

Building partnerships that benefit wetlands and threatened species

Flyway Network Site on Delta Downs in Kurtijar People's Traditional Country hosts threatened shorebirds

Roger Jaensch (Independent ornithologist), Paul Richardson (Normanton Land & Sea Rangers, Carpentaria Land Council Aboriginal Corporation) and the Queensland Department of Environment and Heritage Protection

In the South-East Gulf of Carpentaria, collaboration between Indigenous people, graziers, ornithologists and governments has raised prospects for protection of threatened migratory shorebirds.

Broad intertidal mud and sand flats along 300 kilometres of Queensland's coastline in the South-East Gulf of Carpentaria provide non-breeding refuge for 50 000 to 100 000 migratory waterbirds. Among the 20 regularly occurring species, the eastern curlew (*Numenius madagascariensis*) (listed as critically endangered under the *Environment Protection and Biodiversity Conservation Act 1999*) and great knot (*Calidris tenuirostris*) are both globally threatened, being listed as vulnerable on the IUCN Red List. Both populations are in rapid decline.



Pelican Island sandbars on the Delta Downs Coast, South-East Gulf of Carpentaria, Australia's most recently designated Flyway Network Site under the Partnership for the East Asian–Australasian Flyway (© Copyright, Roger

Jaensch and Carpentaria Land Council Aboriginal Corporation)

The primary reason for decline is loss of habitat in the East Asian–Australasian Flyway, especially at critical stop-over sites in the Yellow Sea region. Here, 65 per cent of intertidal flats have been lost or modified over the last five decades to meet the demands of escalating economic development.

To improve prospects for migratory waterbirds and their habitats, the Partnership for the East Asian–Australasian Flyway was formed in 2006. The Partnership promotes cooperation across the Flyway's 22 countries. Its Flyway Site Network is a voluntary non-binding arrangement with over 120 sites spread from New Zealand to Russia and Alaska.

The Carpentaria Land Council Aboriginal Corporation (CLCAC) Normanton Land and Sea Rangers recognised the importance of the South–East Gulf of Carpentaria for threatened and other migratory waterbirds and in 2014 approached local Traditional Owners, the Kurtijar People, about nominating a Flyway Network Site on their country. The Kurtijar run about 40 000 head of cattle on Delta Downs pastoral lease (Morr Morr Pastoral Company). Using survey data collected by the Queensland Wader Study Group, a site 43 kilometres long and about four kilometres wide along the Delta Downs coast, was identified. The site includes prime intertidal habitat for shorebird feeding and areas important for roosting at high tide.

After consultations with Traditional Owners and other stakeholders, the site was nominated by the Australian Government to be included in the Flyway Site Network. In December 2014, the Flyway Partnership designated the site as Australia's 20th Flyway Network Site and the sixth in Queensland.

This new Flyway Network Site will raise awareness of the 20 000 kilometre round trip that these amazing shorebirds travel every year and the importance of providing habitat in the South-East Gulf of Carpentaria for these species.

The inclusion of the site in an international network is a source of great pride for the Kurtjar People who nominated the site to continue to provide habitat for threatened and other species on their country.

For further information, please visit:

<http://wetlandinfo.ehp.qld.gov.au/wetlands/>
and <http://www.eaaflyway.net/about/the-flyway/flyway-site-network/>



Large flock of knots and godwits at a roost site on the South-East Gulf of Carpentaria coast (© Copyright, Roger Jaensch and Carpentaria Land Council Aboriginal Corporation)



Eastern curlew (Numenius madagascariensis) (foreground) and whimbrels (Numenius phaeopus) (background) are among the migratory shorebirds occurring in the new Flyway Network Site on the Delta Downs coast of the South-East Gulf of Carpentaria (© Copyright, Roger Jaensch and Carpentaria Land Council Aboriginal Corporation)

Indigenous Wetland Wardens

Andrew Morrison, Rhys Collins (Port Phillip and Westernport Catchment Management Authority) and Dan Weller (BirdLife Australia)

In February 2015, Port Phillip and Westernport Catchment Management Authority (PPWCMA) and BirdLife Australia held the inaugural *Indigenous Wetland Wardens* workshop within Victoria's Western Port and Port Phillip Bay Ramsar sites.



The inaugural Indigenous Wetland Wardens pose for a photo (© Copyright, Andrew Morrison)

This free training event for Indigenous Australians aims to provide participants with the skills and knowledge to identify shorebirds and gain an understanding of how to manage and preserve their critical wetland habitat.

Staff from BirdLife Australia, PPWCMA, Parks Victoria and conservation rangers from Hobsons Bay City Council led the enthusiastic group through a range of topics including wetland conservation, shorebird ecology and identification, environmental monitoring and pest plant and animal management.



Green and golden bell frog in the NCIG compensatory habitat (© Copyright, Nathan Juchau, NCIG)

Phillip Island Nature Parks Environment Ranger, Shani Blyth said, “this workshop was a great opportunity to learn more about shorebirds from such enthusiastic and experienced people who work to protect critical wetland and coastal habitats”.

Stage 1 of the workshop was conducted over two-days in Altona with a mix of classroom based learning and practical field based activities at important shorebird sites, including Cheetham Wetlands and Altona foreshore.

Stage 2 was hosted at the Willum Warrain Aboriginal Gathering Place in Hastings over three-days. Participants gained an insight into wetland habitat and the threats to shorebirds throughout the Western Port Ramsar region.

Indigenous Wetland Wardens training helps bring together Indigenous Australians from a variety of backgrounds, with some participants already employed or completing formal training in natural resource management, and others attending to learn brand new skills with the hope of gaining meaningful employment in the future.

French Island resident Nola White loved the practical side of the workshop noting, “Going out to sites like Cheetham Wetlands, Coolart Wetlands and particularly St Andrews Beach and seeing the hooded plovers with their babies, watching how they reacted to people being around, looking for food and seeing how camouflaged they really were in their natural environment was a real eye opener”.

The five-day training program was provided by PPWCMA's Ramsar Protection Program and funded through the Australian Government's National Landcare Programme.



A pair of sooty oystercatchers (Haematopus fuliginosus) mid-flight along St Andrews Beach

(© Copyright, Andrew Morrison)

New partnership network helps to protect Australian mangroves and saltmarsh

Norman C. Duke, Jock Mackenzie, Apanie Wood and Damien Burrows (James Cook University TropWATER Centre and MangroveWatch Ltd.)

MangroveWatch and the new Australian Mangrove and Saltmarsh Network are helping to link communities and promote information sharing to improve monitoring and management of coastal habitats.



Butch' Lindsay Titmarsh, Fraser coast cattle grazier proudly shows Dr Norm Duke, mangrove scientist, an amazing 700 year old mangrove tree on his patch (© Copyright, Norman C. Duke)

Tidal wetlands and mangroves around the world are seriously threatened by rapid rates of coastal expansion and development resulting in mangroves disappearing at an alarming rate, with 30 per cent lost in the last 30 years (Duke et al., 2007).

In Australia, while mangroves are threatened as sea levels rise and climate changes, they are arguably more degraded and lost by impacts from conversion, nutrient pollution, herbicide runoff and altered hydrology.

These factors reduce the capacity of tidal wetland plants to respond effectively. Better management is required urgently before these wetlands and their significant benefits are lost forever.

Around Australia, local communities readily understand the valuable contributions mangroves provide. For example, mangroves provide coastal protection and risk minimisation from erosion and wave damage; somewhere to secure your boat in a

storm; a carbon sink five times greater than any other habitat; as well as marine nurseries and places to catch fish and crabs by all fishers. Losing mangroves also means losing biodiversity, including threatened species such as Illidge's ant-blue butterfly (*Acrodipsas illidgei*), water mouse (*Xeromys myoides*), ant plant (*Myrmecodia beccarii*) and mangrove orchid (*Dendrobium mirbelianum*).

MangroveWatch is a program that partners scientists with community and government and industry partners to monitor the condition of coastlines. Partners include local non-government organisations (such as the Wildlife Preservation Society Queensland), traditional owner groups (including the Gidarjil Development Corporation and the Balkanu Cape York Development Corporation), Natural Resource Management bodies (such as SEQ Catchments, Burnett Mary Regional Group and Torres Strait Regional Authority), environmental education facilities, government agencies (through programs like Reef Rescue), and industry advocates (including Brisbane Airport Corporation and Gladstone Ports Corporation).

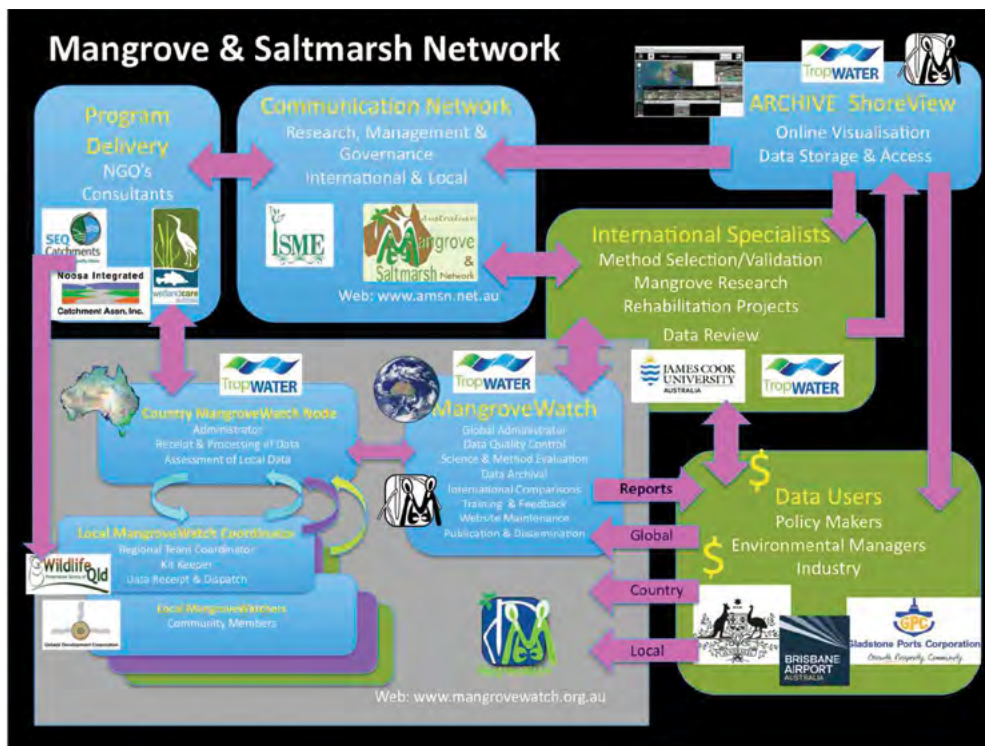
Introduced in earlier editions of *Wetlands Australia* (Duke, Mackenzie 2010; Mackenzie et al. 2011), the plan with MangroveWatch has been to link communities interested in applying scientific rigour to monitoring and assessment, as well as sharing knowledge and skills amongst all stakeholders. Groups are active in nine Natural Resource Management areas, involving more than 15 communities and approximately 500 citizen scientists. To date, these people have filmed and monitored more than 2000 kilometres of the Australian shoreline, providing a significant contribution to more informed and effective shoreline management and restoration.

The recent launch of the Australian Mangrove and Saltmarsh Network further supports this growing interest in tidal wetlands, facilitating greater communication between stakeholders.

To discover who-is-who amongst participants please visit the Australian Mangrove and Saltmarsh Network website www.amsn.net.au. And, to learn more about MangroveWatch see the website www.mangrovewatch.org.au. Also, follow us on Twitter: @MangroveWatch, like us on Facebook: MangroveWatch or email: mangrovewatch@gmail.com.

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MangroveWatch works as an environmental monitoring program implemented by local community groups (bottom left), supported by partners ranging from the scientist trainers and assessors of data collected by community members, to educators, government managers, and industry; the latter assist with funding and support of community programs. Communication between stakeholders is facilitated by the Australian Mangrove and Saltmarsh Network (© Copyright, MangroveWatch)



In 2015, a number of MangroveWatch groups are active in eastern Australia, including a small number overseas. Inset images: top left, Wildlife Queensland Citizen Scientists aboard Moreton Bay Environmental Education Centre's 'Janjari' for Moreton Bay MangroveWatch (© Copyright, Peter Wear); and lower left, Torres Strait Rangers surveying on foot the shoreline of Warraber Island (© Copyright, Norman C Duke) (© Copyright, MangroveWatch)

Bird surveys on the Barratta Creek: A research initiative with BirdLife Australia

Hanna Kogelman, WetlandCare Australia

A new monitoring partnership will help to inform research and restoration efforts in Barratta Creek, near the Bowling Green Bay Ramsar site in Queensland.

Diverse assemblages of birds have been recorded within the Barratta Creek remnant wetlands. With Barratta Creek at its heart, Bowling Green Bay's listing as a Ramsar wetland is largely based upon its outstanding values as habitat for migratory waterbirds. The Barratta Creek remnant wetlands provide habitat for nationally endangered and locally threatened wildlife, including the northern quoll (*Dasyurus hallucatus*), squirrel glider (*Petaurus norfolcensis*) and the rufous owl (*Ninox rufa*). Since the commencement of our project we have been undertaking flora and fauna surveys of high value remnant wetlands and these findings are reported to the Australian Government as part of the Atlas of Living Australia, a federal government initiative to enhance and make available biodiversity data from multiple sources, and reported back to our local community through biannual Advisory Group Meetings and Committee meetings.

At the start of 2014, we signed an agreement with BirdLife Australia who will be conducting bird surveys at key regeneration sites across the Barratta Creek. Townsville members of the BirdLife Australia team have chosen four sites in the Barratta Creek to conduct bird counts, species identification and photographic surveys to set a benchmark for future comparisons. These surveys will occur twice annually until June 2017.

This project provides the opportunity to support monitoring efforts which seek to demonstrate positive environmental outcomes for threatened species resulting from changes in co-management of wetlands and waterways in the Barratta Creek conservation area currently managed by Sunwater.

WetlandCare Australia is unable to carry out sound, repeatable bird monitoring efforts itself, and BirdLife Townsville has kindly offered to assist in monitoring bird use of target wetlands over the life of the project. WetlandCare Australia welcomes the support of BirdLife Australia and looks forward to working in partnership with the club's expert amateur birdwatchers.

The survey findings will continue to be reported to the Atlas of Living Australia, and allow us to prioritise wetlands for surveying and indicate where our research efforts are better targeted to benefit and support threatened species.

A wedge-tailed eagle (Aquila audax)
perched above a nest in the Barratta
Creek catchment, Queensland
(© Copyright, Merv Pyott)



An iconic species is being used to drive behaviour change in Western Australia

South West Catchments Council

The blue swimmer crab (*Portunus pelagicus*) is again being used as the hero and emotive driver for the new autumn *Save the Crabs, Then Eat Them* campaign in south-west Western Australia.



HOME RIVER OCEAN
Fertiliser. Hold off when there's rain around.

The local's love of eating seafood is being used in a campaign that aims to reduce nutrient runoff from urban areas in south-west Western Australia (© Copyright, South West Catchments Council)

Following the success of the winter campaign, which uses crabbing and enjoying seafood as the drivers for change in fertiliser practices, the South West Catchments Council (SWCC) has increased the prominence of the species in its new campaign.

“The new suite of commercials features our unlikely crab heroes, Crusty and Chrisso, who give us their perspective on how fertiliser use impacts local waterways,” said SWCC CEO Damien Postma.

“The two endearing characters bring the crabs to life which we hope will achieve greater cut through with the community and build on the success of the previous winter campaign.”

In 2014, a winter campaign tracking survey was undertaken with 209 local residents to determine if the campaign’s approach was successful in reaching its target audience. The survey indicates that the winter *Save the Crabs, Then eat Them* adverts had performed above expectations, with 97 per cent of residents finding them believable and 79 per cent finding them relevant. Furthermore, 64 per cent of residents surveyed said that the campaign increased the way they value the blue swimmer crab and its habitat.

The survey results informed the development of the autumn campaign, and the final decision to make the crab the central figure of the advertisements. This approach integrated with the previous campaign to build on the messaging and marketing achieved during the first campaign.

The campaign is part of the Home River Ocean program, which aims to reduce nutrient runoff from urban areas entering waterways through a series of targeted behaviour change campaigns.

The winter campaign was adapted from the successful Chesapeake Bay ‘Save the Crabs, Then eat Em’ campaign in the United States, and was featured in the February 2015 edition of *Wetlands Australia*: <http://www.environment.gov.au/water/wetlands/publications/wetlands-australia/national-wetlands-update-february-2015>

Home River Ocean is supported by the South West Catchments Council through funding from the Australian Government. The project partners include the South West Catchments Council, Peel-Harvey Catchment Council, Perth Region NRM, Water Corporation, GeoCatch, Department of Water, Swan River Trust, SERCUL and Murdoch University.

For more information and to view the adverts, visit the Home River Ocean website and social media sites: www.savethecrabs.com, www.facebook.com/homeriverocean