Annual General Meeting

Retiring President Margaret welcomed everyone, and thanked Christina and Trevor for allowing the Group use of their home for the meeting.

Minutes of the previous AGM, which had been circulated, were ratified by a show of hands.

Margaret then presented her President's report for the year, which was received with acclamation. Her report appears later in this newsletter.

Treasurer John Knight presented an interim financial report for the period 1st November 2015 to 30th September 2016, and advised the meeting that, as APS NSW Region has determined that the financial year will run from 1st January to 31st December in each year, that the final report will be presented early in the new year. The report as tabled was agreed upon by a show of hands, and appears later in this newsletter.

As there was no business arising from the floor, **Returning Officer Peter John** declared all Committee positions vacant, then disclosed those nominations which were received prior to the AGM by Secretary Michele. Peter then called for any further nominations, but there none forthcoming.

Results of the election: There was no nomination for president, so this position was held over, to be determined at the next regular meeting of the committee. Likewise there was no nomination for vice-president.

Michele Pymble was re-elected as Secretary,

and Amanda Marsh as her deputy and Minutes Secretary.

Mary Harrison was elected to the role of Treasurer,

Jenny John retains the position of Membership Secretary, much to everyone's relief, Jillian Peck continues in her role as Publicity Officer,

John Knight remains as a committee member and newsletter editor,

and new member Geoff Gosling was elected as a committee member, bringing much business acumen and experience to the position.

As there was no further business, the AGM was declared closed, and Margaret handed over to John Knight to introduce our Guest Speaker for the day.

Report on last meeting by John Knight

Photos taken from Simon's powerpoint presentation

Our Guest Speaker **Professor Simon Haberle** Director of the School of Culture History and Language Australian National University **introduced members present to the very apt topic** "Gardens, Pollen and Respiratory Health: What we know, What we don't know and What we need to know about pollen and its impact on our daily lives".

Simon began by introducing his involvement in a long term monitoring program for climate change science, and community health management, explaining the role of pollen, and how different plants have evolved the most efficient ways to distribute pollen to ensure successful reproduction.

Simon illustrated his use of the **Burkart Sporewatcher** (shown on the right), and described how he can correctly identify the type of pollen found in the air, and monitor its density. His study is primarily based on results obtained in Canberra and the ACT, but is relevant Australia wide

Using this information he is able to predict how pollen might affect susceptible people, such as those who suffer from "hay fever" and other allergies. • Allergic rhinitis is a medically

- Allergic rhinitis is a medically economically important chronic dis that affects 1 in 5 people living in ACT, which is more than any other 9 or Territory in Australia (2011).
- Allergic rhinitis (hay fever) and epis asthma attacks triggered by grass por regularly affects up to three mi Australians.





Pollen comes in many shapes and sizes

Many non-native plants are highly

allergenic.



Privet, Ligustrum spp flowers and close up of pollen grains



Wind dispersed pollen, Cypress sp. Illustrating just how prolific pollen production can be, and why some pollen "gets up your nose" and in your eyes



Plane tree Platanus x acerifolia leaf and developing fruit, and close up of pollen grain.



Pine tree pollen close up

Plantago lanceolata English Plantain, a common weed through much of Australia, flower spike and close up of pollen





Simon's research demonstrated the close correlation of the onset of hay fever with a dramatic increase in airborne pollen.

From August to October non-native tree pollen increased from <50 grains per cubic metre to in excess of 400, whilst grass pollen showed a similar increase from October to December. These figures were obtained in Canberra, where a large collection of exotic trees were planted, and of course the capital is surrounded by grasslands. However Simon pointed out that similar results are obtained from many areas in Australia, albeit total pollen count is somewhat less. It is interesting to note that weather services now include a likely airborne pollen count to warn people susceptible to allergies to be aware.

Pollen production by plants known to cause allergies makes for interesting reading. July to September, Alder Alnus spp, peaking August, Cypress pines, Cupressaceae, peaking September – October August to January, August to May, She Oaks, Allocasuarina, peaking September - October Pine Trees, Pinus spp, peaking September August to November, August to November, Poplars, Populus spp, peaking September August to November, Ash Trees, Fraxinus spp, peaking mid August to September August to November, Birch Trees, Betula spp, peaking September to October Elm Trees, Quercus spp, peaking September August to October, August to November, Willows, Salix spp, peaking September September to October, Plane Trees, Platanus spp, peaking September to October September to December, Olive Trees, Olea spp, peaking October to November September to November, Oak Trees, Quercus spp, peaking October





September to January, Paterson's Curse, Echium sp, peaking October to December September to February, Grasses, Poaceae, peaking November and again in January October to February, October to February, November to February, November to March, Privet, Ligustrum spp, peaking December to January These times are of course approximate, as they are dependent upon temperatures.



During question time Simon was asked to comment on the widely held belief that Wattles are to blame for at least some allergies. His table showed that Wattles, Acacia spp, produce pollen from July to February, peaking August to November, but the grains are too heavy to become part of the airborne pollen mix, and can therefore be exonerated as a culprit causing hay fever. Thank goodness for that ! There can be no doubt that as our climate changes, plants which do not currently appear locally may be favoured by increased temperature and rainfall, and other allergens will appear. Grasses are a case in point. The types of grasses, and when they flower change across a range of latitudes. The major environmental factors grasses respond to are rainfall and temperature. Under current climate change predictions, Canberra may move to a more Sydney-like pollen season.

The need for a pollen monitoring program



Simon showed the correlation between hospital admissions and increased pollen count. Citizen science is helping to understand this correlation, and Canberrapollen app, available for both Android and Apple products, launched in October 2014 has had over 12000 downloads.

Many people are now reporting pollen count information, responding to the question "how

is your hay fever today". Simon urged all to download the app and join information sharing.

Delivering daily pollen count information to the public

- Improve clinical management of hay fever and allergic asthma.
- Provide region-specific calendar of the pollen season
- Encourage compliance and quality use of medicines
- Empower patients to adopt allergen avoidance strategies
- Reveal region dependent differences in exposure to allergenic pollens
- Provide a platform for patient education asthma triggers

Christina was then asked to introduce her new book 'Horse Island' which she did with enthusiasm.



The book is a personal story of Christina's, and indeed her forebears, involvement with Horse Island, and her choice to use Australian plants rather than exotics. A genuine love of plants, and an ability to use them to great advantage, is patently displayed in the sprawling gardens she has designed, and the book faithfully tells her story with beautifully photographed panoramas and also in intimate detail.

Christina explained that Horse Island has been part of her family for many generations. Her great great grandfather Thomas Mort, well known industrialist, was an innovative farmer, well before his time, and on his Comerang property his approach to clearing was subtle and respectful, in a time when most new settlers obliterated the native vegetation.

25 years ago, Horse Island was just a weed infested scrubby 200 acre block, with scattered stands of Eucalyptus tereticornis and Casuarina glauca.

Said Christina, 'I feel deep connections to my ancestors when I work in the garden, and gratitude to them. I am also thankful for the opportunity to build such a garden and in a location so close to my own family roots'.

It is obvious that she has inherited a sympathetic mind, capable of understanding nature and working with the landscape, using as framework those large mature trees which give the garden their character. Then, choosing to use only Australian plants, but using them in a formal sense when everyone was suggesting that they would only grow well in a naturalistic bush setting, is the genius Christina bestows on her garden. As growers of Australian plants, we are indeed fortunate to be able to visit this garden, to be so warmly received, and offered the opportunity to marvel at just how well Australian plants can look when treated respectfully.

Christina was warmly applauded and took questions before we broke for lunch.

True to her nature, Christina donated a copy of her Horse Island book to the group, to be raffled on the day to assist the group. It is fitting that the book was won by Jan Raabe, who has worked with Christina at Horse Island landscaping





some of the gardens around the cottage.

Simon had offered to show us a selection of pollen grains collected from Christina's garden, so while we enjoyed wandering for a couple of hours, he set up a mini laboratory with a microscope so we could have a look at what the pollen of some Australian plants look like.

In each case the pollen grains are magnified x 400



Lunch was enjoyed beneath a canopy of *Eucalyptus camaldulensis 'Blue Veil',* a choice selection released by Peter and

Banksia undata, which we thought we knew as **Dryandra praemorsa**, before all Dryandra were moved to Banksia in 2007. Mind you many still debate the validity of the move, and continue to use Dryandra. Note the elongated pollen with 2 pores.

It was interesting that Simon identified the pollen as belonging to Banksia, although he did not know the name of the plant. Maybe another point to the validity of using dNA to help sort out plant relationships.

A form of **Grevillea whiteana**, known as G. 'Moonlight", and the typically triangular pollen grain of Grevillea, with 3 pores.

Hakea has similar shaped pollen, another pointer to the argument of joining the 2 genera as one, that is move Grevillea into Hakea

Melaleuca incana has the triangular pollen grains typical of this Myrtaceae group

At the end of a very busy but enjoyable day, John thanked Simon for his work in putting together a comprehensive presentation on pollen and its effects, and for the extra effort in collecting pollen samples from the garden for our education.

Finally, Christina was called forward to receive from Phil, on behalf of the group, some grafted plants for her garden, and a bottle of fine wine to enjoy once we all packed up.

This was a most enjoyable day, and everyone I am sure went away more knowledgeable about the role of pollen than when they arrived.

We are very grateful that Christina continues to support the group by offering her garden as a venue for meetings. Alyogyne huegelii has very distinct pollen grains

Slides provided by Simon Haberle

