

# Roebuck Bay Working Group Inc.

# NEWSLETTER

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#### **VERGE GARDEN TRENDING IN BROOME**

It is inspiring to see people across Broome creating showy displays of local coastal plants on their verges. As awareness grows of the links between gardening and the health of Broome's coastal waters, locals are planting endemic plants and vegetables, digging swales to trap rainwater, mulching, and adding logs to provide habitat for wildlife on their verges.

Meet verge rejuvenators Karen Stewart and Tom Harley from Broome. These community minded individuals have led the way, planting dozens of neglected verges in Old Broome with local coastal plants, and in doing so, have cooled streets and homes, provided habitat for wildlife, nutritious bushtuckers for the community and importantly, reduced eroding pindan and litter entering roadside drains that discharge into Roebuck Bay.

There are many happy surprises when you begin work on a verge garden, neighbours cheer you on and so do the wildlife, with birds, frogs and lizards enjoying the mulch and flowering and fruiting local coastal plants.





A verge garden helps Broome's coastal waters. With housing blocks contoured toward our roads and most roadside stormwater drains discharging into Roebuck Bay - an international Ramsar Site, National Heritage site and Yawuru Nagulagun Roebuck Bay Marine Park. Digging large depressions around plants, with the downhill side built up to capture sheet rain, traps rainwater and reduces polluted runoff. Regular mulching helps too, as it soaks up rainwater, reduces evaporation and improves soil structure, helping plants to be more productive and resistant to disease and insect attack. Here are the resources to help you plan a verge garden Coastal Plants for Broome Verges » and ebook Coastal Gardens A Planting Guide for Broome »

This verge regeneration project is sponsored by Rangelands NRM with support from the Federal Government National Landcare Program.











#### NATURE NURTURE-COMPOSTING AT HOME

The Science on the Broome Coast series has produced an awesome short film on making compost. Starring passionate composter and presenter Jardine Macdonald (Program Manager of Rangelands NRM WA), Jardine provides a practical demonstration on how to make compost in six weeks.

#### What is Composting?

In simple terms, it is a controlled breakdown of biodegradable organic garden or kitchen waste by beneficial bacteria and fungi to create humus, a rich nutrient-filled material. The result is compost that is a soil conditioner and nutrient supplier for better growth of vegetables, fruit trees and your garden.

As communities become more and more environmentally conscious, composting will be part of everyday life, keeping organic waste out of landfill, which releases methane, a potent greenhouse gas.

Plants that are growing in compost are healthier, thereby more resistant to disease and insect attack. Using compost to strengthen soil and plants, means less use of pesticides and thereby, less polluted garden runoff during heavy rain into roadside stormwater drains that discharge into Roebuck Bay.

As you can see, composting helps to keep Roebuck Bay's water clean and in turn, the marine life healthy, and this includes fish, migratory shorebirds, nearshore dolphins and the invertebrate life living in the vast intertidal mudflats and seagrass meadows.

The e-booklet <u>Coastal Gardens - A Planting Guide</u> <u>for Broome</u> » is a helpful resource produced by the Roebuck Bay Working Group, providing practical advice on growing local coastal plants, benefiting your wallet, the environment and Broome's coastal waters, including Ramsar listed Roebuck Bay.









The short film is sponsored by Inspiring Australia, the Department of Biodiversity Conservation and Awareness, and Rangelands NRM with support from the Federal Government National Landcare Program.











#### MIGRATORY SHOREBIRD SERIES TRAVELS ACROSS THE WORLD

Renowned Broome ornithologist, Chris Hassell, has written an outstanding five-part series on the Annual Cycle of Roebuck Bay's Migratory Shorebirds. Chris' knowledge and passion for shorebirds is palpable in his writing; informed, by many years of observing shorebirds, and on ground research for the Global Flyway Network (University of Groningen Royal Netherlands Institute for Sea Research), and Australasian Wader Studies Group on Roebuck Bay, Eighty Mile Beach and the Yellow Sea lying between mainland China and the Korean peninsula.

The popular series was published on social media to coincide with the shorebird's preparation for their breeding migration north to staging areas in the Yellow Sea, then to their breeding grounds that encompass northern China, Mongolia, southern Russia and the high arctic.

"Migration is an exciting time for the birds, observers can really feel it as they watch the birds just prior to taking off on

their long journeys. A flock gathered on the mud will call loudly, this will attract more of their species who are ready for migration. The birds will stop feeding and begin stretching their wings, jumping, and getting 'excited'. And then one bird will decide it is, now! And off they go. The flock will often circle several times, calling continuously, then form into the classic 'vee' and curved lines, ready for the long flight north. Watching a flock head off is a genuinely moving experience."

Hyperlinks are listed below to enjoy reading the fascinating five-part series on the SHOREBIRD ANNUAL CYCLE.

- Part 1 THE FIRST LEG OF THE JOURNEY »
- Part 2 THE YELLOW SEA TO THE BREEDING GROUNDS »
- Part 3 BREEDING »
- Part 4 **SOUTHWARD MIGRATION** »
- Part 5 LIFE IN ROEBUCK BAY »

The next enthralling four-part series will be on **SHOREBIRD FEEDING ECOLOGY**. Written and illustrated by ornithologist Ricki Coughlan, the series will be published on RBWG's Facebook page and website in September 2022.



Whimbrels head north on their annual breeding migration © Ric Else



Studying Red Knots on the Yellow Sea mudflats © Rob Butier



A young Great Knot on the tundra breeding grounds © Jan van de Kam



Shorebirds roost undisturbed on Roebuck Bay © Ric Else

The series on migratory shorebirds is sponsored by Rangelands NRM with support from the Federal Government National Landcare Program.











#### DOLPHINS, SHOREBIRDS, COMPOST, FISH, ANIMATIONS, FILMMAKING

Roebuck Bay's international Ramsar values featured in the 2022 Science on the Broome Coast series, with migratory shorebirds explored through animations and an Australia Nuclear Science and Technology Organisation (ANSTO) poster competition. The Science on Broome Coast series has facilitated activities over the last two years to encourage local students to participate. In 2021 a Broome student won second place and three students received a commendation.

Nearshore dolphins attracted a lot of interest, with 40 Dolphin Watch volunteers attending a training session by Dr Holly Raudino and Jason Menzies, to learn about dolphin ecology and behaviour and the use of Marine Fauna sightings. The training equipped volunteers with the skills to conduct dolphin surveys and report their sightings, using a smart phone app





A training event by researchers from Dolphin Watch in the science series © Alex Brown

and <u>Finbook Roebuck Bay »</u> to identify individual dolphins by the unique shape and markings on their dorsal fins.

Another popular presentation, held on Broome's new Town Beach Jetty, provided a sublime viewing location to learn about why Roebuck Bay is a fish paradise and how everyone can keep it that way. Another educational Science on the Broome Coast series run by Grace Maglio, who has stepped down after four years as Coordinator. Thanks Grace

MAJOR SPONSORS Inspiring Australia, Rangelands NRM, National Landcare Program, Department of Biodiversity Conservation and Attractions, University of Notre Dame Broome, Broome Men's Shed, Absolute Ocean Charters, Broome Bird Observatory, Broome Whale Watching, Bunnings, Harry Butler Institute, Reef Chief and Yane Sotiroski Photography.

#### MUD AND SALTWATER WORKSHOPS FOR FIRST TIME FILMMAKERS

To meet the enthusiasm of locals wishing to make their debut short film for entry in the Mud and Saltwater Short Film Fest (MSSFF) in early June 2023, two filmmaking workshops were delivered by MSSFF Producer Pia Boyer, with a guest appearance at the workshops by award winning documentary maker Paul Bell.

To further prepare filmmakers, a fabulous '2 Minute Film in 3 Days' event on September 3-5, 2022, will provide on ground filmmaking support from MSSFF Producer, Pia Boyer, MSSFF Judges, Paul Bell and Mark Jones and post production help from MSSFF Judge Neil Turner at the Pilbara



and Kimberley Aboriginal Media studios. The short films will be screened on Monday September 5<sup>th</sup>, 2022, at Matsos Brewery, start time 7pm. So come along and enjoy the films and meet the filmmakers and acting talent! For more information go to <u>Mud and Saltwater website</u> and <u>Facebook page »</u>

MAJOR SPONSORS Inspiring Australia, Rangelands NRM, National Landcare Program, Sobrane Gallery, Cygnet Bay Pearls, Yane Sotiroski Photography, The Mangrove Hotel PRIZES, DONORS Broome Betta Home Living, Broome Bird Observatory, Broome Whale Watching, Camera Electronic, Feral Films, Good Cartel, Mark Jones Films, Press Play, Pilbara & Kimberley Aboriginal Media, Pindan Printing, Reef Chief, ULK Productions, Willie Pearl Lugger Cruises.











#### **ENVIRONMENTAL INVESTIGATIONS OF ROEBUCK BAY**

#### By Phil Ward Senior Advisor - Environment Programs, The Water Corporation

Broome South Wastewater Treatment Plant (WWTP) was commissioned in 1981 and services the Broome community by treating and disposing of the town's wastewater. In 2014, the Department of Water and Environmental Regulation (DWER) reviewed nutrient concentrations in the groundwater beneath the site.

In the last eight years, Water Corporation has undertaken extensive investigations which included groundwater and surface water monitoring, preliminary and detailed site investigations, hydrogeological modelling, electromagnetic surveys, and most recently a detailed ecological risk assessment (DERA).

The investigations are now complete, and the findings indicate there is a very low risk to ecological receptors from the contaminants identified, and therefore the WWTP is unlikely to be having a detrimental effect on the ecology of Roebuck Bay.

Water Corporation recognises the environmental significance and value of Roebuck Bay and its popularity among locals and tourists and sees the closure and decommissioning of Broome South WWTP as a suitable approach to minimise the risk to the ecological receptors of this environment.

The latest reports have now been submitted to DWER and will be scrutinised by a DWER-appointed auditor who is a technical expert in the field.

Water Corporation is committed to closing the Broome South WWTP post-2022 and is currently undergoing an extensive capital upgrade to Broome North WWTP to allow it to treat all of Broome's wastewater. Once the Broome South WWTP is decommissioned, the land will be returned to the State Government who will decide its future use.













#### **GOVERNANCE OF RBWG**

Many thanks to our awesome RBWG Management Committee; Chairperson Grey Mackay, outgoing Vice Chairperson Kira Andrews, Outgoing Committee member Grace Maglio and Acting Project Manager Kandy Curran who support projects that advocate, protect and support responsible management of Ramsar listed Roebuck Bay.

These projects include the innovative Science on the Broome Coast series run by Grace Maglio who has stepped down from the position, the popular biannual Mud and Saltwater Short Film Fest directed by Kandy Curran, and the collaborative Environs Kimberley and Roebuck Bay Working Group project to develop a practical training video on how to conduct an effective seagrass survey. The resultant video will ensure future seagrass monitoring volunteers have access to the professional training to improve consistency of the survey monitoring efforts overall. Thanks to Kira Andrews who has voluntarily managed the State NRM Seagrass grant.







## Follow Roebuck Bay Working Group...

- ♣ Check out the Roebuck Bay Working Group website »
- Like and follow the Roebuck Bay Working Group Facebook Page »\_
- Check out the Mud and Saltwater Short Film Fest website »
- ♣ Like and follow the Mud and Saltwater Film Fest Facebook page »
- ♣ Like and follow the Kimberley Filmmakers Forum »

Disclaimer: RBWG has made every effort to verify all facts in this newsletter.

The three times winner of State Awards and runner up for a National Coastcare Award, the Roebuck Bay Working Group works to raise awareness and support management and protection of Roebuck Bay's natural and cultural values and status as a Ramsar and National Heritage listed wetland and Yawuru Nagulagun Roebuck Bay Marine Park.









