

FLUTRAP

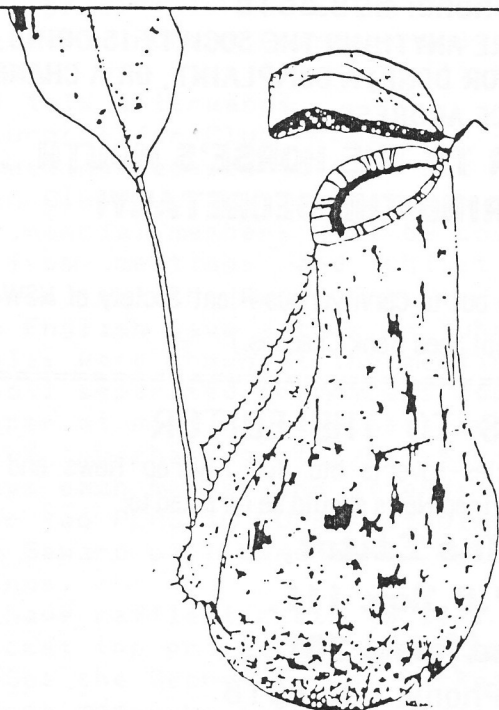
NEWS

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ISSUE NO. 4/1986

JULY / AUGUST '86

OFFICIAL NEWSLETTER FOR THE
CARNIVOROUS PLANT SOCIETY OF NSW



N. COCCINEA

COMMITTEE MEMBERS

President	:	Rob Charnock	:	(047)51.2822
Vice President	:	Ian English	:	654.9239
Secretary	:	Cecily Rumps	:	698.8618
Treasurer	:	Bob Seward	:	639.2925
Editor	:	Daryl Brenton	:	698.8618
Seed Bank Director	:	Laurence Adney	:	451.6920
Committee Members	:	2 needed!!		
Can you help?				

ALL CORRESPONDENCE is to be sent to:

**The Secretary,
P.O. Box 111,
Redfern, 2016.**

or 'Phone: 698.8618

**IF YOU HAVE A QUERY RE ANYTHING THE SOCIETY IS DOING,
SUPPOSED TO BE DOING OR DONE, A COMPLAINT, OR A CHANGE
OF ADDRESS ...**

**GET IT FROM OR TO THE HORSE'S MOUTH ...
WRITE OR RING THE SECRETARY!**

CHEQUES: to be made out to Carnivorous Plant Society of NSW and
sent to THE SECRETARY (except Seed Bank Cheques.)

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LETTERS TO THE EDITOR

Letters to the Editor/Articles-adverts etc. for Flytrap News and any
correspondence regarding Flytrap News should be directed to:

**The Editor,
P.O.Box 111,
Redfern, 2016.**

or 'Phone: 698.8618

The views published in this magazine are those of the
author/s and not necessarily those of the Society.

NOTES FROM THE GENERAL MEETING

In spite of the petrol strike some 14 members still made it to Ryde!! One even came all the way from Newcastle - his attendance was appreciated and a great example to the rest of us!!

**The editor was away on holidays so the committee members only numbered 5.

**We are in desperate need of two (2) ordinary committee members. All you have to do is attend the Committee meetings when you can and just generally assist those who are either in positions or on the show committee. We are supposed to have 8 committee members according to the rules but presently only have 6. CAN YOU HELP OUT FOR THE REMAINDER OF THIS FINANCIAL YEAR???

**GUEST SPEAKERS FOR NEXT 3 MEETINGS ARE:

August - Dr. Stan Oljenik will show a 1/2 hr. movie and give a brief talk following.

September - Robert Charnock will give a talk (subject??)

October - Dr. Stan Oljenik will show slides and give a brief talk afterwards.

**Insurance for Club Members

The meeting decided to take out insurance through the Garden Club. We shall become an affiliated member and all financial members will be covered on their way to and from meetings and whilst they are on society business, eg: the Wyong Show for example.

**Ian English gave a talk on Tuberous Drosera and plant examples were shown at the meeting - one plant having the soil separated so members could see the tuber depth.

**Supper at meetings to cost .20c which will cover the cost of purchasing tea/coffee/biscuits/milk/sugar etc. Perhaps each member who attends meetings could donate one or two PLASTIC CUPS suitable for hot drinks. Mrs. Joyce Seward will take care of the catering for the meetings.

**We have raffle tickets to sell for the Wyong show - \$1/ticket the prize is a Green House that measures 2.4 x 1.8. See the Secretary for tickets...the more we sell the more money we earn!! Please see article elsewhere in this issue about the WYONG EXOTIC PLANTS EXPO and the SPRING IN THE GARDENS shows ... you may be able to help us out in some way...remember these shows are to help the club - your club - both financially and in membership numbers

WYONG EXOTIC PLANT EXPO 86
=====

Well here it is with only 6 weeks to go to the show!!!

Your Show committee needs your help urgently!!

To make a success of our participation in this show ... and to bring in the money that the Society needs to make sure it will survive yet another year ... we need the following on LOAN, or on COMMISSION or as a GIFT...

1)***4 door prizes up to the value of \$5-6 each ... each club has to supply these and we all get a share of the proceeds.

2)***members to sell raffle tickets - the prize is a green house measuring 2.4 x 1.8 metres. The tickets are \$1.00 each and are in books of 5. How many can you take to sell? Phone the secretary (698.8618) and she will arrange to get the tickets to you.

3)***Help with transporting plants and equipment to Wyong on Thursday 4th September and return to Sydney on Sunday or Monday 7/8th September.

4)***Supply of plants to be used in the display (loan only)

5)***Supply of material for display:

Pine bark ... bale of hay ... peat moss ...
sphagnum moss ... driftwood ... rocks ... reeds ...
ferns ... logs ... stumps ... foam boxes ...

and anything else you can think of that might be suitable. These can be on 'loan' basis or as a gift to the Society. They will be used again in October for Spring in the Gardens.

6)***People to help for an hour or so each day if possible. So far only two members are going up for the duration of the show and they would appreciate some assistance if at all possible. The show runs from Friday 5th to Sunday 7 September 9am start 5pm close each day.

PLANTS FOR SALE

There are plants for sale at all meetings. If you have plants you wish to sell then bring them along to the meeting. You can sell them and give the Society 15% of the price or donate the plant for the Society to sell. We have to raise funds to cover the cost of this magazine and our Society's running costs, so this will assist both YOU AND THE SOCIETY!!

Please make sure plants are clearly labeled with:

NAME OF PLANT(on one tag)

YOUR NAME and SALE PRICE(on another tag)



MEETINGS FOR 1986

Friday, 8 August

Friday, 17 October

Friday, 12 September

Friday, ?? December

Meetings held in Classroom 7, Level 5A, Food School Building facing Blaxland Road, Ryde...ENTER VIA CARPARK from Horticultural College - Parks Road but drive straight ahead instead of turning left at gateway. Take care and watch out for the speed dips!! not humps!! Take lift to Level 5, walk to the left as you come out of lift area. Go up 1 set of stairs- Level 5A...the room is open. Ask someone if you can't find it. Meetings commence 7.30pm - end 9.30pm.

SEED BANK NEWS

If you want to purchase seed at a meeting please let me know before hand by phoning (02) 451.6920. SEED \$1.00/PKT. Put your name, address, list of seeds and payment in envelope - POST TO:

Carnivorous Plant Society of NSW,

c/- Laurence Adney,

8 Kerry Close,

Beacon Hill, NSW., 2100.

ADVERTISE IN FLYTRAP NEWS

Help raise money- advertising in Flytrap News. We advertise anything

Want to sell your HOUSE?

Your DOG?

Your KIDS!!! (that's an idea)

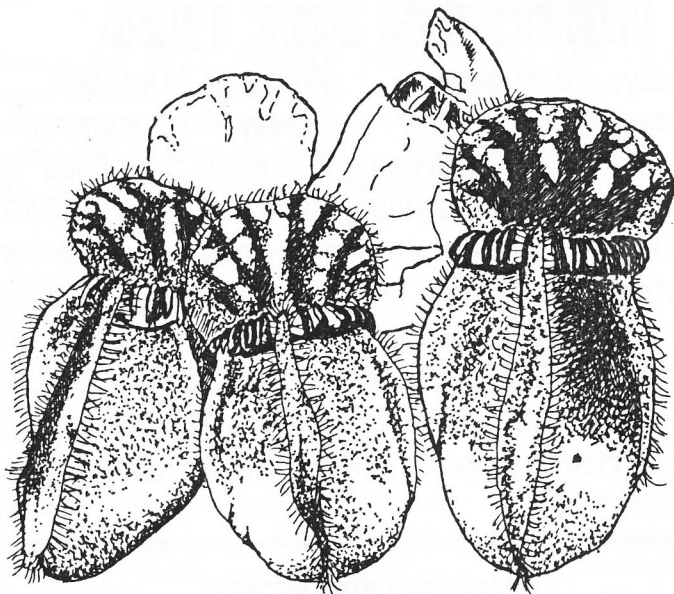
Have some spare plants for sale?

How about some pots?

Having a GARAGE SALE?

Well then, use Flytrap News and advertise the Fact!!

Flytrap News sells at Flemington Markets and at other markets in Sydney.



RAFFLES FOR FUND RAISING . . .

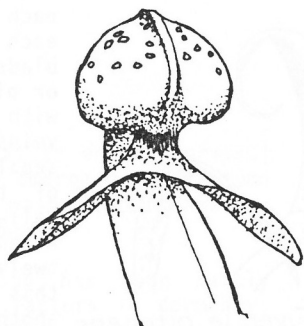
We need donations of plant/s, soil mixture, etc for the raffle prizes. We hold two raffles per meeting - one is usually plant/s the other can be anything - last month it was a cup, saucer & plate in Bone China (Mothers' Day you know!). If you have something you can spare for a raffle prize please bring it along to the next meeting you attend - it will be gratefully received and you will be profusely thanked by those who are supplying all at present!

by Colin D. Philp.

Darlingtonia californica, family Sarraceniaceae.

A most beautiful and unusual plant, *Darlingtonia* is a native to the bogs of mountains in northern California and Oregon.

As the pictures of *Darlingtonia* are growing they twist 180° in either direction, so that the pitcher's openings are always facing away from the centre of the Rosette. The pitchers are mostly pale yellow-green above and darker green below. In full sunlight there is frequently much red to yellow coloration of the upper portions of the pitchers. The hood area has numerous confluent light windows or areolae similar to those found in *Sarracenia Minor*.

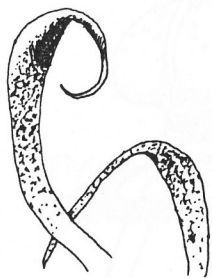


The pitchers which grow up to 1 metre, are erect and are narrow at the bottom, widen to 12-15cm in a somewhat globose hood at the top. A forked appendage which supposedly resembles the fangs or tongue of a snake, hangs from the front of the opening to the hood. In mature plants these can be green to red, depending on the amount of light the plant receives.

The plant is perennial with a long branching rhizome and fibrous roots. Vegetative reproduction is more prevalent than sexual reproduction. The numerous stolons (runners) which grow from the rhizome are probably most responsible for the massive proliferation of *Darlingtonia* at suitable locations.

The production of nectar is probably the plant's most effective lure. Other lures include pitcher coloration and odoriferous substance. Nectar-secreting glands are found on both surfaces of the "fangs", along the upper inner surfaces of the pitcher and dome, virtually the entire external surface of the leaf. The appendage that hangs from the mouth, presumably acts as a ramp which provides a path for the insects into the dome. On the back surface of the appendage, the side facing the pitcher, are numerous stiff upward-pointing hairs. An insect alighting on this surface, discovers that it is extremely difficult to walk down the appendage, hence it is directed upward toward the opening of the pitcher. Close to the opening, the appendage becomes narrower and thus funnels insects into the mouth of the hood. Once in the opening of the pitcher, the insect is enticed further by the numerous nectar-secreting glands inside the hood. They can continue to feed around the opening. The translucent spots at the top or rear of the dome appear like windows to the outside and some insects try to leave through them only to slam into the false windows and to tumble down into the pool at the bottom, where they drown! Some insects continue to feed on the nectar in the forward portion of the dome, which contains many nectar glands and hairs, so directed as to guide the visitors to the back of the hood and hopefully into the depths of the pitcher and into the death pool. Along the walls of the pitcher, or hollow part of the tube, there are downward-pointing hairs to guide the prey to the bottom and to prevent their escape from the depths of the pitcher. The pitchers are sometimes almost half filled with prey; there is no evidence that the plant secretes digestive juices.

Apparently bacteria break down the softer parts of the insects, making them soluble and available to the plant. The inner surfaces below the dome are capable of absorbing the digested material. At times there are so many captives in a pitcher, that a strong odor of decay is produced. Studies have shown, that when material such as raw meat is fed to the pitcher, the amount of fluid in the pitcher increases five-fold.



Juvenile pitchers

The flowers appear in spring, and one flower appears on each stem. Hanging downwards at the point of opening on each stem, at intervals there are bracts or leaf-like blades; these may be pale yellow-green to whitish-pink or pink to deep red. The five petals are heavily veined with crimson, with a yellowish-green colour between the veins. Outside the petals, there are five pale green sepals. These are larger than the petals. In the centre of the flower is the ovary - this is large and bell-shaped with a star-shaped five-armed stigma. Arranged in a circle at the base of the ovary, is the twelve to fifteen short stamens, these produce pollen; this may be collected and placed on the stigma of another *Darlingtonia* flower to produce seed. The seed matures about 10 weeks after fertilization. Seeds are club-shaped, pale brown, hairy and 2-3mm long.

With this species, it is very important to keep the root system as cool as possible, preferably 50°F; and not exceeding 60°F. The compost should be live Sphagnum Moss and 2 or 3 large crocks in the bottom, or a layer of large chunks of horticultural charcoal as I use. For rapid drainage of excess water, clay pots should be used for this species as plastic pots hold the heat. The recommended pot size is 6" to 7" although using a pot of these sizes in our climate, when temperatures are in the 80's and 90's(F) means keeping the root system cool can be a problem and a lot of work!! I have found by keeping this species in a larger pot than recommended (12" terracotta) my plants are 3.5" high and it is possible to keep the roots at a cool temperature. I grow mine in a hothouse, together with *Nepenthes*, *Tropical Drosera* and *Utricularia*. In winter I put them outside so they can have a better winter dormancy period. My hothouse temperature is 25°C with 90% humidity and 40% light.

During the growing period they are watered twice daily using 1 litre morning and evening, water temp. being 40/50°F. If it is a hot night, large ice cubes are placed on top (made by freezing water in a 2 litre icecream container then broken up with hammer). These melt slowly during the night and keep the root system cool. In winter they are watered once or twice a week; they are best watered from the top, letting the water run out of the bottom of the pot rather than using the tray system as compost must remain absolutely fresh. Using the tray system the Sphagnum Moss can become stagnant, and salts can build up which will cause the death of your plant. Re-potting them every year is not a good idea because like *pinguicula*, this species hates too much root disturbance. As a rule the compost should be changed every 3 years but if they are grown in 12" plus terracotta pots re-potting may be unnecessary as long as the Moss remains fresh. For further information read Adrian Slack's book "Carnivorous Plants".

GENERAL CULTURE OF TUBEROUS DROSERA

A talk given by Ian English
at July Meeting

Tuberous drosera come from very varied conditions but can basically be grouped into the following categories for general cultivation:

- Group 1: Well drained types:
 a) sand forms or drained heavier soils
 b) drained laterite soil
- Group 2: Not well drained types:
 a) wet swamp
 b) drying swamp

The reason these plants have developed their tubers is to ensure survival during the extreme heat of the summer months. Plants emerge during Autumn as temperatures decrease. Temperature here is the main factor, however there must be adequate water or emergence could be slowed.

By the time flowering has finished tuber formation has been partly completed or finished and this is one of the major factors in dormancy. Other factors are temperature increase and water reduction. Dormancy can be delayed by cool, damp conditions but this could lead to the tuber rotting completely.

To cultivate these plants successfully the most important point to note is that the pot must be allowed to dry out completely over a period of about one month following the first sign of the leaves dying back!! The pot must then be stored completely dry until the following Autumn when gradual watering may be started. During the summer they should generally be kept moist, cool and humid in semi-shade.

Tuberous drosera require a deep pot which also has plenty of width. Tubers are found about 2/3 of the way down the pot but sometimes the tuber can send down a dropper which forms another lower tuber with the original then rotting away. By this method the plant adjusts to the depth at which the tuber grows. Daughter tubers are formed by shoots coming off the main stem while the plant is in growth. These grow horizontally and produce new tubers which can be removed and repotted once the plant has gone dormant. Well drained types use a mix of two parts coarse washed river sand and one part peat moss and swamp types use one part sand and two parts peat moss.

Fertilization is very good for tuberous drosera if done carefully. It has the effect of increasing the tuber size towards the end of the season. Fertilizer should be sprayed as a foliar spray using quarter strength every two to three weeks. Over feeding will burn the roots!!

IF YOUR DOG THINKS YOU'RE THE GREATEST PERSON IN THE
WORLD, DON'T SEEK A SECOND OPINION ... JIM FIEBIG

AN OAK TREE IS JUST A NUT THAT HELD ITS GROUND!
... FRED SHERO

Simplistic CP Fertilization Facts

by Bob Hanrahan, 2130 Meadowind Lane, Marietta, CA 30062

From I.C.P.S. Newsletter Vol.15-2

It is a well known fact that mature carnivores are quite adapt at capturing sufficient prey in the wilds to meet their nutritional requirements. But what of life in a controlled greenhouse where insects are discouraged and even eliminated by other means? Most endearing collectors have resorted to using manmade fertilizers periodically to stimulate their plants. The only question that remains is how much, how often, what kind, and how to apply the fertilizer. Over the years, I have grown countless thousands of different carnivores and have developed the following thoughts on the matter. I provide them to you as a starting point and not as an end or absolute rule to follow. It has been my policy to experiment, and I encourage you to do the same when surplus plants are available and considered expendable.

I have found that all of the commercially available houseplant fertilizers that I have used are acceptable to CP in diluted application rates. I personally use the "K-Mart" brands which are similar to the "Miracle Gro" series because they are readily available on sale a couple of times a year. A two-pound box lasts me over a year (at constant use) with a large quantity of plants. The smallest available box should last the hobbyist for a number of years. I alternate between the acid type (30-10-10) and the standard type (15-30-15) indiscriminately.

The most stringent policy that I try to adhere to is a consistent application program of twice-a-week for both seedlings and mature plants. I prefer to feed at highly diluted rates, 1/10 to 1/20th full-strength, on a nearly continual basis to promote plant growth, rather than a full-blown feed once a month. This constant low-level nourishment

forces growth continually, which is preferred for commercial production when time-grown programs have to be met. All feeding programs are discontinued when plants are in a dormant state.

The application device that I use is a "fogger" type sprayer. It puts out a heavy mist that totally surrounds the plants with the fertilizer solution. I am able to get nearly 100% coverage of foliar material, even with plants growing in dense proximity. Electrically operated foggers are expensive, and for many years I used a hand operated sprayer (both canister and finger-pump types) with similar success. Collectors can use a finger-pump type but must be careful to avoid over-watering your plants. You want to mist them, not swamp them. *Drosera* are the best guide as to application rates. The more active *Drosera* (*D. capensis*, *D. hamiltonii* and *D. rotundifolia*) will really curl and fold up with excessive or near full-strength fertilizer. Experimentation with your sprayer and type of fertilizer-to-water ratio will determine the proper level for you to use. Ideally, *Drosera* tentacles will just bend in slightly, an hour or two after being fertilized. You can direct your sprays into *Sarracenia*, *Nepenthes*, *Cephalotus* and *Darlingtonia* pitchers if you desire. I always had too many plants to be selective and relied on the fogger to cover all areas. The important fact is to direct the spray to the plants, not to the medium. This is wasteful of fertilizer, and excessive use could eventually alter the medium's composition in closed unit terrariums.

You have been given "just the facts" to get you started in developing a synthetic CP fertilizing program. The fun starts with the results.

HEATED TERRARIUM FOR TROPICAL CARNIVOROUS PLANTS

by Robert Gibson

The tropical carnivorous plants are fascinating but unfortunately require special care to survive Sydney's winters. The method I am using is a heated, sealed terrarium which supports my small collection of plants. It consists of:-

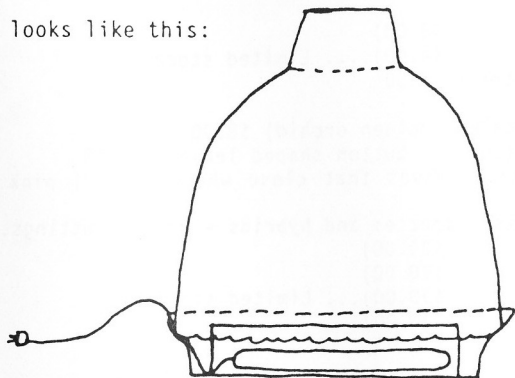
a small tropical fish tank water heater;

a perspex dome - 28cm high and 34cm in diameter (the 8cm diameter circular hole at the top of the dome is capped with a clear container from a take-away chinese meal!!);

a large tray, 8cm deep, 38cm in diameter; and,

a small tray, 3cm deep, 28cm in diameter.

When set up it looks like this:



Total height: 40cm

Max. width: 38cm

The water heater has a thermostat which maintains a minimum temperature of 18°C. This minimum temperature can be increased but I have not found this necessary. The water heater must be kept submerged while it is switched on otherwise it will overheat and fuse.

I obtained the Japanese made heater in July '84 at a local pet shop. It was the smallest size available and cost \$17. It had a 1 year warranty and has always functioned properly but has had a few near misses.

The small tray is also very important, it is inverted so that it covers the water heater, keeping it below the water surface, and provides a platform on which the pots are placed.

The large tray holds enough water for the water heater to function properly and also provides a firm base for the main dome.

I obtained the large perspex dome 3 years ago for \$10, since then, they have become unavailable (to my knowledge). The top of the perspex dome has a 10cm diameter opening. I have capped this with a clear plastic conical container. This adds more volume to the system.

ADVANTAGES:

- supports tropical carnivorous plants;
- movable, since it is a compact system;
- relatively inexpensive compared with the cost of building and maintaining a tropical greenhouse (hot house) cost being \$30 exclusive of plants;
- can be used as a temporary measure if a hot house is being built
- can be used for propagation;
- plants can easily be checked if and when the need arises.

DISADVANTAGES:

- restricted space means a limited selection of plants;
- condensation on sides means the plant's leaves are always wet;
- plants are delicate when brought up in such a system;
- pot bases have to be above the water level-restricts space for plants;
- water in large tray must be topped up regularly - then replaced after a few months;
- light levels may be a problem. Low light levels restrict plant growth.

Artificial lighting may be used with this set up, but I have not yet looked into this aspect.



FOR SALE

- * N. mirabilis \$8.00)
- * D. prolifera \$4.00).... Limited stock
- * Some unknown utrics \$1.00

Other Plants:

- * pendribium discolor (golden orchid) \$8.00
- * button orchid (curious button shaped leaves) \$4.00
- * mimosa (sensitive leaves that close when touched) pink pom pom flowers \$6.00

Uncommon nepenthes : species and hybrids - rooted cuttings...

- * N. maxima \$20.00)
- * N. wrigleyana \$20.00)
- * N. drummondi \$30.00)... Limited stock
- * N. henryana \$30.00)
- * N. dicksoniana \$40.00)

Terms: \$3 postage and packaging - CASH OR MONEY ORDER ONLY ...

Order from:

Mr. Dean White, Marine Parade, Newell Beach, Qld, 4873

MEMBERSHIP APPLICATION

Secretary
Carnivorous Plant Society of NSW
P.O. Box 87
BURWOOD 2134

Subscription \$10 (individual) or \$15 (family)

Name

Postal Address

.....

Phone (Optional)

Date / /