

ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS  
THE AUSTRALIAN DAISY STUDY GROUP NEWSLETTER NO.19

Dear Members,

In July, whilst meandering around the Atherton Tablelands area, we came across one of the nicest daisies seen on our trip up north. After recognising it as Helichrysum newcastlianum, (possibly named after the nearby Newcastle range) we found it growing everywhere along the roadside, in rocky crevices and on cliff tops.

As this species has not been very successful in cultivation so far, I tried taking a pH reading of the soil, thinking this may give me a clue to its likes, but found the very rocky soil into which its roots were embedded, yielded not an inch, so its likes still remain a mystery.

I am also not certain as to whether H. newcastlianum is an annual or perennial, as many of the plants seen had died back to the rootstock after flowering. Judging by the many smaller plants around, there appeared to be no problem with regeneration. This regeneration may have come from seed, or they may have been suckers from the main rootstock.

Overshadowing its smaller bush companions in both size and colour, H. newcastlianum stood out at 40 cms high, and although covered with large white, (sometimes pink) papery flower-heads, 3-4½ cms in diam., the most striking feature of these plants was the rich, deep-pink buds, providing a highlight against the soft grey, woolly leaves and stems. Guaranteed to put a gleam in everybody's eye.

I feel sure that H. newcastlianum will be just the daisy to displace H. anthemoides from its top spot at our future flower shows, provided of course, we can learn the secret of its success in cultivation.

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ERODIOPHYLLUM ELDERI.

I recently received a 'phone call from Bev. Courtney bearing some great news on a simple method of extracting seeds from Erodiophyllum elderi's tough little cones.

Throw away that hammer, vice and magic knife and just soak the pods overnight in half a cup of warm water. As the cones open, the seeds around the perimeter are the first to pop out, others tucked in further may need to be winkled out with the tweezers. What could be simpler.

Bev. also said she left a few seeds in water for a period of 4 or 5 days and found they had already started to germinate when she was ready to sow them.

Thanks Bev. for sharing your findings with us so promptly.



Dried specimen of  
Helichrysum newcastlianum

The following is an extract from the Plants & Gardens News/3 Brooklyn Botanic Gardens, New York U.S.A.

PROMOTING SEED GERMINATION OF FIRE-FOLLOWING PLANTS:

Over the past few years, botanists have been trying to understand why certain herbaceous plants, sometimes called "fire-annuals", appear after fires in the chaparral shrublands of California. These fire-following plants persist for a short time, then die out, leaving their seeds to remain dormant - until another fire. Some researchers have speculated that fire destroys germination inhibitors, thus allowing the dormant seeds to sprout; others have suggested that fire produces germination stimulators. The latter hypothesis was confirmed recently by researchers at Whittier College: components in charred wood stimulate germination of the seeds of fire-following plants.

Most any type of wood will do. In fact, the wood doesn't need to be burned - heating to about 350°F (177°C) for half an hour produces the water-soluble stimulatory compound, apparently formed from hemicelluloses in the wood.

The importance of this discovery for horticulture could be enormous, since it means that a number of native plants that couldn't be grown easily previously can now be germinated simply by soaking their seeds in water with some of the germination stimulator added. (For home experimenters, this means charring wood pieces with an open flame, grinding them up, and then adding the material to water for an overnight soak; pour some of the water into the growing mix in which the seeds are planted. Some species may need additional seed treatments, such as periods of low temperatures, for good seed germination).

Perhaps within the next couple of years, we'll be seeing seeds of "new" fire-following native plants offered to home growers by wildflower seed companies, complete with "germination stimulation kits" containing powdered burnt wood!

Source: Sterling C. Keeley and Marie Pizzorno, "Charred Wood Stimulated Germination of Two Fire-Following Herbs of the California Chaparral and the Role of Hemicellulose", American Journal of Botany 73(9), September 1986, 1289-1297, (Botanical Society of America, 1735 Neil Ave., Columbus OH 43210.)

Thank you to Bev. Courtney for this most interesting article. I would be pleased if members would give this simple method a try, particularly with seeds of Olearia and Ixodia which germinate so well after bushfires, and let me know of your results.

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PHOTOCOPIER:

For the photocopying of our newsletter, we are very grateful to Neil Greig and Camberwell Grammar who now provide this service purely for the cost of the paper used.

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NEW MEMBERS:

A warm welcome to the following new members:-

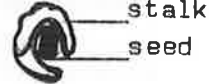
Mrs. Cherree Densley, Killarney  
Ruth Marriott, Mt. Eliza  
Dianne Gillies, Maldon

Mrs. Coral Hughes, Koonwarra  
SGAP Blue Mountains Group, Glenbrook

ANTS AND SEED DISPERSAL (a follow on to Joy Cook's article) - PETER VAUGHAN

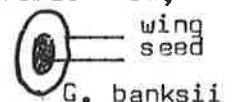
Seed dispersal is an interest of mine and I was very interested to read Joy's experience with the ants. On reading the article my immediate thought was 'how obvious'. Yet I am sure this method of seed dispersal has not been recorded and possibly not even considered for *Brachyscome*. (I am checking on this).

Ants are common seed dispersers. Plants that depend on ants for seed dispersal are termed myrmecochores. There is usually a reward attached to the seed. Compare *Acacia melanoxylon* seed to *A. implexa* seed. *A. melanoxylon* has a red seed stalk that is so long it encircles the seed. *A. implexa* has a short pale coloured stalk. The seed stalk is very nutritious and remains attached to the seed after falling. Ants gather the seed of desirable species, take it to their nest, remove the nutritious portion and then discard the unwanted seed, either in a disused part of the nest, or on the rubbish heap (usually an area beside the nest). *A. melanoxylon* is obviously ant dispersed and *A. implexa* isn't. This probably accounts for the major difference between the habits of these two species (their distributions are very similar).



Grevillea banksii:

I once had a sealed plastic bag of *Grevillea banksii* seed (natural form, not garden form). Ants detected the seed inside and chewed through the plastic, gathered the seed and carted it back to where their trail disappeared into a crack in the concrete. The *Grevillea* seeds would not fit in so they chewed the wings off and left the seeds. Therefore, winged *Grevillea* seeds are also ant dispersed.



Brachyscomes:

*Brachyscome* seeds aren't very different to *Grevillea* seeds, except they are much smaller. In contrast to most daisies they are not wind transported. We now know the reason, ants do the deed for them. Therefore, if you find *brachyscomes* and no seeds, look adjacent to ant nests. Their rubbish dumps may hold some.

Advantages:

What does the plant gain from ant dispersal. There are some very big advantages, i.e.:-

1. They are safe from predators.
2. There is less seedling competition (ants remove seeds and seedlings of undesirable species).
3. The ant nest rubbish dump is a nutrient rich site and seeds are often covered with a layer of compost (not necessarily an advantage with daisies).
4. They may be favourably placed for fire. Seeds placed underground are often stimulated and grow after intense fires. Seeds on the surface respond to minor fires. The ant nest rubbish dump generally does not burn and therefore seed survival is high.

From this you can see that myrmecochory is a common feature of Australian plants, yet we do not appreciate its full value. I would like to thank Joy for presenting her observations, especially in such a humorous manner.

P.S. It is significant that the important identifying feature of *brachyscomes*, i.e. the wings on the seed, appear so significant in seedling establishment and consequently plant growth. A particular ant species probably favours a particular seed due to ease of handling (and perhaps flavour) and therefore, the seedling lives with the ant in its desired soil and moisture levels.

P.P.S. Remember the close association Esma Salkin found between ants and some daisies (reported in the last newsletter).

EVENTS FROM JULY TO NOVEMBER, 1987 - JUDY BARKER

S.G.A.P. - VIC. MEETING - JULY, 9th

Three years ago Maureen and I talked to S.G.A.P. - Vic. about daisies. This time the subject was 'Daisies New to Cultivation'. Amongst the species we particularly liked were Brachyscome aculeata and B. tatei (which has since shown us that it does not like wet Victorian winters), Cassinia uncata (two forms), Helichrysum acuminatum (not exactly new), H. cuneifolium, H. ledifolium (slow, but a winner) and H. viscosum (including new forms with reddish, orange or brown bracts). Helipterum anthemoides (Qld. form) is also highly regarded, with its profusion of quite large heads and its long flowering period, but the red bud form is still everyone's favourite. Ixiolaena leptolepis (Horsham) and I. sp. (Queensland) also look very useful, fast-growing, long-flowering bets to us.

Jenny Rejske provided her usual cheery help in selling tubes and seed.

NEWCASTLE S.G.A.P. MEETING - AUGUST 5th

Speaking to this group of active enthusiasts was a pleasure from first to last. Their activities officer, Mark Henley, fetched, carried, set up slides and, in short, treated me like royalty. (Every group should have one). This was the first interstate visit our Study Group has made, and it set a pattern which would be hard to equal.

It was very good to meet our Newcastle members, Peter, Allan and John, and to renew acquaintance with Lyn. Great interest was expressed in our one copy of the book and much seed was sold.

THE MELBOURNE WILDFLOWER SHOW - AUGUST, 15th & 16th

Maroondah Group generously allowed us three trestles so there was plenty of room to move around our display and at times we needed every bit of it. We divided the seed into two lots and sold it at both ends of our display. At each seed bank two members were kept busy for most of the two days.

The cold conditions leading up to the show meant that we relied mainly on our dried specimens - which were at least twelve months old. Three large pots of Helipterum anthemoides (red bud form) stole the show. Everyone wanted seed or plants, and some went to excessive lengths to get cuttings.

Helichrysum lindleyi (four tubes in a small terracotta pot with all the spaces filled with sand) obliged by flowering generously and this species was in great demand. Specimens of Helichrysum ledifolium and H. newcastlianum (which Maureen had kindly sent us) were much admired and seed was constantly requested, but H. ledifolium has not germinated for us so far and seed of H. newcastlianum was unavailable.

We had sold out of Helipterum roseum seed by lunchtime on Saturday, and by the end of the show, we had also sold out of H. manglesii, H. splendidum, Helichrysum subulifolium and Schoenia cassinianum. Obviously the large and/or showy had taken the eye.

Joy Greig, Jenny, Colin, Barbara, Joy Cook & Bev. were pillars of strength in this enterprise.



H. anthemoides (red bud form)  
Drawing by Betty Campbell

EVENTS FROM JULY TO NOVEMBER, 1987 CONT'D. - JUDY BARKER

WAVERLEY S.G.A.P. MEETING - AUGUST, 25th

This talk was titled 'How we wrote the book'. As Waverley Group is 'family' for many of our study group members, it was not a serious night and we could indulge in a certain amount of hilarity and exaggeration. Just as well, because the thirty slides I had chosen to round off the talk went through my faulty projector in three minutes flat. Nothing I could do would stem the tide. With any other group this would have caused acute embarrassment, but raucous laughter greeted my distress on this occasion. Efficient Waverley members changed projectors without fuss and I was able to proceed fairly calmly.

Our book was not ready for sale, but we took it to Waverley's September meeting where it sold like hot cakes.

MAROONDAH SPECIAL WEEKEND - SEPTEMBER, 18th/20th

Three members spoke to Maroondah Group on the Friday evening; Esma Salkin on propagation, Jenny Rejske on wiring and drying, and me on the botanical differences between Victorian daisies. Neither Esma nor Jenny had spoken in public much, but their performance was excellent and they were roundly applauded.

Joy Cook was in charge of sales of tubes for 50 cents, but had no hope of orderly marketing in the melee. We sold about 600 tubes and some books.

The following Sunday we visited Karwarra Native Gardens and set up a display, because the gardens were open to the public under a scheme run jointly by the Royal Horticultural Society and the A.B.C. We took a number of Maroondah members around the garden to identify any Asteraceae growing there. Not many species were to be found, but Frances Emerson has suggested that this omission could be rectified in the autumn of 1988.

The visitors were interested in the small collection of dried flowers and containers we displayed. A number of books and more tubes were sold.

A.B.C. GARDENING SHOW - SEPTEMBER, 19th

Lothians sent a review copy of our book to the A.B.C. Rural Department. They responded by inviting me to be a guest on 3LO at 8.00 a.m. It was a fascinating exercise, albeit nerve wracking, but of great value to our cause in that an astonishing number of gardeners listen to the program. Some of them now realise that there are more Australian daisies than 'the little one that appears in the lawn'. The majority of the talkback questions were directed towards the problems of lemon trees; none towards daisies.

ANGAIR SHOW - SEPTEMBER, 26th/27th

Maureen returned just in time to arrange a beautiful display of potted plants and fresh and dried specimens. We tried to concentrate on as much fresh material as possible. It was interesting that many of our customers thought fresh and dried specimens of Helipterum manglesii were two different species. The Study Group had been given pride of place in the hall with plenty of display area.

H. roseum was again favourite, but Helichrysum baxteri and Brachyscome diversifolia sold well here. Again Helipterum anthemoides (red bud form) took first prize and the few pots we had were the first to disappear. We could have sold a ton of Brachyscome multifida, either as seed or in tubes. There were many enquiries for Helichrysum ledifolium and H. lindleyi. Olearia phlogopappa was also in great demand, probably because Jenny had brought great branches of it in all colours.

We did a brisk business in seed and pots and a steady line in book sales. We could not have coped without Maureen and Vic., Jenny Rejske and Betty Campbell. The heat made conditions rather trying, but there was little time to reflect upon it.

EVENTS FROM JULY TO NOVEMBER, 1987 CONT'D. - JUDY BARKER

OTWAY S.G.A.P. SHOW - OCTOBER, 11th

It is always a pleasure to mingle with the friendly, generous members of the Otway Group. Their show is held in conjunction with the Gellibrand River Market and is of a very high standard for the quality and diversity of species they display.

Joy Cook and her family came down to help with sales and information for the amazing number of people who passed through the doors. Joy is a saleswoman of extraordinary capacity; I marvelled to hear her selling kilos of seed of Calomeria amarantoides (with its vaunted aphrodisiac qualities) to customers trailing five or six children and a baby. Other species in demand were Brachyscome diversifolia and B. angustifolia var. heterophylla. We sold a surprising amount of seed - mainly the showy annuals - and quite a few books. Max and the Cook girls formed a great back-up staff and we all had a happy, busy day.

3 RRR 'GET ROOTED' - NOVEMBER, 1st

Despite my trepidation at appearing on such a frighteningly named gardening show, I found this program most impressive. I knew 3 RRR was laid back and full of jokes, but the two young horticulturalists who run 'Get Rooted' turned out to be most knowledgeable and had done their homework on our book very thoroughly.

Of the seven people who phoned in with questions, five were on the subject of daisies, which was a surprise to the experts as well as to me. This program, at 10.00 a.m. on Sundays is good fun and profitable listening.

I would like to proffer heartfelt thanks to the many members who have helped with all these endeavours in Maureen's absence. They have been extremely generous with their time and advice, botanical, artistic and sheerly practical. They have kept me sane (or almost so) and my family is grateful.

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OTHER EVENTS - MAUREEN

Another two shows well worthy of mention were Shepparton, (which I was very sorry I missed) and Peninsula. From the slides Esma & Alf took of the Shepparton Show, I was most impressed with the landscaped display of daisies. Upon the stage a sea of sunrays glowed, equal to any scene on a Western Australian postcard. Congratulations Shepparton for this magnificent effort.

I was home from Qld. and able to attend the Peninsula Show on Sunday, 18th October, and was very pleased I did, as this whole show was very well presented. Bev. had arranged her own daisy display and of particular note was her own cultivar of Brachyscome multifida var. multifida (a cushion form with very deep purple flowers). She also thought up a unique idea of displaying her dried specimens without the worry of damage during transport between shows. In a pleasing design, the daisies were attached onto a cream tapestry cloth that had been firmly affixed to a wooden frame. Each specimen had been neatly labelled.

Our last event for the season was a Spring Plant Sale in a 2½ acre garden at Tynong North. This was organised by members of SGAP - Vic. Over 10,000 plants were available for sale and included many unusual species of daisies.

Judy & Colin set up our daisy display on Friday and included some potted specimens in top class condition. Favourites were Joy Greig's pot of Brachyscome nivalis var. nivalis and Judy's Celmisia asteliifolia. Needless to say these two species were the first to sell.

My thanks to the many members who propagated plants for this sale. Your help and assistance over this week-end in manning the display, selling books, seeds and plants was also very much appreciated.

SEED LIST:

Additions

Angianthus acrohyalinus  
" glabratus, tomentosus  
Bedfordia salicina  
Blennospora drummondii  
Brachyscome sp. (Three Springs) W.A.  
Calomeria amaranthoides  
Cassinia aculeata (Mt. Gambier),  
" quinquefaria, uncata  
Celmisia saxifraga  
Chrysocoryne drummondii, pusilla  
Chthonocephalus pseudevax  
Craspedia chrysantha  
Helichrysum anteniferum?, bracteatum  
(Cape Hillsborough Qld), dealbatum,  
obcordatum Tas.  
Ixodia achillaeoides  
Myriocephalus stuartii  
Olearia argophylla, lepidophylla, lirata  
Podolepis lessonii  
Senecio brunonis  
Vittadinia (Flinders Ranges)  
Waitzia suaveolens

Deletions

Brachyscome cardiocarpa, microcarpa,  
spathulata var. glabra  
Calocephalus citreus  
Calotis cuneifolia  
Celmisia asteliifolia  
Helichrysum acuminatum, argophyllum,  
bracteatum 'Dargan Hill Monarch', 'Hastings  
Gold', hybrids - gold, orange, pink, white,  
cuneifolium, ericetum, glutinosum,  
rogersianum, semipapposum (Anglesea),  
thyrsoideum  
Helipterum jessenii, strictum, stipitatum.  
uniflorum  
Leptorhynchos elongatus, tenuifolius  
Olearia algida, alpina, elliptica, erubescens,  
glutinosa, gravis, lirata, microphylla,  
phlogopappa, ramulosa, sp. Mt. Selwyn,  
sp. Qld., tomentosa  
Rutidosis murchisonii, sp. (Qld)  
Vittadinia bicolor, muelleri

SEED DONORS:

My thanks and appreciation to the following seed donors:-

Beth Armstrong, Pat Short, Jeff Irons, John Colwill, Joy Greig, Dr. P. Short,  
Dr. J. Warcup, Bev. Courtney, Alf Salkin.

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LEAF CUTTINGS - BEV. COURTNEY

Further to my article on leaf cuttings in the last newsletter, I am happy to report that two of my leaves have produced tiny new plants which are growing healthily. The remaining four (all six were forms of Brachyscome multifida) have produced good, strong root systems and the leaves are still green and healthy, but no sign of any new top growth as yet. I am hopeful that they will grow eventually, when the fancy takes them.

At a later date I took leaf cuttings of Brachyscome angustifolia and B. spathulata and the results have been the same - quick rooting, good root systems, but no new top growth so far. I was interested to see that B. spathulata has produced a thick, white fleshy root typical of plants of this type which spread by means of underground stems, so I am hopeful of this one.

As a technique, production of new plants from leaf cuttings is probably too slow to be of much use. It will be very useful, however, for reproducing plants growing in the wild, where limited propagating material is available.

FINANCIAL STATEMENT 1/7/86 - 30/6/87 - JOY COOK (TREASURER)

<u>Income</u>			<u>Expenditure</u>	
Cash at Bank 1/7/86		611.31	Cash at Bank 30/6/87	552.31
Subscriptions	280.00		F. Duty	2.47
Donations	144.00		Stationery	154.66
Paper/Newsletters	18.00		Book establishment	219.02
Interest from Bank	41.40		Seed	21.20
Seed sales	217.59		Herbarium	149.02
Oasis sales	<u>2.00</u>		Petty Cash	50.00
			Postage	<u>165.62</u>
		<u>702.99</u>		<u>761.99</u>
Total income to 30/6/87		<u>\$1314.30</u>		<u>\$1314.30</u>

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SUBSCRIPTIONS:

1987 SUBSCRIPTIONS ARE NOW OVERDUE. A LARGE RED CROSS means you are an unfinancial member and this will be your LAST NEWSLETTER unless payment is received. Cheques to be made payable to the Australian Daisy Study Group and forwarded to Leader. \$5.00 PER YEAR (\$10.00 OVERSEAS MEMBERS).

Receipt is acknowledged of the following subscriptions:-

Maureen Schaumann '87	ASGAP. Vic '87	Pat Shaw '87
Judy Barker '87	Pine Rivers SGAP '87	Jeff Irons '87
Jenny Rejske '87	Foothills SGAP '87	Betty Campbell '87
Val McConchie '87	Blue Mtns. SGAP '87	Barbara Buchanan '87
Bonni Reichelt '87	W.A. Wild. Society '87	Ngairie Turner '87
Esma & Alf. Salkin '87	Canberra SGAP '87	Joy Greig '87
Tom Chalkley '87	Geelong SGAP '87	Joy Cook '87
Marilyn Connell '87	Arts Heritage '86, '87	Pat Treacy '88
	Max McDowall '87	Beth Armstrong '87, '88

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DONATIONS:

Many thanks to the following for their donations:-

Bev Courtney \$5	Bonni Reichelt \$5	Helene Feely \$10
Val McConchie \$5	ASGAP Vic. \$5	Maroondah SGAP \$20 (in appreciation of daisy seminar)

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This will be my last newsletter to you all as I have decided to step down as leader of the group, but will continue on as an active member. This should give me more time to concentrate on the drying and preserving aspects of daisies, as well as growing and collecting during my future travels. Fortunately for me, and you too, Esma Salkin has consented to be leader, on a trial basis only, for 12 months. I am sure you will all be very happy under her leadership.

My thanks to you all for your help, support and encouragement over the past 6½ years.

I hope you and your families all have a very happy, peaceful Xmas & New Year.

*Esma Salkin*

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All correspondence and requests for seed, enclosing stamped self-addressed envelope to new leader:-

Mrs. Esma Salkin,  
38 Pinewood Drive,  
MT. WAVERLEY