandy Beach and shown green *Leporella fimbriata*. According to Gloria they appear at the same spot every year. A rain shower chased us again. A rain shower chased us again. Gloria invited us home for a lunch break after which we returned to Sandy Beach to look at the green *L. fimbriata* again and some normal green/brownish ones. We then went to Knoll Drive where I was shown more *E dilatatus* ssp *multiflorus* that were growing along the roadside.

Poorish weather aside, it was a most interesting day, and again my sincere thanks to Gloria, Dallas and Graham for showing and driving me around.

FIELD TRIP REPORT 10 MAY TO BROOKTON BY NOEL CLARKE

Christine Lock, Ruth & Jim Downes, Jack Eboral, Bill Burton & Noel Clarke met at Skeets Place. Here we found *Eriochilus dilatatus* ssp *dilatatus* in flower and *Pterostylis aspera* in bud (about 2 weeks to go).

We then proceeded to a bit of bush about 8km south of Brookton where we found more *Eriochilus dilatatus* ssp *dilatatus* and also *E dilatatus* ssp *undulatus*.

Our final stop was Boyagin Rock where all we found was *Pterostylis aspera* in bud.

All the areas were very dry, even the growth in the paddocks was drying off.

INVITATION TO EDDY WAJON'S 50TH BIRTHDAY PARTY PRELIMINARY ANNOUNCEMENT

Please keep your calendar free on 27,28,29 September 2003 - Queen's Birthday long weekend. Venue our conservation bush block

at Tenterden, near Mt Barker, close to Stirling Range.

Activities will include spit roast, orchid walk, wildflower festival, winery tour.

Accommodation on the block or nearby. More details and formal invitation to come.

TALK BY DR ANDREW BATTY - TRANSLOCATION OF ORCHIDS

Andrew used Power Point to present his topic. It was divided into five sections; threats, orchid biology, new propagation methods, seed bank and *Rhizanthella* project.

The threats to orchids included land clearing, salt incursion, mining, dieback and accidental destruction. All these factors contribute in varying degrees to the loss of habitat suitable for orchid propagation and growth in the wild. Our terrestrial orchids all grow in conjunction with fungi. This fungus is only found in the top 10 to 15 centimetres of the soil. Therefore no fungus is found where the orchid tubers grow. The fungus is also necessary for successful propagation from seed. It is the powerhouse for seedlings. Orchid seeds are like fine dust and unlike other plant seeds do not have a food store built in.

Past methods used for propagation had only a 10% survival rate. The current method uses a sterilised plastic takeaway food container with an agar solution covered with silica sand into which the germinated seeds are transplanted. In three months they become equivalent to 3-4 year old plants that are then transplanted into punnets. Using this method a 90% survival rate has been achieved.

Our terrestrials have evolved to grow in a wet followed by a dry season. The seeds lay dormant till it rains which cracks the cover and germination starts. If the rain is late and the dry is early the seedlings do not have sufficient growth to survive. In good years when the rain is early and is maintained to late in the season the seedlings have a good chance of surviving. Seed collection in the bush is achieved by enclosing the seedpod in a fine cloth so that the seeds can be collected instead of being dispersed in the ground. They are then collected, dried and stored in liquid nitrogen till required. The associated fungus is also stored in liquid nitrogen though in a different container.

Andrew is currently working on germinating *Rhizanthella gardneri*. He has successfully pollinated the flowers and produced seedpods. The seed is 50 times larger than *Caladenia* seeds. The technique used is to first grow the *Melaleuca uncinata*. The *Rhizanthella* seedling when it starts to germinate causes the fungus to

attach to the *Melaleuca*. The nutrition required by the *Rhizanthella* seedling is now transferred from the *Melaleuca* plant by the fungus. *Rhizanthella* is related to *Prasophyllum* & *Microtis*. The plant has shrunk till it grows completely underground.

Translocation of tubers and seedlings with and without fungus introduced has been tried.

There did not appear to be much difference between the two methods used. The survival rate was about 18% for both methods.

Currently an experiment is under way. The translocation site is surveyed and soil samples are taken. Orchid seeds are sown in the soil samples and if they grow the fungus is introduced at the site and the seedlings translocated.

Regarding pot culture, the rescued plants thrive for a few years and then die. This is a result of the fungus dying because it also requires nutrients.

THE SPIDER'S WEB by NOEL CLARKE

The *Caladenia* review is still unresolved. There was a meeting of all Australian Herbaria recently. The States decided to embrace the Hopper & Brown version and Canberra decided to embrace the Jones & Clements version. This is a most unsatisfactory solution. As a layman I am confused.

"Name invalid type species not nominated" or words to that effect have been used to reject parts of Szlachetko's (2001) paper.

Does this mean that the genera "*Caladenia*" attributed to Robert Brown and without a type species nominated is illegal?

Lindley (1840) provided sketches and Bentham (1873) provided words (a picture is worth a thousand words) but did not nominate a type species for "*Calonema*". Is "*Calonema*" also illegal?

If "*Caladenia*" R.Br. is acceptable then "*Calonema*" (Lindl. or Benth.) should also be acceptable.

Could this therefore make "*Calonema*" Morgan (no date mentioned) illegal due to prior use?

Further if a type species is required to legalise the name proposed then Pfitzer's (1889) "*Eucaladenia*" with type species "*flava*" should mean that instead of "*Caladenia*" we should read "*Eucaladenia*".

What a tangled web we weave.

In a more serious vein many thanks to Hopper and Brown for their publication in *Nuytsia* (2001) the key, names, description and drawings of the W.A. *Caladenias* that we have bandied around for years; an excellent effort.

We now require a botanist to provide the same for all the ssp and affs for the other genera, in particular the *Pterostylis* group.

HISTORY OF ORCHID COLLECTING IN SOUTH WESTERN AUSTRALIA, 1791 - 1971 by RON HEBERLE

This article is reproduced from Orchids of Western Australia published by WANOSCG c. 1986.

INTRODUCTION

The botanical history of the South West was essentially a saga of extraordinary endeavour, where the first settlers, although mainly involved with "day to day" survival, still found the time to explore and collect the strangely different flora, and ranged far and wide into what was then a harsh and inhospitable land. It was largely from the efforts of these intrepid souls and the early visitors providing a solid foundation of knowledge that has culminated in the currently nearly 8000 species that have been named and described.

With the spectacular progress of our State during the past 160 years, agriculture, industry, commerce and population increases have put much of the flora under threat. It is appropriate to look back; to recognise, admire and pay homage to those very few who paved the way forward.

The scope of this work is to cover botanical history from Menzies (1791) to George (1971) with emphasis on those people involved in collecting, recording, naming and describing terrestrial orchid species. A brief history is given of the lives and times of those so involved.

The author hopes that the members of WANOSCG and other readers will be influenced to read at least some of the literature, where a much fuller coverage makes quite fascinating reading.

ARCHIBALD MENZIES 1754 - 1842 Surgeon and Naturalist.

H.M.S. "Discovery" under the command of Captain George Vancouver en route to North America discovered King George's Sound (Albany) in 1791. During thirteen days (28 Sept to 11 Oct) Vancouver explored the area and named King George's Sound, - Bald Head - Breaksea and Michaelmas Islands - Princess Royal and Oyster Harbours

Archibald Menzies had been appointed to the expedition under the sponsorship of Sir Joseph Banks with the instructions to study climates, report on soil fertility, and collect samples of

seeds, plants and shrubs and to put the earth and rocks to his microscope. His remuneration was to be eighty pounds per year.

He made extensive collections of plants at King George's Sound; however, most were lost before the "Discovery" returned to England 31/2 years later.

Robert Brown wrote up and published the surviving specimens in his epic work *Prodromus Florae Hollandiae et Insulae Van Diemen* in 1810 (the forerunner to the *Flora of New Holland and the Islands*). This work contained the first three terrestrial orchids to be named and described from New Holland (the south western part of Western Australia). One of these was named in Menzies' honour.

- *Caladenia menziesii* R. Brown Prod. 1810.
- *Caladenia flava* R. Brown Prod. 1810.
- *Diuris longifolia* R. Brown Prod. 1810.

At least 30 orchids flower in the area during September - October, we must assume that if collected, were among the lost specimens.

ROBERT BROWN 1773 - 1858 Surgeon, Botanist and Naturalist

Under the patronage of Sir Joseph Banks, Robert Brown was appointed to the Flinders Expedition commissioned by the British Admiralty in 1801 to explore and map the coastline of New Holland. The "Investigator" first sighted Cape Leeuwin and proceeded east to King George's Sound, arriving on December 8 and continuing the voyage along the south coast on January 5, 1802.

Apart from the mapping exercises of the area a defective mast had to be replaced. This enabled Robert Brown and his assistants Peter Goode (A gardener from Kew) and Ferdinand Bauer (botanical artist) to collect some 500 specimens of flora mostly new to botanical science.

During one of these collecting trips the party was stranded overnight in an area now called Lake Seppings and recorded being 'eaten alive' by mosquitoes. The most extensive search was from Princess Royal Harbour along a chain of swamps and lakes to the west where Young's Siding now stands and returning along the coastal scarp to Frenchman's Bay anchorage. Brown recorded 13 terrestrials from his King George's Sound collections and a further 18 from his eastern states collections have since proved to be represented in W.A.

We can thank Sir Joseph Banks for the success of Brown's collection as he provided ten thousand pounds to finance the Flinders Expedition. Orchids named as a result include:

- *Cryptostylis ovata*.

- *Diuris emarginata* var *pauciflora* (*D. pauciflora*), *D. emarginata* var *emarginata* (*D. emarginata*), *D. setacea*.
- *Epiblema grandiflorum*.
- *Microtis alba*, *M. media*, *M. pulchella*.
- *Prasophyllum gibbosum*, *P. macrostachyum*.
- *Thelymitra canaliculata*, *T. tigrina*, *T. fuscolutea* var *fuscolutea* (*T. benthamiana*).

In 1871 Reichenbach named *Prasophyllum brownii* and *Microtis brownii* in Brown's honour from specimens collected at King George's Sound by Brown in 1801. The latter has since been reduced to synonymy because of Brown's prior name *M. rara* from a collection in South Australia in 1802. (*M. brownii* has since been reinstated for the W.A. plants.) He was also honoured by Endlicher in 1871 with *Caladenia brunonis* (now *Elythranthera*) collected by Von Hugel at the Swan River Colony (Perth) and at King George's Sound (Albany) in November and December 1833.

Brown's work at King George's Sound in 1810 has proved to be extremely thorough, since just four terrestrials not recorded by him have been found flowering in December. It is interesting to note that all of Brown's recordings can still be seen flowering in December as they did 185 years ago.

TO BE CONTINUED.

WANOSCG – MINUTES OF GENERAL MEETING 16th APRIL 2003

Meeting commenced at 8.10pm

President Mike Harper opened the meeting.

ATTENDANCE:

32 members and 2 visitors were present as per the attendance register.

NEW MEMBERS:

Jim and Ruth DOWNES of Attadale WA
Robert and Tania TATUM of Herne Hill WA

VISITORS:

Kaye Bell, John Ewing.

MINUTES

Moved. Ross Fox / Tom Blinco Minutes of General meeting of March 19th 2003 as presented in the Bulletin be confirmed.
CARRIED.

Matters Arising:

Nil

CORRESPONDENCE:

As per list circulated with attendance book and dealt with by committee.

Members who ordered their copy of Australian Orchid Research Volume 4 at the previous meeting are advised that these are available from the treasurer.

TREASURERS REPORT:

The treasurer's report is circulated with attendance register for members. Matters from that report are dealt with by committee or by any inquiry from the floor.

Matters Arising:

Nil

FIELD TRIPS:

Christine is unable to be at the meeting tonight. The next planned trip is to Skeets Road with Noel Clarke leading.

Members were asked to consider having a turn with the digital camera and passing on their knowledge of its use to other members.

Reports from the floor included:

Pinjarra - *Praecoxanthus* reported.

Walpole - *Eriochilus* species and *Leporella* and yellow clones of same reported.

Corrigin - *Genoplesium* reported

PLANT TABLE:

Nil

GENERAL BUSINESS:

1. Members were advised that the club had glasses printed with *Caladenia flava* as the club logo and the year 2003 printed on each. These were available for purchase at \$7.50 each.

It is the intention of the committee to have a different glass printed each year if there is sufficient interest.

GUEST SPEAKER:

The speaker for tonight's meeting was Dr Andrew Batty, research scientist in Orchids for the Botanic Gardens.

Andrew gave us an insight into latest research in orchid propagation, the Relationship with the microfungi, and translocation research. This is a topic of interest to all and was backed up with a great PowerPoint Presentation of interesting slides.

RAFFLE:

The raffle was donated by Scilla and Gerald Stack and won by Noel Clarke.

SUPPER:

Margaret Fox provided supper again for the meeting.

Thank you from all members who attended
The meeting closed at 9.20pm.

The next general meeting, will be on 21st May 2003, at the Kings Park Botanic Gardens Administration building, 8.00pm.

Guest Speaker will be Ron Heberle, in a presentation entitled "a little about a lot". Ron is a very experienced orchidologist who has observed our native orchids in their habitats for many years.

THE WEST AUSTRALIAN NATIVE ORCHID STUDY and CONSERVATION GROUP Inc.

STATEMENT OF CASH RECEIPTS and PAYMENTS

for the year ended 31 January 2003

RECEIPTS	2001/2	2002/3	2001/2	2002/3
Subscriptions	1740.00	1740.00	Address labels	0.00
Raffles	321.95	339.00	Bulletin copying	912.00
Supper Takings	134.20	102.15	Bulletin postage	507.25
Orchids of WA	18.00	9.00	Treasurer's petty cash	20.00
Orchids of SW Australia	90.00	135.00	Bank fees	38.55
Car stickers	9.00	7.50	Death notices	0.00
Survival kits	20.00	0.00	Library expenses	0.00
Pat Dundas cards	8.00	56.00	Stationery	115.40
Postage reimbursements	33.50	0.00	Postage	9.00
Donations	56.50	152.00	PO Box rental	49.50
Orchid flowering times	10.00	0.00	Affiliation fees	75.00
Bank interest	2.51	2.47	Public risk insurance	223.80
Calendars	0.00	0.00	Hall hire	312.00
Name tags	0.00	0.00	Wine glasses	0.00
Rufa reports	70.00	0.00	Xmas function	0.00
History booklets	0.00	6.00	Car stickers	0.00
Refund book purchase	60.00	0.00	Photo copying	0.00
Govt. Grant	4685.00	0.00	Kings Park book	60.00
Flava badges	0.00	0.00	Computer/Camera equipment	7649.85
Transfer - fixed deposit	500.00	0.00	Supper costs	19.33
Sundries		30.00	inet Setup fees	0.00
	7758.66	2579.12		9991.68
				3663.60

SUMMARY - BANK WEST A/Cs

General	2001/2	2002/3	Fixed Deposit	2001/2	2002/3
Balance 1 February	4500.03	2267.01	Balance 1 February	6728.23	6609.89
Plus Receipts	7758.66	2579.12	Plus Interest	381.75	216.52
	12258.69	4846.13		7109.98	6826.41
Less Payments	9991.68	3663.60	Less Payments	500.09	0.00
Balance 31 January	2267.01	1182.53	Balance 31 January	6609.89	6826.41

	SUPPER ROSTER	RAFFLE ROSTER	SPEAKER
MARCH	D. Wajon	D. Hayward	Members slides
APRIL	M. Fox	S & G Stack	Dr Andrew Batty
MAY	M. Harper	N. Clarke	Ron Heberle
JUNE	G. Blinco	G & V Brockman	Chris French
JULY	N. Clarke	S. Harris	
AUGUST	M. Dahlkamp		
SEPTEMBER			
OCTOBER			
NOVEMBER			

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FORTHCOMING FIELD TRIPS

31 May - Secret Harbour.
22 June - Cataby
6 July - Williams
16/17 August - Eneabba
24 August - Culbin Rock
28/29/30 September - Tenterden