



NEWSLETTER AUGUST 2016

JULY TALKS

While the nation was heading to the polls and discussing the “democracy sausage”, members of the Southern Tablelands Group were discussing frost and ecology. Once again, in the depths of winter, members listened to fascinating talks prepared by Jen Ashwell and Tim Hayes. And although both are deep wells of invaluable information, interesting talks such as those delivered at the start of the month don’t happen by chance, but require preparation and planning. So on behalf of members, I’d like to thank them for again sharing their knowledge and insight.

As Jen explained at the beginning of her talk, ecology is an enormous topic which covers the relationship between the living and non-living worlds. Just as last year’s talk demystified naming of plants, this year’s gave members a better understanding of the factors impacting ecosystems and plant communities. The understanding we gained will give us a better insight on future walks, when observing differences in plant populations and the factors impacting those communities.

While altitude, seasonal change, latitude and longitude, rainfall and soil type all influence what can be grown in a particular location, secondary factors can also impact what will grow—such as logging, railway lines, fire, grazing and strip mining.

Revegetation was discussed with interest. Rather sadly, considering some of the degraded land we’ve seen during recent walks, it was noted that after significant disturbances, the succession process of revegetation will not return an ecosystem to pre-disturbance state. There will generally be some loss in biodiversity.

Spotting a Grey Butcherbird in my garden for the first time, while writing this article got me thinking about how the terms “species richness” and “biodiversity” as explained by Jen, apply in my backyard. If I understood the terms correctly, both have increased in the four years I’ve been actively promoting habitat. When I first moved in, there was one apricot tree and

lawn (I use the term loosely!) To my dismay, coming from a country garden, where I took for granted a wide variety of avian visitors, the only birds I saw here were Indian Miners, Starlings and Sparrows—all in large numbers, with the occasional Magpie Lark, Magpie and Pied Currawong. Now, after four years of focussed gardening, I regularly see honey eaters such as Eastern Spinebills and Red Wattlebirds, insect eaters such as Superb Fairy Wrens and Yellow-rumped Thornbills and seed eaters such as Crimson and Eastern Rosellas. A very rough calculation of current plant species is upward of 70, including trees, shrubs, ground covers and grasses.

So I’m happy to report there are now more species evident (higher species richness) and they are in more balanced numbers (higher diversity). I can’t wait to see the impact when my trees and shrubs put on growth and provide better protection for welcome visitors.

Considering the time of year and recent snowfalls, Tim’s explanation of frost and its impact on plants was particularly pertinent.

Tim began by explaining the process of frost formation a cellular level, as well as covering some of the properties of water and energy exchange.

He explained the importance of hardening off as one of nature’s best protectors against frost. Goulburn gardeners are well used to this concept, particularly when buying new plants from mild, coastal areas. Sudden changes in weather, including unseasonal warm or cold patches, are very trying to plants.

Tim outlined numerous ways to protect plants from the harshest conditions, such as use of heat banks (brick or stone walls, or round rocks), refraining from using fertiliser which will stimulate growth and lower the sugar concentration in plants, maintaining soil moisture, and slowing the thaw (allowing susceptible plants to “defrost” in the shade).

The use of mulches was also discussed. While mulches retain general heat, they also prevent heat absorption during the day—so the keenest of gardeners *could* go around and move mulch on a sunny day, and then put the plants to bed in the evening but

Presentation; the garden is seen in the last two slides.

Of particular interest to me was Tim's explanation of air movement and the creation of frost pockets (my term). The heavier, cold air heads to the lowest point of a garden. Interestingly, the presence of solid barriers such as fences or banks of plants obstructing air flow will cause the cold air to "gather" forming high frost zones. This could explain why *Myoporum parvifolium* gets severely frost damaged in my garden, but in Raina's garden appeared highly frost tolerant, and also why the reverse was true of *Dianella revoluta*. In mine, *Myoporum* is planted at the lowest point of the garden, in front of a solid fence, so the cold air has nowhere to go. Perhaps this also explains why I've had such trouble with my "fast growing screen" of shrubs—which has had to be replanted between 2-4 times. The only survivors from the first planting are two *Callistemon*—*pallidus* and *phoeniceus*. The former thrives in all seasons, the latter gets severely frost damaged each winter, but then comes back in the spring. I knew the spot was harsh in summer, in front of the west facing zinc fence, I hadn't fully realised the extent of the challenges the plants also face in winter. On the other hand, my *Dianella* is protected from the worst of the frost by a brick wall.

Two weeks on, with the election result now known, and as things settle back into their usual state of inertia on a national level, it's good to realise that on an individual and community level (the wetlands and CE4G), we can make a difference to the relationship between the living and the non-living worlds. Hopefully now, with a better understanding of ecology and frost, we'll also have more successes in our own little patches.



Myoporum parvifolium in Pauline's garden - looking healthy enough now but gets quite browned-off in the depths of winter - note the confining fence.

Thanks to Pauline for the above article. Just to refer to another point that Pauline mentioned - the use of large rocks to act as heat absorbers during the day. It was when browsing some links in the Armidale Group's website that I thought that frost and its effects would be a suitable topic for our mid-year indoor study. I also mentioned the garden of Neil Wilson - a member of our own Group in the very early days.. You can see two views of this garden in the slide presentation that Neil gave to the Armidale Group last year. To view the presentation go to www.aps-armidale.org.au and then take the following route: [Activities - Forum Speakers - Frost Management through Garden Design May 2015](#). That will take you into the PowerPoint

CALENDAR

Sun Aug 7	Banksia Walk Morton National Park
Sat Sep 3	Narrangill NR veg. survey with GFN group
Sat Oct 1	West Goulburn Bushland
Sat Nov 5	Windellama Field Day
Wed Nov 23	Wetlands Garden maintenance
Sat Dec 3	Christmas get-together and walk at Tony and Sandra's property at Back Arm

POTTING -UP

A potting-up morning was held on July 14 and we had a number of people attending despite the short notice. It was held mostly in Jen's sunroom which made it much more pleasant. Again a variety of tasks was carried out; Frank and I potted up things from our cuttings session earlier in the year. Some difficulty is being encountered in getting the right setting for watering with the propagation unit; as we potted up, differences in the wetness of the potting mix were noted from different parts of the unit. The results, though, are good; Jen is doing a bit of fine tuning so that the unit can be set and then more or less left to itself.

WINDELLAMA FIELD DAY

November seems a long way off but now is the time for planning anything extra we might be able to do at this event. Last year we had the kids' activity of putting seed in a prepared pot and taking it home with them. Perhaps, there is some other activity for kids that might be suitable and easy to plan/organise. The seed activity can still be done.

AUGUST WALK

The email detailing the change - noted in red in the calendar above - has been sent out. Notice that the walk is on the Sunday. We will be doing what was to be the June walk in the Morton NP. We will be looking at any banksias around the destination area. We will be stopping at a few spots to see the variation in flora and then move on a bit further. I will bring a few laminated leaflets with a few pea genera on it as I did for the nature reserve walk near Gundaroo. If there are peas in flower, people may like to identify them to the genus level.

TAMWORTH

All committee members excluding myself are heading to Tamworth around August 19 for the District Group get-together. With the current discussion on the Society's plans and directions for the future, there will be some interesting discussion. We thank them for representing us and trust that the trip will be most enjoyable.