Australian Native Orchid Society - Macarthur Group

APRIL 2018

Edited by Tony Asquith mail: aaasquith@bigpond.com. Phone 4625 9874

President: Mr. W. Southwell (Ph. 46818589) **Postal Address**:- 20 Colo Street,

Secretary: Mr. R. Morrison COURIDJAH**. 2171**

Treasurer: Mrs. C. Asquith (Ph. 46259874) **Next Meeting:** **THURSDAY, 17th MAY, 2018**

Life Members: Mr. J. Riley, M. T. Cooke, and W. & M. Southwell. (J. English)

Conservation Officer:

ANOS Macathur Group disclaims any responsibility for losses which may be attributed to the use or misuse of any materials published in this newsletter

Venue: BIRRAWA HALL
FITZPATRICK ROAD
Mt. ANNAN.

Should you wish to pay into our account for your fees
BSB 062517 A/C 00909929
Doors open 7.15pm, benching closes 7.55pm, meeting starts 8pm

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Hi to All

A big thank you to Bob Bishop for his presentation on potting mixes and material he had for sale on the night.

Congratulations to Carol & Tony for plant of the night and Greg Steenbeeke for popular choice.

Auction night is this month, so bring along anything that may sell at the auction, whether orchid related or not.

The report from the ANOS Council has now been received, there will be discussion on this at the meeting. (Email sent to those who are on email)

Wally

AUCTION NIGHT NEXT MEETING!! Got a few things you don't want? Orchids, Plants, Books, Things, maybe toys or badges, etc? Why not bring them along to the auction and raise a bit of money for our group

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Minutes of Meeting APRIL 19/4/2018

Apologies Terry Cooke, Neil Robertson, Phil Griffiths, Gordon Bush.

Minutes from March meeting noted

Moved Don Roberts Second Ian Lawson Carried

Correspondence; various newsletters, Letter from OSNSW (Moved Tony Asquith 2ND Graeme Morrison

Treasurers Report treasurer's report presented By our Treasurer

Proposed C. Asquith Greg Steenbeeke

Delegates report nil

General Business

1. Spring and October Shows Both at Oran Park.
2. May Schedules to be sent out.
3. Judges Contacted/ ANOS Venue changes to be emailed.
4. Rosemeadow – 7am set-up, 4pm Finish. Judging 9am. Exotic 9.30am.
5. NPWS Management Plan -Flora and Fauna – December 2017. This is available on the Office of Environment and Heritage website. Wally spoke of bird groups reaction to this "Plan" and encouraged members to write to State Members.
6. Rescind motion Moved Ross Seconded Greg
7. Next meeting Our Auction Night
8. Judges course is to be held soon....INTERESTED???

Raffle Chris Patterson (2) Don Roberts.

Presentation by Kiwi Orchid Bark's Bob Bishop. He spoke of potting mixes, use of limestone, charcoal and perlite.. Meeting Closed about 9.30pm.

2018 Show Dates **Spring Show 22 September 2018**
October Show 27 October 2018

All email members have received Ros Capell's assessment of the new laws that Wal received last week. It will be discussed at our meeting…Please read the paper prior to coming to our meeting.

Notice: LOOKING FOR BARK?? The produce store in Blaxland Road, Campbelltown now stocks Orchiata Bark at good price.

AND SO TO SHOW RESULTS!!!!!

2018 AUTUMN Show at ROSEMEADOW 10/5/2018

Grand Champion	**Den. Burana Stripes**	**Mary-Anne Warner**
Reserve Champion	**Den. Bigibbum**	**Mary-Anne Warner**
Bigibbum or Inflence	**Den. Burana Stripes**	**Mary-Anne Warner**
Any Other Orchid	**Den. Hilda Poxin**	**A. & C. Asquith**
Specimen Orchid	**Coel. Frimbriata**	**G. Steenbeeke**
Exotic Orchid	**Catt. California Girl 'Orchid Library'**	**A. & C. Asquith**

Editors Note : When I figure out why I get double line spacing instead of single…..I'll publish the rest of the results

Watering Orchids

From Bribie Island Orchid Society Website.

The following are rules for water control, which may help to guide you towards better orchid culture

Water your orchids when growth is active and vigorous, and water copiously. Then wait until they need water before watering again.

If growth slows up or stops when it should be vigorous, look for root trouble instead of going into an overwatering programme.

Water mostly on bright, sunny days. If it is dark and cloudy, postpone watering.

Don't use water with a high mineral content, as the plant can't tolerate large quantities of dissolved material in water.

It is easy to overwater when the humidity is high.

Ventilation is important to promote evaporation and cooling at the leaf surfaces.

Most orchids require a rest period after blooming. Withhold water until the plant gives you the signal to start watering again by starting new root growth, and then don't water until there are enough roots to use the water.

If honey appears on your plant, take it as a sign that things are well.

Keep your plants clean. Dirt and dust clog the pores through which water evaporates.

It is possible to starve your plant by watering it too sparingly, although most orchids are lost through over watering rather than underwatering. When your plant shows the need for water by growing new roots, water it but – be careful.

Remember, the humidity is always higher at night than in the daytime, so don't water in the evening. Wrinkled pseudobulbs may indicate either over or under watering.

When you have your orchid doing well on a regular watering schedule – don't change it. Orchids like regular habits.

Study your green house, especially with regard to ventilation. It may have in it a great range of conditions which affect watering and other factors. Find for each orchid its own spot in the house and leave it there.

Provide ample water when flowers are forming. Protect your plants against extremes of temperature by controlling water and humidity.

Don't expect your plants to change their habits to suit your convenience. They have already made the rules for the game. You must be governed by them and fit your programme to their requirements.

This item was found in a very old paper issued by Red Comb House in Brisbane (no date but I think it was in the 1940's) but the information is still relevant. These notes have been used at our Cultural and New Grower's Meetings. They are from various sources and we thank the authors. All articles are supplied in good faith and the Bribie Island Orchid Society and its members will not be held responsible for any loss or damage.

Benching Results APRIL Meeting 2018.

Dendrobium Species	Den. Lithocolor	G. Steenbeeke
	Den. biggibum	R. Morrison
Dendrobium Hybrid	Den. Topaz Dream	A. & C. Asquith
Den. Burana?	Emerald R. Morrison	
Sarcanthinae Species	Sarc. Hirticalcar	R. Morrison
Sarcanthinae Hybrid	Sarc. Bessie	I. Lawson
Bulbophyllum	Nil	
Rhizobium (Species)	Nil	
Rhyzobium (Hybrid)	Den. Waverly x racemosum	G. Steenbeeke
	Den. Waverly x racemosum	G. Steenbeeke
Aust. Species Other	cadetia taylori	W. & M. Southwell
	Ceshichis reflexa	R. Morrison
Aust. Hybrid Other	Nil	
Terrestrial Pterostylis Species	Nil	
Caladenia Species	Nil	
Diurus species	Nil	
Evergreen Terrestrial spp	Nil	
Terrestrial Other spp.	Nil	
Terrestrial Hybrid	Nil	
Australasian Species	Nil	
Dockrillia	Nil	
Australasian Hybrid	Den. Topaz Sweet	A. & C. Asquith
	Den. Elanor Chan	N. Bates
Seedling First Flowering	Sarc. Velvet	R. Morrison
	Sarc. George Colthop x Velvet	G. Steenbeeke
Growing Competition 1.	A. & C. Asquith	
Growing Competition 2.	C. Asquith	R. Morrison

Plant of the night was Den. Topaz Dream grown by Tony and Carol Asquith and Popular Choice was Den. Ithacola Grown by Greg Steenbeeke Congratulations

Growing Orchids in Your Home

You can grow orchids in your home without living in the tropics or having the luxury of a greenhouse. Today, houseplants are a regular part of home decoration. If you have ever successfully grown a houseplant, or enjoyed a flowering potted plant, you can grow orchids. The good news is there are plenty of options to give a beautiful display of flowering orchids year round.

LIGHT Without enough light, orchids may produce lush looking growths but no flowers. Not giving orchids enough light is the most common reason for failure to bloom. Orchids grown under sufficient light will have lighter, somewhat yellowgreen foliage and strong upright growths. Place the orchid close to an east, west, or lightly shaded south window. A north window will rarely provide adequate light. If light is too intense in a southern exposure, a sheer curtain can hung to diffuse the light.

TEMPERATURE Orchids will be comfortable where you are comfortable. Typical home temperatures of 55–60 F (13–16 C) at night and 75 F (24 C) during the day are fine. Guard against excessively low or high temperatures immediately adjacent to glass windows. Some leeway for seasonal fluctuations is allowed. Do not place your plants in front of the furnace or air conditioning ducts.

HUMIDITY Group plants to take advantage of their collective transpiration (exhaled moisture) or place them on gravel-filled trays to raise the humidity. Be sure that the plants are sitting above the water level.

WATERING More orchids are killed by over-watering than by any other reason. Constant wetness will cause the roots to rot, which leaves the plant without a means for taking up nourishment which then causes the leaves to droop and will eventually kill the plant. The classic advice is to water the day before the plant dries out. If you have to let the plant go dry to figure out what a dry plant weighs, it will not kill the plant and will make you a better grower. Another measure is to use the pencil trick (the point of a sharpened pencil, when inserted into the medium, will darken with moisture if the plant has enough water). And, there's always the old standby - put your finger in the mix. If it feels wet, it is wet. If you aren't sure whether it is time to water, wait one more day. When orchids are watered, they should be watered copiously. Water should be provided until it runs freely from the drainage holes. The best place to water your plant is in the kitchen sink. Use lukewarm water (do not use salt softened water) and water your plant for about 15 seconds and be sure to thoroughly wet the media. Then allow the plant to drain for about 15 minutes. It may appear dry but it has had enough water. After the plants are watered, they should be placed so that the pots do not stand in water.

FERTILIZER Orchids need to be fed regularly. Growers suggest using a "balanced" fertilizer such as 20-20-20. If you are unsure of what fertilizer to use, you can generally use any fertilizer you would for your other container plants. Orchids will do far better with too little fertilizer than with too much. Feed "weakly, weekly" applying a dilute (1/4 strength) fertilizer each time you water. Water first then follow with fertilizer solution.

TIP FOR SUCCESS Orchids grown in the home during the colder months can be moved outdoors in a protected area during the summer. Take care to protect them from direct sun and position them where they will be easy to water and care for. Before returning them indoors in early autumn, inspect plants to make sure they are free of insects and ailments.

PLANTS Some of the more popular orchids to consider are:
Cattleya Alliance Hybrids and Species: Choose miniature types less than 10 inches tall; bright light of southern exposure is best.
Dendrobiums: Dwarf phalaenopsis types, or higher-altitude miniatures; bright light at south window required.
Oncidiums: Many types available in flower, best if smaller growing; bright light.
Paphiopedilums: Lady's-slipper orchids grow well under home conditions, giving long-lasting blooms; provide African violet growing conditions.
Phalaenopsis: Moth orchids are absolutely the number-one best orchid houseplant; provide African- violet conditions.

ORCHIDS IN THE GARDEN Properly selected and cared for, orchids can be among the showiest and most exotic of all garden or patio plants and almost without exception, no matter where you live there are orchids that can be adapted to outdoor culture for at least part of, if not the entire, year. There are many areas throughout the southern and central United States where temperatures for a good portion of the year are compatible with the needs of many orchids. Even if you live in areas with severe winters, you will find that orchids thrive out-of-doors during the warm summer months. This enables the plants to grow so much better than they would if left indoors all year. Some coastal areas are nearly frost-free year round. In these areas, with some protection from excessive sun, wind, and rain, lovely orchid plants can be successfully cultivated on the patio or as a part of the landscape. Growers in frost-free areas with cooler summer nights (below 60 F in August and into the fall) can grow cymbidiums, one of the finest of all garden orchids. Where summer nights are warmer, many varieties of vandas and cattleya types are appropriate

Culture sheets for more than a dozen genera and groups of orchids that explain the basic needs required to grow and flower these plants successfully are available on the AOS web site. You will also find many additional articles and a video library all to help you grow your orchids.

The American Orchid Society is the world's leading provider of information about and related to orchids. We invite you to join us and learn about the world's most fascinating flowers and plants. American Orchid Society at Fairchild Tropical Botanic Garden 10901 Old Cutler Road, Coral Gables, FL 33156 www.aos.org

GOOD GROWING

A bit extra for email members

Australian Native Orchids

Orchids are the largest and most successful plant group on earth. Estimates of their numbers range from 20 000 to more than 35 000 in 750-850 genera. These numbers mean that nearly 10% of the world's flowering plants are orchids.

TERRESTRIAL

Habitats:
Terrestrial orchids in Australia reach their optimum development in the sclerophyll forests of the south. Here the open forests and woodlands in some areas may be carpeted with an array of interesting and colorful forms, especially noticeable in the spring when the majority of species flower. Certain species favour particular niches within the forest, thus some are colonisers of the slopes and ridges whereas others are found predominately in sheltered gullies and along watercourses, often in quite shady locations

Terrestrial orchids are often common in coastal districts. Coastal forests eg Melaluca forests, stabilised coastal dunes and heathlands are suitable habitats and may support a wide diversity of types. Soils are usually sandy, although peaty barns may predominate in some areas. Coastal swamps often contain interesting species. In such habitats, water is present in winter and spring and the orchid plants can be partially submerged. Terrestrial orchids decrease in abundance with increasing distance from the coast. Suitable inland habitats include mallee communities. sandhills and sandplain vegetation (especially in Western Australia). Some grow along the snow line areas of some high ranges.

THE STRUCTURE OF TERRESTRIAL ORCHIDS

Roots:
Roots of terrestrial orchids are generally fleshy and very brittle. Perennials such as Calanthe and Phaius produce a mass of thick roots, whereas most deciduous terrestrial have a few, short roots which are often irregularly shaped.

Storage Roots:
The roots of many deciduous terrestrial orchids form fleshy organs for storage or resting purposes. Commonly known as tubers, these structures are correctly termed tuberoids, because they are formed on roots and not stems on which true tubers arise. Such structures are very common in Australian terrestrials and they allow the orchids to survive (by avoidance), the extremes of dryness and heat which occur in late

spring and summer. Tuberoids contain an apical bud and new roots are produced from the base as it elongates into a new stem. Some species produce a single tuberoid each year which replaces the parent tuberoid. This is known as a replacement tuberoid and it is usually produced at the end of a short root termed a dropper or sinker. Those terrestrials which grow in colonies can produce more than one tuberoid annually, each at the end of a long, fleshy root. Thus these species increase in numbers by vegetative means and the extra tuberoids are termed daughter tuberoids. A few terrestrials such as species of Spiranthes and Cryptostylis, have swollen fleshy roots that can act as storage organs.

Leaf Shape:
Leaf shapes encountered in Australian terrestrial orchids include linear (Diuns sp.), cylindrical (Thelmitra), cordate (Acianthus exertus), lobed (Acianthus arnplexi caulisdiuris), some are hollow (Microtis and Prasophyllum).Brassavola Cucullata Leaf Thickness, Vestiture and Colouration:
Many terrestrial orchids have leaves which are very thin-textured (Corybas, Peristylus), whereas others are fleshy (Calochilus robertsonii), or tough and leathery (Cryptostylis subulata). Most are smooth but a few are hairy or have unusual bristle like structures (Caladenia gemmata). In the majority the colouration of both surfaces is similar but in a few terrestrials the under surface of the leaf can be purplish (Acianthus exsertus) or appear as if frosted (Corybas). Many species which grow in very shaded habitats have thin textured, pleated leaves (Calanthe triplicata).

Leaf Arrangements:
The leaves of deciduous terrestrial orchids are mainly basal and may be solitary (Acianthus, Thelyrnitra), in pairs (Chiloglottis), or form a spreading rosette (Pterostylis). Some groups have leaves scattered up the stem in a loose spiral (Habenaria, Spiranthes); others are arranged along the stems in two alternate rows. This later arrangement is termed distichous and is exemplified in Pterostylis longifolia.

Inflorescence:
The point where the inflorescence arises is of interest. In deciduous terrestrials the inflorescence is terminal on the stem, whereas in many of the evergreen types such as Calanthe triplicata and Phaius tankevilleae, the inflorescence arises from a nearly basal node. Many native orchids have one-flowered inflorescences (Chiloglottis, Corybas, Pterostylis). Flower arrangements on an inflorescence can be spiral (Spiranthes sinensis), alternately in two ranks.

Effects of Fire:
Fire is a major environmental factor in Australia and the most important habitats for terrestrial orchids are burnt regularly. Members of the Australian flora, including some orchids, have developed remarkable adaptations to cope with fire. Many terrestrial orchids not only survive summer bushfires but have become so adapted to their occurrence, that they have become an integral part of their life cycle. Thus a number of species require fire to induce flowering (that is they will only flower after fires) and many other species flower much more profusely in the season following a burn. About sixteen species of Australian terrestrial orchids are dependant on the stimulus provided by a summer fire before they will flower. Clearly such orchids have evolved during the long history of burning. It is interesting to note that fifteen of the sixteen fire dependent species occur naturally in south-western Western Australia, thirteen of these being endemic to this region. In eastern Australia there are only three species which can be said to be fire dependent and only one of these is endemic to the region.

Terrestrials dependent/stimulated by fire. Caladenia, Diuris, Chiloglottis. Corybas, Lyperanthus Aficrotis, Prasophyllum, Glossodia, Thelyrnitra.

VEGETATIVE REPRODUCTION

Terrestrial:
Many terrestrial orchids which grow in colonies increase by producing more than one new tuberoid each season. Thus the colonies increase in size and spread into new territory. The extra daughter tuberoids are produced at the end of long, stolon-like roots and are of similar shape and size to the parent tuberoid. By this technique some terrestrial orchids can increase two to four fold in numbers each year. Species which exhibit this type of vegetative reproduction can be found in the genera Actanthus, Corybas, Pterostylis, Lyperanthus to name a few.
Terrestrial orchids are much less commonly grown than other epiphytes, and the Australian deciduous species are more challenging than most. The fact that they may often require specialised treatment, and that

some species may be below the ground for long periods limits their appeal to the general grower of orchids. Other types of terrestrial orchids, such as Calanthe triplicata and Phaius tankervilleae, are not so difficult to grow and plants can often be found in mixed collections.

Growth Cycle:
The successful cultivation of deciduous terrestrial orchids relies heavily on an understanding of their growth cycle, which is strongly seasonal. The plants survive the hot, dry summer conditions as dormant tuberoids. These sprout after the advent of good, soaking rains. Most species are dormant over summer and come into active growth after late summer and autumn rains (February-March).

When the shoots from the previously dormant tuberoids reach the surface, they develop into a leaf or rosette characteristic of the species. Some species flower directly from the tubers and the leaves emerge later, whereas in others the leaves are born along the flower stem. Some species of Pterostylis have a leafy rosette which is a separate juvenile plant, revoluta, grandiflora. or is attached to the base of the flowering scape, parvilora, many others form a rosette first and later an inflorescence develops from the centre, nutans. Most of the spring flowering orchids have a fully developed leaves before the flower emerges.

Pot culture:
The majority of terrestrial orchids are grown in pots as they need specialised treatment and protection from pests and diseases.

Potting Mix:
Deciduous terrestrial orchids require a soil-based mixture for their growth. A suitable soil mix must be very freely draining and should include sand and an organic component. Organic material is an important addition to the potting mix because it provides a substrate for the mycorrhizal fungi. It also increases the water-holding capacity and nutrition of the mix. Two different types of organic material are used together in a potting mix for terrestrial orchids. They are leaf mould and wood shavings, peat moss may also be used as a complete mix.

Suitable Potting Mix:
A suitable potting mix for deciduous terrestrial can be made by combining the components in the following proportions:

	Mix 1	Mix 2
soil	1 part	1 part
coarse sand	2 parts	3 parts
leaf mould	1 part	1 part
shavings	1 part	2 parts

These are good basic mixes and both are suitable for most terrestrial species. Variations can be made by increasing or decreasing the proportions of the materials or by changing the type of components. For example, some orchids prefer heavier soils whereas others grow best in light sandy loams. Mixes can be opened up by using coarse sand, or by increasing the proportion shavings or leaf mould. Fresh leaf mould as obtained from the ground surface under suitable trees is coarse; however, the lower layers have broken down humus. This decomposed leaf mould is excellent for growth in the short term; however, for lasting effects a proportion of coarse litter should be included.

Fertilizers:
We have seen that most terrestrial orchids rely heavily on a mycorrhizal fungus for their survival. This relationship can be readily upset by the excessive use of fertilizers and hence fertilizing of terrestrial orchids must be carried out with care. A small quantity of blood and bone (one dessert spoon per bucket or 10 grams per 9 litres of mix) added to the mix can be beneficial. One or two annual applications of half strength liquid fertilizers can also be of benefit to some species.

PESTS AND DISEASES

Pests:

Terrestrial are particularly vulnerable to attack and a large snail can do a lot of damage overnight. Damaged areas become slimy from the exudation of sap and can provide an entry point for diseases. Where the surface tissue is grazed, the damaged areas are at first pale green and then become papery and die.

Caterpillar and Grubs:

The most persistent caterpillar to feed on orchids is undoubtedly that of the Light Brown Apple Moth or Leaf Roller. These fleshy, green or pinkish grubs grow to about 10 millimetres long and form crude shelters by joining leaves together. Cut worms and loopers are can also get very active. (I use Grubkill, and I spray the total area at first sign).

Spider Mites:

These tiny eight-legged animals are a common and serious pest to orchids, especially terrestrials. Spider mites feed by sucking the sap and usually congregate in colonies on the underside of leaves. (I use Hortico Red Spider miticide and to help prevent further attack Divstien).

DISEASES

Mediocalcar Root Rot:

Terrestrial orchids can suffer from a fungi, which can become active if the potting mix is incorrect (especially if drainage is inadequate) or if over watered or grown in too much shade. Afflicted plants develop a watery brown rot which spreads quickly and causes death. Control is to identify and correct the problem; that is improving factors such as drainage and air movement, reducing watering and protecting plants from heavy rain and drips.

Grey Mould:

This common fungus attacks damaged leaf tissue in still, humid conditions. Grey mould can attack terrestrial, usually entering tissue damaged by heavy watering, rain splash or drips.

Leaf Spots and Rots:

Various fungi attack the leaves of orchids causing spots, blotches and sometimes rots. Leaf rot can be a major problem of terrestrial orchids especially in tropical and subtropical regions. It is worse on plants grown in the open and often follows damage caused by heavy rain.

Rusts:

Certain terrestrial orchids are susceptible to leaf rusts. These develop on the leaves as orange, powdery pustules and frequently cause distortion and curling. The disease is spread by rustcoloured spores and usually persists through successive generations of orchids. Although a fairly minor disease, rust has been noted in species of Chiloglottis, Diuris, Microtis. Control can be difficult and most growers destroy affected plants.
