

WAMBALIMAN

The newsletter of the
Wildlife Preservation Society of Queensland
Fraser Coast Branch



THIS ISSUE:

- Presidential Ponderings
- Branch Activity Report
- EAG update
- *EPBC gets an "F"*
- Garden mathematicians
- Nature Watch - echidnas
- Nature Watch - wattles
- *Ethics and Ethology*
- (Children's) Book review

AUTUMN 2021

WAMBALIMAN since 1967

In the language of the Butchulla people, who are custodians of land that includes the Fraser Coast, 'wambaliman' means 'to carry', and refers to the messages that the Newsletter is communicating.

Editor's Note

I have been away. To Sydney. Amazing you can be so close to a big city and enjoy beautiful natural areas 15-30 minutes away. I am talking about Lane Cove and Ku-ring-gai Chase National Parks, not to mention the beautifully leafy inner suburbs. I was in Sydney to see family but the walks in the bush and around leafy residential areas were a bonus. It was lovely to come home to the beach but the Bay looks hot and stark—every time I look more trees and other vegetation has gone. Unless I focus on the beach it's got no identity – it looks like any old suburban area.

I can only assume that that is what is acceptable to the majority. Such a shame. In the 27 years I have lived in the area I have witnessed massive habitat and character destruction and despair that we lost the opportunity here in the Bay to be different and progressive in our outlook.

Recently our Council—our elected representatives—voted overwhelmingly to allow a building of 16 storeys to be erected in Pialba. This is despite the fact that it appears unallowable under our current Planning Scheme. Only two councilors, Mayor George Seymour and Cr David Lewis were opposed to such a monstrosity. What does such a decision imply for the area?

So despite my personal ideals, and for all my efforts being part of the local community consultation processes both as an individual and part of local wildlife and conservation groups, I am a part of the resulting mediocrity of the Bay that now largely overshadows the remaining natural beauty.

Jenni



**WILDLIFE PRESERVATION
SOCIETY OF QUEENSLAND**
known informally as
WILDLIFE QUEENSLAND

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WAMBALIMAN

e-copy in colour
hardcopy in black and white

Let us know if you want the e-copy only.

Contributions for Wambaliman

We welcome contributions from WPSQ members and supporters. Articles can take the form of reports, observations of nature, anecdotes, quotes, humour etc.

Send contributions to:

ggduckz@gmail.com

**Submissions for the next issue
are due by Friday 16 July 2021**

Opinions expressed in Wambaliman are not necessarily those endorsed by the Wildlife Preservation Society Queensland, Fraser Coast Branch unless specifically attributed to them.

What's On

Branch meetings

Usually - 3rd Sunday bi-monthly 2:00pm
Halcro St Community Centre, Pialba
20 June
15 August
19 September (AGM)
21 November

WILDLIFE TALKS IN THE LIBRARY

Friday 14 May (to be confirmed) 1pm
Hervey Bay Library
Alan Peebles—*Vanishing Birds*
Friday 28 May 1pm Maryborough Library
Lindsay Titmarsh—*Tandora and Koalas*
Bookings essential—see FCRC website

NATURE WALKS

2ND MAY—GLENBAR

The new organising committee is John Williams, Frank Ekin & Sam Raveneau. Contact John if you want to be on mailing list for the walks information 0428980019 or john.williams17@bigpond.com

Backyard Bioblitz Workshop

Friday 30 April
1.30-3.30
Hervey Bay Library
Learn how to use iNaturalist app
Bookings essential: contact Vanessa

**FRASER COAST
AUTUMN BACKYARD BIOBLITZ
Weekend 15-16 May**

Don't forget to LIKE us on

[www.facebook.com/
WPSQFraserCoast](http://www.facebook.com/WPSQFraserCoast)

Check out our page on

<https://wildlife.org.au/fraser-coast/>

Presidential Ponderings

with Vanessa Elwell-Gavins

Vanessa talks about the Branch's NEW PARTNERSHIP WITH UNIVERSITY OF THE SUNSHINE COAST



Members will remember that our Branch sponsored a prize for a first-year student of Wildlife Ecology at the University of the Sunshine Coast (USC), terminating in 2020. We then considered whether to renew the prize and concluded that, while beneficial for the winner, it had not enhanced our relationship with USC, nor made any apparent contribution to wildlife preservation in our region. Members generally agreed a partnership with USC would still be valuable.

The opportunity for a different type of partnership arose quickly, thanks to an idea for a post-graduate student project on Greater Gliders in our region, which are a nationally listed threatened species. This was initiated by Carol Bussey in September 2020 and further developed with Dr Bonnie Holmes (USC Wildlife Ecology) and Rod Buchanan (Environmental Coordinator, Fraser Coast Regional Council). The plight of wildlife in rapidly urbanising environments also emerged as topical, given the debacle with the displacement of a mob of Eastern Grey Kangaroos as a result of a development in Point Vernon. One 'possible' project was now two prospective projects.

Further discussions between Dr

Holmes and our working group, comprising Carol, myself, Sara Gerdson and Bruce Dick, culminated in February 2021 with Branch approval in principle for expenditure of \$5,000 on each of two projects to be conducted by Honours students in Wildlife Ecology:

Eastern Grey Kangaroo habitat displacement in a rapidly urbanising environment in Hervey Bay (expected start mid 2021), and home range and habitat use of Greater Gliders (expected start 2022).

The working group has since held a Zoom meeting with Dr Holmes, where we met Dr Beth Brunton, who will supervise the 'Kangaroo' project, and Dr Christofer Clemente, who will supervise the 'Greater Glider' project.

Project scoping statements are being finalised, and the all-important details of the agreement the Branch needs with the University are yet to be negotiated.

What will these projects achieve? At a practical level, both projects should yield information and recommendations that the Branch can use in future lobbying to mitigate the impact of development on wildlife. The 'Kangaroo' project is focussed on a common species that is being displaced from its habitat by

rapid urbanisation. This project should yield an overview of high risk locations, policy options and management prescriptions to mitigate the impact and minimise harm to this iconic species.

The 'Greater Glider' project should provide insights into the home range and habitat use of greater gliders across the region. Greater Gliders are heavy users of hollow-bearing trees, so the loss of these trees through land clearing for urban or rural development can be expected to cause a decline in local populations. This project should yield information for communication products with landholders, as well as information the Branch can use when lobbying governments.

Both projects should have outcomes extending beyond the project specifics. I hope the Honours students undertaking the projects, and their cohort, will realise the relevance of their academic studies in wildlife ecology for tackling real-world, practical threats facing our wildlife. These students will hopefully go on to careers where they may have a tangible impact on future outcomes for our wildlife in rapidly urbanising environments and in rural areas.

Our university sector is itself a threatened species under current policies, and many are struggling to maintain standards and a range of offerings suitable for our changing world. By sponsoring these two projects, I hope our Branch will provide USC Wildlife Ecology staff and students with a conduit into the community, and insights into the real-politik of policy-making, management issues and trade-offs that leave our wildlife in an ever-increasing spiral of decline. The projects should generate realisation by the current and future student body that wildlife ecology is an area worthy of academic study with real outcomes for conservation as well as career prospects.

I hope our Branch will benefit from supporting and harnessing the talents, passion and academic rigour of competent students, guided by specialist academics.

The 'answers' generated by these two projects may or may not be 'new', but they should be grounded in scientific rigour. This may lend credibility to the conclusions reached that we as a Branch and as individuals are unlikely to achieve on our own. ✿



Know your
2020-21 Executive
John (vice president),
Bruce (Treasurer),
Vanessa (President)
and
Kerry (Secretary)

Quarterly Branch Activity Report *mid January—mid April 2021*

Gearing up for another year!!!

Submissions / Delegations / Reps

- The Branch made submissions on the draft Greening Fraser Coast Strategy and the Burnett Mary Regional Plan in January.
- Frank Ekin and I met with Cr Jade Wellings (Division 5) twice over two successive weeks. Cr David Lewis joined us for the second meeting. It was a useful opportunity to market what the Branch does to a new(ish) councillor who happens to be my Divisional councillor, and for Frank to give a presentation on catchment management and erosion issues in Hervey Bay.
- Vanessa attended the Environment Advisory Group meeting in Maryborough on 11 March (see separate article for a summary).
- Discussions continued with University of the Sunshine Coast over the two proposed projects to be conducted by Honours students of Wildlife Ecology.

Communications

- Wambaliman* Summer edition was released towards the end of January - many thanks as always to editor Jenni Watts and all contributors.
- Our column *Wildlife Matters* has continued in the free local newspapers. Many thanks to Carol for coordinating this over the last year or so. Diane Christensen and Ruby Rosenfield are now coordinating these. Please contact me if you are willing to assist them.

Meetings

- The Executive met on Wednesday 17 February.
- We held our first general meeting for 2021 on 21 February.

Nature Walks

- The Nature Walks program started on Sunday 7 March with a walk from The Pines to ESA Park and return.
- The walk scheduled for Saturday 3 April, among the mangroves at Tandorra, hosted by Lindsay Titmarsh, was postponed because of inclement weather. It was instead held on 17 April.

Other Activities

- The Summer *Backyard Bioblitz* took place on the weekend of 13-14 February.
- Planning has taken place for a workshop for people interested in participating in the Backyard Bioblitz but who are not sure how to take adequate photographs on their camera or phone, or use the *iNaturalist* website or app.
- On 13 February, Peter Duck and Jenni Watts ran a wonderful tour of the mangroves near the mouth of Eli Creek in Point Vernon. This was part of World Wetlands Day Month, organised by Council to showcase Fraser Coast wetlands. Jenni ran a second tour at the end of February, to cater for the excess demand.

Assets

Kerry Alston and Bruce Dick have reviewed the Branch's assets, which

have now been whittled down and moved from Anne-Marie Wylie's garage to Bruce's.

Fundraising

•John Williams has continued to run highly successful raffles at the Beach House Hotel from 1pm on a Sunday. Our Branch is the beneficiary every second week, while funds go to Wildlife Rescue every other week.

•We have a new coordinating team on stand-by to take up management of the Bunnings Sausage Sizzles, and have drafted a letter of application to Bunnings now that we have received our 2021 insurance certificates.

Admin jobs

•Kerry Alston and I spent a couple of hours together working through the on-line questionnaire issued by Queensland Water and Land Commission as a requirement for gaining our free annual insurance.

•We have also met our Federal reporting obligations with completion of the on-line form for the Australian Charities and Not-for Profit Commission.

✱ *Vanessa Elwell-Gavins*

Branch Fundraiser
CONTAINER DEPOSIT SCHEME
Code: C10192159
contact Phone: 0428980019

Budding wildlife writers needed!

Our Branch is a regular contributor to several local publications including the glossy magazine **The Fraser Coast Beacon**, local papers, **Hervey Bay Advertiser** and **The Maryborough Sun** and smaller local news sheets.

Members are invited to submit articles for consideration by our editorial team.

For a copy of the criteria or information contact - Diane dianec.49@hotmail.com and Ruby (ph 41234765) coryndennett1@dodo.com.au

Local identity and long time branch member Alan Logan leaves the Bay

Long-time Branch member and former grazier from Tumberumba, Alan Logan, now 90 years old has recently relocated from Hervey Bay to assisted living in Brisbane to be nearer to children, grand-children and great-grandchildren. Quite a few of us have known Alan well over the years, and been respectful of his passion for the environment, and his extensive knowledge of our native orchids.

Alan continued to attend our Nature Walks and the FCRC CEP Botany Group as much as possible up until the present. He gave us two excellent Library talks in recent years. Those of us who went on the Banksia Circuit walk at Woodgate about three years ago will not forget that he was able to identify an unusual climbing orchid in flower after listening to a description over the phone!

Alan will continue to receive his copy of Wambaliman. We wish Alan and Marie all the very best on behalf of the Branch. ✱

FCRC Environment Advisory Group (EAG)

Notes from meeting 11 March 2021
10am to 1pm taken by Vanessa Elwell-Gavins, President, Wildlife Qld Fraser Coast (this is NOT an official record).

Key issues

Jasmine Butler, Senior Strategic Planner, who has been managing the Planning Scheme Review and the Coastal Futures Project, is on maternity leave from 15 March. Her position will be filled (temporarily) by Emily Burke. The time-frame for both projects has slipped a little. Emily is aware of Jasmine's offer to give the Branch a presentation on the likely directions of the Planning Scheme review, which will be going to Council in April.

The *Planning Scheme Review* is likely to identify multi-purpose corridors, mapping of matters of local environmental significance, areas for offsets and a range of environmental issues to be reflected in the planning scheme. 'Trade-offs' may also be permitted that allow developers to offer smaller blocks for sale than 'normal' if wildlife corridors are retained or created.

Issues raised

- poor implementation and lack of compliance are major causes for concern about the Planning Scheme.
- there is a disconnect between the Planning Scheme and protection of functional attributes of natural areas resulting in broad-scale land clearing.
- David Lewis (chair) advised he had moved a motion in Council 5 years ago to investigate options for corridors and

open space.

- the need for Council to appoint one or more Environmental Planners, similar to other Councils. It appears this need may be recognised at senior level but has never been budgeted for. A motion will be drafted for the EAG to ask Council to address this disconnect.

Marine Bird signage:

Marine bird signage is being erected at boat ramps and jetties and other high-use fishing areas. A sign is already credited with saving an osprey which had become entangled in fishing line and was rescued by fishermen who had read the sign.

Wildwatch fauna spatial mapping:

Council is investigating the use of State Government Wildwatch fauna spatial mapping and data layers, which would be maintained by Council's GIS team. This would provide important links to the State database and would be beneficial across a range of outcomes, including hazard reduction for wildlife and planning.

Koala Conservation Strategy - link to SEQ Strategy:

Council had written to the State Government asking for Fraser Coast to be included in the SEQ Koala Conservation Strategy. Hervey Bay and Tinana koalas are all in a perilous position because of land clearing for development. EAG agreed to a recommendation to Council encouraging them to adopt relevant provisions of the SEQ Koala Conservation Strategy.

Environment levy:

The pros and cons of reinstating an environmental levy were discussed. Council is moving away from levies, which should be for a 'defined purpose' rather than core business/on-going maintenance in the relevant area.

There is a case for managing environmental asset purchases and all other environmental activity through the annual budget, where it might be less vulnerable to being terminated. The Land for Wildlife Officer position (funded from the old Environment levy) has been granted an 18-month extension once a new Officer is appointed.

Council's draft Natural Environment Style Guideline:

Tina Raveneau presented the new style guide that will be used to brand all environmental signage.

Management of drainage reserves including mowing and use of poisons:

Council mowing is not supposed to go within a couple of metres of watercourses. Where mowing has taken place close to watercourses, Col Zemek (Biosecurity Coordinator) maintained that would have been done by adjacent landholders. (That is a moot point where there are no private landholders adjacent to waterways, as in Liuzzi St.). Some poisons are legally permitted to be used in or near waterways. Council staff are always required to 'comply with the label'. The importance of sound management of watercourses for maintaining water quality and habitat was stressed. Council is having ongoing discussions about maintaining habitat function through spraying, for example

at Moolyir Creek. Watercourses that become overgrown can lose their function as waterways and habitat for birds. Watercourses in urban areas will never be pristine but it is possible to maintain them in a semi-natural state so they maintain their ecosystem function.

We recommended that Council develop effective public communications on 'being a good bushland neighbour', living along urban creeks, lakes and waterways, and living in the coastal zone. Tina Raveneau is working on this.

Biodiversity Conservation planning (Biodiversity Action Plan, Environmental Strategy, Threatened Species Action Plan, Natural Environment Officer):

A Biodiversity Action Plan is included as a deliverable under Council's Operational Plan and Council has agreed to development of an Environmental Strategy. The Threatened Species Action Plan did not receive any funding in the 2020-21 budget but Rod Buchanan will try again to get funding for this from the 2021-22 budget.

Land for sale on Ansons Rd, Dundowran Beach:

A block of timbered land, some of which is designated as coastal vine thicket including *Casuarina glauca* (Swamp Oak) and habitat for Black-breasted Button-quail between Sempfs Rd and the beach on the eastern side of Ansons Rd was offered for auction in late 2020 but was not sold. Preliminary approval for development of 17 blocks on 8 hectares of the land was given years ago but its development may be contrary to the Local Area Plan for Eli Waters/ Dundowran Beach.

Cont'd page 12

EPBC gets an ‘F’

Prof. Graeme Samuel AC headed an expert committee to review the EPBC Act. 30,000 contributions were made over the course of the review. The report released in October 2020 was 268 pages long.

The **Executive Summary** is 25 pages long. I have typed out the titles of chapters (underlined) and the subheadings to give members the gist of what the committee concluded. *Anything written in italics is by me to clarify.*

Protection of Australia's environment and iconic places

Australia's natural environment and iconic places are in an overall state of decline and are under increasing threat. The current environmental trajectory is unsustainable.

The EPBC Act is ineffective. It does not enable the Commonwealth to effectively protect environmental matters that are important for the nation. It is not fit to address current or future environmental challenges.

New National Environmental Standards should be the centrepiece of fundamental reform of national environmental law.

National Environmental Standards (NES) for Matters of National Environmental Significance (MNES).

National Environmental Standards are “outcomes” not processes. So basically the process the proponent follows is not as important as achieving a legally enforceable NES. NES need to be clear concise and specific. Only the Commonwealth Environment Minister can override NES for MNES which should rarely occur and the reason must be made public. Please note the difference between NES and MNES.

National Environmental Standards

should be applied to multiple scales of decision-making

NES should enable integration of environmental decisions by the Commonwealth and States and Territories.

National Environmental Standards must evolve.

National Environmental Standards are the centrepiece of a broader reform framework.

The framework includes indigenous participation, high quality data, enforcement and compliance, monitoring, expert advice, transparency, legal review and access to justice.

The protections of the EPBC Act should focus on core Commonwealth environmental responsibilities.

National Environmental Standards will support greater integration of Commonwealth, State and Territory environmental responsibilities.

Indigenous culture and heritage

Indigenous knowledge and views are not fully valued in decision making.

Indigenous Australians see, and are entitled to expect, stronger national-level protection of their cultural heritage.

The destruction of Juukan Gorge was approved under WA state laws and

Commonwealth intervention did not occur.

The EPBC Act does not meet the aspirations of Traditional Owners for managing their land.

Reforms should be co-designed with Indigenous Australians.

Legislative complexity

The EPBC is complex, dated, creates unnecessary regulatory burdens, compliance is time consuming and costly.

Trust in the EPBC Act

The community and industry do not trust the EPBC Act and there is merit to their concerns.

Transparent independent advice can improve trust in the EPBC Act.

Legal standing and review.

As we know people who are challenged by environmentalists say that “lawfare” is being used. However, Prof Samuel states “the importance of legal review in Australian society”.

Interactions with State and Territory laws.

Efforts made to reduce duplication in development assessment and approval have not gone far enough.

Legally enforceable National Environmental Standards provide a clear pathway to accredit States and Territories.

Accreditation of States and Territories is a strong recommendation and therefore the accreditation process has to be rigorous and subject to oversight and revocation of the right to NES assessment if the States or Territories are

negligent in their duties.

Oversight by the Environment Assurance Commissioner

The Commissioner needs to be independent and well resourced and to be provided with staff to ensure that NES are being upheld.

Commonwealth decisions and interactions with other Commonwealth laws

Commonwealth-led assessments and approvals should be streamlined.

Interactions with other Commonwealth environmental management laws.

The accreditation model recommended by the Review can equally be applied to other Commonwealth agencies where they can meet the NES.

Commonwealth fisheries

Offshore petroleum

Regional Forest Agreements

Approvals granted by other Commonwealth agencies

Regulation of wildlife trade

Planning and restoration

The EPBC lacks comprehensive plans.

Planning, conservation, recovery plans and restoration need to be done at a landscape level. It needs to have plans to deal with broadscale disasters like the recent bushfires, biosecurity, climate change.

National and landscape scale plans are needed.

Government investment should align with planning priorities.

The regulatory levers of government, including offsets, should align with the priorities of plans.

Additional mechanisms to support private investment are needed.

Compliance and enforcement

Compliance and enforcement of the EPBC Act is ineffective.

Strong, independent compliance and enforcement is required

Data, information and systems

A national supply chain of information should be an easily accessible, authoritative source that the public, proponents and government can rely on.

Monitoring, evaluation and reporting of outcomes

An Ecologically Sustainable Development Committee needs to develop the framework and baselines to measure performance protecting Matters of National Environmental Significance and to prepare an annual report to track the outcomes for MNES and whether the NES need adjustment.

The reform pathway.

Immediate steps should be taken to set up the basis for implementing the whole plan. Within 12 months a further tranche of actions need to be commenced.

PS There is also a list of 38 recommendations by the committee to Parliament. They can be accessed online.

✿ *Prepared by Carol Bussey*

EAG Report continued from page 9

Mike Moller (from Wide Bay Burnett Environment Council) proposed that Council should buy this land (currently listed for \$4.2 million). It is not clear why Council might want to pay a commercial rate for all the land when part of the land is expected to be retained as a natural area/drainage reserve.

However, we agreed to pass a motion asking Council to (a) consider purchasing the Ansons Rd site and (b) provide resources for strategic planning for protection of high priority environmental assets.

✿ *Vanessa Elwell-Gavins*

Branch logo and shirt options



• *The original colour and design chosen was a “Bizcool” – all acrylic – Wasabi coloured polo \$24 and an extra \$6 if you want a pocket . (from Morgans)*

Other options include:

• *Cotton (65%) blend shirt in apple green.*

• *“Claremont” 95% cotton shirt in apple green is available from BullAnt Designs in Pialba - \$30 with the logo.*

• *You can get the logo on any shirt for \$9.50 at Morgans Sewing*

Vale Noel Dean

Some of our more longer serving members knew Branch member Noel from Tiaro. He was not so active in recent years but we remember his generosity in sharing his place for a Christmas break up years ago and his involvement in Branch activities. This photo was taken about 10 years ago at a Branch activity at Fay Smith Wetlands Maryborough.



The Mary River turtle has lost one of its champions, as Noel Dean has passed away.

He once told me his father asked him why he bought a property on the Mary River, what did HE know about farming? Noel's response was that he bought it so he could sit in the shade of the trees on his folding chair and watch. Noel and Sue had seen the animal tracks coming out of the river during spring & early summer and wondered if it was a croc.

Since learning about the endangered turtles that lived in his stretch of the river, he kept a watchful eye on his river bank looking for turtle nests to protect. Oft times when I arrived at his place at 6am, he'd already been down the river to check. He'd invite me into the kitchen, offer me a Bundy Ginger beer, get out his trusty diary where he recorded in detail all that he observed and made sure I hadn't missed any detail.

Although one to avoid the limelight, Noel was very happy for a segment of Two & the Great Divide to be filmed on his property with Tim Flannery & John Doyle. He loved chatting with them and the film crew.

He was happy to share his knowledge and property with researchers. It was one of Mariana's field sites for her PhD. Simon Linke from Griffith Uni and his research team used Noel's place to record turtle noises during incubation. The Aquatic Ecology team from Bundaberg (Andrew, Tom & Sharon) used Noel's place to access the river. This last year his place was one of the properties in our Landcare Cat's Claw control project.

Above all, Noel was such a gentleman in the old style. He ALWAYS opened the gate and carried the equipment.

We were all welcome at his and Sue's place. He loved it when his family came and wanted them to share in and learn to love what he so valued about the river and its creatures.

Noel will be missed HEAPS. Our sincere condolences to Sue, Tammy, William and Dan and their families.

✿ *Marilyn Connell*

Nature Walk—The Pines to ESA Park



Perfect sky, tide well out, the Bay looking its best, welcomed the first Nature Walk for the year, 7th March. If ever there was the need for the shade from the sun by the foreshore trees, this was the day.

The plan had been to walk from The Pines to ESA Park along the beach and then return by the Point Vernon Reserve. But it was a hot morning, and after the first half hour the walkers retreated to the shade of the trees in the Reserve.

As always, the Nature Walk was oversubscribed thus joining the long list of similar events that have been held on the Fraser Coast in recent weeks. It is clear, that ever more people are interested in our local environment and green spaces.

John Williams welcomed the walkers and emphasized that the object of the

walk was to have a conversation about all that surrounds us along the Point Vernon shoreline. Sam Raveneau explained the long history of Council restoration of the foreshore and explained the replanting at various sites. Particularly, Sam explained the big effort to reduce erosion at certain points and the need to dissipate run-off water to reduce weed and seed spread and minimize erosion. Sam was the centre of conversation and questions by the group concerning foreshore plants.

Member, Cj Baker, had done a lot of preparation to explain the geology of this immediate locality and the enormity of the Mary Basin. Many of the group were amazed to learn of the age of the rocks and the reasons for the formations. Time didn't permit for more of Cj's captivating talk.

✿ *Frank Ekin*

Fay Smith Wetlands



Some of you will know that there was a fire in the Fay Smith Wetlands. It ripped through between 20 and 25% of the wetlands and scorched some areas that are normally wet. The fire brigade attended.

Thankfully the stretch by the creek where children from the special school had recently planted tree saplings was not affected.

The day after the fire I chatted with a young boy cycling through the wetlands on his way to school. He said he and his group had been hosing the hockey fields down on the day of the fire and they saw a teenage boy running out of the wetlands with a skateboard under his arm. The boy thought that he was the culprit.

As I write the wetlands has received more than 150mm of rain and it is full of water. Some of the badly burnt large trees are sprouting epicormic growth. The Eastern Water Dragons got away unscathed. I found a totally charred cane toad. We have seen large and small birds foraging in the burnt areas and I have heard the calls of the Eastern Dwarf Tree Frog (*Litoria fallax*) and the Brown-striped Frog, formerly called the Striped Marsh Frog (*Lymnodynastes peronii*). Even after the recent rain the burnt smell persists when you walk through it.

On unburnt vegetation adjacent to the boardwalk I recently photographed this handsome Robber Fly belonging to the genus *Cophinopoda*.



✿ **Ruby Rosenfield**

Mangrove Walk at Eli Creek, Point Vernon



As part of the Council's month-long wetlands program inspired by World Wetlands Day (February 2) the Branch ran a Mangrove Walk at the mouth of Eli Creek, Point Vernon. The walk run by Jenni and Peter held on Saturday 13 February was fully booked with over 50 on the walk. To cater for the sizeable waiting list Jenni repeated the walk on Friday 26 February.

With a very low tide we were able to walk out through the mangroves to the wide openness at the mouth of Eli Creek taking in several species of mangrove and getting a good feel for the ecosystem. As the name suggests the communities of mangrove plants grow in zones where one species dominate, often like a grove, rather than the makeup we generally see in terrestrial plant communities where we have a variety of species and a mix of heights.

Mangrove species are not a botanically related group of plants but the name given to species that have the ability to

tolerate salt and anaerobic soils, conditions that are found in our intertidal areas. Mangrove is also the name of the ecosystem formed by these plants.

Mangroves are vital in the protection of our coasts as a physical buffer between land and sea, as filters for pollutants, as habitat (particularly as fish nurseries and fish feeding grounds) and carbon storage. Mangroves are fully protected on public and private land under the Fisheries Act 1994.

Of the ten common species of mangroves found in the Fraser Coast eight can be seen at Eli Creek. Identification is easy as the species are so different to each other.

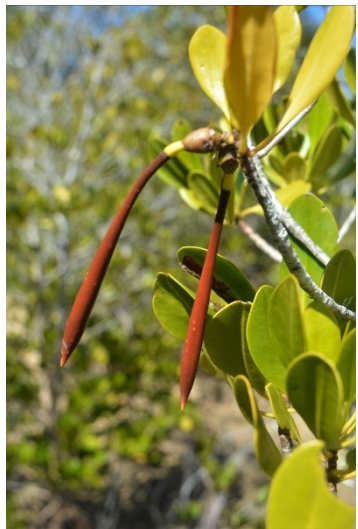
So how does a mangrove grow in such salty conditions? Cleverly most salt is excluded by the root membranes. In some species excess salt is stored in leaves which turn yellow-brown and drop off. You may have noticed this semi deciduous-like behaviour – there are always mounds of dead leaves on

tide lines where mangroves grow. Other species exude excess salt through glands on the leaves. In the River Mangrove for instance, salt crystals are clearly visible on the leaves (image right).

Low oxygen in the soils is also something mangroves have evolved to deal with. Most people would be aware of the peg or snorkel roots of the Grey Mangrove. These protuberances coming from the underground roots allow for the uptake of oxygen which is essential for the plants to breathe and grow, using the sugars the plant has made through photosynthesis. The prop roots of the Stilt Mangrove and the flanged trunk of the Yellow Mangrove serve the same purpose as peg roots.

On the walk we saw the long seedpods of the Stilt and Yellow Mangrove (image right). Again, one can't miss these washed up on the tide line at this time of year. Another adaptation to the conditions is that this is no ordinary fruit. The structure is called a propagule - essentially a seedling ready to go. It forms on the plant, growing out of the fruit and hangs on the tree until conditions are right for it to drop into the water and be carried away somewhere to grow.

Mangrove species are certainly diverse and fascinating. If you remember the insect repellent a walk in the mangroves is enjoyable and enlightening. And thankfully, this is not croc country, although it is their habitat! **•Jenni Watts**



I did it again! Incorrect name on a caption. Helen sent me this photo of Max and I immediately thought it was Scott. In the last Wambi I captioned the photo "Scott is known to go to great lengths to get a good photo!" As true as this is, this was a photo of Max who appears to be just as keen. Sorry guys. •Ed.



Bits and Pieces



Image by Marilyn

Turtle continues to have international fame

“Meet Australia’s Gorgeous ‘Punk Turtle’ And The Passionate Conservationist Saving The Species”

appeared recently on the World Atlas website. For the Mary River Turtle (whose crop of living algae growing on its head has given it the nickname punk turtle) and Marilyn Connell that’s some coverage as the website

alone has a readership of 165 million people per year! Read the excellent article for yourself at <https://www.worldatlas.com/news/meet-australia-s-gorgeous-punk-turtle-and-the-passionate-conservationist-saving-the-species.html>.

How long does it take for this message to get through?

Dead and sick baby Loggerhead Turtles are washing up on Capricorn Coast beaches in numbers never seen before by researchers, after swallowing plastic.

Dr Col Limpus Chief Scientific Officer, Department of Environment says breeding numbers will be affected in decades to come.

Source: ABC Capricornia Wednesday 17 February 2021

Australians are used to living in a land of extremes. This month it was New South Wales’ turn, when colossal rains inundated the state. But as Earth hurtles towards a temperature rise of 3° this century, **how much worse will it get?**

A group of eminent Australian scientists has examined that question. And the answer, quite frankly, is terrifying.

Global sea levels would rise up to 80 centimetres, drowning much of our coastline. Yields of key crops would fall by between 5% and 50%. Heatwaves in Queensland would happen up to seven times a year, lasting an average 16 days. And of course, the Great Barrier Reef would no longer exist.

As Ove Hoegh-Guldberg and Lesley Hughes write today, this is not an imaginary future dystopia. It’s a scientific projection based on our current emissions trajectory – a vision of Australia we must both strenuously try to avoid, but also prepare for.

Other important research released today reveals the toll climate change and other threats are already wreaking on our precious wild places. As Albert Van Dijk and his colleagues write, Australia’s environmental health last year scored an appalling 3 out of 10, based on a suite of indicators such as river flows, soil health and tree cover. .

Amid the depressing news, however, there’s reason to hope. As our experts remind us, with urgent action and some luck, there is still much we can salvage.

Source: The Conversation article March 2021 by Nicole Hasham Section Editor: Energy + Environment – The Conversation Media Group

NATURE WATCH—The Mathematicians In Our Garden

I can't say that my arachnophobia is cured but it has certainly been tempered through observing the lives of the orb weavers in my small garden.

I have watched a Garden Orb Weaver spider hurriedly constructing her perfectly symmetrical web between bushes at dusk to be ready for catching food during the night. I have seen her dismantle the web in the morning and wait out the day safely hidden among the leaves, then to reconstruct her web again the next evening. But I have seen her struggling to build the web when it was windy and one evening the gusts of wind were so strong that she was unable to build it at all. No web, no food.

I have watched the unfolding lives of several Golden Orb spiders, which build elaborate webs, stay in them permanently and keep their rubbish (discarded insect debris) neat and tidy on a long string. But survival is precarious. One of them had an enormous web with strong tie lines stretching across the courtyard. But I thought she was too exposed to the birds that sit on the fence and one day she was gone and the web was in tatters so I can only come to one conclusion as to what probably happened.

Another Golden Orb spider established quite a queendom in a corner of the courtyard, with her main circular web protected by a web tangle on top. She obviously had plenty of food and also a male in his own little web beside her. But the location of her comfy home had no shade and was sheltered from cool-

ing breezes, and one very hot summer afternoon the full blast of the sun was on her web. She had oriented her body to minimize the area of exposure to the sun, and while spiders can tolerate quite high temperatures before it is lethal, she didn't recover. Subsequently the small male moved into her space and lived some time on his own.

Much to my delight, a St Andrew's Cross spider established herself outside my window where I could comfortably watch her. At that time several tropical lows formed off the Queensland coast and she spent a lot of her time repairing the web broken by strong winds. One morning I saw that the wind had done a lot of damage to her web during the night and she was busy doing the repairs. Then all of a sudden she came to a halt on the edge of a massive ragged hole. She was stationary there for perhaps 5 minutes (a long time) and there was no doubt in my mind that she was calculating and working out the way to repair this complicated hole. Then she proceeded with her work and the end result was perfect – brilliant mathematician!

At the beginning of April I realized that all the orb weavers were gone. A literature search revealed the sad fact that they only live for one season. Once they have done their biological duty of passing on their genetic inheritance to the next generation, that's it. Nature is so cruel.

✿ *Merike Johnson*

NATURE WATCH— A Real Aussie Battler



Photo by Belinda Rafton

One little creature I have seen waddling across the Burrum Heads-Pialba Road in the Toogoom State Forest area was an echidna. Unfortunately they don't always make it across the road!

Despite the fact that we think of echidnas as primitive (monotremes evolved when dinosaurs were still around) the little animals are very successful organisms in the Australian environment.

They are found all over Australia and southern Papua.

Surprisingly for a small animal, they are very long lived – at least 50 years. They have excellent survival skills that suit them to our continent of drought and flooding rains. Echidnas are quite good swimmers. At the other end of the scale, in a bushfire, echidnas burrow into the soil and can survive even if the tips of their spines get melted!

In seasons when the environment is dry and unproductive, echidnas hibernate to save energy.

An echidna copes with most predators by quickly digging vertically into the soil and wedging its body so that dingoes, goannas and other predators can't get at it. Sadly this does not protect it from cars, or bulldozers clearing its habitat.

The best time to see echidnas is spring when a group of hopeful males trail around behind the female (an echidna train). When the female is ready to mate, the strongest male pushes contenders aside and mates with the female. The female lays an egg about 1.6 cm in diameter which she carries in a pouch-like structure on the belly. The egg hatches into a tiny foetus-like hatchling after 10 days. Echidnas, like whales, lack teats so the young sucks milk from patches on mum's belly. The baby echidna, (called a puggle), leaves (or is made to leave!) the pouch once it starts growing spines.*

The scientific name of the echidna is *Tachyglossus aculeatus*. *Aculeatus* means spiny, and *tachyglossus* means "fast tongue". Echidnas have no teeth and an almost fused tube-like mouth so the long thin tongue is vital.

I was lucky enough to visit a wildlife sanctuary and see attendants feeding the cutest echidna with insect mix. Its long quick bright pink tongue lapped up the tucker. In the wild a healthy echidna can eat 40,000 white ants and/or ants per day. Good on them!

✿ *Carol Bussey*

Branch member Carol wrote this article originally for the local Toogoom Chatter

*Australian Geographic Nov-Dec 2020 P 66.
The Ultimate Survivor by John Pickrell.

NATURE WATCH— The Wattle

The lovely plant in the photograph has the rather uninspiring common name of Flat-stemmed Wattle. The scientific name, *Acacia complanata*, is prettier. The species is not common but occurs in some forested areas of the Fraser Coast. It is easily propagated from seed and only grows to about 5 metres so it is a good ornamental addition to the home garden.



What look like leaves in the photo are actually modified stems called phyllodes. Phyllodes lose less water in dry conditions than leaves do, giving acacias a survival advantage.

However, the most common wattles on the Fraser Coast are probably Black Wattle *Acacia leiocalyx* and Hickory Wattle *Acacia disparrima*.

Some landholders treat wattles, especially Black Wattle, with contempt, as though they were weeds. However, these Cinderellas of the plant world deserve respect for the important role they play in the environment and in service to humans.

Firstly acacias are pioneer species. After fire, acacias quickly germinate and help stabilise the bare burnt soil and provide habitat. These hardy plants are often used by mining companies in land rehabilitation.

Secondly, acacias are legumes like peas and beans. Legumes have nodules on their roots which contain rhizobial bacteria. These bacteria convert nitrogen from the atmosphere into chemical compounds that plants can then use to make protein.

The acacias generously share this protein with bees via the copious pollen they produce, and with birds and Squirrel Gliders, who eat the fat and protein rich seeds. Humans also collect the large seed bounty from acacias and grind them up to make a nutritious flour.

On the Fraser Coast, we have many other species of acacia including the endangered Tiny Wattle *Acacia baueri* that grows in the moist heathland and is only about 10-15 cm tall!

Two attractive species also here are the Brisbane Golden (or Fringed) Wattle, *Acacia fimbriata* and the Primrose Ball Wattle, *Acacia flavescens* – an untidy tree but glorious when in flower.

Australia has more species of acacia than any other country – about 1000.

✿ *Carol Bussey*

Branch member Carol wrote this article originally for the Wildlife Matters column in the Hervey Bay Advertiser 22 April 2021

ETHOLOGY and ETHICS

If you are into Ethology (the study of animal behaviour), a recent book by Jennifer Ackerman titled "The Bird Way: a new look at how birds talk, work, play, parent and think" (2020) is a very enlightening study.

Not since my early adulthood, when I avidly read many of Konrad Lorenz's books, especially about birds, have I found such a diverse treasure of up to date carefully researched avian information.

We may well describe them as dinosaurs that have survived the ravages of time, but they are far more than that on the evolutionary scale of things. Since the ages of angiosperms and trees many millions of years ago on planet Earth, they have been nurtured and have nurtured the remarkable biology that has allowed humans to spring into existence and survive these past few thousand years.

Ackerman speculates in her closing chapter that due to their super efficient signalling and their tightly packed neurons, birds could become the next big thinkers, an event that would enable their survival if humans became extinct. It points up the symbiotic relationship that has developed between birds and humans: they have recently learned to use us for food and shelter and for ages before, birds produced and continue to nurture the expansion of forests that enabled more breathing creatures to evolve.

Song birds evolved in Australia as part of Gondwana and not in the northern hemisphere. How much of Beethoven's musical inspiration is based on human mimicry of birds one might ask.

We could learn a great deal more about weather patterns, air movements and so much more about the natural world from birds.

What a crying shame that many developers and their subservient politicians who shun the ethics governing our natural environment and existence, give total precedence to planning that destroys so much of what eons of delightful creatures have worked so hard for!

Konrad Lorenz who wrote King Solomons Ring (1952) quotes Wordsworth in lament of humans and weapons:

"If such be Nature's holy plan,

Have I not reason to lament

What man has made of man?"

✿ **Jackie Henrion**

(Children's) BOOK REVIEW

The other day young grandson Riley showed me his school library book. I was initially taken by the delightful illustrations and the familiarity of the story. I soon realised that ***The Call of the Far Eastern Curlew*** had a strong message that needs to be told, particularly to children, like Parker, who is the young would-be ornithologist featured in this children's story book.

Author Katrina Logan and illustrator Geoff Logan have conjured a masterful tale that will delight young and old alike. It details Parker's fascination with the critically endangered Eastern Curlew, the largest of the migratory shorebirds. Parker documents observations he makes on the mudflats of Toondah Harbour. Snippets from his journal are dotted throughout the book, highlighting interesting facts that help us appreciate why these annual visitors are so special.

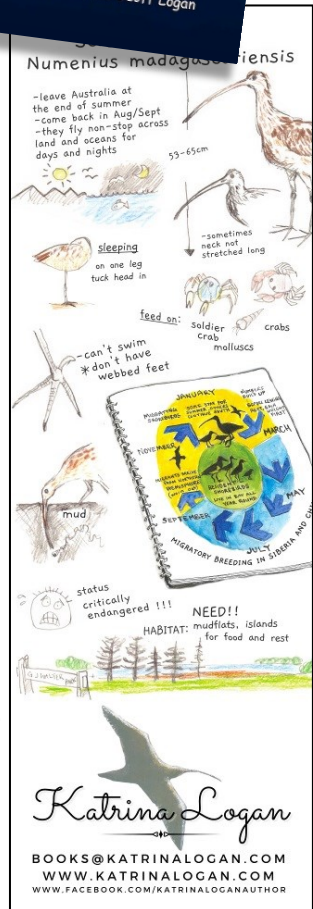
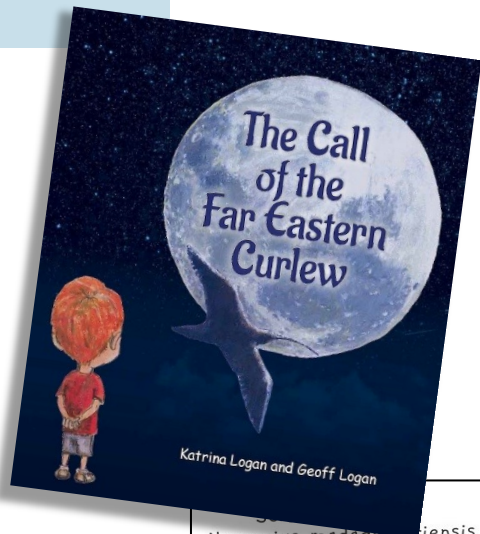
Parker becomes dismayed by the all too familiar threats to the Curlews (and other migratory waders), dogs off leads, terrorising jet skis, careless boaties, and zipping drones that are easily mistaken as raptors. He laments to his father, "What if by the time I am a real ornithologist the Far Eastern Curlews are all gone?"

He embarks on a campaign of activism and education. He enlists the help of the Queensland Wader Study Group. And one little boy makes quite a difference.

If you have grandchildren, nieces or nephews, or young neighbours this would be a perfect gift, or consider buying just for yourself. Better still, donate a couple of copies to your local primary school.

It can be purchased through the author's website, www.katrinalogan.com

✿ *Peter Duck*





The objectives of Wildlife Queensland are to:

- (1) preserve the fauna and flora of Australia by all lawful means;
- (2) educate by all means possible all sections of the community, particularly the young, in understanding the principles of conservation and preservation of the natural environment;
- (3) discourage by all legal means possible the destruction, exploitation or unnecessary development of any part of the natural environment;
- (4) encourage rational land use and proper planning of development and use of the natural environment and management thereof.

Want to join Wildlife Queensland?

<https://wildlife.org.au/shop/membership/membership-3/>

\$30 Individual

\$45 Family / non-profit group

\$20 Concession

\$12.50 Youth

Once you have joined Wildlife Queensland you may elect to be assigned a Branch such as Fraser Coast.

Wildlife Queensland and its branches are not wildlife rescue or care organizations.

However, we thank you for caring for our wildlife and if you wish to report sick, injured or orphaned wildlife contact: RSPCA Qld on 1300 ANIMAL or preferably contact our local rescue service. Our local service has the expertise and will eliminate delays in taking action.

WILDLIFE RESCUE FRASER COAST

for ***all*** species of native wildlife

Phone **4121 3146 anytime** (backup number 0419988240)

WRFC rescue and care for all species of native fauna - such as injured or unwell koalas, kangaroos and wallabies, micro bats, flying foxes, birds and reptiles.

For marine strandings ring the QLD Government Wildlife Hotline 1300 130 372