Coorong, Lower Lakes and Murray Mouth Recovery



Community update

May 2016

This email newsletter is published by the <u>Department of Environment</u>, <u>Water and Natural Resources</u> (DEWNR) to update the community about work being done to secure the future of the Coorong, Lower Lakes and Murray Mouth (CLLMM) region as a healthy, productive and resilient wetland of international importance.

The CLLMM Recovery Project is part of the South Australian Government's Murray Futures program, funded by the South Australian and Australian Governments.

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Coorong and Lakes Photo Competition 2016

The Coorong and Lakes Photo Competition was held in late 2015 to celebrate 30 years since the site's listing as Wetland of International Importance under the Ramsar Convention.

The wetland, which houses the River Murray mouth (and the longest and largest river in Australia), and an array of habitats, was originally nominated under the Ramsar Convention (an international treaty that aims to halt, and where possible, reverse the worldwide loss of wetlands) on 1 November 1985. It was the 25th Australian Ramsar site to be listed.

The photo competition provided photography enthusiasts, whether visiting or living in the wetland, an



Overall winner, Our Wetland - 'Coorong's soul' by Brayden Mann

opportunity to capture what they felt was most special about the area.

A popular recreational and tourist attraction, the Coorong, Lakes Alexandrina and Albert wetland is also home to irrigated agriculture, and commercial fishing. The wetland supports a range of aquatic



ecosystems and communities, from freshwater to marine. It supports nationally and internationally significant flora and fauna, and provides critical habitat for a range of migratory bird species. The Ngarrindjeri people have a long association with the Ramsar site which has great cultural significance.

The winners of the competition were announced on World Wetlands Day on 2 February. There were over 180 photos received from a range of people who live, work and play in the wetland. The quality and diversity of images was truly impressive. Check out the winning images online at http://www.environment.sa.gov.au/coorong-lakes-photo-comp

The overall winner of the competition was 'Coorong's Soul' (pictured above) by Brayden Mann, who took home the major prize of a \$1000 Diamonds Camera and Video voucher and a training course valued at \$500. Brayden is a student from Victor Harbor High.

Category winners were also announced, each receiving a regional experience prize from Canoe the Coorong, the Spirit of the Coorong, or National Parks South Australia.

Category winners were:

Our Wetland – Sally Grundy from Mundoo Island Station via Goolwa
Wetland Habitat and Landscapes – Patrick Boylan from Mount Gambier
Wetland Flora and Fauna – Beth Nixon from McCracken
Threats including Pests and Weeds – Michelle Forte from Brompton
Wetland through time – Beth Nixon from McCracken

We asked each of the winners to provide a quote asking what inspired them to submit their photos, or what is was that they enjoyed about the competition and this is what they said:

Brayden Mann – Coorong's Soul (image above)

"Having a Shack on the Coorong has meant that I have been able to grow up in the extraordinary ecosystem. So far in my 17 years of living I have seen the Coorong in its best state, and its worst. I remember the times of harrowing drought, extremely high salinity levels and devastatingly low salinity levels.

I have seen native species and introduced ones come and go, from birds to Mulloway and now Carp to Seals. I have witnessed sand dunes move from summer to summer and vegetation spread over entire areas. I have seen the Murray Mouth open and close more times than some of the barrages do.

After all I have seen, I can be certain of one thing; that the Coorong will never be completely safe to thrive as the incredible ecosystem it is. It will always face threats, living and non-living. There will be years where the wildlife are thriving and other years where they will be disappearing. This is why this photography competition is so important. The Coorong changes year to year, and through photography we can capture the good times. The good times when the wildlife is abundant, the Murry Mouth is flowing and the ecosystem is alive.

These photos won't just be excellent as tourism resources, but they will serve as a timeless reminder of what we need to fight to preserve. Even photographs of the bad times will be just as influential. The bad times when the water has dried up, the wildlife is dead and the Murray Mouth has closed over should be photographed and displayed to motivate people to help save and preserve this truly unique and beautiful ecosystem.

The Coorong must be helped, and even a photography competition is a great contribution to doing so. We can help protect it now, but we cannot save it later. Initiatives like this one are the reason we





will never let the Coorong get beyond the point of no repair, so people long into the future will be able to enjoy this astonishing ecosystem just as we have fortunately be able to."

Sally Grundy - At one with Nature

"I am lucky to live and work in one of Australia's most beautiful and unique environments – the Lower Lakes and Coorong. I carry my camera with me to work everyday on our Mundoo Island Station so am able to capture some amazing images.

We have many international tourists and their reaction to our environment is testament to how special the Lower Lakes and Coorong are. The natural environment in which I live and work is my photographic inspiration as my canvas changes daily."



Our Wetland: 'At one with Nature' by Sally Grundy

Patrick Boylan - Divisible by Three

"I submitted 'Divisible by Three' as I am fascinated by the bright and variable colours of halophytes, the salt tolerant plants that fringe the riparian zone of the Coorong salt pans. These hardy little plants provide an ecotone between the saline environment of the dried lake pan and the outside

perimeter of the riparian zone.

Very often these little plants are overlooked as a part of the ecology of the harsh and ever changing saline environment of the Coorong and lower lakes. The colourful contrast of halophytes, salt and sky was an attractive photographic composition across the limnological continuum".



Wetland Habitat and Landscapes: 'Divisible by Three' by Patrick Boylan

Beth Nixon – Black winged stilts Beth Nixon – Wreck of the PS Albion

"As a keen photographer I spend many hours downstream from the Goolwa Barrage capturing images of wildlife and, in particular, birds. When I heard about the Coorong and Lakes Photo Competition I thought that it was potentially a great way to share my photos with others.

The competition description stated: 'One of the aims of the competition is that all winning photos will feature in the updated Coorong and Lakes Alexandrina and Albert Ecological Character Description.' That was a great incentive to enter and hopefully to show others the beauty of the region".



Wetland Flora and Fauna: - 'Black winged stilts' by Beth Nixon







Wetland through time: 'Wreck of the PS Albion' By Beth Nixon



Threats including pests and weeds: - 'The Wetlands Desert' by Michelle Forte

Michelle Forte – The Wetlands Desert

"I love capturing nature – at its best and its

worst. On the day I went out to capture photos for the competition, it was amazing to see that on one side of the road was this beautiful body of water, surrounded by so much greenery and wildlife, whilst on the other side of the road – it was almost desert-like. The harsh conditions of Australia show no mercy. I guess that's what I love and hate about it"!

Also celebrating World Wetlands Day, a video was produced by the Recovery Project to illustrate why the Coorong, Lower Lakes and Murray Mouth is so important to members of the local community, available online: https://youtu.be/Y5kJF5-ID5s. You may see some familiar faces!

Hubs of activity on the Lakes

The Lakes Hub has released its 2014-15 Annual Report demonstrating its extensive role in sharing information and encouraging collaboration in the Coorong and Lakes region. Read the full Lakes Hub Annual Report.

Based in both Milang and Meningie, the Lakes Hub has recorded some impressive statistics about what kept them busy over the 2015/16 year.

The Hub was contacted for information 20,000 times over the 2014/15 Financial Year – that's an average of more than 80 contacts per day.

The Hubs staff and volunteers provided information on the Lakes and Coorong to visitors, government staff and the community 11,887 times – this equates to 50 instances per business day. The front desk was also busy and a total of 2711 people visited either the Milang or Meningie Hub in person over the financial year.

In the online arena, there were more than 7622 website visits with most visitors downloading the monthly community bulletins. The Lakes Hub Facebook page has also helped connect community with news about what is happening in the region, with 165,697 impressions over the financial year.

Aside from sharing information, the Hub support collaboration and engagement in the region between community and Department of Environment, Water and Natural Resources. In 2015/16 the Hub supported the Community Nurseries Network, which employed up to 40 local people and approximately 40 volunteers each month. A total of 18 school-based events were run by the CNN coordinator.





The Lakes Hub were also out and about in the region and ran 20 community events which attracted 340 attendees. Staff also provided community members with information on more than 120 environmental training and education opportunities provided to local groups and other organisations. Lakes Hub coordinator Faith Coleman says:

"I joined the Lakes Hub in 2014, because I believe that community understanding and ownership of the issues they face is critical to them being able to solve them. This is what the Lakes Hub was established to do, in the face of the Millennium drought.

"Over this year, we have seen a significant shift in the way our community engages with us, from more traditional media (bulletins and walk-ins) toward various forms of social and electronic media. Within the organisation we have also moved to more integrated forms of cloud computing. Both of these changes fit well with our plans for transition, reducing ongoing costs as the CLLMM funding comes to an end."

If you are interested in getting involved in Lakes Hub activities in either Milang or Meningie, you can get in touch with Faith Coleman, Hub Coordinator, on 8537 0808 or at info@lakeshub.com.

Ngarrindjeri Yannarumi Assessment

<u>Ngarrindjeri Regional Authority (NRA)</u> has recently made significant progress in developing the Ngarrindjeri Yannarumi Assessment. Yannarumi – meaning speaking as country – is a traditional Ngarrindjeri process of decision making and assessment. This process has been adapted to enable the NRA to assess the lawfulness and life giving elements of contemporary issues according to Ngarrindjeri principles.

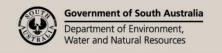
Most recently the NRA in consultation with Ngarrindjeri Elders has applied Yannarumi to its engagement in the management of the Coorong and Lakes Alexandrina and Albert Ramsar site, as well as an assessment of the cultural health of this site.

The assessment has found that with the signing of agreements like the Kungun Ngarrindjeri Yunnan Agreement (KNYA) and Ngarrindjeri Speaking as Country Deed for the Murray Mouth, Ngarrindjeri have been able to see an improvement in the Ramsar site in the way it supports Ngarrindjeri to exercise its cultural responsibility of care.

This assessment process is a unique innovation for the region. It will enable the NRA to undertake replicable assessments across a range of different issues from partnerships, engagement in NRM, down to the cultural health of a specific wetland. This work has been progressed in partnership with the



Department of Environment, Water and Natural Resources (DEWNR) through the Coorong, Lower Lakes and Murray Mouth (CLLMM) Recovery Project, funded by the South Australian Government's Murray Futures initiative and the Australian Government. For more information contact Mr Rick Hartman, Ngarrindjeri Yarluwar-Ruwe Program Coordinator on 8532 9000.





Planting program winter extension

The Coorong, Lower Lakes and Murray Mouth Vegetation Program has been extended to complete the winter terrestrial planting season.

A total of 150,000 plants will go into the ground at Wyndgate in a final departmental project which will finish at the end of August.

A further community project will see the Goolwa Wellington LAP plant a further 160,000 native species from Milang to Goolwa by December 2016.

Wren arrival is certainly something to tweet about

Clayton Bay Landholder Kathy never expected to have a bucket list moment in her own backyard.

However, a chance visit to the block Kathy and her husband Damon own on the Finniss River turned into a very lucky day for the avid birdwatcher.

Kathy spotted an endangered Mount Lofty Ranges Southern Emu Wren in

what might be the southern-most sighting of the tiny bird. The initial sighting of a male wren was followed up just before Easter by the exciting discovery of a female wren – signalling the exciting possibly that the birds are a breeding pair.

The birds have been taking advantage of the new habitat created by revegetation projects for the Coorong, Lower Lakes and Murray Mouth program. The male wren only appeared after being frightened by a snake at the water's edge and flew into the open along with a family of Blue Wrens.

'It was the first time we had seen any wrens on the property - there was a single Emu Wren with a family of nine blue wrens,' she says.

The endangered Mount Lofty Ranges Southern Emu Wren enjoys its new brand habitat on the property.

'I was in the right place at the right

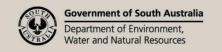
time. I was beside myself - seeing an Emu Wren was on my bucket list!'

'And to discover just a few weeks later that the little male wren had female friend was a joy, and hopefully a sign of things to come.'

'I was also thrilled for the teams that had planted there.'

Kathy and Damon bought the block in 2010 at a time when the river had receded significantly. Enter the Goolwa/Wellington LAP who coordinated the drought response planting program on behalf of DEWNR. A total of five community organisations planted on the property over a number of years in all weather conditions

Kerri Bartley, GWLAP Revegetation Project Officer coordinated some of the onsite plantings and manages the ongoing maintenance of the site.





'It has been fantastic to have been involved in a project where the outcomes and rewards can start to be seen – from a bare paddock to habitat for native birds and other important wild life is a win-win for everyone,' she says. In total, 12,660 plants of 52 local, native species were planted on the property.

'The sighting of the Mount Lofty Ranges Southern Emu Wrens in the newly planted habitat highlights the correct selection and placement of native plants appropriate for attracting native birds,' Kerri says.

'The newly planted habitat will hopefully continue to attract other native fauna to the area in the future.'

Kerri says there were so many positive aspects from the project that went beyond the planting itself.

'The community groups used the plantings as fundraising opportunities for their local facilities and services,' she says. 'The groups that were involved ranged from Strathalbyn Soccer Club and disability group Community Lifestyles to Ashbourne Cricket



Look carefully to spot the pair of wrens here - it's hoped that the flutter of tiny wings will occur soon.

Club, Strathalbyn Scout Group and Victor Harbor Hockey Club.

'All of these groups will be returning in 2016 to plant again which highlights the enormous success of the Community Revegetation Project.'

The community project is part of the CLLMM Recovery Project's massive revegetation program – one of the largest of its kind in Australia.

Vegetation Program manager Hafiz Stewart says the program has tackled the ecological problems of the region at a landscape scale by prioritising the vegetation communities to restore, and by determining where restoration activities should occur.

The planting activities have increased the resilience and connectivity of native habitats, and provided valuable refuges for the region's native flora and fauna, such as the recently sighted Southern Emu Wren, he says.

'This is fantastic news, and really indicates the value of the collaboration between the community and the Department over the last five years. The sighting is particularly timely, given that the CLLMM Vegetation Program is nearing completion and to see that we have successfully provided habitat for such an iconic South Australian species is the icing on the cake.'

Project officer for the Mount Lofty Ranges Southern Emu Wren and Fleurieu Peninsula Swamps Recovery Program Tim Vale says the appearance of the Southern Emu Wren in the newly created habitat was very significant.

'The Mount Lofty Ranges Southern Emu Wren is an endangered species that's still declining despite a long-term recovery plan - there are a maximum of 200 individuals left across the Fleurieu.'

Mr Vale says it is the first time that this bird had been spotted in an area of revegetated habitat. It was 'really heartening' as the birds were quite specific in their habitat selection and use.





It has been more than five years since the property was first planted. Kathy said there had been huge changes in that time and what was originally a barren paddock was now home to trees 12-15 feet tall, and a range of other flora.

In the early days not many birds frequented the property either and 'to see any bird was a big deal'.

'The diversity has changed enormously – just in the last few months we have seen honeyeaters, ducks, chats, lapwings, willy wagtails, harriers, kites, a peregrine falcon, and of course the wrens – things are starting to come back that we have never seen there before. Even the growing diversity of bugs is incredible. It's really positive to see how far things have come.'

'Things are starting to happen there – all it needed was a little encouragement and nurturing.

'Just to see the enormity of what everyone has achieved – it's quite an amazing thing.'

Genetic research may help drought-proof Coorong and Lakes

New research could help three prominent native plant species in the Coorong and Lower Lakes region survive future droughts.

Scientists from DEWNR and the University of Adelaide studied the genetic diversity of three key species used in the CLLMM Recovery Project, with their findings to contribute to future planting strategies.

Ross Meffin (pictured below), DEWNR scientist, said their findings will allow this diversity to be reflected in future plantings and increase the chances that the species will be able to adapt to changing conditions in the future.



"The team used an advanced DNA sequencing technique to shed light on plant diversity, which is the amount of variability in the genetic makeup of a species.

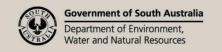
"We also looked at the population and genetic structure of three key species used in the CLLMM Recovery Project," Dr Meffin said.

"By collecting and analysing leaf tissue samples, the research has produced genetic data for the drooping sheoak (*Allocasuarina verticillata*), muntries or emu apples (*Kunzea pomifera*) and river club rush (*Schoenoplectus validus*)."

"Without genetic diversity, species would only be able to survive in a very limited range of conditions and would not be able to adapt to changes such as increasing frequency of drought," Dr Meffin said.

"Thus preserving appropriate genetic diversity is crucial to ensuring the long term health of populations and species.

"The research also confirms our approach of sourcing plants either locally or regionally dependent on the species is effective.'





One stop shop for revegetation

A practical restoration and planting guide for the Coorong and Lower Lakes will be a part of the legacy of the CLLMM Recovery Project, which commenced in 2011.

The guide will be a useful on-ground reference for people wanting to undertake revegetation projects including Local Action Planning Association members, landholders, Ngarrindjeri and environmentally-minded members of the public.

The guide, which will be available in both hardcopy and online, comprises easy-to-use flowcharts to walk would-be planters through the process of selecting most suitable species to plant in difference areas. It gives those undertaking revegetation the detail right down to the appropriate number of plants per hectare, and includes soil type descriptions, landform descriptions and lists of the species that would have most likely been present in pre-European times.

"The guide takes people through the decision-making process and acts as a one-stop-shop for revegetation projects in the region," DEWNR scientist, Ross Meffin says.

The guide is a collection of key research findings from the CLLMM Recovery Project's Vegetation Program. The research identified vegetation communities that were a priority to restore and those that were likely to provide appropriate habitat for native species in the future.

"Providing this information to the community will leave a lasting legacy of the successful five-year planting program, while also ensuring that future plantings beyond the life of the program are appropriate and sustainable," Dr Meffin says.

The planting guide will be published and available to the public in April. For further details please contact Ross Meffin: Ross.Meffin@sa.gov.au

For further information about the Coorong Lower Lakes and Murray Mouth Recovery Project contact:

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