

ASSOCIATION OF SOCIETIES FOR GROWING AUSTRALIAN PLANTS

NUMBER 35

ISSN 0727 - 7008

HAKEA STUDY GROUP NEWSLETTER

November 2007

Dear members and friends,

My name is Paul Kennedy and I am your new Hakea Study Group leader. At the ASGAP conference in Newcastle I was appointed the new Study Group leader. Now it is down to work as I plan to put out three newsletters per year. So were do I start? I would like to send you this newsletter early, so that you can get some idea of what I have in mind for the future.

Len Coe, the previous leader, has sent me a box comprising of a small amount of correspondence and a lot of seed, some of which is quite old. In the next newsletter I will deal with what seed I think is viable, issue a members list and include a financial statement. So what do I think our aims should be?

In line with the aims of the Society which is the preservation of Australian plants by cultivation;

To make Hakeas better known as garden plants.

To encourage members to grow as many species as possible in different climates and soils and report back on success and failures.

To bring into cultivation those species that are endangered in the wild.

To have a better understanding of differences in species.

To observe flowering times, growth rates and differences between juvenile and mature leaves.

To encourage Botanical gardens and arboretums to have significant collections of Hakeas.

I should start by saying a little bit about myself. I have been a member of the Society for some 35 years and have been active in growing Australian plants as well as being involved in the administration of the Society as both Federal, State and group level. I have just finished being President of APS Victoria and currently one of the two Vice Presidents of ASGAP. Together with my wife Barbara we have an 18 acre arboretum of Australian plants here at Strathmerton near the Murray River. The main collections are Hakeas, Banksias and Eucalypts, although there are many other genera represented as well. We have two large sandhills and clay soil in between, so we try planting everything as close as possible to their natural soil type in the wild.

We have been growing Hakeas for nearly thirty years, first at Heathmont, an eastern Melbourne suburb and in the last eleven years here at Strathmerton.

As we are in the tenth year of drought, I would like to commence this newsletter back in April 2007, so that you can get a glimpse of how tough things are here at present.

The long hot summer lingered on and we wondered if we were ever to see good rains again. The plants have stood up to it fairly well, but the ones from cooler higher rainfall areas have certainly suffered. Autumn came and the days slowly became cooler, but still much warmer than our normal autumn temperature.

The days have been beautiful and sunny after our first good fall of drought breaking rain fell on the 27<sup>th</sup> of April. Just when I planned to do lot of cleaning up and pruning here I am inside. I caught a severe cold bordering on the flu and it has taken me three weeks to shake it off. So I have been desk bound, but it has been a good chance to clean up a lot of seed lying around the desk and cupboards.

I have managed to put some protection around those plants that I consider frost tender

and will try some of the anti freeze spray solution as well. So far the late autumn has been very mild and the garden has burst into flower to make up for the awful summer. I hope we do not have minus 8 degrees C this winter.

The mild autumn has probably encouraged the *Hakea loreas* ssp. *lorea* (formally known as *suberea*) from central Australia to finally put out flower spikes and flower in a great mass of yellow flowers. From the start of the appearance of the flower raceme to flowering took less than four weeks. They are certainly quick at producing flowers. The plants are probably seven years old and four metres high and of course the flowers are at the top. Nevertheless I have been waiting a long time for this event to happen and the camera will record the event. Just as I wait for the perfect flower arrangement, along comes a minus 5 degrees C frost in July and the flowers are burnt off. There will be no seed set either.

So what other *Hakeas* start flowering early? The first are *Hakea cycloptera*, *arborescens* and *tuberculata*. in March, and by the end of May when these are on the wane *Hakea megalosperma*, *petiolaris* and *burrendong* beauty herald the beginning of many *Hakeas* coming into flower. *Hakea megalosperma* flowers profusely but to date has not set any seed.

The *Hakeas* that I have been really looking at intensely are the forms of *pycnoneura* and *scoparia* ssp *trycherica* from Mount Ragged in Western Australia, which have started to flower for the first time. Again they were in flower when the frost came and the flowers were burnt off. They were also putting out a lot of new growth and this was badly burnt too. Of all the central and southern *Hakea* species these were the only ones to suffer badly.

The *Hakea* collection from around Australia was finally achieved when a *Hakea lorea* ssp *borealis* from west of Katherine was planted in late April. I have covered it up and wait to see if it will survive our winter. It is planted near an east facing brick wall where other *Hakeas* from Cape York have survived very well. It started well by putting out new growth and survived till the end of September, when I think the prolonged cool dry weather was too much for it. Nevertheless there are more seedlings on the way, so we will keep trying.

Another tropical *Hakea* to flower for the first time was *Hakea arborescens*. The flowers are very small but the insects must pollinate them as small seeds were set. However the cool nights caused the seed to drop off. Still I think it is an achievement to get this far.

In the past I have mentioned to *Hakea* enthusiasts my *Hakea* losses due to the extreme heat and drought. Another two hung on till the end of March, *Hakea ambigua* from the Stirling ranges area of western Australia and the *Budderang* Ranges form of *pachyphylla* both then gave up the fight just as the cooler weather arrived.

The *Hakea salicifolias* seem to last about eight years and then die in this drier climate. I just keep replacing them and trying to put them in more shady positions. I saw one growing on a rocky headland near Foster in NSW and it looked a much healthier specimen than mine due to the much wetter and milder climate. *Hakea sericea* is another that seems to do the same thing, so you just keep putting plants in to overcome the losses.

.....One of the observations that I have noticed is that plants from cooler climates or from forest areas that are in shade or partial shade on hot days seem to survive much better and require less water to get through the summer. If I was starting again I would try planting taller drought tolerant plants on the northern side of garden area in a east –west direction and then the smaller less hardy plants behind. It seems as though climate change is going to happen and looking at the water level in the Murray

River at present their predictions would seem to be correct as the River is not far of being a series of water holes. It is quite amazing how quickly it has crept up on us considering eleven years ago in 1996 we had above average rainfall.

In mid April we head over to the South Australian plant sale and help Max Ewer sell some seven hundred Hakea seedlings in tubes. On the way across to SA it is always a joy to visit Max's garden near Lucindale in South Australia. The Hakeas grow so well there despite the cooler climate and even the northern inland species survive showing that they can be quite adaptable. Max plants more than one of each species and even searches out those that may have some variation to the normal species. One that took my attention was a very dark green leaf form of Hakea laurina. The flowers start out as a normal creamy pink colour but then change to a deep crimson red. The plant does not appear to grow as tall as the other forms of Hakea laurina but is certainly a very attractive form to have in our gardens.

Both Max and I have been waiting for our Hakea cygna ssp. needlei to form seed. Being an endangered plant in the wild the need to get plants established in our gardens and setting seed is critical. On inspection of Max's plants in April we noticed that at long last one specimen had set seed, so when they are mature more plants will be propagated and distributed to Hakea enthusiasts.

APS Vic is having the Fred Rogers seminar on Eremophilias on the 2<sup>nd</sup>. and 3<sup>rd</sup>. of October in 2008. at Horsham. It seems to me that this would be a good time to consider having a Hakea crawl to a number of gardens either before or after the seminar.

Well it is now August and the mild autumn weather disappeared at the end of May and since then it has been horribly cold with the maximum daytime temperatures sitting around 13 degrees C. We have not had many frosts but one in mid July was a minus 5degrees C and burnt off most of the flower spikes on my Hakea lorea ssp lorea from central Australia even though they were 3.6m above the ground. The Hakea pycnoneura's and the crosses with Hakea scoparia's from Mount Ragged were also in flower and were affected by the frost.

38 mm of rain fell in July and then it stopped!! Since then only a couple of showers despite the southern part of Victoria getting quite heavy falls. The grass died off in September and there is no sub soil moisture. The hot days have arrived in November and one wonders just what will be alive at the end of summer. In all we have had 200 mm of rain for the year when our average is 450mm. It is the second year that we have had no spring rains.

The warmer Spring days arrived in mid September and new growth appeared on many of the native plants. To my surprise the Hakea loreas ssp. lorea put out a new lot of flower spikes with the new growth and are now in full flower in mid November. Hakea leucoptera and its ssp sericipes are flowering too. I have one small flower on Hakea fraseri, so the promise of better flowering in future years looks good. It is one that gets watered regularly as it comes from a cool moist climate and has a cover over it in summer to keep the heat off.

#### Research.

Recently I was doing some research into the distribution of the northern Hakea species in WA and the Northern Territory as friends send me down specimens they have found on their travels. Many can be quite similar in leaf shape and hence difficult to determine unless you have flower and seed samples. So what do you expect to find in the northern region of Australia? The range given is approximate, so don't be surprised to find specimens beyond the outline described.

If you want to see a particular species and have a GPS, I do have some latitudes and longitudes that will help you.

*Hakea lorea* ssp *borealis*.

Around Mount House station in the Kimberleys, Keep River NP to Katherine and across to Boorooloola in the Northern Territory with an outlier on Groote Island and near Oerpelli in Arnhem land. Has a seed capsule 40mm to 60mm long.

*Hakea arborescens*.

Extensive through the Kimberleys, north of Tennant Creek in Central Australia including Darwin and Arnhem Land and across into Queensland in an area north of Winton – Charters Towers but not extending into Cape York beyond Normanton – Cairns.

*Hakea macrocarpa*.

Found mostly north of Alice Springs and along the Plenty Highway and Tanami Track and into the lower Kimberleys. Further north in the Northern territory it is not so common but that may be due to a lack of herbarium specimens.

*Hakea chordophylla*.

Extends from the Pilbara up to into the Kimberleys and between Katherine and Alice Springs in the Northern Territory and into the central parts of Queensland.

*Hakea lorea* ssp. *lorea*.

Because *Hakea suberea* from Central Australia and *Hakea fraseri* from southern Queensland were all lumped together in the revision this ssp. now has a large area of distribution. It extends from Derby to Carnarvon inland from Halls Creek to Kalgoorlie, from Tennant Creek to the northern part of South Australia, around Boulia – Mount Isa and then from Georgetown southwards along the inland side of the great divide towards the NSW border. It grows over a whole range of climates and soils with variable terete leaf characteristics.

New members.

I welcome Tom Constant from Bullsbrook in WA, Pauline Wickstead from Gunning in NSW and Paddy Lightfoot from Newcastle in NSW. I hope you will enjoy the friendship and knowledge that the Study group offers.

Burrendong Arboretum Trust.

I have received a letter from the Secretary asking us to help in expanding their collection of some 60 species. Earlier in the year I sent seed to the Canberra Botanic Gardens to germinate for the purpose of expanding their collection. I had discussions with their Curator Jim Dutton at the ASGAP conference in Newcastle and I believe it would be fitting to help them further their collection as well as fitting in with our aims. In due course I hope to receive a list of what species they have.

Finances.

As so few newsletters have gone out in the past year, I have decided not to ask existing members to pay again this year. I believe if you pay for something you should get value for your money.

Another year is about to come to a close. I hope you all receive good summer rains and are able to enjoy watching your native plants grow, especially the Hakeas. May you all have a peaceful and happy Christmas.

Regards, Paul.

