



Network News



Newsletter of the Wedderburn Conservation Management Network – October 2012

Conserving Biodiversity

Interdependent Fauna and Flora in the Wedderburn environs

Mistletoe is often regarded as a parasite of shrubs and trees however Mistletoe produces its energy through photosynthesis and functions only in a semi-parasitic mode. Continuing studies are demonstrating the importance of mistletoe for biodiversity in degraded bushland. (Watson D. M. & Herring M 2006)

Too often we see the wonders of fauna or flora as isolated observations and miss the complexity and beauty of the co-evolutionary relationships. Mistletoe is a good example to illustrate some of these inter-dependencies.

At least four species of Mistletoe occur around the Wedderburn/Mount Korong locality and one, the Grey Mistletoe *Amyema quandang* Fig 1 can be seen on Cootamundra Wattle *Acacia bayleania* in gardens around Wedderburn and is common on Dean's Wattle *Acacia deanei* ssp. *paucijuga* and Wallowa *Acacia euthycarpa* around Mount Korong.

The flower structure of Mistletoe is designed to transfer pollen to and from the head of visiting honeyeaters such as New Holland Honeyeaters Fig 2 commonly seen attending the flowers. Mistletoe

Birds Fig 3 follow the fruiting cycle of mistletoe species and consume the fruit. The digestive system of Mistletoe Birds is modified to facilitate rapid transit of ingested fruit and the bird's behavior is adapted to increase the chance of seed falling to a suitable growth position on a host plant. These birds perch atop the host tree and frequently turn parallel to the perch twig prior to voiding the seed which emerges like a necklace of pearls, to slowly drip down through the foliage.

Fig 4 is of an *Ogyris* butterfly whose larvae are dependent on the attendance by certain ant species. The butterfly has brilliant iridescent metallic blue upper wing surfaces that flash in the sunlight and are hidden from view as the insect keeps wings together when perched on the mistletoe.

The obvious thought to ponder when considering these examples of interdependent associations is which species is dependent on which other species for ongoing function of this component of the ecosystem?

Article – D. Stewart

Images in Figs 1 to 4 (descending order) were taken near Mt. Korong and Wedderburn by D. Stewart.

This complete article including all photographs will be made available on the blog.



WCMN Field Day – Visit by St Arnaud Field Naturalists Club

On Sunday 26 August 2012 the WCMN hosted a field day for members of the St Arnaud Field Naturalists Club. Peter Watts led the group on a visit to an active Malleefowl mound at Wychitella NCR and gave a great talk on his observations of local birds. The group were especially keen to discuss his experiences with monitoring the birds using motion sensor cameras.

After lunch at the Skinners Flat Reservoir picnic area, Jeroen van Veen of Australian Bush Heritage led a tour of the Nardoo Hills reserve, where the group observed several rare plants and discussed management issues. They then participated in a tree planting exercise on the reserve.

The day was a great opportunity for members of both organisations (WCMN and Field Naturalists) to come together and share their experiences and knowledge.

Article and photograph – Karly Learmonth



Enjoy the wealth of wildflowers

We really are enjoying walking in the Wychitella Nature Conservation Reserve at this time of year. It's Spring, the wildflowers are everywhere, the colours and varieties so diverse. A few weeks ago in among the bushes flashes of purple colour seemed to be everywhere. They are the easily recognisable and quite large Wax Lip orchids. The Wax Lips were preceded earlier in the month by the more subtle colours of delicate pinks and blues of the Caladenias, smaller orchids, but beautiful. In some places we have also seen the lovely creamy white Hooded Caladenia orchids. The commonly seen orchids of our district come in many colours. The yellow and brown of Leopards, the Purplish Beard orchid and the many forms of Greenhood. With hotter days we have been fortunate to see some small populations of Sun Orchids which only open up when the temperature is warm enough. On one morning walk we were surprised to find a few groups of Rabbit Ear orchids fully open, early in the morning. This area also has some special orchids. Green Comb Spider orchids seem to be favourite food for wallabies and it's wonderful to spot one of these spectacular orchids in flower. The delight we experience when observing these beautiful wildflowers in the bush is because they are special plants and an important part of the biodiversity of nature. When talking to older community members they describe how decades ago wildflowers were in abundance in some favourite places and how they were picked by the armful. It is an important message that over the years the numbers and variety of species of wildflowers have decreased along with suitable habitat for them. Take the opportunity to admire and appreciate the wildflowers that are still present in the bush. Take photos and leave the flowers there for future generations.

Wedderburn Conservation Management "Observers"

Photo to accompany this article is of a Wax Lip Orchid



Analysis of avian diversity in a fragmented southern Mallee habitat

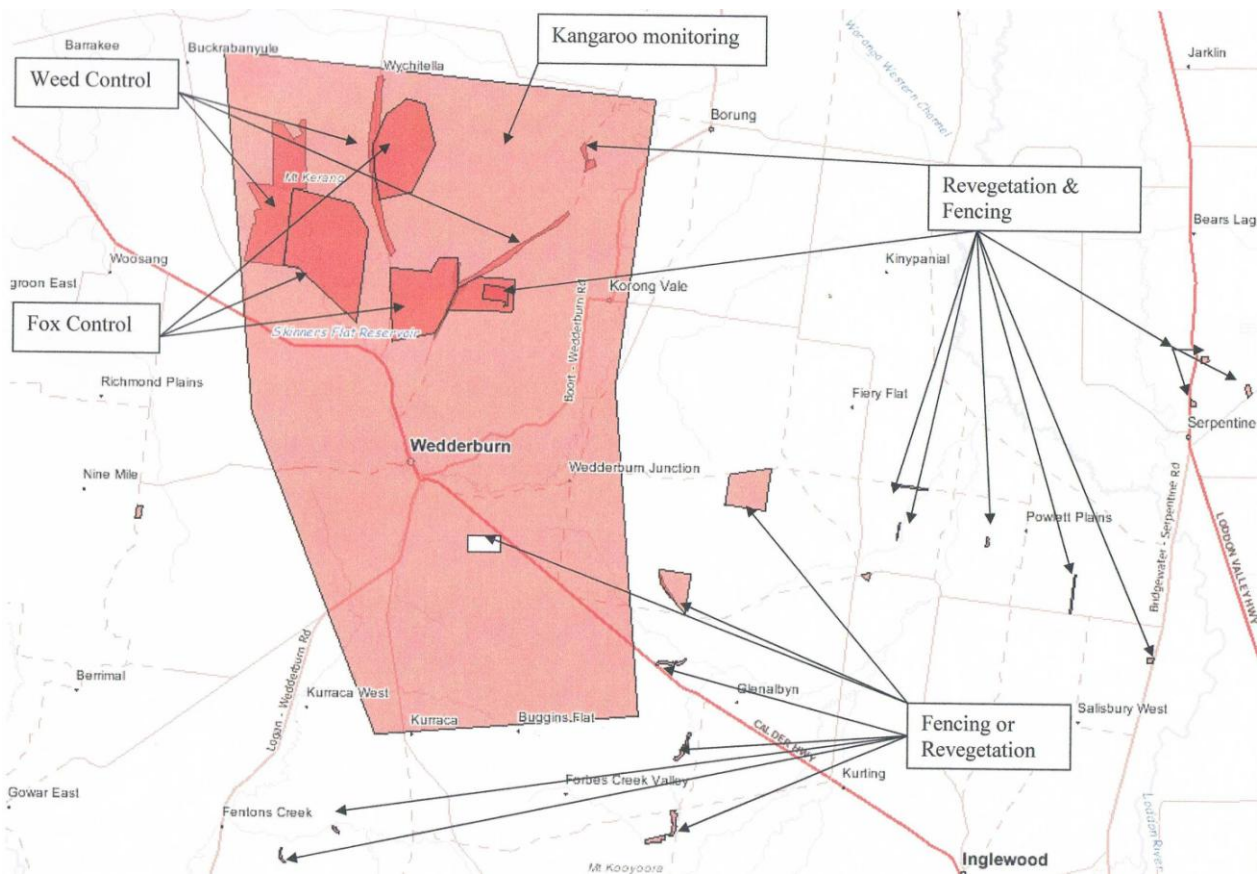
As an Honours Year project with the University of Ballarat, the avifaunal communities of the Wedderburn area will be surveyed. This work follows that of Gell (1985) who surveyed the area 27 years previously to determine the effect of reserve size and isolation on bird communities within Mallee habitat. In re-surveying these southern Mallee remnants, the proposed project will utilise the results of Gell as baseline data to determine the changes to community composition along both temporal and spatial scales.

It has been demonstrated that species decline as a result of habitat fragmentation may experience substantial lag times; with the loss of species continuing many decades following a disturbance event. This proposed project will examine the changes to have occurred with the bird communities in the Wedderburn area and assess whether the management practices of the past 30 years have succeeded in halting the loss of species. Several of the survey locations are within Parks Victoria boundaries including the Wychitella Nature Conservation Reserve, Wedderburn State Forest, Barrakee Bush Reserve, Nardo Creek Bush Reserve and Wallaby Way Bush Reserve

Article -Tom Miller

The Wedderburn CMN area of interest

A question frequently asked by interested people is “just how big is the Wedderburn CMN’s area of interest”. The map and accompanying information given below will give some idea of the current scope of on-ground network projects.



What Birds use the Wedderburn Landscape – Saturday 8 September

Fifteen participants attended the Bird watching event of the Naturally Loddon, A Wonderland in Spring Festival. Very windy weather was not the best environment for bird watching, but during the course of the day a substantial list was noted, numerous species having been heard, but not seen. The morning activity was held at Doug Pocock’s property which offers a variety of different habitats for birds. We split into two groups, went different directions, and then met later to compare sightings. Over the lunch break Michael presented a brief outline of the WCMN, its area and activities. The afternoon was spent at Mt Kerang bush heritage property. Jeroen described many species that are found on the property, and the keen eyes of the students spotted the painted button quail, a significant sighting.



This was a successful day of bird watching, in spite of less than favourable conditions for this activity. We did gain an insight into what birds do actually use the Wedderburn Landscape.

WCMN Guest Speaker Evening – Dr Linda Broadhurst, CSIRO

On 22 August 2012 the WCMN hosted a guest speaker evening at the Empire State Hotel in Inglewood. Dr Linda Broadhurst, a research scientist from CSIRO in Canberra spoke to the group about seed genetics and seed provenance in revegetation jobs.

The event was a great success, with 25 people attending. Participants spoke highly of the presentation, with several commenting that the content was “complex but clear”. As well as discussing how genetic diversity comes about, Linda provided several case studies of Victorian species, and provided useful and practical advice to participants about local issues. Some of the key messages of the evening were:



- It is hard to do irreparable damage when carrying out revegetation works.
- Large trees are important reservoirs of genetic diversity in the landscape.
- When collecting seed, harvest over several successive years, and from all sides of the canopy. Blend seed from successive years together to improve genetic diversity in revegetation jobs.
- Strong evolutionary forces such as saline soils, or particularly wet or dry climates cause local adaptation – if these strong selective pressures are not present in your area, bringing in new species to boost the gene pool can be a good thing in revegetation.
- Create a buffer zone around revegetation sites if pollution of the gene pool is a concern – ask yourself “is it better to get these plants back in the landscape?” Assess the risk, and be aware that cross-pollination may occur.
- When working in very high conservation significance sites, be more cautious about mixing provenance than you would be when working with a degrading remnant of lesser conservation significance.

There was strong feedback from participants that they would like a follow up workshop on seed collection and treatment. This will be arranged for sometime over the coming months.

The WCMN is a network including interested individuals and both public and private land managers who come together to promote a shared aim. That shared aim is to work with the community in general to promote profitable, productive and sustainable human enterprises while conserving and indeed enhancing the biodiversity of their area of interest.

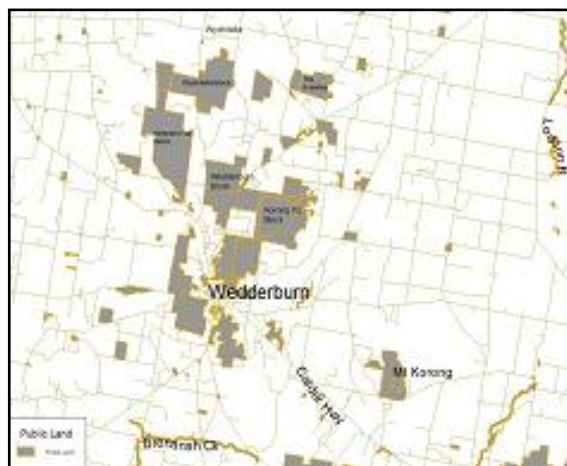
For further information concerning any items in this newsletter or other aspects of the WCMN contact **WCMN ranger, Karly Learmonth- 0429 356 285**
WCMN President, Michael Moore – 54943542
Website addresses

wedderburncmn.org

<http://wedderburncmnnews.blogspot.com/>

<http://lplnnews.blogspot.com/>

LPLN- Loddon Plains Landcare Network



The WCMN Area of Interest

‘Proudly supported by the Victorian Government Landcare Grants Program’.



NORTH CENTRAL
Catchment Management Authority
Connecting Rivers, Landscapes, People



CARING
FOR
OUR
COUNTRY