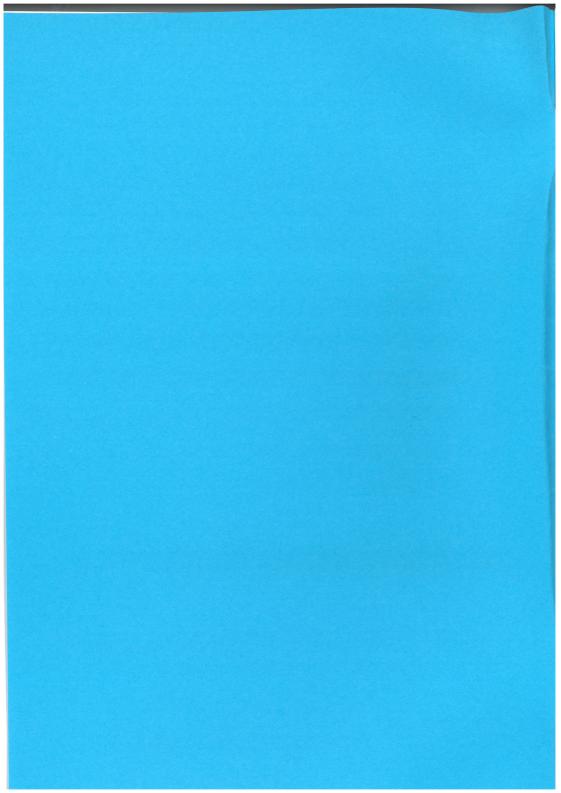


EPIFLORA

Volume 14 No. 1

March 2005





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President's Letter

Dear fellow epiphyte growers

Since the December issue of Epiflora we have enjoyed a very successful growing season with an abundance of hoya flowers and great growth on all our epiphytes. It does seem that although our summer was rather late starting the hot temperatures of January and February have benefited our plants.

For Roy and I our summer holiday took us north. On a brief visit to Auckland we took the opportunity to catch up with Grant Bayley. We marvelled at his business enterprise selling high quality cards to various outlets in the north. Most of us were aware of Grant's prowess as a photographer but these cards have taken my admiration of his talent to another level. It was good to also meet Heather Greaves and her husband in Kaitaia. Heather was a member of the former Auckland Society and is growing epicacti and hoyas as well as other plants. Along with her husband Heather has a small nursery which they are in the process of expanding. On our journey from Kerikeri to Raglan we visited Joy West's nursery. It was good to catch up with Joy and of course purchase some of her well-grown hoyas.

On returning home we have begun the mammoth task of pruning and repotting epicacti and giving our other epiphytes some tender loving care before the winter approaches.

Many of you may have been disappointed that the February meeting was cancelled and your opportunity to learn more about digital photography was lost. Do not despair! Neville Chan has very kindly agreed to share his expertise on this subject with us at our next meeting in March.

I look forward to seeing all those who can make it to the March meeting.

Kind regards

Jane Griffith

5th March 2005

The Programme for 2005

Meetings are at Johnsonville Union Church (Dr. Taylor Terrace) and start at 2.00 pm. Library books etc. are available at 1.30 pm.

Those on duty are responsible for preparing the room, assisting with tea and tidying the room at the end of the meeting and bringing a plant or other item for the raffle. If for any reason you are unable to do your allocated duty please arrange for someone else to do it.

March 12th Digital Photography.

On Duty: Lois Bond, Penny Luckens, Mary Hardgrave

April 9th Visit to Karori Sanctuary

May 14th Epicacti propagation from seeds

On Duty: Alice and Rex Hannam, Marion Austin

June 11th "From flower to fantasy"

July 9th Mid Winter! (lunch and a visiting speaker)

August 13th Botanical Illustrations

September 10th Bromeliads
October 8th Rhipsalis

November 12th Field trip - details to be confirmed

December 10th AGM and Christmas Function

April Meeting:

Imagine a secret valley only 2km from the city centre, 252 ha of native forest ringing with the songs of our rare native birds. Karori Wildlife Sanctuary is a protected natural area where the bio-diversity of a square mile of forest is being restored.

• A predator-proof fence, specifically designed to exclude 14 species of non-native mammals, ranging from possums to mice, encircles the 8.6km perimeter.

- The Sanctuary is at present in a degraded state. Flora now missing from the site or rare - including large podocarp species such as rimu and totara - will be reestablished.
- Many species of threatened native wildlife will be re-introduced. The little spotted kiwi - one of our rarer kiwi - has already been released.

The Sanctuary enables New Zealanders of all ages to experience and learn from our precious natural heritage in an easily accessible location. We are going to visit the sanctuary on Saturday April 9th, we will meet at the entrance (in Waiapu Road, Karori) at 2.00pm. There is plenty of parking close to the entrance. The entrance fee is \$8.00 - we will arrange afternoon tea, and for a guide to escort us for a short walk into the sanctuary.

The AGM

This is the one meeting in the year everyone looks forward to! At the meeting our President Jane Griffith presented the annual report. We also re-elected her - and the committee..

It gives me great pleasure to present this report for the fourteenth year of our Society. Once again we have enjoyed a good range of programmes throughout the year increasing our knowledge of growing epicacti, hoyas, schlumbergeras, hatioras and ceropegias. Topics on subjects other than the epiphytes we grow have added further interest to our programmes. To all those who prepared talks, took part in workshops, wrote articles about these or contributed to programmes in any way many thanks.

Visits to collections have proved popular in recent years and this year we made two such excursions – a crawl round some of the Waikanae members' gardens, ending up with a barbeque and then in November a week-end trip to Taranaki.

From time to time we receive requests from garden clubs and horticultural societies to talk about epiphytes – several members have given such talks this year and on your behalf I thank them for doing this on our behalf.

A small society like ours thrives on involvement by many people and therefore let us all receive thanks for the part we have played in being members of the Wellington Epiphyllum

& Hoya Society. Your contribution is very much appreciated in whatever form it takes. I would especially like to thank the committee for the mirade of contributions they make preparing the schedule of programmes, arranging outside visits, keeping the accounts, looking after pots and fertiliser, organising afternoon teas, being responsible for the library, competitions, raffles and producing Epiflora.

I wish you all a very happy holiday season and look forward to seeing you in 2005.

The January Jaunt

As we have done on earlier occasions the January meeting took the form of an outing to visit gardens and collections. Kaye Keighley writes about it

The weather in Miramar was absolutely gorgeous when we left to pick up our two passengers around Saturday lunchtime but as we progressed up the coast towards Kapiti it began to deteriorate. Kapiti Island was shrouded in cloud and there were a few spots of rain on our windscreen. But, who cared about the weather when we had such lovely gardens to visit.

Our first stop was at the Burleigh's in Paraparaumu. They have a one and a half acre sheltered back-section. Rolling lawns with beautifully laid out gardens that contain all sorts of plants. A native planting at the top is still under way - it won't take long to progress knowing how the rest of the section has blossomed in the short time that Adrienne and Colin have been in residence. Down towards the back area, pegs denote the layout of Colin's model railway - far bigger than the one they had in their previous abode. The train system will consist of bridges and tunnels and when it really rains there will be a real river! Adrienne's formal garden has had a few setbacks with the recent rain causing many of the plantings to yellow off as the result of too much water. She will have to look carefully at what she puts there now. The Burleighs have established a small Museum housing their collection of Dolls, Prams and Pushchairs, Trains, Steam Engines and a huge collection of "dinkies" - Matchbox, Fun Ho and Corgi..

Next stop was over the railway line at Waikanae and up the hill to Kaka Street. Here we viewed the lush, very tidy, garden of Alice and Rex Hannam. Just inside the gate were fuchsias, hostas and various shrubs. Against the house a bronze shrub caught our eye - what a wonderful colour and shape. A bougainvillea covered the fence. I loved the way they hung

the pots of zygos on the fence. I should say I envy them, as no way could I do that on my fence in Miramar. Around the back, a vegetable garden filled with a variety of healthy vegetables - I could have tickled the spuds! How they manage to cram - very tidily - such a huge variety of plants into their section, I don't know. Dahlias of all shapes and sizes, cannas, tree dahlias, fuchsias, penstemons, you name it, there they are. The climbing beans were not producing as desired. Few flowers - which appears to be a common problem throughout the district. Vireya rhododendrons were grouped near the back door and large clumps of aristaemas had finished flowering. The cuppa and home baking was a welcome addition. Thank you Alice and Rex.

On to Anne and Neville Goble's on the sea side of the railway line. Anne has been complaining that she has little room for all her plants but she has certainly made the most of her new garden. I loved the idea of putting the hostas in pots so that when they die down they can be shifted and not trampled on because you have forgotten where you have planted them. Anne has let Neville have room for his cacti collection, all neatly displayed on shelves - on the veranda area and around the shed area. There was a great display of bromeliads, too.

From Anne's, we progressed to Roy and Jane Griffith's back section garden haven And, what a lot of work they have done since Merv and I were last there. The big hot house has been demolished to make way for a clear vista of a sweeping lawn and garden focussing on a penguin statue.

A new hoya house has been built and their epi house is full of healthy looking epis. A shelf full of Jane and Roy's cacti is on one side of this house. I got a good laugh out of seeing Neville Chan's quick reaction when he accidentally placed his hind quarters on one rather vicious one as he knelt to capture photos of others on the shelf. A competition was held at Roy & Jane's to identify a plant in flower. Penny finally remembered the species - *Brachystelma foetidum*.

To top the afternoon off we enjoyed a barbecue tea - cooked to a turn by Rex and Neville.

A First for our Society

For many years some members of the society have been hybrising epicacti. The Griffiths are two such people who over the years have thrown out many unprepossessing hybrids and thousands of small seedlings. A few of their hybrids they felt were worth keeping and over the past 3-4 years they have recorded details of the plants and their flowering.

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In November 2004 they decided it was time to register some of these new hybrids with the Epiphyllum Society of America – the international organisation that deals with epicacti registrations. These registrations were accepted and in January 2005 they received a letter from the Chairman of registrations assigning their 12 hybrids with registration numbers. The descriptions of these plants and flowers will appear in the next Directory of Epiphyllum Species and Hybrids.

Roy and Jane decided to begin the names of these new hybrids (and any future ones) with "Waikanae". So the hybrid that was first named "Wellington sunshine" has been registered as "Waikanae sunshine". Other hybrids they have registered include "Waikanae blush" and "Waikanae fire".

They hope to have cuttings of the various hybrids available in due course to enable a number of members to grow plants so that these epicacti do not get lost over time.

The Case for Hybridisation

John Horobin wrote this article which was first published in the May 1996 issue of "Epiphytes" (The journal of the Epiphytic Plant Study Group). The article he refers to by Alan Tuppen was published in the February 1996 issue of "Epiphytes"...

The article "Why Hybridise?" by Alan Tuppen has inspired these comments. Having been a plant breeder for many years perhaps I am a little biased, but I feel that I must also put the other point of view and let readers make up their own minds. I am not going to argue against the case for growing just wild species which is a valuable and worthwhile occupation in its own right, but to point out the value of hybridisation in improving what we have already.

Pictures of new epi hybrids

The pictures of "Waikanae sunshine" and "Waikane belle" on the previous page were taken by Jane Griffith.

Firstly hybridisation both within and between species is a fact of life, both in the wild and by man's efforts in cultivation. It is the initial starting point that generates variability on which both natural and artificial selection can act. Without it there would be no improvement or adaptation of populations to a changing environment. The point to remember is that habitat collected plants are not often ideally adapted for the conditions we grow them in. In many ways it is surprising that so many species do as well as they do. Plants of course have to put up with a lot in nature. Weather changes are frequent in many regions and plants, unlike animals, cannot lift up their roots and find shelter until the worst has passed. They have to be adaptable to survive, hence they can often do well in our artificially created environments.

At this point we really ought to define what we mean about the term "hybridisation". It is a term that is often used in the context of crosses between species or distinct types rather than within a species or very similar types, but it really is quite a loose term in many respects. The differences found within a species can be large or small, it is genetic barriers to hybridisation that really define the boundaries on what is possible and what is not by "natural" means. Hybridisation is a cross between two individuals and of course there are many techniques available nowadays that make crosses possible that could not otherwise be achieved by simple pollination of one species with another.

If the habitat collected plants are not ideally suited to the growing conditions that we can offer them then what can be done? We can either change the environment which is often expensive or of course hybridise and select better performing forms of course! It is in human nature to be always looking for something better than one has got already. The desire for more attractive and beautiful plants has been a powerful driving force, which remains with us to this day. I agree with Alan that the more restricted range of epiphytic cacti species suitable for a small greenhouse compared to terrestrial cacti such as Mamillaria, Noctocactus and Rebutia means that the growing of hybrids is almost inevitable. But if this maintains interest in our plants this must be a good thing.

The pictures overleaf were taken by **Jane Griffith**. They are (clockwise from the left) H. anulata, H. acuta, H. erythrina, H. kerrii.

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In epiphytic cacti one can produce an almost never-ending list of beautiful houseplants that would never have seen the light of day if somebody had not tried a "cross or two" to see what would happen. Quite a lot of "breeding" has been rather haphazard, but nonetheless has yielded quite good results. One only has to think of the epicactus "Ackermannii" and of course the common Christmas cactus. I do also happen to think that these hybrids do serve another very useful purpose - because they are so attractive when in full bloom and so easy to grow they do encourage people to become interested in the more difficult hybrids and maybe even rarer species. I myself started out with a just a few hybrids and soon moved on to collecting species, initially because I wanted some of them for possible hybridisation. I soon found of course, like Alan, that many of these species were very beautiful in their own right and well worth growing. Many I obtained I did not try to hybridise for one reason or another but have kept them going because I like them anyway for what they are. But I would not have ended up collecting and growing so many species if it had not been for my initial interest in the hybrids and my desire to produce new and interesting forms.

One of the interesting things is that people who collect and grow epiphytic cacti are not generally lovers of terrestrial cacti and vice versa, although there are of course exceptions. I always think that the epiphytic cacti have much more in common.with common "foliage" houseplants and therefore tend to attract interest from the same quarter. Thus to some extent an interest in producing a beautiful pot plant is inevitable.

Half the fun in hybridisation is that one really does not know what will turn up. With experience and knowledge it is possible to predict to some extent and determine the best parents to use but the thrill of the first flower on the first seedling of a batch is something unique. There is nothing quite like it.

Hybridisation does of course have a lot of other benefits. Virus infections tend to accumulate in many vegetatively propagated plants with time and one of the best ways of "cleaning them up" is to grow new plants from seed. Of course to do this with a self-incompatible species, which will not set seed with its own pollen, we need more than one clone which is another problem in itself - the vast majority of epiphytic cacti are represented by just one clone in cultivation. Alan mentioned S. *orssichiana* and it seems that the widely distributed clone is

virus infected and is not performing as well as it should. In a case like this we desperately need other clones to enable seed to be produced.

It is certainly true that many epicactus hybrids are remarkably similar, this partly being explained by so many having the original parents in common, plus often a common aim between breeders But this is not the fault of the hybridisation process itself. Hybrids can be very variable in shape and form, but it is true that many people do tend to stop at the more uniform F1 generation and not move onto the segregating F2 with its tremendous range of variability between the two parents.

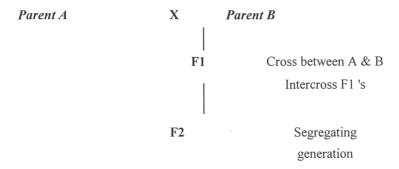


Fig. 1. Simple Crossing Outline

As Alan stated one is rather limited in the number of epiphytic cacti species that are available in cultivation and this puts limitations on what can be hybridised too. Many species will not cross with each other; they are just too far apart genetically and reported successful crosses between widely differing species are almost certainly just self triggered by the presence of foreign pollen. Reported crosses with Echinopsis are a probable example. This is another reason for many of the hybrids looking so similar - one has initially to use the limited range of species that are available. That plus the fact that usually only one clone is available of each species really does limit the gene pool to a great degree and restricts what can be done. I do wish that collectors of new species would collect more than one individual, and preferably seed, so that more clones can be maintained in cultivation.

I have never seen an exhaustive list of what will and will not naturally cross in the epiphytic

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cacti. This I really would like to see and it would make a very useful project for someone. I would be particularly interested in the many species of Rhipsalis - which species will cross with which? I have seen virtually nothing published on this, but there must be scope here for something interesting. The fact that these naturally-self pollinate in many instances makes the work difficult, but not impossible. Perhaps this is a project that the EPSG could organise? Comments certainly appreciated on whether or not this is a feasible idea and how this might be done.

But after all this, it should be remembered that one should grow what gives the most pleasure. In this way one is encouraged to grow more and better plants. Beauty is certainly in the eye of the beholder as far as epiphytic cacti are concerned. We should all appreciate the plants for what they are, whether of artificial or natural origin, it is whether we like them or not that really matters.

The Excitement of seeing new flowers for the first time

Jane Griffith writes..

This season has been an exciting one for us as we have had several hoyas flower for the first time.

Firstly *Hoya acuta* – a hoya that has been in cultivation a long time as noted by Dale Kloppenburg in his book, The Hoya Handbook (Orca Publishing Co., 1992). Kloppenburg noted that this species was growing in Kew Gardens, England in 1918. The plant has attractive foliage and our plant has rose-pink toned flowers. There are also clones of this species with different flower colours.

There were several blooms on our plant. Unfortunately by the time I read about *acuta's* distinct perfume our plant was no longer in flower but this is certainly something I will note next year!

Secondly *Hoya anulata* – a species that comes from New Guinea and was first recorded in 1905. This plant has been growing in a relatively shady part of our plastic house and its white

flowers with pink corona were blooming well before I noticed them hanging downwards.

Thirdly *Hoya erythrina* – this warm growing hoya has as its natural habitat the forests of Malaysia where it is found in river valleys between 400-700 m. Therefore you can imagine our delight when our small plant decided to flower for the first time in December 2004. The plant has distinct foliage with both dark green and bronze leaves. The flowers are buttery yellow and on our plant not particularly distinctive but this might be because the plant is still comparatively small.

Finally *Hoya kerrii* – known in the United States of America as the "Sweetheart" or "Valentine" hoya because of its heart-shaped leaves. These leaves are the size and consistency of *Hoya obovata* and like *obovata* they grow vigorously. Heather Greave told us that individual leaves of *kerrii* are potted up and sold in the U.S.A. on Valentines Day! *Hoya kerrii* is a vigorous grower and our particular clone has numerous blooms of pinky toned flowers. The central crown of the flower exudes a brown honeydew which needs to be cleaned regularly from the plant's leaves. Its definitely a hoya to have in your collection both for its flowers and the distinctive leaves.

(Pictures of these flowers are on pages 10 and 11)

Further Reading

Our Society receives journals from a number of other societies with similar interests. These journals are all available from our library. In the last couple of months a number of interesting items have been published. Here are some snippets that you might find interesting. (Of course you really should go and read the articles for yourself!)

In the latest issue of **Asclepios** (No 91) there is an excellent article entitled "Notes on the cultivation of ceropegiads." In this Dennis de Koek sets out fully and clearly how to grow, propagate and care for these plants. The article is illustrated with many superb photos. This really is a "must-read" article for anyone interested in these plants.

Also in this edition the editor (Alan Butler) makes a wry comment that many of us would agree with: "Having moved from misty, rainy England to warm, sunny Italy,



I can say with some authority that where you live has a big impact on the ease or otherwise of growing "our" plants. In my experience, the type of soil you use is probably neither here nor there. The plants need four things: water, food, heat and good light. How you provide these things depends a lot on your growing facilities and where you live.....". As another correspondent says (repeatedly) "You could grow plants in chopped up rubber gum-boots - provided you can provide these four basic requirements".

And continuing the "what is your potting mix" theme - Dick Kohlschreiber writes in the February issue of **Epi-Gram** (South Bay Epiphyllum Society) about the mixes used by some of the Californian growers. The rule seems to be "if it works - keep at it".

The December 2004 issue of EPIG has a lengthy article on the subject of virus infections in schlumbergera - and describes a technique for dealing with the problem. The article is in German but there is an English abstract which sets out the key points.

And finally in the latest issue of **The Bulletin** (Vol 60 No 2) Keith Ballard and Raymond Eden both write on the subject of "labelling plants". As Keith notes "with about 10,000 registered varieties of epis and numerous unregistered ones, recovery of a lost name is uncertain at best. Therefore it is important to have a reliable and long lasting system of labelling.".

Now is the time

What you should be doing right now depends not a little on exactly where you live. Here are some suggestions for the Wellington growers. If you live in Cambridge or Christchurch you may need to adjust things a little. According to the calendar - it is autumn in New Zealand - and while we hope warm weather will continue we have recently had a number of cold nights - with temperatures going down to $10\,^{\circ}\mathrm{C}$ at times however some days have been hot - so you can find plants getting dehydrated - particularly if they are in a greenhouse (we easily get temperatures of over $40\,^{\circ}\mathrm{C}$ in ours - even with the vents open and the fan on).

Epicacti - it is time for work! The flowers are over for the year - so you can prune and repot as necessary. Cut away really old growth as well as any damaged or diseased stems and encourage new growth from the base of the plant. Keep an eye out for pests and spray as necessary

Hoyas - enjoy the flowers, water when dry. Keep a wary eye out for mealy bugs and other pests and deal with them promptly.

Schlumbergeras - fertilise and water carefully.

Rhipsalis - reduce watering. Prune and repot if you wish.

Aporophyllums - Water less. Prune lightly - you may also repot (with care - and with gloves!!)

Ceropegias - enjoy the flowers (and check for pests very, very frequently!)

It is past subscription time !!

So if you have not already paid - it is time to act. The society's year runs from January to December. A membership renewal slip is included with this issue. Alice Hannam (our treasurer) would love to hear from you.

Odd Cuttings and Seeds

Pest remedies

When we visited Joy West's nursery recently we asked (as you do) "What do you use to combat pests?". (It is worth noting that there was nary a mealy bug to be seen in the whole of her very extensive plastic house). Joy said that she now uses "Attack". The active ingredients are pirimiphos-methyl and permethrin. It is a broad spectrum insecticide that will kill insects by contact, as a stomach poison, and through fumigant action. It can be sprayed on - or used as a soil drench and (joy of joys) it can be used on everything (including ceropegias). Be prepared with a small mortgage when you go to buy it - a one litre can cost us \$60 - but we expect it to last till we are 153 because one uses 10ml in 10 litres of water. Buy one and share it with a friend!

Cook's corner...

A correspondent (from New Mexico) notes that rhipsalis fruit is edible (but some fruit tastes better than others). You could even use it to make jelly if you have enough at one time (but not if you have been using systemic sprays on the plants - Ed.).

Books Books Books ...

More news on Rainbow Gardens Bookshop. The business has been sold and has moved to Tucson, Arizona. The new postal address is:

Rainbow Gardens Bookshop, 3620 W. Sahuaro Divide, Tucson, Arizona 85742.

their website (www.rainbowgardensbookshop.com) remains the same.

And talking of books - we have recently seen a list of sites which have collections of succulent plant botanical art available (some libraries are moving to make digitised copies of rare books available via the internet). If you would like a copy of the list - ask.

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Places to buy hoyas

Here are two addresses for New Zealand afficionados:

Heather and Keith Greave, 163 Victoria Valley Rd, RD1, Kaitaia.

E-mail: kandh1@xtra.co.nz

Joy West: PHP Nurseries, 18 Kanuka Road, R.D. Bombay, Auckland. Phone 09-2360302

Back numbers of "Epiflora"

The first edition of **Epiflora** appeared in March 1992. We have limited stocks of backnumbers for most issues from Volume 2 (March 1993) onwards. Ask the editor for details.

Future Publication Dates...

EPIFLORA is published quarterly by the Wellington Epiphyllum and Hoya Society.

Comments and contributions are most welcome. The society aims to encourage discussion and debate; opinions expressed are those of the authors and do not necessarily represent those of the society. It is the policy of the society to publish corrections of fact but not to comment on matters of opinion expressed in other publications All material in Epiflora may be reprinted by non-profit organisations provided that proper credit is given to WEHS, Epiflora and the author.

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\$12.00

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\$NZ24.00 or \$US12.00)

Additional Associate Members -

\$4.00

(At same address as a member)

Society web address:

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