



Newsletter for Landcare and Dunecare in Byron Shire



<http://www.brunswickvalleylandcare.org.au/>

November 2019

The Byron Shire has been included in the Statewide Natural Disaster Declaration.

This means that Byron Shire residents affected by the bush fires may be eligible for a range of financial assistance from the NSW Government.

Disaster Relief Grants are available, dependent on eligibility. More information about these grants

- Disaster Welfare Assistance Line 1800 018 444.

Emergency Assistance For Landholders

Local Land Services and NSW DPI can assist landholders who have been impacted by the fires with emergency fodder, stock water, veterinary assistance and assessment of animals. Landholders are also encouraged report any stock losses. For more information visit the [NSW DPI website](#).

- Call 1800 814 647.



Please check in on your friends and neighbours, and if you or someone you know needs help, reach out. The following are free services available 24 hours a day, seven days a week:

- Mental Health Line – 1800 011 511
- Lifeline - 13 11 14
- Mensline - 1300 789 978
- Kids Helpline - 1800 55 1800
- Beyondblue 1300 22 4636

Locally the Mullumbimby & District Neighbourhood Centre Listening Space is a free counselling/support service. They also have a disaster welfare officer.

- Mullumbimby & District Neighbourhood Centre 66841286

If you would like to make a donation:

- Mullumbimby & District Neighbourhood Centre <https://mdnc.org.au/donate/>
- The Salvation Army 13 72 58 <https://www.salvationarmy.org.au/donate>
- Vinnies 13 18 12 <https://donate.vinnies.org.au/appeals-nsw/vinnies-nsw-bushfire-appeal-nsw>
- The Red Cross 1800 733 276 <https://www.redcross.org.au/>

While firefighters and emergency services are working tirelessly to contain bushfires many of our volunteer wildlife carers and rescuers are working to help animals that have been left hungry, homeless or hurt as a result of the devastation. Locally you can make donations for our wildlife to:

- Friends of the Koala <https://www.friendsofthekoala.org/>
- WIRES <http://www.wiresnr.org/>
- Northern Rivers Wildlife Carers <https://www.wildlifecarers.com/>

Volunteer!

Just a reminder that although we all want to help during a crisis, one of the best things you can do all year round is volunteer! Whether this is with the RFS, Rescue Squad, Vinnies, Red Cross, Salvation Army, CWA, The Neighbourhood Centre, Wildlife carer organisations or of course Landcare - all these exist because of the tireless work of volunteers. **A huge thank you to all the volunteers!**

Photo: The Blackbutt Plateau, Huonbrook credit Rainer Hartlieb

The
**RISING
STRONG**
Project

ff
federal
films

Brunswick Valley
Landcare
Inc.

FedTalks
think global, talk local

2040

PLUS
Presentation
FROM
LOCAL
SCIENTIST

**FILM &
DISCUSSION**

THURSDAY 21 NOV 5:30PM
FEDERAL HALL, FEDERAL

Entry \$5 kids \$15 adults | Free food
Tickets via Eventbrite- 2040 Film & Talks: Federal

 *This project has been assisted by the New South
Wales Government through its Environmental
Trust.*

 North Coast
Regional
Landcare

Join [Brunswick Valley Landcare Inc](#) and [FedTalks](#) for a special community screening of the [2040](#) Film, sparking conversations about local impacts and possible solutions for conserving biodiversity in a shifting climate. With free finger food, presentations and discussion of local actions, this is the first Byron shire event in a series of community educational activities, and is part of the [Rising Strong Project](#). Tickets \$15 adults and \$5 kids Tickets include food, speaker and facilitated discussion session. Purchase via <https://www.eventbrite.com/e/2040-film-talks-federal-tickets-76399295349>



Snake Awareness Workshop

Learn about the common snakes found in our area.

How do snakes generally behave?

Why is snake bite first aid effective?

Thursday 28th November 2019 9.30—11.00 am Ewingsdale
or

Friday 29th November 2019 3.00—4.30 pm Mullumbimby

BOOKINGS are essential as numbers are limited to 30 people.

Entry is by Gold Coins donation. Morning or afternoon tea will be provided.

To book the **Ewingsdale** event please visit <https://snakeawareness-ewingsdale.eventbrite.com.au>

To book the **Mullumbimby** event please visit <https://snakeawareness-mullumbimby.eventbrite.com.au>

Directions to the venue and further details will be given on booking.

This workshop is a community information event sponsored by Brunswick Valley Landcare with venues kindly provided by our partners Byron Shire Council and The Farm Byron Bay.





Saturday
23 Nov 9 - 4pm
Alstonville
\$88
lunch included



Business Planning Masterclass

with Mark Napper

MANY FARMERS UNDERESTIMATE THE VALUE OF PURSUING THE DEVELOPMENT OF A GOOD BUSINESS PLAN BEFORE THEY BEGIN BUT IT IS NEVER TOO LATE !

A GOOD BUSINESS PLAN IS ONE OF THE KEYS TO A SUCCESSFUL BUSINESS START-UP.

THE REAL VALUE OF CREATING A BUSINESS PLAN IS NOT IN HAVING THE FINISHED PRODUCT IN HAND; INSTEAD, THE VALUE LIES IN THE PROCESS OF RESEARCHING AND THINKING ABOUT YOUR BUSINESS IN A SYSTEMATIC WAY.

**TICKETS AVIALABLE at: www.eventbrite.com.au
www.northcoast.edu.au | (02) 6628 5426
enquire@northcoastcc.edu.au**





Australian Entomological Society, 50th AGM and Scientific Conference

The conference will be held at the Brisbane Convention & Exhibition Centre at South Bank, Brisbane, from Sunday 1st to Wednesday 4th December, 2019.

This year, the conference theme is Understanding the Australian Biota in a Changing World, reflecting the joint interests of the three societies as well as addressing the pressing challenges of climatic and biotic change in the Anthropocene. We hope that a significant proportion of the symposia and associated presentations will play a part in advancing our understanding of the significance and conservation of Australia's biota and in revealing the important functional aspects of both natural and modified ecosystems.

<https://www.aesconferences.com.au/>



2nd Australian Native Bee Conference

Integrating beekeeping, crop pollination, hive products and research.

St Leo's College, University of Queensland, St Lucia, Brisbane

Thu 5th Dec - Sat 7th Dec 2019

Bee Identification Workshop on Sun 8th Dec 2019

The Australian Native Bee Association Inc invites beekeepers, farmers, educators, industry leaders and researchers to share knowledge at the 2nd Australian Native Bee Conference. We will discuss issues required to increase understanding and unlock the potential of our native bees, a valuable but under-utilized natural resource.

The conference and field trip will take place over three days, Thu 5th to Saturday 7th December 2019.

<https://australiannativebeeconference.com.au/>



Byron Bird Buddies (BBB) Program Update for November & December 2019

(Locality Group of Brunswick Valley Landcare)

What To Bring - Always wear covered shoes and bring water, hat, sunscreen and insect repellent. For surveys always bring something to eat for morning or afternoon tea and lunch if it's over the lunch period.

Contact - for all BBB activities contact Jan - Mobile 0428864378 or byronbirdbuddy@gmail.com

Note: For surveys, experience is not necessary. Beginners are welcomed at all outings which will provide an opportunity to learn about our birds and their habitat. If you intend coming to any of BBB project activities please let BBB or Jan know)

BBB – continue monitoring of Pied Oystercatcher & Beach Stone-curlew breeding sites and record site visit on BBB online Excel spreadsheet. Please, contact Jan at byronbirdbuddy@gmail.com if you wish to participate in a nesting bird-watch during the beach-nesting bird season – August to December.

When: November Thursday 21st

What/Why: Sathya Sai School – assist Linda with shorebird presentation

Who: BBB & BLNR (Jan & Linda)

Time: ??? To be decided

Where: Tweed Coast - **Contact:** Jan - 0428864378

BBB – Sunday 24th at 11 am - Meeting – (prior to the survey at 2.30pm) - this is an opportunity for new people to meet & discuss BBB projects.

When: November Sunday 24th

What/Why: Afternoon 4-6 hr Survey – Byron Wetlands

Who: BBB

Time: 2.30pm to 8pm

Where: Byron Wetlands - meet end of Wallum Place off Bayshore Drive – L after IGA shopping Center

Contact: byronbirdbuddy@gmail.com or Jan 0428864378

When: December – Thursday 12th

What/Why: Afternoon 4-6 hr Survey – Byron Wetlands

Who: BBB

Time: 2.30pm to 8pm

Where: Vallances Road - Mullumbimby off Coolamon Scenic Drive – Meet at the ponds at the bottom of the hill before the end of the road

Contact: byronbirdbuddy@gmail.com or Jan 0428864378

Other Groups

Who: Richmond/Brunswick Bird Watchers

When: Wednesday November 6th, 21st & December 4th (? summer break-up & Xmas party) –

Where: Survey sites to be decided at end of each outing

Time: 8 am - Contact: richmondbrunswickbirdwatchers@gmail.com

Who: BirdLife Northern Rivers

<http://www.birdlife.org.au/locations/birdlife-northern-nsw/birdlife-northern-rivers>

Photo: Little Eagle by Deborah Pearse



The November issue of Village Eco News is now available. There is a great article on ticks this month <http://brunswickvalleylandcare.org.au/wp-content/uploads/2016/06/Village-Eco-News-Issue-37->

[November-2019.pdf](#)

Congratulations to our raffle winner Karl Page!

Karl won 2 x SILVER three day passes to the iconic [Mullumbimby Music Festival](#) plus accommodation at nearby luxury [Teak Tree Farm](#) in Myocum! Thank you to all those who bought a ticket. All proceeds go towards our hardworking [Landcare](#) groups in the Byron Shire.



Tweed Byron Hinterland Trails



[Falls](#) and [Minyon Grass picnic area](#) in [Nightcap National Park](#) as part of the [Tweed Byron Hinterland Trails](#) project.

The Minyon Falls master plan, developed by NewScape for the National Parks and Wildlife Service, is the first of four separate master plans for different precincts within the Tweed Byron Hinterland Trails project. It will be placed on public exhibition from Friday 25 October to Monday 25 November 2019.

The Minyon Falls precinct is a popular visitor destination in Nightcap National Park near Lismore on the north coast. Here you can see Minyon Falls plunging 100 metres into a deep pool amid tall forests and spectacular scenery.

This master plan will guide works to enhance visitor access and interpretation at Minyon Falls lookout and nearby day use area. The works aim to complement the site's natural and cultural values and provide opportunities for a more diverse range of visitors to enjoy our spectacular national parks.

The documents are available for viewing on the DPIE website at www.environment.nsw.gov.au/consult and at the following locations:

NPWS Alstonville office - 494 Bruxner Highway, Alstonville NSW 2477

NPWS Byron Bay office - Tallow Beach Road, Byron Bay NSW 2481

You are invited to make a written submission on the Minyon Falls master plan by 25 November 2019.

Email your submission to: npws.northcoastbranch@environment.nsw.gov.au

Make a submission via the website: www.environment.nsw.gov.au/consult

The submissions will be considered by DPIE in finalising the master plan designs.



Big Scrub
Landcare
The Voice of
the Rainforest

Work at Big Scrub Landcare – Manager Required

Big Scrub Landcare are looking for a professional Manager to look after all day-to-day operations of the organisation including: stakeholder and community engagement, fundraising, project management, administration and communication.

Key Accountabilities:

Coordinate and deliver community engagement strategies and approaches that promote Big Scrub Landcare's programs and meet funded project outcomes. Some of these approaches include the Big Scrub Rainforest Day, community events and publishing collateral.

Manage and expand databases (reporting, regulatory, grant opportunities, BSL membership, administration)

Manage all of BSL's existing digital platforms including email, social media, websites, fundraising portals

Manage and drive the development and implementation of fundraising strategies and approaches to meet and deliver BSL's funding needs for all programs. Review, evaluate and measure ongoing effectiveness and make recommendations for improvement

Manage key internal and external stakeholder relationships as well as broad community engagement.

[To read the Position Description click here.](#) Applications close 8am Monday 25th November and can be submitted to info@bigscrubrainforest.org.

Should you require further information about the role please contact: Shannon Greenfields on 0422 204 294 or shannon@bigscrubrainforest.org.

https://www.bigscrubrainforest.org/work_at_big_scrub_landcare/

Koala Habitat Information Base

We are pleased to let you know the Koala Habitat Information Base is now available for download on the NSW Government's [Sharing and Enabling Environmental Data \(SEED\)](#) portal.

Building our knowledge on koala habitat

The development of a statewide Koala Habitat Information Base is a key commitment under the 'Building our knowledge' pillar of the NSW Koala Strategy. It delivers the best available statewide spatial data on koala habitat, likelihood, koala preferred trees and koala sightings for NSW.

A technical guide is available on our website at <https://www.environment.nsw.gov.au/topics/animals-and-plants/threatened-species/programs-legislation-and-framework/nsw-koala-strategy/building-knowledge-on-koala-habitat>

A webinar showing how to access the data on the Sharing and Enabling Environmental Data portal (SEED) will be delivered on Thursday 24 October from 1 pm to 2 pm. To register, please visit the following link: https://dpensw.adobeconnect.com/koala/event/event_info.html

Roadkill hotspots

Fixing priority koala roadkill hotspots is a key commitment under the 'Safety and health of koala populations' pillar of the NSW Koala Strategy. The installation of over 9 km of koala fencing and other associate infrastructures along Picton Road, near Wollondilly, is now complete. This is the first vehicle strike hotspot fixed under the NSW Koala Strategy, which commits \$3.3 million to address this issue.

We are currently working with Road and Maritime Services, local councils and the community to identify additional priority roadkill hotspots to implement effective mitigation responses.

STORIES to inspire and give you hope

Bangalow Koalas Inc. Wins Australian Community Media Landcare Community Group Champion Award

Bangalow Koalas Inc from Byron Shire, is the recipient of the Australian Community Media Landcare Community Group Champion Award at the NSW Landcare Awards for their work in creating a Koala Wildlife Corridor connecting properties from Byron Bay and surrounds out towards Repentance Creek and beyond.

Held last week in Broken Hill, the NSW Landcare Awards feature 10 categories ranging from individual to group awards.

Representative of Bangalow Koalas Inc, Linda Sparrow said she was thrilled to receive the award on behalf of the group.

“Bangalow Koalas Inc. does an incredible job and I was pleased and honoured to share the work they do on behalf of our community.”

“Bangalow Koalas Inc. was founded in 2016 and is a community group devoted to protecting and saving the koala population. What started as a handful of concerned neighbours has grown into an active, change-creating community group which has, to date, planted over 19,000 trees on 18 properties in just 21 months. With a further 46 interested landholders willing to join their corridor, we are well on the way to realising our goal of creating a Koala Wildlife Corridor across the Northern Rivers”, said Ms Sparrow.

CEO of Landcare NSW, Dr Adrian Zammit, said the awards were a chance for each Landcare region and group to share their stories and successes from across the state to their fellow Landcarers.

“The NSW Landcare Awards highlight the incredible work that our Landcare community do. Bangalow Koalas Inc. are doing an amazing job in building sustainable landscapes and sustainable communities.”

“On behalf of the Landcare NSW community, I congratulate Bangalow Koalas Inc. for winning the Australian Community Media Landcare Community Group Champion Award.”

“Landcare is about communities working together to create positive outcomes for the environment and the agricultural landscapes across NSW. It has never been more important that we continue to support and recognise the dedication and commitment of our Landcarers and recognise their tremendous efforts,” said Dr Zammit.

Grand champions of the NSW National Award categories will now go on to represent the whole NSW Landcare Community at the 2020 National Landcare Awards in Sydney.

Contact:

Linda Sparrow, President Bangalow Koalas Inc.

e: twodogsmedia@optusnet.com.au

Samantha Stratton, Marketing Coordinator Landcare NSW

e: ss Stratton@landcarensw.org.au



Threatened ecosystems to be protected from weeds across the Byron Shire

by Local Land Services

The local environment at key sites at Byron Bay and Suffolk will be improved through a targeted weed control program being delivered by North Coast Local Land Services (LLS) in partnership with Byron Shire Council.

The sites in the Byron Shire are two of nine priority locations across the North Coast that will be targeted for weed control due to the occurrence of rare and unique areas of vegetation known as Threatened Ecological Communities (TECs). The TECs are located on coastal floodplains and include Swamp Oak Forest, Swamp Sclerophyll Forest and Subtropical Coastal Floodplain Forest.

The project will be delivered over seven years allowing for initial weed control to be continually followed-up ensuring the best possible reduction in weed infestations into the future. The collaboration between North Coast LLS and the Council will achieve common local and regional objectives such as enhanced biodiversity in local bushland, healthier coastal habitats and improved water quality.

“These Threatened Ecological Communities are typically small in area and are under pressure from many threats largely due to their close proximity to urban areas” Simon Abbott, Senior Land Services Officer with North Coast LLS said. “By targeting these priority sites for long-term weed control, the project aims to protect a network of these significant vegetation communities across a 250km coastal corridor”.

By employing local Indigenous bush regeneration groups, the project will also provide opportunities for Aboriginal employment and working on country. On-ground works of the project are expected to commence early next year, and builds upon previous restoration work of the Council.

The project also provides an opportunity for local residents to learn more about how they can be involved in protecting their local bushland. The local community can be involved by attending events, joining a Landcare group, or getting involved in ongoing restoration of these important sites.

“By keeping an eye on your local bushland for new weeds popping up, local residents can be on the frontline and be actively involved in halting the impact of invasive plants on these significant ecosystems” Mr Abbott said.

The North Coast LLS are playing an important local role in the project by coordinating site monitoring and planning that will ensure the best outcomes are achieved for these special sites.

The program is being funded by the NSW Government through a partnership between the Saving our Species program and the Environmental Trust. Grant funding of \$350,000 is being matched by the project partners.

Media Contact: Simon Abbott, Senior Land Services Officer, North Coast Local Land Services Kempsey 0455 894 962.

REGENERATIVE AGRICULTURE

Mary River repaired at Kenilworth, saving farmland and benefitting Great Barrier Reef

by ABC Rural: Jennifer Nichols

Photo: Landowners Ruth and Stephen Carter at Kenilworth's Mount Ubi Station.



One of the most eroded stretches of a Queensland river has been transformed in a bid to stop valuable farmland washing away and polluting water.

Key points:

- A badly eroded stretch of Queensland's Mary River, once considered a "basket case" has been repaired
- The \$500,000 project to restore the banks included 9,000 native plants being put in

Station owners say the transformation has been "overwhelming" and will help to protect the Great Barrier Reef



Photo: The river repair site at the Carter's beef property before restoration began in April 2019. Supplied: Mary River Catchment Coordinating Committee

The environmental stakes are high on the Mary River at Kenilworth, which is the fourth-highest source of sediment, out of 35 catchments, flowing onto the Great Barrier Reef. Tree clearing, sand and gravel mining, and the misguided farming practices of the past turned what was once a shady meandering river to a denuded waterway plagued by erosion.

"We've certainly lost a lot of land, we're told something like 600,000 tonnes has disappeared, probably over the past 70 years, from floods and from erosion," Mount Ubi Station owner Stephen Carter said.

"It was a straight drop of 10 metres [from the bank] right down to the river, and every time we got a rise in the river or a flood it would be cut from underneath.

"The clearing means the water gets into the river quicker when we have a flood, and because there was a lot of vegetation taken away, the water comes in so much faster.

["And then away it goes — straight down out to sea."](#)

Photo: Looking downstream over the repaired riverbank at the Carter's farm at Kenilworth in October 2019.



Fighting the tide

With the help of Federal Government funding, action has been taken to start repairing the damage and stop thousands of tonnes of sediment continuing to be lost.

The severely eroded bank by the Carter's property is unrecognisable after Alluvium Consulting coordinated \$500,000-worth of works designed to reduce future sediment loss by 90 per cent.

"This project came out of a plan we developed after the 2011 and 2013 floods with a range of stakeholders, including the Burnett Mary Regional Group, who funded this site, but also the Mary River catchment Coordinating Committee, Seqwater, and the Sunshine Coast Regional Council," project manager Misko Ivezich said.

"We basically looked at this reach in Kenilworth and it was a really, really high producer of erosion with lots of land loss and lots of roads washed out."

Earthmoving equipment reshaped the bank and rows of six-metre long timber poles were driven four metres into the ground to slow down floodwater.



Photo: The river repair site during restoration. Supplied: Burnett Mary Regional Group

Nine thousand natives were planted on the site, which is protected by electric fencing to ward off marauding feral deer.

Under the Australian Government's Reef 2050 Water Quality Improvement Plan, water quality targets have been set for all catchments that drain onto the Great Barrier Reef.

The groups working on the Mary River have prioritised a list of projects that are waiting for future funding.

'Basket case'

Brad Wedlock from the Mary River Catchment Coordinating Committee praised property owners for coming on board to be part of the solution.

Photo: The first river repair site before restoration works in Kenilworth in 2015. (Supplied: Alluvium Consulting)

Photo: The repair site four years later shows the area now covered with vegetation. Supplied: Alluvium Consulting)

"Ten or 15 years ago this reach in particular was a basket case," Mr

Wedlock said.

"It was very difficult to actually see a future in what we would do here but, with just working away, getting a couple of landholders on board who were willing to try some new techniques, it's just sort of crept up on us and probably now we say 'snowballed'.

"We can see the progress that's being made, but there's at least another 30 or 50, or even 100 years worth of work with this issue that we've got here with riverbank erosion."

A two-kilometre stretch downstream was the first to be transformed back in 2015 and has survived the test of time and nature.

"It's been through multiple floods and a few cyclones as well — previously that bank was eroding metres per annum with different floods," Mr Wedlock said.

"This is not a technique that's particularly new, all of this has been developed all around the world and it's been implemented in Victoria for 20 to 30 years and it's also been working in Central Queensland and North Queensland for about 10 to 15 years."

An 'overwhelming' transformation

Weeds and deer remain a challenge but thousands of native plants will be crucial to the long-term future of the restoration project.

"Piles will only last 10 to 20 years because the timber will rot away, so the ultimate stability will be the multiple sets of tree roots and shrubs and forbs and grasses and all those things going down onto this riverbank now and stabilising it for the longer term," Mr Wedlock said.

Over the long term, the revegetated banks are expected to help cool the water where endangered Mary River cod are currently spawning.

"It's really quite overwhelming to have this completed in our lifetime," Mr Carter's wife, Ruth Carter said.

["\[It's\] to the benefit of everyone — the district and the Reef."](#)

<https://www.abc.net.au/news/rural/2019-11-05/mary-river-erosion-repaired-community-restoration-revegetation/11668226>



How to help Wildlife during Bushfires by WIRES

During bushfires and emergency events WIRES can be inundated with enquires from people wanting to assist wildlife.

Many calls and emails are from people wanting to assist with the rescue of injured wildlife in a direct way. While these offers are appreciated as it's very encouraging to know that people want to help wildlife in times of tragedy, it is necessary for WIRES rescuers and carers to be trained and licenced before they are able to do this safely. Only appropriately trained members are authorised to carry out emergency wildlife rescue and care activities and even they cannot enter the fire grounds until they have been declared safe by the agencies in charge.

If you are interested in [becoming a volunteer](#) with WIRES we encourage you to attend a [Rescue and Immediate Care Course](#) so that you can join a local branch and assist with ongoing wildlife rescue and care in the future.

WIRES receive hundreds of calls daily to assist individual animals in distress and we are actively assisting sick, injured and orphaned wildlife 365 days a year. Bushfires and heat stress events unfortunately present an ongoing threat to our wildlife, particularly in the warmer months and when they occur they place additional demands on our limited resources. At all times though, our rescue team and volunteers do their best to provide rescue advice and assistance for all animals as quickly as possible.

The best way to assist our wildlife rescue and care work is by [donating to WIRES](#), as this ensures we can provide the most appropriate help for native animals across the state. If you are in or near areas impacted by fires, you can also assist wildlife as outlined below:

- Take domestic animals with you if you evacuate or keep cats indoors and dogs under control wherever possible so that wildlife can flee safely through your yard if needed.
- Leave out bowls of water for animals and birds escaping fires, use shallow bowls with a few sticks or stones on one side to allow smaller animals to escape if they fall in.
- Keep a cardboard box and towel in the boot of your car in case you find an injured animal that you can safely contain without putting yourself in any danger.
- If you rescue an animal that has been burnt, do not attempt to feed it, please wrap it loosely, ideally in 100% cotton fabric, place it in a ventilated box with a lid and keep it in a dark, quiet place whilst waiting for a rescuer or for transport to the nearest vet.
- If you can safely take injured animals to your nearest vet please do so, as injured animals will require urgent vet assessment. If you can please also call WIRES to let us know which vet you've taken the animal to so we can follow up with vet to bring the animals into care when they are ready.
- Do not approach injured snakes, flying-foxes, large macropods, raptors or monitors as these must be rescued by trained specialists, for these species please call WIRES first for rescue assistance on [1300 094 737](#).
- If you own a swimming pool and live near where fires are burning there are some simple things you can do to assist wildlife who may be seeking water. Always drape something over the edge of your pool so that animals have a surface to grab hold of and climb out. A length of heavy duty rope or even a bodyboard, secured at one end to something heavy outside the pool, is ideal as it does not absorb water and provides a platform for an exhausted animal to rest on. Pool steps are also frequently too high to allow animals an easy exit and placing bricks or large stones to the side of each step can make it easier for animals to gain a foothold and climb out. Always check your pool regularly (twice daily) including in the skimmer box. If you do find any animal trapped in a pool, call WIRES immediately on [1300 094 737](#) for advice.

Rakali (*Hydromys chrysogaster*) by Tweed

Landcare Inc

Photo: Rakali, Gumaay or Water Rat. Photo: Cory Young

Rakali are one of Australia's beautiful but lesser-known native rodents. They have been described as Australia's native otter due to their large size; thick fur and love of the water [see video here](#). It is the only member of the genus *Hydromys*. They live primarily in a wide variety of freshwater habitats and have a semiaquatic and nocturnal lifestyle, living in burrows on the banks of rivers, lakes, irrigation channels and estuaries and feeding on aquatic insects, fish, crustaceans, mussels, snails, frogs, birds' eggs and water birds.



Females are generally smaller than males but tail lengths are normally the same. They have partially webbed hind feet, waterproof fur, a flattened head, a long blunt nose, many whiskers and small ears and eyes. They are black to brown in colour with an orange to white belly, and dark tail with a white tip and can grow to over 1kg. The cold country Rakali (from Tasmania, or around Canberra) are generally more golden-bellied, black-backed whereas warm country individuals are generally paler

Photo: The charismatic Rakali contemplates its next meal Source: Tanya Loos

Photo: A partially webbed hind foot Ann Killeen



Hunted for their soft fur and considered a nuisance animal, numbers were under threat until a protection order in 1938. Along with turtles and platypus, they are often trapped and drowned in opera nets and wire traps for freshwater crayfish

From the hunted to the hunter, these intelligent, semi-aquatic rats have revealed another talent: they are one of the only Australian mammals to safely eat toxic cane toad without being poisoned. Recent research by Parrott et. al. (2019) published in Australian Mammalogy, found water rats in Western Australia adapted to hunt the highly poisonous toads by neatly dissecting the toads to eat their hearts and livers while avoiding the poisonous skin and glands. They adapted to do this less than two years after the toads moved into the rats' territory.

They can be confused with Platypus as the two species co-exist in the many waterways. Water rats tend to swim steadily at the surface and frequently leave the water to climb on logs, rocks or man-made structures whereas platypus tend not to. Rakali can be a totem species and the Minjungbal people are reported to have Rakali dreaming sites on the Brunswick River.

The place of the water rat by Jim Nutter, Main Arm

Mary Gardner's excellent article in the Echo on our rakali, '[Shy Golden Water Rats](#)', white tailed water rats, reminded me of a story told to me by our local historian Frank Mills OAM.

There is a bend in the river on the Main Arm of the Brunswick opposite Kohinur Hall. It was here that is the site of the Water Rat 'Dreaming'. This was the totem of the Durrumbul Mob of the Minjungbal People. In the local language *Durr* was the Water Rat and *Bal* means place of.

Though all of the surrounding creeks and rivers seem to have platypus I have heard of no sightings on the Bruns. That isn't to say they aren't here. Nor have I seen or heard of sightings of rakali.

<https://www.echo.net.au/2019/06/place-water-rat/>

References

-<https://www.abc.net.au/science/articles/2007/10/04/2185999.htm>

-http://theconversation.com/eat-your-heart-out-native-water-rats-have-worked-out-how-to-safely-eat-cane-toads-123986?utm_source=twitter&utm_medium=twitterbutton

-Atkinson, C. A; Lund, M. A; Morris, K. D (2008). "[BiblioRakali: the Australian water rat, *Hydromys chrysogaster* Geoffroy, 1804 \(Muridae: Hydromyinae\), a subject-specific bibliography](#)" (PDF). *Conservation Science Western Australia*. 7 (1): 65–71. Retrieved 2015-10-25.

-"[Hydromys chrysogaster: Water-rat | Atlas of Living Australia](#)". *bie.ala.org.au*. Retrieved 2015-10-23.

-<https://en.wikipedia.org/wiki/Rakali>

FUNDING

Do you have a great project and need funds to make it happen?

You can find more information on available grants on the Brunswick Valley Landcare website including a calendar of all grants expected to be available during 2019. There are also some handy tips on how to be successful with grant applications. Below is a summary of grants which are currently accepting applications and ones that are anticipated to open within the next month.

<http://brunswickvalleylandcare.org.au/funding/>

Restoration and Rehabilitation grants

The NSW Environmental Trust is now inviting applications to the 2019 round of its Restoration and Rehabilitation Grants Program. A total of \$4 million is available to the following organisations for projects that assist in the ongoing sustainable management and stewardship of significant environmental assets and services in NSW:

- \$2 million for projects by community organisations
- \$2 million for projects by government entities

Grants of between \$5,000 and \$100,000 are available.

Applications **now close on Monday 2 December 2019 at 3pm sharp**. To find out about other grants programs delivered by the Environmental Trust, please visit the

www.environmentaltrust.nsw.gov.au



Climate Change Community Grants Scheme



AdaptNSW

Understanding and adapting to climate change in New South Wales

\$600,000 in 1 round of grants, with grants between \$10,000 and \$30,000 available for individual projects. **Applications are open from now until 31 January 2020.**

<https://climatechange.environment.nsw.gov.au/Adapting-to-climate-change/Community-Grants>

Weed of the Month

This month's weed of the month is Bamboo.

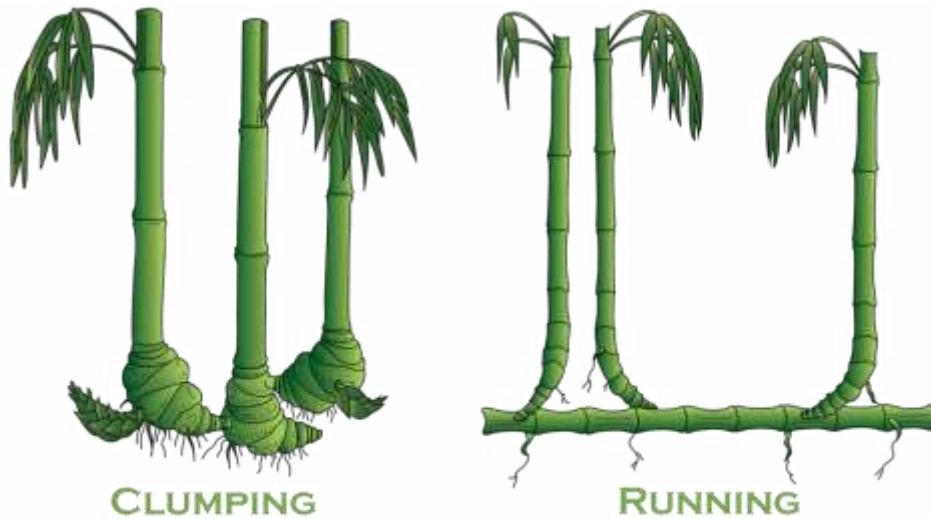
One of the reasons I am including this in the newsletter this week is that there have been accounts coming in from Landholders who have seen first hand how quickly and hotly bamboo burns. So if you have it planted near your house, you may like to consider removing it.

There are 2 basic types of Bamboo:

- **Running or Rhizomatous bamboo** (*Phyllostachys* species)
- **Clumping** (*Bambusa* species)



Photo: Burnt Clumping Bamboo in Huonbrook
credit Rainer Hartlieb



Rhizomatous bamboo is a hardy plant. It forms an impenetrable network of roots and heavy leaf litter. Rhizomatous bamboo is extremely invasive in a range of climates as it is extremely fast-spreading. It has been used as an ornamental plant in Australia, but easily escapes cultivation and spreads to form an impenetrable network of roots and heavy leaf litter. There are around 30 species of *Phyllostachys*, all of Asian origin.

Rhizomatous bamboo spreads rapidly. It can produce erect shoots from the entire length of its rhizomes (underground stems), resulting in many loosely clumped shoots over large areas. It can be spread through rhizome fragments in dumped garden waste.

Rhizomatous bamboo is a member of the grass family. Its stems are flattened and grooved in cross section, and its leaves have a network pattern of veins (unlike *Bambusa* species, which have a round, grooveless stem cross-section, and parallel veins on their leaf blades). Once well established, these aggressive bamboos can travel 15 feet or more a year. The rhizomes spread out like tentacles underground and push up stalks, known as "culms", which can reach as high as 40 feet. Removal of thick infestations can require heavy digging equipment and years of keeping an eye out for any errant shoots trying to take hold. Running bamboo can get behind home sidings, into pipelines and push up driveways.



To prevent a running bamboo from spreading, a “rhizome barrier” is essential.

A barrier two or three feet deep is effective. It should be slanted outward at the top so that when the rhizomes hit the barrier they will bend upwards. A barrier does not stop a running rhizome, it only deflects it. The barrier should project an inch or two above ground level. Check the barrier once a year and cut off rhizomes that arch over the top.

More details and tips on how to control bamboo can be found here

<https://weeds.dpi.nsw.gov.au/Weeds/RhizomatousBamboo>

<https://www.business.qld.gov.au/industries/farms-fishing-forestry/agriculture/land-management/health-pests-weeds-diseases/weeds-diseases/invasive-plants/other/bamboo>

Info on:

- golden bamboo *Phyllostachys aurea* <https://weeds.brisbane.qld.gov.au/weeds/golden-bamboo>
- black bamboo *Phyllostachys nigra* <https://weeds.brisbane.qld.gov.au/weeds/black-bamboo>

An interesting article from America on the removal of bamboo without the use of chemicals

<https://www.thespruce.com/how-to-get-rid-of-bamboo-naturally-2132939>

Clumping Bamboo (*Bambusa* species)

Bamboo is a clumping plant with hollow greenish-yellow canes. Dense stands grow to exclude other vegetation. Bamboo is a member of the grass family. Although not as invasive as running bamboo (*Phyllostachys* species), clumping types of bamboo (*Bambusa* species) have proven to be problematic in parts of Australia where dense, clumping stands of bamboo exclude other vegetation. There are over 100 species of *Bambusa*, with three native to northern Australia.



Bamboo rarely produces seed. It spreads as a dense clump, by producing shoots from the ends of its rhizomes (underground stems) close to the original clump. Dumping of garden rubbish containing rhizome fragments results in spread from gardens into bushland and other areas.

Bamboo is a woody, clumping plant. The various species of bamboo can occur as shrubs through to trees. The stems of bamboo are circular in cross-section, and hollow. Leaves have parallel veins. Bamboo can be distinguished from rhizomatous or running bamboo (*Phyllostachys* spp.) whose stems are flattened and grooved in cross section.

<https://weeds.dpi.nsw.gov.au/Weeds/Bamboo>

WORKING BEES - why not get out and get involved in one of our local groups?

For all Landcare Working Bees please wear protective clothing - long pants, long-sleeved shirt, closed-in shoes, hat, gloves and bring water, sunscreen, and insect repellent. **Please always contact the groups co-ordinators before attending a working bee as plans do change!**

Bangalow Land and Rivercare, Bangalow

WHEN: every Saturday 8:30am
WHERE: find out from Liz Gander
CONTACT: Liz Gander bangalowlandcare@gmail.com 66871309

Green and Clean Awareness Team, Byron Bay

WHEN: 3rd Sunday of the month 9:00am
WHERE: Meet Main Beach, Byron Bay
CONTACT: Veda Turner vedaturner@gmail.com 0427 857 991

Heritage Park Landcare, Mullumbimby

WHEN: alternate Saturdays 9:00am – 11:00 am
WHERE: Heritage Park, Mullumbimby
CONTACT: Diana Hughes bromspot@gmail.com

Jinangong Landcare, Ocean Shores

WHEN: 1st Sunday of the month
WHERE: The Tunnel Road, Ocean Shores
CONTACT: Ian Parer ianparer@hotmail.com

Mullum Town Landcare, Mullumbimby

WHEN: last Sunday of the month
WHERE: find out from Rita de Heer
CONTACT: Rita de Heer 02 6684 1495 ritadeheer7@gmail.com

Ocean Shores Landcare, Ocean Shores

WHEN: each Friday at 8.30 – 11.00 am (8.00am DST)
WHERE: corner of Yallakool Drive and Warrambool Road, Ocean Shores
CONTACT: David Kemp dnkemp77@gmail.com 0427 650 861

South New Brighton Dunecare

WHEN: 1st Friday of the month 1:30pm - 4:30pm
WHERE: Meet at southern end of the Esplanade at the Strand beach access point.
CONTACT: Robyn Bolden robyn.bolden@optusnet.com.au 6680 1970

Suffolk Park Dunecare

WHEN: 1st Saturday of the month
CONTACT: Helen Brown hellyh@bigpond.com 6685 4964

Tyagarah Landcare

WHEN: Each Thursday 9:00am – 11:00am
WHERE: 23 Prestons Lane, Tyagarah
CONTACT: Bela Allen bela.allen@yahoo.com 6684 7113

Can't find a group near you? We have many other groups who meet on an ad hoc basis (contact us for more details) or if there isn't an existing group in your neighbourhood or you are interested in looking after a particular area, BVL can help you to form a locality group under the BVL umbrella.

LINKS

- Arakwal <http://arakwal.com.au/>
 - Border Rangers Alliance <http://www.greasternranges.org.au/border-ranges/overview/overview>
 - Bangalow River and Landcare <http://www.bangalowlandcare.org.au/>
 - Big Scrub Landcare <https://www.bigscrubrainforest.org.au/>
 - Brunswick Valley Landcare <http://www.brunswickvalleylandcare.org.au/>
 - Byron Bird Buddies <http://www.byronbirdbuddies.com.au/>
 - Byron Community College <http://www.byroncollege.org.au/>
 - Byron Shire Council <http://www.byron.nsw.gov.au/>
 - EnviTE www.envite.org.au
 - Environmental Trust <http://www.environment.nsw.gov.au/grants/envtrust.htm>
 - Friends of the Koala www.friendsofthekoala.org
 - Local Land Services www.northcoast.ils.nsw.gov.au
 - North Coast Local Land Services <http://northcoast.ils.nsw.gov.au/>
 - Border Ranges Richmond Valley Landcare www.brrvln.org.au
 - Mullumbimby Community Gardens <http://mullumcommunitygarden.wordpress.com/>
 - North Coast Nature <http://www.northcoastnature.org.au/>
 - Richmond Landcare Inc. <http://www.richmondlandcare.org/>
 - Rous County Council (formerly Far North Coast Weeds) <http://rous.nsw.gov.au/>
 - Soilcare <http://www.soilcare.org>
 - Tweed Landcare Inc. <http://www.tweedlandcare.org.au/>
 - Wilson's Creek Huonbrook Landcare <http://www.wilsonscreeklandcare.mullum.com.au/>
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For information about Landcare or other natural resource issues in Byron shire please contact

Landcare Support Officer

Alison Ratcliffe 6626 7028 0421 244 640 (Monday, Thursday and Friday)

email: aratcliffe@byron.nsw.gov.au



This newsletter is supported by Byron Shire Council.

