



Gypsum lake at Koobabbie

MCC was fortunate to be able to conduct their July 2010 OGM at the beautiful historic employee cottages at Alison Doley's farm 'Koobabbie' near Coorow. The meeting was followed by a tour of the naturally-saline wetland system (including a gypsum lake) on the western edge of 'Koobabbie', and sites of revegetation and surface water management.



From left, Duncan Peter, Alison Doley, John Longman, Lawrie Short, Jan Waite, John Braid and Peter Waterhouse in a stand of *Melaleuca uncinata* complex at the primary saline lake system.



Alison is on the steering committee of the Buntine-Marchagee Natural Diversity Recovery Catchment (BMNDRC) project, a DEC initiative responding to the threat of altered hydrology on biodiversity. (An article on the BMNDRC project follows.) In addition to her personal contributions to NRM at Koobabbie, including the first 50 km of fencing of remnant vegetation, Alison has received funding from the BMNDRC project, the National Heritage Trust and NACC's Saline Lands project.

Alison is active in the conservation of Carnaby's Black Cockatoo. The farm's salmon gum and gimlet woodland provides suitable nesting hollows, which are supplemented with 7 artificial nests, part of a trial that established their ready acceptance by Carnaby's Black Cockatoo. Nesting hollows occur in trees greater than 130 years old. They are in short supply since agricultural clearing and tend to be invaded by plague species of Corella and Galah, so Alison undertakes shooting and egg removal to improve the likelihood of successful breeding for the endangered Carnaby's Black Cockatoo.



At left, remnant bush has been enhanced and protected by extending the width of the woodland belt to 60 m through revegetation using *Eucalyptus loxophleba* (York gum), seen in the middle of the photo.

At right, a site low in the sub-catchment has been revegetated using *Eucalyptus loxophleba* (York gum) with an understorey of *Atriplex amnicola* (river saltbush) to enhance water use and reduce risk of salinisation. Established in 2008, the site has produced excellent plant cover and has already provided fodder for sheep.





Alison showed us a translocation site for declared rare flora. *Eremophila koobabbiensis* (left) is listed as Critically Endangered at state and national levels, its only known occurrence being small populations on Alison’s farm, which regenerated after remnant vegetation was fenced in 1989. The species grows in association with the Priority 2 declared rare species, *Eremophila sargentii* (right), in salmon gum and gimlet woodland. Alison set aside an area where these two species were planted in 2008, propagated by cuttings, to ensure their preservation.



Planting density is a topic of entertaining debate between Alison and the BMNDRC staff. Alison would prefer to have trees planted at 5 m spacing because an eventual spacing of 15 m is desirable where trees are being planted to provide nesting hollows. David Pongracz and Gavan Mullan (BMNDRC) are of the opinion that high density of young recruits occurs naturally after disturbance, and competition between individuals will sort out the final density. There is sufficient genetic diversity among seedling stock for there to be variation in ability to survive strong competition. Furthermore, good canopy cover reduces weeds within a few years. Time will tell whether the extra cost of higher density is worth it.

At right, 2008 site showing good growth at high density (~2 m between trees).



Eucalypt species composition reflecting the sequence of soil types across the sub-catchment

As a relatively large amount of the original vegetation still remains on Alison’s farm, the sequence of varied soil types in the higher parts of the landscape, through the clayey loams of the mid slope flats, to the more sandy soils surrounding the primary saline lake system, is strongly reflected in the eucalypt species composition of the remnant woodlands.

Increasing distance from the lakes →



Eucalyptus brachycorys

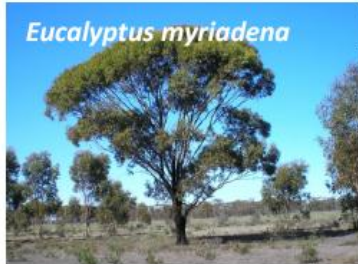
Circling the salt lakes is woodland of *Eucalyptus brachycorys* (left), a mallee species.



Eucalyptus sargentii

Next closest to the lakes is *Eucalyptus sargentii* (salt river gum - left) woodland, also with *Melaleuca* middle storey.

Salt river gum has often been used to revegetate salt affected areas.

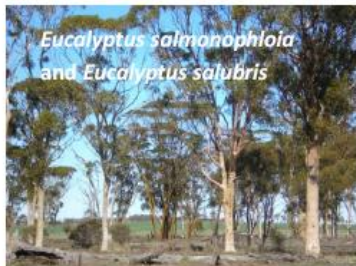


Eucalyptus myriadena

Further away from the lakes is *Eucalyptus myriadena* (left) woodland, which graduates into *Eucalyptus longicornis* (red morrell - right) woodland of the productive morrell soils.



Eucalyptus longicornis



Eucalyptus salmonophloia and *Eucalyptus salubris*

The heavier soils of the mid slope flats support mixed *Eucalyptus salmonophloia* and *Eucalyptus salubris* (salmon gum and gimlet - left) woodland.



Eucalyptus salubris

And the higher parts of the landscape are inhabited by mixtures of York gum, salmon gum and gimlet (left), depending on soil type.



Gypsum lake at Koobabbie

Photos by Peter Waterhouse and Ingrid Krockenberger



Black-Winged Stilt on a freshwater claypan wetland at Koobabbie



At a subsequent visit to Koobabbie, Black-Winged Stilt were observed on a freshwater claypan wetland (above). Birds such as these are a noticeable sign of the ecological importance of wetland ecosystems.

Alison pointed out an area around the lake edges which provided habitat for the Rare and Endangered *Ptilotus fasciculatus* (Fitzgerald's Mulla-mulla). This perennial species (left) forms a mat which holds the soil together, forming a small mound. It has the unusual seasonal response of resurrecting after rain, changing from crisp and brown to leafy green when sufficient moisture is available. The species was thought to be extinct until collections made in 1987 were correctly identified as *Ptilotus fasciculatus* in 2000.

MCC Annual General Meeting 1st October 2010

The MCC's AGM was held at the Moora Bowling Club on Friday 1st October with a variety of committee members and community attending. The positions of Secretary and Treasurer were up for re-election with Duncan Peter and Cynthia McMorran again putting their names forward and reprising their roles for another year. Praise was given to Helen Watkins and the NRMOs for putting together an informative and interesting annual report.



Above: Melanie Bainbridge (WALGA) prompted much discussion

Chittering Landcare Centre gave an in-depth and thought provoking presentation on how their region operates and where they receive funding from. Rachel and Ingrid from MCC gave a presentation round up of activities and projects MCC have been involved with over the last year.

The AGM ended with a great lunch provided by the bowling club, and was followed by an OGM.

Chris King and Shelley Spriggs from NACC were present and commented on the direction NRM is heading in the Northern Agricultural Region, and what MCC should be doing to stay in front.

Special guest speakers for the AGM included Melanie Bainbridge from WALGA, who spoke extensively about her role as the Climate Change Coordinator, and what tools and training WALGA are offering to local government and groups. Rosanna Hindmarsh from the



Above: Rosanna Hindmarsh's presentation



2010 Victoria Plains Wildflower Walk

MCC was pleased to be involved with the 2010 Victoria Plains Wildflower Walk, held on 19 September at Calingiri. Ingrid, along with Department of Environment and Conservation (DEC), World Wide Fund for Nature (WWF) and other enthusiasts, guided tours of natural bushland for about 80 visitors. MCC sponsored the photographic competition.



Sarah Mason (right) and the friendly behind-the-scenes team all worked hard to ensure the day was success. Along with local produce stalls and a team from Land for Wildlife, a popular stand was the Kaarakin Black Cockatoo Rehabilitation Centre display.



(Left) One of many spectacular wildflower displays, picked from Sarah and Geoff's vast and impressive stands of revegetation at Carrah Farm, Calingiri.



Mother and daughter, Nicole (left) and Kelly McInnes of Calingiri, won first place adult's and first place children's photography. Nicole's photo of Carnaby's Black Cockatoos also won the people's choice award.

Harmony the Carnaby (right) was happy to demonstrate how to extract nutritious seeds from woody fruits, their food in the wild. Harmony was rescued and rehabilitated but is not suitable for release back into the wild.



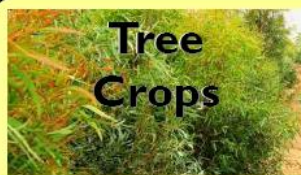
This endearing bird is now part of a group of educational Black Cockatoos helping to raise awareness of the plight of rare and endangered cockatoos, and to promote the activities of the Kaarakin Black Cockatoo Rehabilitation Centre in East Martin, just outside Perth (website for the Centre: <http://blackcockatoorecovery.com>).

(Below) Wild Carnaby's Black Cockatoo feeding on dryandra and hakea heath in remnant bushland in the NAR.



NACC have recently reviewed and updated their incentives program to make it more attractive to apply. Tree crops now have further options on top of just oil mallees that include sandalwood and brushwood. The fodder shrub (saltbush) incentive has been doubled to a maximum incentive of \$8,000 which could help plant up to 47 ha of saltbush !

If you're interested in any of these then give us a call to discuss on **9653 1355**.

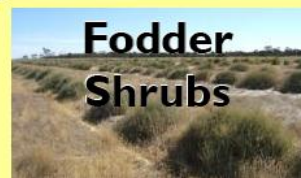


Tree Crops

Overview: Incentives available for Sandalwood host species, oil mallees and brushwood

What do I get?

- Up to \$250/ha
- Membership to industry group for one year ie Oil Mallee Association

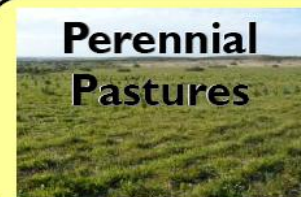


Fodder Shrubs

Overview: Incentive available for saltbush and rhagodia sp. Also plain and mesh fencing

What do I get?

- Seedling - \$0.20 each
- Fencing - \$2,000/km (mesh). \$1,000/km (plain)



Perennial Pastures

Overview: Incentives available for sub tropical perennial grasses, tagasaste, fencing and watering point

What do I get?

- Pasture - \$85/ha
- Fencing - \$1,725/km (mesh), \$1,150/km (plain), \$575/km (electric)
- Watering point - \$1,000 each (max 1)



Strategic Revegetation

Overview: Incentives available for fencing, weed and rabbit control, and seedlings

What do I get?

- Fencing - between \$1,150 & \$3,450/km depending on size of area
- Re-veg - \$750 - \$1,000/ ha
- Weeds - \$30/ha/yr. Rabbits - various rates



Rabbit Control

Overview: Incentives for fencing, 1080 baiting, fumigation and warren ripping

What do I get?

- Baiting - \$20/km/yr. Phostoxin fumigation - \$20 per warren
- Warren ripping - \$50 per warren
- Exclusion fencing - between \$4,500 - \$6,700/km dependant on size

Farmer focus

Who: Phil Martin

Where: Warrooga Farm, 10km N Watheroo

What: Sheep and crops on 2800ha

Env problems: wind erosion, rising ground water,

salinity, non wetting sands, spiny rush

NACC funded projects: Rivercare, Wetland protection, Perennial Pastures, Eastern Oil Mallees & Tree Crops

Phil's comments: Farm has lower level of wind erosion compared to five years ago. Stock and crop yields have improved as well as biodiversity. Look at your farm holistically - use a variety of tools to improve the land.



Above: Stanley Yokwe (Regional Landcare Facilitator) with Phil Martin looking over his 2009 oil mallee project in June 2010. These oil mallees, coupled with other native plantings, have drastically reduced wind and water erosion on the farm.

There was a fabulous turnout of over 60 farmers, industry reps, community and students at the Moora-Miling Pasture Improvement Group's Spring Field day held on the 22nd September.

The day included a bus tour which stopped on Creslow Rd at Richard Humphry's new saltbush pasture. Tony White (president of MMPIG) gave an overview of the project followed by Richard who was on hand to explain why saltbush is an integral part of his farming system and how the project has helped him. Ian Pulbrook (Greenoil Nursery) then explained the saltbush species used and the planting methods employed during the project.

Everyone then had a chance to inspect the pasture, which looked pretty good considering the prolonged dry weather.

The MCC/MMPIG saltbush project is now nearing completion with formal post seeding inspections, payments, and a project booklet and DVD left to do.



Above: Richard Humphry talked about why he likes saltbush in his farming system

Below: Massive crowd attends MMPIG field day



Photopoint Monitoring of 2007/08 Saltbush Project

As part of the MCC saltbush projects, annual monitoring is conducted to provide a visual record and to gauge what changes the saltbush pastures make to the project sites long term. This helps with determining whether the works carried out actually worked - for the environment and the farmer as well as further afield, and also with developing new projects.

Below is Neil Pearse's saltbush pasture near Miling which is situated in a waterlogging prone salty site (valley floor). It has been designed to help with water control (ground and surface) and provide autumn stock feed. So far it looks fabulous !



2008



2009



2010

Dalwallinu Show 21 August 2010

MCC shared a booth at the Dalwallinu Show with Lizzie King and Dene Solomon of the Yarra Yarra Catchment Management Group. NACC CEO Shelley Spriggs and NACC Landcare Facilitator Stanley Yokwe lent a helping hand. Lizzie brought along oil mallee and brushwood seedling give-aways, which helped to bring in lots of people for a chat about all things NRM.



Above: NACC, YYCMG and MCC with their combined display at the Dally show

Moora Show 17th & 18th September 2010

MCC shared a stand with the West Midlands Group in the Robert Keamy Exhibition Shed. We had over 900 native tree seedlings to give away courtesy of Bauxite Resources Ltd, which were a massive hit and brought in the crowds. NACC had given us framed photos to give away for new signed members which also proved popular with nearly thirty entries. All in all it was a great day with our stand coming 2nd in the show for a non profit organisation display.



Above: Hellene McTaggart (WMG), Ingrid Krockenberger (MCC) & Rachel Walmsley (MCC)



Above: The MCC/WMG/NACC display - lots of people came for the free seedlings and to talk to one of the NRM staff

Upcoming events

- ★ 26th/27th Oct - NACC AGM & bus tour , 9938 0100
- ★ 27th Oct - Gingin water meeting, 9279 5831
- ★ 3rd Dec - MCC Christmas OGM, 9653 1355

**Moore
Catchment
Council**



*protecting the natural resources
in the Moore River Catchment*



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