

ACCOUNT OF AN APS NSW FOUR DAY VISIT TO PROPERTIES IN CENTRAL WEST NSW

In August 2021 APS (NSW) advertised a trip for interested members to visit the Central West, specifically to Wellington, Burrendong, Dubbo, Narromine and Parkes during October. However, Covid-19 caused it to be postponed until April 1-4, 2022 with adjustments to the venues.

The aim was for APS NSW to establish an interest group in which members share and acquire greater knowledge and skills in how to support regeneration, re-vegetation and restoration of NSW landscapes, leading to greater resilience of the land and the native flora and fauna.

Simply stated, one objective of the Society is to *'support the protection and conservation of native flora and fauna, which can be achieved by the conservation of natural environments, habitat management and the restoration of environments that have been degraded through human activity'*.

The trip was to provide the forty people attending the four day event the opportunity to acquire a greater understanding of native plants and habitat resilience and what individuals and collective groups can do to assist.

The Tour Leader was John Aitken supported by his wife Liz who recorded interviews with property owners and the Manager of Burrendong Botanic Garden and Arboretum together with highlights of the various properties. Also assisting was Heather Miles, NSW President of the APS.

John arranged for members to visit seven properties at Forest Reef near Millthorpe, Dubbo, Narromine, Trangie and Toongi (pronounced *'toon-guy'*). Six of the owners were actively involved in the restoration of the natural vegetation, partially or completely, on their properties and they were very happy to show us what they had achieved so far and to share future plans. Three of the properties we visited were owned by two members of APS NSW; Jean and Basil Baldwin at Forest Reef and Andrew and Jenny Knop who had properties at Dubbo and Narromine.

On Friday April 1 we set off early to meet everyone at 2pm at Jean and Basil's property "Fourjay Farms" at Forest Reef, where first up we enjoyed freshly made hazelnut pancakes and a much welcomed cup of tea. Apart from their Australian native garden, Jean and Basil also farm 500 hazelnut trees and

members were able to purchase some of their products and see the freshly harvested hazelnuts drying in trays. Before taking a walk across their paddocks,



Basil took us for a walk into the hazelnut groves and showed us the giant vacuum cleaner type machine which sucks up the nuts from the ground after the fallen nuts have been windrowed.



From there we walked through several paddocks where over the last thirty years native grasses have been planted together with wide corridors of mature shrubs and eucalypts to connect habitats for wildlife.



A 200 strong flock of Australian White sheep graze the native pastures and provide additional income.



From Forest Reef we travelled onto Orange where several stayed overnight, whilst other members went on to either stay at the Burrendong Sport and Recreation Centre or in Air B&Bs.

On Saturday April 2 our first port of call was an 80km trip to the Burrendong Botanic Garden and Arboretum at 95 Tara Road, Mumbil, where we met Friends of the Gardens (FOG) members at the Visitors Centre. Here they propagate plants from seeds and cuttings, some can be bought, and others are returned to the grounds of the Arboretum. Chris (from APS Hills and Parramatta) also bought several trays of plants to be sold to help with their fundraising. Jim and I purchased a DVD about the Arboretum which is well worth a look.



We met the Manager (Mike Herbert), who has just come on board together with an indigenous horticulturalist (Wiradjuri Nation) and they shared their plans for the expansive 167ha grounds of the Arboretum. Our group was broken into three and set off with our FOG guide in our vehicles to visit various sites.

First up we decided to go to the Eremophila garden established on sloping woodland. Sadly, it was very overrun with weeds and needed a lot of attention with a shortage of volunteers. Some specimens were labelled; others had died. We spent about 30 minutes there before moving onto the Fern Gully which also needs some love and care. There are Tree Ferns, Rough Tree Ferns (*Cyathea australis*) and Scaly Tree Ferns (*C. Cooperi*) and Soft Tree Ferns (*Dicksonia antarctica*) together with numerous cycads such as Lepidozamia and Macrozamia (*M. Communis* and *Nothofagus Cunninghamii*). The more heat sensitive plants are covered by expansive steel mesh netting with some army camouflage for added protection. On the western, relatively shaded side two of three Wollemi pines (*Wollemia nobili*)





have survived amongst the White Cypress-Pines (*Callitris columellaris*). In other sections there are Red Cedars (*Toona ciliata*), Coachwoods (*Ceratopetalum apetalum*) and Sassafras (*Atherosperma moschatum*). There is also a Giant Stinging Tree (*Dendrocnide excelsa*) and numerous giant lilies (*Doryanthes Palmeri*) and (*Doryanthes excelsa*) growing along one of the upper paths. Growing on the rocky face below the Lookout there are Maidenhair ferns and colonies of Giant Maidenhair or Blackstem Ferns (*Adiantum formosum*). There are examples of *Doodia* e.g., (*Doodia australis*) and the Prickly Rasp Fern (*Doodia aspera*) (Reference: Fern Gully Walk, Burrendong Botanic Garden and Arboretum).

Lunch was back at the Visitors Centre sitting next to a Bottle tree (*Brachychiton rupestris*). The Visitors Information Centre contains boards with samples of



eucalyptus woody capsules, hakeas and other seed pods to assist with identification.

After lunch we took a drive to Harris Lookout, where in the distance we could see the blue waters of Burrendong Dam.



The Lookout has been planted with many West Australian Plants such as Hakeas and Book-Leaf Mallees (*Eucalyptus kruseana*).



On the way up to the lookout we came across a stand of striking, flowering gums known as Illyarrie, Red-capped Gum or Helmet Nut Gum (*Eucalyptus erythrocorys*).





From the Arboretum we returned to Dubbo which was our base for the next three nights.

Sunday April 3 was a lovely sunny day as we travelled about 30km south of Dubbo to Andrew and Jennifer Knop's property '*Mottlecah*'.

Andrew shared with us how they came to purchase the 2025 acre property in 2006 which was very degraded from livestock grazing and feral animals. After 16 years of hard yet fulfilling work they have been able to transform this property and the other known as 'Merebone' at Narromine.



To re-create the original vegetation they relied upon records from the early explorers such as Oxley, Evans, Cunningham, Sturt and Mitchell on the types of



vegetation they had noted in their travels in the area. For instance Cunningham had written about *Eucalyptus sideroxylon* known as Mugga Ironbark, or Red Ironbark growing on the western slopes as part of the dry sclerophyll forest. He also recorded sightings of the hopbush *Dodonea calycina*, the peaflowers *Pultenaea sp.*,

and *Dylwinia sp.*

Andrew advised that the property's cultural and biodiversity values are permanently protected by a registered conservation agreement covering 99% of the land. He described the colourful background of the property before it came into his hands, sharing that the previous owner had used the site for a marijuana plantation and dammed the creek. The downstream property

owners investigated why the creek had stopped flowing which resulted in a 'bust'.

'Mottlecah' covers the watershed of three important inland catchments; the *Macquarie* and *Bogan* Rivers and *Backwater Cowal*. It contains high conservation vegetation such as Yellow (*Eucalyptus melliodora*) and Grey Box (*Eucalyptus macrocarpa*) Gums, grassy woodlands and Fuzzy Box (*Eucalyptus conica*) woodlands. There are many distant views and interesting rock formations on the property, so it is thought that perhaps the area would also have indigenous significance.

Andrew took us for a walk along the dirt road towards the back of the property pointing out the remnant natural vegetation on the surrounding hillsides and the presence of mature White Cypress-Pines (*Callitris columellaris*) with seedlings popping up not far from the parent trees. There were also stands of Mugga Ironbark (*Eucalyptus sideroxylon*), paper daisies and acacias.



In his time many of the native grasses, like native Rats Tail (*Sporobolus creber*)



have returned. It is generally found in native pastures or sown pastures that have reverted to native species and is very quick to colonise bare patches.

A good comparison could be seen between his native pasture and the neighbour's cultivated pasture paddock. When trees fall/drop limbs, Andrew



either leaves them or piles them to provide habitat for geckos, antechinus, snakes and lizards.



Piling of fallen timber as refuges for native fauna.

Credit: Greening Australia

To get a better idea of the work Andrew is doing on this property and to see the different types of vegetation, he provided the following Instagram address: https://www.instagram.com/western_woodlands/

One other issue Andrew has just started to experience is the damage wreaked by feral pigs snuffling around for tuberous roots. Traps have been set initially using free feeding in enclosures supplemented by the use of vanilla essence on a rag as an attractant. Once more and more pigs are drawn to the feed and the numbers warrant the trap is sprung.

Leaving 'Mottlecah', we headed to 'Clearview', the aptly named property of Rob and Rosemary Webb at Narromine, on the way passing through some beautiful countryside with many stately trees on the roadside. According to our supplied notes, Rob and Rosemary are 'Landcare pioneers who have managed to successfully combine agriculture and environment themes to improve the water quality, soil and biodiversity for future generations'. Rosemary was not present on the day, so for those people who did not have the chance to enjoy lunch en-route, Rob made us feel very welcome by inviting us to sit on his front lawn in the shade of some ancient pines.

Rob switched to regenerative farming methods after experiencing the effects of the 1982-85 drought where most of his topsoil was blown away. He felt there had to be a better way of farming and set about to implement multiple restoration projects. These included the establishment of native

shelter belts, fodder shrubs such as salt bush (which incidentally if you ever have the chance, Rob advised us to try saltbush lamb chops or similar cuts of meat saying the meat was very tender!) and some years ago, assisted with other landholders and his father, the restoration of the nearby 560 ha section of the *Backwater Cowal Wetland* by undertaking mass plantings of River Red-Gum (*Eucalyptus camuldulensis*) seedlings.

Rob and Rosemary also expanded their agricultural portfolio by growing native plants for the cut foliage/flower business, for example 'Mottlecah' (*Eucalyptus. macrocarpa*).

Following Rob out into the nearby paddock, we could appreciate planting the Old Man saltbush (*Atriplex nummularia*) in parallel rows with native pasture in between to facilitate stock movement. Turning south we could see that one of his paddocks contained a broadacre crop.

We drove out with Rob to the *Backwater Cowal Wetland* which had recently been sold. He does not know what plans the new owners have for this wetland but they have allowed their cattle to graze on the mudflats after the dam holding back water was deliberately breached. Hopefully the new owners will come to accept the importance of wetlands for breeding of local birds and migratory birds. There are several organisations that can help.





He and his family are contesting a proposal for the Inland Rail (freight) Corridor to come through the east of his property with an embankment up to 7m high.

Saying our farewells to Rob, we headed off to Andrew and Jennifer Knop's other property 'Merebone' and Alan and Therese Channel's farm 'Warrina' which is next door to the Knop's property.

Both properties have been re-vegetated extensively, becoming grassy woodlands covering about 17 hectares with a direct link to the Macquarie River and Webb Reserve. In the Narromine urban area, there are three hydraulic floodway areas; the **Macquarie** River Floodway, the Town **Cowal** Floodway on 'Merebone' and the **Manildra** Floodway. Fallen trees are left in position as habitat for native wildlife. Both properties are registered

conservation areas involved with the protection of indigenous flora, fauna and cultural heritage.



As we walked along the 'Warrina' driveway there was a variety of Western Australian shrubs and trees- such as Bookleaf mallee (*Eucalyptus kruseana*) with its beautiful yellow blossoms clustered between the silvery grey foliage, and York Gum (*Eucalyptus loxophleba*) with its lovely rusty coloured trunk.





Crossing over to 'Merebone' we walked across the *Town Cowl Floodway* through some of the revegetated paddocks, admiring saltbush and sites where in the past aboriginal people had used stone tools, some of which have been found exposed on the ground.

Another striking tree was the Mottlecah (*Eucalyptus macrocarpa*) with its giant gumnuts and the buds of a stunning mallee, Scarlet Pear Gum (*Eucalyptus stoatei*)



Continuing our stroll up the drive we came into the front garden to find a beautifully presented array of cakes, dips, cookies and another lovely cup of tea waiting for all of us. Therese runs a cake decorating business and her cakes “were to die for” especially the ornate icing patterns! Too beautiful to eat, but eat we did! A really lovely way to end such an interesting and thought provoking day.

On Monday April 4 we were on the road early on another beautiful sunny day with clear skies headed for one of Bruce and Roz Maynard’s properties at Trangie entering via the ‘*Glenfield*’ gate. ‘*Willydah*’ was nearby. Bruce shared that he had started into regenerative farm methods about 30 years ago with the aim of returning the land to a natural landscape. They have planted about 200,000 trees and 350,000 saltbush shrubs across 1500 hectares, where he farms with livestock and mixed cropping. Like other farmers in the district they too have had their ups and downs. Worsening



drought and severe dust storms, where they watched their topsoil become airborne, forced them to destock and reconsider how best to future proof their properties.

Saltbush block plantings originally evolved to various patterns (strips/spirals/ concentric circles/rectangles) over the years with alleys of

native pasture in between. The saltbush has provided extra fodder for the sheep and cattle and the patterns provide varying degrees of stock protection from wind and reduction of plant transpiration and soil moisture.



In another paddock his son demonstrated '*No Till No Kill*'. They have allowed the natural grasses to return, even weeds because he feels that every plant contributes different nutrients to the soil.

Oats were being sown into furrows in natural grassland using a tractor drawn airseeder. When the oats come to a head he simply turns the sheep out into the



paddock. He is changing to ancient heritage grains and starting to work with indigenous food companies.



He practises '*no stress, self-herding*' with his stock. If you would like to read more about this <https://www.youtube.com/watch?v=G2zMG371npM> or in your search engine: type 'Bruce and Roz Maynard - The Lazy Farmers from Narromine'.

There is also a small nursery where Bruce and family members collect their own native seed and propagate same before planting the trees out onto the property.

From the paddock we drove out to a former Crown road which has been sold and subsumed into private properties. However, unlike other farmers who removed all the natural vegetation and just used the land to plant more crops, Bruce





restored the corridor with native vegetation, e.g., Bimble Box, Kurrajong and Callitris-Pine.

Following lunch we departed for Toongi Hall down the Obley Road past the entrance to Taronga Western Plains Zoo.



It was such a beautiful place, a wide cleared area with magnificent old gums and a beautiful afternoon that I think I could have just stayed there. Our guide from Australian Strategic Materials (ASM)/ Toongi Biodiversity Offset explained the rare earth mine which was to be developed in stages over the next twenty years working life.. ASM has fenced 1021 ha of Biodiversity Offsets across a 3,715 ha property where there is plenty of regenerating White Box Woodland, Inland Grey Box, Fuzzy Box, Dwyers Gum, White Cypress Pine and heathland community on Dowd's Hill.

The rare Pink-Tailed Worm Lizard has also been discovered at this site and replacement rocks have been put in place to translocate the species as required.



ASM

Leaving our vehicles near the site to be mined amongst the dead scotch thistles, our guide took us through the gate into the offset woodland and along the track.



Foxtail spear grass on Dowd's Hill

Stipa densiflora



ASM

It was hard to believe that the open cut mine would eventually measure 500m in diameter and 115m deep.

The view from the top of Dowd's Hill across the Toongi countryside is quite spectacular!



From Toongi we returned to our accommodation and left for home on Tuesday morning.

Truly an amazing journey just to see the countryside and the work being done by committed farmers to return some if not all their land to natural pastures or to develop natural grasslands together with vast tree plantings alongside conventional farming methods, to conserve habitat, biodiversity and link fragmented landscapes. A great long weekend enjoyed by all!

References

<https://asm-au.com/sustainability/biodiversity/> about ASM policy on biodiversity at the Rare Earth Mine site

<http://www.youtube.com/watch?v=aqDEf9JGT7> for info about the Pink Tailed Worm Lizard

Photography for the article - Ricki and Jim Nash APS Parra-Hills

Take-out

There is a building concern for conservation and regeneration but all our hosts acknowledged the short-term commercial constraints holding back many property owners. The overarching messages were:

1. You have to be passionate.
2. It helps to have deep pockets.
3. You need a long time frame.
4. You need a degree of confidence that the course you have set and the advice that will help you along the way will see you through.
5. Be prepared to re-set your course as knowledge is gained.
6. You need local, state and federal governments and agencies to be onboard with assistance and funding.
7. Volunteer groups such as APS with their collective depth of knowledge can contribute to the wider dissemination of and advocacy of *'support for the protection and conservation of native flora and fauna, which can be achieved by the conservation of natural environments, habitat management and the restoration of environments that have been degraded through human activity'*

Special thanks for all the organisation that went into making the trip such a success and to our hosts.