



Citizen Science Programs

- Echidna Watch
 - Platypus Watch
 - MangroveWatch
 - Seagrass-Watch
 - Quoll Seekers
 - Glider Network
- <http://www.wildlife.org.au/projects/mangrove/>



<http://www.mangrovewatch.org.au/>
www.facebook.com/pages/MangroveWatch

Moreton Bay Mangrove Monitoring Newsletter No 11

August 2013

IN THIS EDITION

EVENTS

- The Fifth Biennial Great Sandy Conference: *Fraser Island - A Natural Laboratory*
- A Queensland Herbarium Seminar: *Mangroves and Mud in Moreton Bay- Past, present and is there a future?*
- *MangroveWatch* in the Daintree with *Earthwatch*

MANGROVES IN THE NEWS

- *BAC partners with Wildlife Queensland*
- *MangroveWatch* in, and on, the *Great South East*
- The rush of mangrove watching
- Habitat loss doubles coastal flood impact
- *The Port of Brisbane, is people, and its personalities*

CITIZEN SCIENTISTS AT WORK AND PLAY

- Citizen science heading for world domination
- WQ hosts MW Training
- Art + academia = awareness
- Citizen Scientists mentor students and teachers
- *Night Eyes* onboard for *MangroveWatch*
- *MangroveWatch* Training Workshop
- Gallery of Images from the MW Crews

MANGROVES OF MORETON BAY

- Managing mangrove monitoring
- *MangroveWatch* Moreton Bay 2012 Data Summary

AND . . . mossies put the bite on some more than others

<http://blogs.smithsonianmag.com/science/2013/07/why-do-mosquitoes-bite-some-people-more-than-others/#.UeFwEmPIIa4.twitter>



EVENTS

- Gain new insights into some of the special attributes of the Great Sandy Region at the **Fifth Biennial Great Sandy Conference**. Entitled **Fraser Island - A Natural Laboratory** it's on Thursday, 8th August 2013 from 9.00 am to 5.00 pm at the Auditorium Mt Coot-tha Botanic Gardens, Brisbane. The impressive array of presenters include Jock Mackenzie (JCU *MangroveWatch Hub*), Dr Barry Jones, Prof Roger Kitching, Elizabeth Cumming, Dr Patrick Moss and Dr Greg Baxter.

There'll also be short presentations, poster displays covering visitor surveys, a sustainable fishery, and the orchid *Phaius australis*, as well as a photographic display. For more information

<http://www.fido.org.au/naturallaboratory/Natural%20Lab%20Conf%20Flier%20A.pdf> For online registration
<http://fraserislandconference2013.eventbrite.com.au>

- **Mangroves and Mud in Moreton Bay Past, present and is there a future?** As part of the Queensland Herbarium Monthly seminar series scientists Arnon Accad and Ralph Dowling will present this fascinating topic on Monday 12th August 2013 from 12.00 noon to 1.00 pm in the F. M. Bailey Room at the Queensland Herbarium, Brisbane Botanic Gardens, Mt Coot-tha Road, Toowong. These seminars are open to the public and you are welcome to attend, and to invite others - staff or work colleagues and anyone else - who may be interested in attending. Read the abstract on page 9 of this newsletter or visit <http://www.qld.gov.au/environment/plants-animals/plants/herbarium/seminars-events/>

- **MangroveWatch in the Daintree with Earthwatch** in October for a truly unique and meaningful experience. As a volunteer you can collect data, share experiences and knowledge and be part of a scientific team collecting essential data. A working vacation with educational and recreational opportunities like diving in the nearby Great Barrier Reef. For more information <http://www.earthwatch.org/australia/exped/duke.html>



<http://www.youtube.com/watch?v=i3Tc-PDQA>

MANGROVES IN THE NEWS

- **BAC partners with Wildlife Queensland**

Brisbane Airport Corporation (BAC) has pledged its support to Wildlife Queensland in a three year, \$240,000 partnership that will help to promote and enhance the ecological values of Moreton Bay through community based action.

BAC's sponsorship will support Wildlife Queensland's Seagrass and Mangrove Watch programs that harness a community volunteer approach whereby the ongoing monitoring of the health and abundance of Seagrass and Mangrove communities in the Bay is done by environmentally interested and invested citizens.

Read the entire Media Release
<http://www.bne.com.au/news/bne-partners-wildlife-queensland>



- **MangroveWatch in, and on, the Great South East**

MangroveWatch Citizen Scientists Narelle Renn and Duane Weatherall have featured in a segment on the Channel 7's *Great South East*. Presenter Martin Bowerman revealed a long-term interest in science while Duane and Narelle spoke of their interest in monitoring, and the merits of mangroves. To watch the segment:
<http://www.youtube.com/watch?v=fYxHFIMpPqI>



The screenshot shows a website interface for 'GREAT SOUTH EAST'. At the top, there are navigation links for 'search', 'sponsors', and 'contact'. Below this is a date 'Archive: 26 May 2013' and the title 'Citizen Science'. A central image shows three people in a mangrove wetland. Below the image is a caption: 'Mangrove Watch is a program staffed by citizen science volunteers, people without scientific qualifications, but who wish to contribute to the preservation of the local environment.' On the left side of the page, there is a vertical menu with links: 'this week', 'last week', 'the team', 'creek to coast', 'great south east', 'queensland weekender', and 'home'. At the bottom left of the page is a 'Queensland' logo.

- **The rush of mangrove watching**

Australia's #1 sailing magazine, the *Cruising Helmsman* carried a story "The rush of mangrove watching" in its April 2013 Edition. Online subscriptions:

<https://itunes.apple.com/au/app/cruising-helmsman/id561365197?mt=8>



- **Habitat loss doubles coastal flood impact**

The risk to life and property from coastal floods doubles with removal of mangroves, marshes, reefs, forests, dunes and other natural defences. <http://phys.org/news/2013-07-habitat-loss-coastal-impact.html>

- **The Port of Brisbane, its people, and its personalities**

In his latest book, *The Port of Brisbane, its people and its personalities*, local historian Peter Ludlow follows the development of the port from its wharves in the city centre to its relocation, development and expansion at Fisherman Islands.

Despite the book's title, it is more than the port's history; it is a history of the Brisbane River from Aboriginal times to the present day, encompassing our association with the river through commerce, study, and recreation. Much of it is told through the words and pictures of those who eye-witnessed the events. It includes a chapter entitled "Conservation" penned (in 2009) by Simon Baltais, Manager of WQ's *MangroveWatch & Seagrass-Watch Citizen Science* programs and member of the *PoB's Community Consultative Committee*. Simon acquaints the reader with the significance of mangroves and seagrass, and commends the Port for its interest in achieving better environmental outcomes.



The Port of Brisbane, its people and its personalities is available via <http://historianludlow.com/HistorianLudlow/PortofBrisbane.html>

CITIZEN SCIENTISTS AT WORK AND PLAY

- **Citizen science heading for world domination**

In this excellent article by Timothy Clemson, this PhD student at University of Portsmouth explains why citizen science is growing and how the traditional media has helped raise awareness and make citizen science part of the popular culture. While we have our own examples of this, notably the recent *MangroveWatch* “Citizen Science” segment on Channel 7’s *Great South East*, the author refers to physicist Brian Cox, a popular television and film presenter, who recently highlighted the truly astronomical achievements of citizen science gained through the *BBC Stargazing Live* program: the viewers-turned-scientists have discovered extra-solar planets and even new phenomena on the surface of Mars.

Read the article at <https://theconversation.com/citizen-science-heading-for-world-domination-14463>



- **WQ hosts MW Training**

Wildlife Queensland hosted a *MangroveWatch* Training Workshop at the QPWS Moreton Bay Manly offices in early March. The workshop was conducted by JCU Scientists Dr Norm Duke and Jock Mackenzie. Twenty-five attendees are now trained in the art of *MangroveWatch* Shoreline Video Assessment Methodology (SVAM).



- **Art + academia = awareness**

Moreton’s Mangroves Exposed was a unique blend of art and academia. Held at *The Artist Tree* Cleveland in late April, amid a mangrove-themed art exhibition, Dr Norm Duke and Jock Mackenzie presented a summary of the data collected by Moreton Bay’s *MangroveWatch* crews.

Moreton’s Mangroves Exposed attracted 57 high quality entries in various medium which were viewed by an estimated 800 people over the course of the exhibition. Plans are underway to compile and present a ‘Virtual Gallery’ so as the inspiring art from *Moreton’s Mangroves Exposed* can be viewed online, indefinitely.

Accolades go to the artists, all of whom pledged a percentage from sales, and to those artists who donated their entries to raise funds for mangrove research. One such entry is “Silky Flow” by Ann Ingram which was awarded 2nd Place in the photographic section. More of Ann’s work can be found at http://www.inghamcollection.com/Wilderness_Design/ANN/ANN.html



Silky Flow

Ann Ingram

- **Citizen Scientists mentor students and teachers**



- Meetings have been held between Principals of *Moreton Bay Environmental Education Centre* and *Whites Hill College*, and *James Cook University* mangrove scientists to devise adaptations to the *MangroveWatch* program that can involve meaningful participation from school students.



- Students have been involved in the two monitoring methods – (below) the Long Plot methodology and (above) Shoreline Video Assessment Methodology (SVAM), with *MangroveWatch* Citizen Scientists providing 1:1 SVAM mentoring.



- Experienced *MangroveWatch* Crew visited the *Jacobs Well Environmental Education Centre* to provide support and guidance on *MangroveWatch* SVAM techniques (below). Teachers from the JWEEC intend to incorporate SVAM into the programs provided by the Centre.



- ***Night Eyes* onboard for *MangroveWatch***

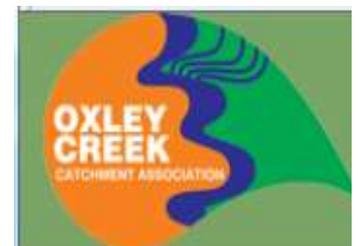
Night Eyes is a multiple award-winning volunteer organisation based at Caloundra. Their principle activities are waterway surveillance, clean-ups and water quality testing. *Night Eyes* members have received training from JCU *MangroveWatch* scientists and onboard, hands-on 1:1 mentoring from experienced *MangroveWatch* Citizen Scientists.



Wildlife Queensland has invested in a second *MangroveWatch* kit which *Night Eyes* members will store, utilise for their monitoring and make available to other groups on the north-side or in the vicinity who are undertaking mangrove monitoring. Our waterways have benefited greatly from the efforts of *Night Eyes* in the past; we thank them for this, and welcome them onboard for *MangroveWatch*.

- **MangroveWatch Training Workshop**

Oxley Creek Catchment Association is holding a *MangroveWatch* Training Workshop on 6- 7th September. Places are strictly limited; preference is given to OCCA members and their associates.



For workshop bookings or more information contact Miriam on 07 3278 2899 or partnerships@oxleycreekcatchment.org.au

- **Gallery of Images from the MW Crew**

In addition to filming mangroves, taking still photographs is an integral part of the Shoreline Video Assessment Methodology (SVAM). The *MangroveWatch Hub* have posted photographic files of the various locations as recorded during SVAM:

<http://picasaweb.google.com/MangroveWatch>

MANGROVES OF MORETON BAY

- **Managing mangrove monitoring**

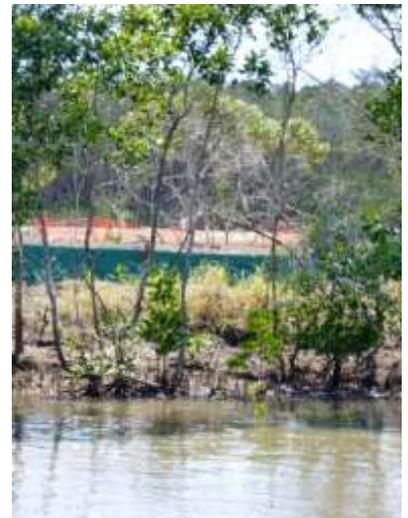
Multiple mangrove monitoring activities are underway in and around Moreton Bay, some by the scientific community and some by 'citizen scientists'. So a meeting was convened in April at the *Queensland Herbarium* to better coordinate mangrove monitoring, determine protocols, identify funding sources and to discuss data sharing, storage and access. The meeting was attended by representatives from the Queensland Herbarium; *MangroveWatch Hub* James Cook University; University of Queensland, SEQ Catchments; OceanWatch Australia; Wildlife Queensland; Terrestrial Ecosystems Research Network; Brisbane Airport Corporation; Department Agriculture, Fisheries and Forests; and, the National Parks, Recreation, Sport & Racing.

- **MangroveWatch Moreton Bay 2012 Data Summary**

MangroveWatch Moreton Bay 2012 Data Summary (Mackenzie J & Duke NC) *June 2013* details data generated during 2012 *MangroveWatch* surveys undertaken by citizen scientists. The information is designed to serve as a baseline for future mangrove monitoring in the target estuaries, enabling future estuary health to be monitored effectively and providing a means to compare mangroves in target estuaries with nearby systems and, elsewhere in Queensland. In addition, the information is designed to assist natural resource managers to identify and target specific issues that threaten mangroves in Moreton Bay.

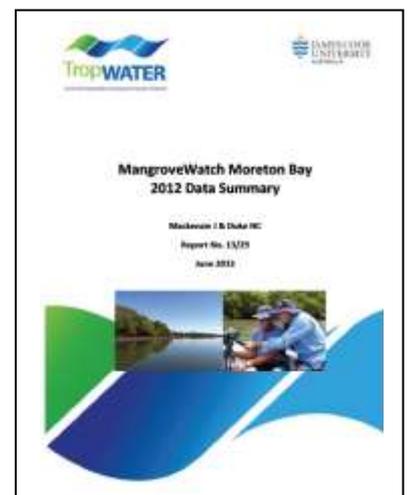
The Report provides an analyses and discussion of four Moreton Bay estuaries: Eprapah, Tingalpa, Nundah and Cabbage Tree Creeks and includes a Case Study of Tingalpa Creek.

A key outcome of these initial Moreton Bay *MangroveWatch* surveys is a long-term visual baseline of mangrove extent, structure and condition along 70km of Moreton Bay shoreline that will provide an accurate means of assessing future changes in years to come. A big THANK YOU to our Citizen Scientists for providing this important data for analysis.○



Jacksons Creek

Latitude: 27:21:361900000000023
Longitude: 153:6:55.31000000000558



Mangroves and Mud in Moreton Bay

Past, present and is there a future?

As part of the Queensland Herbarium Monthly seminar series, Arnon Accad and Ralph Dowling will present a seminar on the mangroves of Moreton Bay

This seminar is to be held on Monday 12th August 2013 between 12 and 1pm in the F. M. Bailey Room at the Queensland Herbarium, Brisbane Botanic Gardens, Mt Coot-tha Road, Toowong.

These seminars are open to the public so please feel welcome to attend, and to invite others who may be interested.

ABSTRACT

Arnon Accad and Ralph Dowling

Moreton Bay has some of the most extensive areas of mangroves in Queensland. But it has not always been this way. This seminar will deal with the development of Moreton Bay and why mangroves occur where they do. It will look into the geological history of the Bay and why it is now such a good place for mangroves. The distribution of mangroves within the Bay and the effects of humans on the mangroves will be discussed. In addition to this historical information a research program that the Queensland Herbarium is undertaking on the mapping and monitoring of mangroves within Moreton Bay will be presented. This program has established 20 long-term monitoring sites within the mangroves and associated communities of Moreton Bay and aims to document past and ongoing changes. These long-term monitoring sites are a subset of sites established during the late 1990s and provide historical site based change information over the last 15 years. The sites will be revisited on a periodical basis in the future. A decadal time series of aerial photography from the 1950s to the present is being established and will provide the necessary historical information and basis for the long-term monitoring of mangroves. Remote sensing using vegetation indices and feature extraction applied to the historical time-series of imagery and aerial photography will help to distinguish between small seasonal differences and the larger, more permanent changes that occur such as mangrove dieback. This project based on over 60 years of information will provide a better understanding of the past and present dynamics of mangrove and associated communities within Moreton Bay and will provide a basis to project future community and species distributions. ○

FOR MORE INFORMATION

Mangrove Hub, James Cook University

www.mangrovetwatch.org.au
<https://research.jcu.edu.au/research/tropwater/research-programs/coastal-and-estuarine-ecology>

Follow us on Twitter: 

Like us on Facebook: 

Tell us about your local mangroves. Take our mangrove survey here.. <http://www.surveymonkey.com/s/QW3CRMV>

Compiled and distributed by



**For more information on Wildlife Queensland's
Citizen Science programs visit**

<http://www.wildlife.org.au/projects/>

Disclaimer: This newsletter is designed to provide information on mangrove-related matters and is intended to complement, supplement and direct the reader to, other sources of information. While every effort has been made to make this newsletter as relevant and accurate as possible, there may be mistakes, both typographical and in content.