

The Lakes Hub is an initiative of the Milang and District Community Association Inc. funded by the Australian Government and the South Australian Government's Murray Futures program.

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## National Tree Day

Sunday 27th July

### Have you got your green thumbs ready?

National Tree Day and Schools Tree Day combine to make Australia's biggest community tree-planting and nature care event. Co-ordinated by Planet Ark and proudly sponsored by Toyota, these are special days for all Australians to help out by planting and caring for native trees and shrubs to improve the environment in which they live. National Tree Day started in 1996 and since then more than 2.8 million people have planted 20 million seedlings!

"I had lots of fun on (National Tree) Day and I can't wait to do it again next year!"

Check out the [Planet Ark web site](#) to find a location near you!

## Lakes Hub Bulletin Survey 2014

Time is running out to have  
your say!



We have made a few changes to the Bulletin this year and this quick survey will help us understand what you think about the bulletin and any of changes that we have made.

Your input is greatly appreciated and you could **win a trip for 2 on the Spirit of the Coorong.**

The winner will be notified by phone & announced in the Bulletin # 202 edition in August.

[Click here to take the Lakes Hub Bulletin Survey](#)



## Planting for Biodiversity- Planet Ark

Most of the plants that we depend on for food and other resources have been bred to select for qualities that make them suitable for agriculture. As a result there is often very little genetic diversity. Natural "wild" populations of plants, on the other hand, will vary greatly in their genetic make-up both within a given population and especially between populations growing in different areas. This is part of the diversity of living things that we describe as **biodiversity**.

Biodiversity encompasses not just the array of different plant and animal species found on the planet, but also the variation between different populations and individuals at the genetic level that may (though not always) be seen as physical differences.

Before Climate Change was the "hot" topic in the environmental debate, the loss of biodiversity was internationally recognised as being the major threat facing the future of life on our planet.

This variety in all living things is important in many ways, such as:

- Helping to safeguard against pests and disease (the Irish Potato Famine in 1845 was brought about by reliance on a single variety of potato that became susceptible to disease).
- Providing sources of new medicines and other plant-derived compounds.
- Contributing to the strength and stability of ecosystems (since a more diverse, complex ecosystem will be more stable).
- Enabling ecosystems to adapt to changing conditions such as climate change.

We are currently undergoing the 6th mass extinction on the planet, the first in 65 million years and the first, many scientists believe, to have been brought about by a single species - humans.

Australia is one of only 17 mega-diverse countries that together contain around one third of the earth's biodiversity and is one of just two developed nations in this select group. Unfortunately Australia has a particularly bad record when it comes to extinctions in the past 200 years, particularly with respect to our native mammals.

With uncertainty over the future of current climatic conditions, having strong biodiversity will give the best chance for species to adapt in the future and avoid becoming extinct.

For further information see [Planting for Climate Change](#) and [Local Native Plants](#).

## Isotopic analysis links Coorong salinity to water regime



Molecular and stable isotopic techniques have been used to examine 5000 years of sedimentary dynamics of the northern Coorong Lagoon, South Australia. The research involved Curtin University's WA-Organic and Isotope Geochemistry Centre (WA-OIGC), the University of Western Australia and CSIRO.

Part of a terminal lake system at the mouth of the Murray River, the lagoon is vital for migratory and native water birds and is listed under the Ramsar Convention on Wetlands and protected as a national park.

However, the lagoon's hydrology has experienced significant alterations and a marked increase in salinity since the 1950s, when water regulations were imposed on the Murray.

Read more at: <http://phys.org/news/2014-07-isotopic-analysis-links-coorong-salinity.html#jCp>

## Measuring water flow in the endangered Coorong

Flinders University groundwater expert Dr Margaret Shanafield is digging deep to find out how much water should be released upstream to replenish the endangered Coorong Wetlands. Dr Shanafield, a Research Fellow from the School of the Environment, is using fibre optic cables to measure the temperature of groundwater in a re-graded channel designed to carry water from Bool Lagoon into the Ramsar-listed Coorong wetlands.

The Coorong is a five kilometre wide body of water that stretches from the Murray Mouth down the south east coast of South Australia for about 110 kilometres, providing an important sanctuary for many species of birds, animals and fish.

In the past, groundwater naturally fed the wetlands and flowed into the Coorong until a series of drains were built for agriculture and pasturing purposes, altering and reducing the groundwater flow which changed conditions in the wetlands. As part of the study, Dr Shanafield and her colleagues at the Flinders-based National Centre for Groundwater Research and Training have installed fibre optic cables in the subsurface of the channel to measure the temperature across 20 metres of streambed, with the data used to construct a 3D computer model of heat transport and flow.

Dr Shanafield said the heat measurements can be used to estimate the amount of water infiltrating below the surface of different areas of the channel, thereby providing information on how much water would need to be released from Bool Lagoon in order to sufficiently replenish the water-starved wetlands.

"A percentage of water released from Bool Lagoon doesn't make it to the Coorong wetlands because of factors including groundwater infiltration and evaporation," said Dr Shanafield, who has just received one of Flinders University's Vice-Chancellor's Awards for Early Career Researchers..

For the full article read more at: <http://phys.org/news/2014-03-endangered-coorong.html#jCp>



Dr Margaret Shanafield checking her equipment before a field trip.

## **CELEBRATING NAIDOC WEEK AT CAMP COORONG.**

**By Andrew Dawes**

A Very successful bush food Walk was undertaken at Camp Coorong on the 15th July with 27 people in attendance. The event was an Initiative of the Lakes Hub to recognise NAIDOC week and to celebrate the history, culture and achievements of Aboriginal and Torres Strait Islander peoples. A bus departed at 10.30pm from the Milang Hub and transported the enthusiasts to Meningie arriving in Meningie at 12.00pm. Here at the Meningie Hub more people joined the tour and after a light walk along the Pelican path and a warm welcome from Andrew Dawes they proceeded to Camp Coorong to begin the Bush foods walk at 1.00 pm.

At Camp Coorong Mr Cyril Trevorrow introduced himself and proceeded to guide the group to a natural piece of scrub which is the only remaining natural scrub in the Coorong Region which is untouched. Driving a short distance the group then walked along a scrub lined path whilst Cyril Trevorrow described plants which could be used for various purposes. Pointing out plants such as the Muntries which sweet berries are eaten and the Honey suckle banksia that has a sweet nectar was the beginning of the journey. The group was able to taste plants that tasted like pepper and some that were salty in flavour. He demonstrated how cutting incisions into types of wattle could leak out a gum which could be used for chewing.

So many practices of the Aboriginal people could be lost if it wasn't for people such as Cyril passing on his knowledge of the native plants in his region and an insightful experience was had by all.

After an exploration of the cultural museum at Camp Coorong and an afternoon tea provided by Camp Coorong an understanding of bush foods was accomplished and the tour headed back to Meningie and Milang at the end of the day.





## Community update

### July 2014

Work being done by the Department of Environment, Water and Natural Resources (DEWNR) to secure the future of the Coorong, Lower Lakes and Murray Mouth (CLLMM) region as a healthy, productive and resilient wetland of international importance.

This newsletter is published by DEWNR to provide updates about the various projects happening across the CLLMM region.

The CLLMM Recovery Project is funded by the Australian and the South Australian governments Murray Futures program.

#### IN THIS ISSUE

- \* Minister Hunter visit for World Fish Migration Day
- \* Announcement of the South East Flows Restoration Project
- \* Water quality and acid sulfate soils monitoring update
- \* Thank you to Anne Hartnett from the CLLMM Recovery Project
- \* Sedge Planting Program on Channel 9
- \* important works give Lower Lakes a boost
- \* Meet the Seasonal Operation Crew

Down load the CLLMM community update [here](#)



**Coorong Tatiara**  
**Local Action Plan Newsletter**  
**Winter Edition**



#### In this Issue

Coomandook Water Security Tour, Water Security Resources , Going Native Farming with native grass pasture ,Lucerne Australia , MacKillop Farm Management Group , Automatic Weather Stations ,Herbicide Resistance: The here & now

and What is Geocaching?

Download the Newsletter [here](#)

## Murray Bridge Turtle workshops

24 July 2014

Professor Mike Thompson from the University of Sydney will be delivering two workshops about South Australian turtles and why they are threatened.

There will be information about the new turtle monitoring smartphone app TurtleSAT and how people can get involved in turtle management and monitoring.

The Murray Bridge workshops are a partnership between the University of Sydney, Natural Resources South Australian Murray-Darling Basin, the Ngarrindjeri Regional Authority and lower Murray Local Action Planning (LAP) groups.

### Location

Ngarrindjeri Business Centre, 50 Princes Hwy, Murray Bridge East **Thursday 24 July**, 2:30-4:30pm; **Friday 25 July**, 10am–noon

RSVP: Email [Phil.McNamara@sa.gov.au](mailto:Phil.McNamara@sa.gov.au) or ring (08) 8532 9100.

Places are limited so please RSVP as soon as possible.

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## Nature Foundation SA's TILQUA LIZARD CRAWL

Come and crawl amongst the lizards and be a researcher for the day. With only approxi-



mately 5,000 Pygmy Bluetongue Lizards remaining, and found only in the Burra region, Flinders University has been conducting research into the species on Nature Foundation SA's Tiliqua Nature Reserve. Come along and learn more about these fascinating lizards and help the re-

search team locate, view and record data on the day.

Sign up now and join in the fun on Sunday 7th September (National Threatened Species Day!)

There are only 60 places available so register quickly to make sure you don't miss out!

Download registration forms [here](#)

## Wild mushrooms are not for eating

Recent rains may have caused an abundance of mushrooms and other fungi to pop up all over the region, but Natural Resources South Australian Murray-Darling Basin (Natural Resources SAMDB) is warning people not to eat them.



State Herbarium Honorary Research Associate Pamela Catcheside said the Natural Resources Centre often received calls from people asking which mushrooms were safe to eat.

“We all love the idea of being able to eat what we gather from the wild, but the answer is that it is not safe to eat them,” Ms Catcheside said. “Wild mushrooms may look similar to the ones you can buy at your local greengrocer, but it is just too often difficult to tell the good from the potentially

dangerous. “For example, death cap mushrooms look quite similar to some edible species but,

as their name suggests, eating them can be fatal. “Even the experts don’t eat what they find because there are so many species of native mushrooms and we don’t know enough about them yet. “The safest place to get your mushrooms is from your local supermarket or fruit

and veg shop.” Ms Catcheside said this did not make fungi bad, as they had a vital role to play in

the environment. Many fungi are nature’s recyclers, helping to break down dead material, while

others form a close partnership with plants. These absorb water and nutrients for the plant and the plant provides sugars and energy for the fungi. So if you have fungi growing in your garden, or see them in the wild, please leave them alone to do what they do best.”

If you are concerned that children or pets might eat them, then you can remove the fruiting bodies and put them in the bin.” There are 12,000 to 15,000 known species of larger fungi in Australia, with new

species still being identified regularly.

If you suspect that someone has eaten a poisonous mushroom, call your local hospital immediately for advice. If an animal has eaten fungus and is showing signs of illness, please contact your local vet.

Photo caption: Amanita phalloides (death cap) mushrooms (pictured) look quite similar to some edible species, but as their name suggests, eating them can be fatal.



## Friends of Coorong NP

**What** Tree Planting

**Where** Parnka Point

**When** Sunday 27<sup>th</sup> July 2014 10.30 – 12.3

**Lunch Provided**

**Contact** Jo Flavell 8575 1200 (Mon – Wed) Wendy Easson 0424 261 740



Planet Ark is calling for people to connect with nature by getting involved in National Tree Planting Day. This event helps address important environmental issues like the loss of habitat for native wildlife, soil salinity and erosion, as well as being good for individual and community health.

Chris Thompson (NRSE) has grown some Melaleucas and Sam Blight (from the Coorong and Tatiara Local Action Plan Group) will provide understory and midstorey plants.

If you don't want to plant, but don't mind checking on last year's seedlings (pulling weeds and straightening or removing guards), that would be a great help as well.

Meet at the day visitor area (near the point) at 10:15am for registration. Estimated travel time from Meningie is 20 minutes. Pre-registration is encouraged.

All tools and equipment will be supplied, but feel free to bring your own if you prefer. Rug up to keep warm and dry!

## Conservation Council SA Environment Awards Nominate now



Do you know someone who has made an outstanding contribution to the environment in South Australia and deserves recognition?

Every year, Conservation Council SA celebrates the efforts and dedication of our community environmentalists. Now is the time for you to nominate local nature lovers for an award, or to encourage them to nominate themselves.

Nominations for three environment awards are being called for:

- \* Jill Hudson Award for Environmental Protection
- \* Young Achievers Award
- \* Unsung Hero Award

More information and nomination forms [here](#).

## Get grafting with a propagation master class

Extend your knowledge of plant propagation with the Botanic Gardens of Adelaide [\*Advanced Plant Propagation\*](#) Master Class.

Presented by expert propagator Matt Coulter, this master class will take you beyond the basics to cover:

- advanced vegetative techniques including leaf and root cutting
- cleft and veneer grafting
- budding including T-budding and chip/patch
- propagation mixes
- propagation environmental controls

**Sunday 3 August**

**10.00 am—3.00 pm**

**Mount Lofty Botanic Garden Nursery**

**\$165 inc. GST**

*Advanced Plant Propagation* is an extension of the Plant Propagation Principles and Practices master class (not a prerequisite) held earlier this year and is part of The Australian Centre of Horticultural Excellence 2014 Master Class Series. For more information please visit [tache.sa.edu.au](http://tache.sa.edu.au) or call (08) 8222 9311 to secure your place.

The Australian Centre of Horticultural Excellence is an initiative of the Botanic Gardens of Adelaide in partnership with TAFE SA. The Centre delivers high quality horticulture training through the educational expertise of TAFE SA and the horticultural knowledge and world-class collections of the Botanic Gardens of Adelaide.

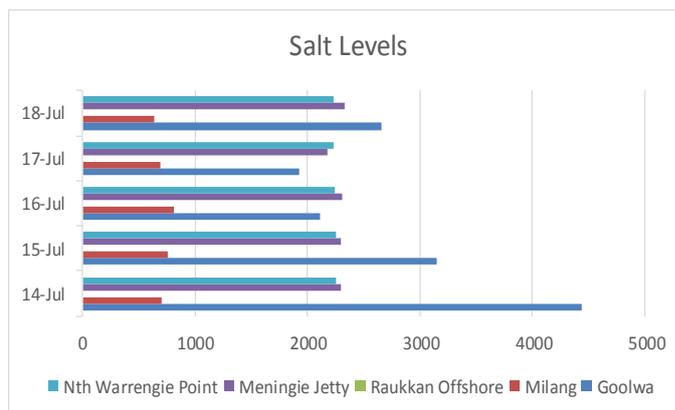
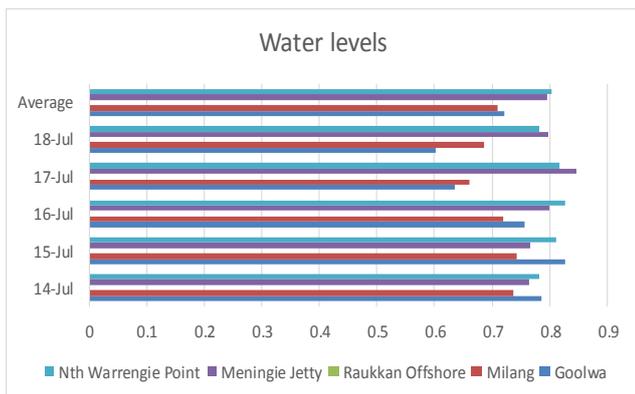
# On the Level

## Lake levels

| Date           | Goolwa       | Milang       | Raukkan Offshore | Meningie Jetty | Nth Warrengie Point |
|----------------|--------------|--------------|------------------|----------------|---------------------|
| 14-Jul         | 0.787        | 0.738        |                  | 0.765          | 0.783               |
| 15-Jul         | 0.828        | 0.743        |                  | 0.766          | 0.812               |
| 16-Jul         | 0.757        | 0.719        |                  | 0.8            | 0.828               |
| 17-Jul         | 0.636        | 0.66         |                  | 0.846          | 0.817               |
| 18-Jul         | 0.602        | 0.686        |                  | 0.798          | 0.782               |
| <b>Average</b> | <b>0.722</b> | <b>0.709</b> | <b>#DIV/0!</b>   | <b>0.795</b>   | <b>0.804</b>        |

## Salt Levels (EC)

| Date           | Goolwa      | Milang     | Raukkan Offshore | Meningie Jetty | Nth Warrengie Point |
|----------------|-------------|------------|------------------|----------------|---------------------|
| 14-Jul         | 4435        | 707        |                  | 2298           | 2254                |
| 15-Jul         | 3145        | 756        |                  | 2298           | 2251                |
| 16-Jul         | 2111        | 809        |                  | 2306           | 2245                |
| 17-Jul         | 1923        | 694        |                  | 2181           | 2236                |
| 18-Jul         | 2653        | 633        |                  | 2328           | 2229                |
| <b>Average</b> | <b>2853</b> | <b>720</b> | <b>#DIV/0!</b>   | <b>2282</b>    | <b>2243</b>         |



## River Murray – Weekly Flow Advice

For weekly flow / level reports on the River Murray and Lakes go to the following website: [www.waterforgood.sa.gov.au](http://www.waterforgood.sa.gov.au)

Up-to-date River Murray flow and water level information can be accessed at the Department for Water, SA Water and Murray-Darling Basin Authority websites: [Water Connect](http://www.waterconnect.sa.gov.au), [Daily Flow Report](http://www.waterforgood.sa.gov.au), [River Murray Storage Data](http://www.waterforgood.sa.gov.au)

Details of river height and rainfall information in the River Murray within Victoria and New South Wales are available at the Bureau of Meteorology website: <http://www.bom.gov.au/vic/flood>

Information on the discharge of acid drainage water into the Lower River Murray can be accessed online at: [www.waterforgood.sa.gov.au](http://www.waterforgood.sa.gov.au)

For the latest River Murray Flow Report and Water Resources Update - 16th November 2012 visit: <http://www.waterconnect.sa.gov.au>

| Some electrical conductivity ranges |                                 |
|-------------------------------------|---------------------------------|
| Water type                          | Electrical conductivity (µS/cm) |
| Deionised water                     | 0.5-3                           |
| Pure rainwater                      | <15                             |
| Freshwater rivers                   | 0 - 800                         |
| Marginal river water                | 800 - 1600                      |
| Brackish water                      | 1600 - 4800                     |
| Saline water                        | > 4800                          |
| Seawater                            | 51 500                          |
| Industrial waters                   | 100 - 10000                     |

Source: Suttar S., Ribbons of Blue Handbook. Scitech, Victoria, 1990.

## CALENDAR OF EVENTS *for more info contact the Lakes Hub*

If you have any relevant community event or courses that you would like added to the Calendar of Events please contact the Lakes Hub.

| July 2014 |   |
|-----------|---|
| 17        |   |
| 18        |   |
| 19        |   |
| 20        |   |
| 21        |   |
| 22        |   |
| 23        |   |
| 24        | Murray Bridge Turtle workshops                            |
| 25        |   |
| 26        |   |
| 27        | Friends of the Coorong Tree Planting<br>National Tree Day |
| 28        |   |
| 29        |   |
| 30        |   |
| 31        |   |
| 1         | August 2014   |
| 2         |   |
| 3         | Get grafting with a propagation master class              |
| 4         |   |
| 5         |   |
| 6         |   |
| 7         |   |
| 8         |   |
| 9         |   |
| 10        |   |
| 11        |   |
| 12        | International Youth Day                                   |

### Disclaimer

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