

Newsletter Conserving and restoring from forest to foreshore JANUARY/ FEBRUARY 2024

GREETINGS LANDCARERS

Welcome to our first newsletter for 2024.

We have been busy regrouping and planning for another great year of events, tree plantings, and networking opportunities.

We've collected another great group of interesting articles to get you inspired this month, so enjoy reading!

From the BVL team



Koala at Cape Byron Distillery recently
Photo: Locky Cooper pixofnature.com @pixofnature_by_LockyCooper

BVL NEWS

BVL instigates new Salesforce database

Brunswick Valley Landcare has obtained Salesforce to use as a database to manage our member and project records in a better way. This will make it much easier to keep track of members and their participation plus track project progress and outcomes.

All members should by now have received an email asking if we have all your information recorded correctly. The email asked that you let us know if your membership details and contact information are accurate.

If you haven't received this email but believe you are a current member, please contact Joanne at <u>jmcmurtry@brunswickvalleylandcare.org.au</u>.

If you are not a current member and would like to be, please see our membership options on our website https://brunswickvalleylandcare.org.au/apply-for-membership/ We're planning to provide more rewards for our members in the future.

Focus on Volunteers

BVL have recently developed a suit of resources to help clearly articulate how we engage volunteers and outline roles, responsibilities and other information relevant for volunteers.

We are planning to invite all our volunteers to a day where we can cover induction information and asking for input from our volunteers on a range of ideas.

The day will also include a 'meet the committee' function.

Whilst details aren't yet finalised, we wanted to give a heads up for this important get

together.



Pictured: Volunteers from Tallowood Ridge group (2021)

Exciting News - great course to be delivered locally!

A short 7 week Statement of Attainment in Bushland Management course is being offered in 2024. This course will be held at the Byron TAFE CLC on Wednesdays, starting on the 28th of February 2023. This course is a great introductory to Conservation and Ecosystem Management and perfect for anyone wanting to develop any natural bushland on their property. The cost is \$910. Please contact TAFE as per the contact details below.





Statement of Attainment in Bushland Management

900-83094V01

Course description:.

This is the perfect introductory course for anyone wanting to learn more about Conservation and Ecosystem Management. This course covers units such as Plant ID, treat weeds, and an Agricultural Chemical Skills accreditation.

This course also provides: Practical hands on experience in developing and maintaining natural bushland areas.

Learner support available

Course outcomes include:

- Prepare, transport and apply agricultural chemicals
- Strong pathways to continue your studies and enhance your career opportunities in Conservation and Ecosystem management
- · Learn how to Identify plants

How to get involved:

Contact TAFE NSW Wollongbar campus on PH: 418637476 or email: Natalie.walsh24@tafensw.edu.au

Or call (02) 6659 3146 to book an appointment.

- Nationally Recognised Training
- This is a fee for service short course

Location

Byron Connected Learning Centre 23 Bayshore Dr, BYRON BAY NSW 2481

Duration

7 weeks – 28th of Feb – 10th April! 1 Day per week – Wednesdays

Study type

Short course

Start date

28th February 2024 Study commitment

7 hours per week



2023 Great Glossy Count results

In September 2023, volunteer citizen scientists took part in the BirdLife Australia Great Glossy Count collecting important data on the Southeastern Glossy Black-Cockatoo population and their feeding habitat.

This data provides an invaluable insight into how this threatened subspecies is faring, and helps support their bushfire recovery and conservation across QLD, NSW, the ACT and Victoria.

And now, the results are in! Check out the summary infographic below.

BirdLife Australia says thank you to volunteer citizen scientists and partners, the Glossy Black Conservancy, for helping make the second Great Glossy Count a success!

For more https://birdlife.org.au/ news/2023-greatglossy-count-results





151 adults (79 males, 62 females)

29 juveniles/subadults

20 fledglings

7027+ SHE-OAKS RECORDED

1747+ WERE FEED TREES



This equates to approx. 1 in 4 she-oaks recorded being a feed tree



395 VOLUNTEERS



GLOSSY ACTIVITY



ALLOFEEDING

FEEDING OR



DRINKING



FLYING





BEGGING

PREENING







*277 is a conservative estimate and could be as high as 307

V1.1 19-12-23

Learn more about the South-eastern Glossy Black-Cockatoo and the Great Glossy Count at:

bit.ly/glossyproject



BYRON SHIRE COUNCIL NEWS

Sea Turtle Nesting Season

Summer is the sea turtle nesting season and beachgoers in the Byron Shire are being asked to keep an eye out and report any tracks they see.

Sea turtle nesting season on the NSW coastline runs from November to March.

"Recent tracks were found on Seven Mile Beach on the border of the Ballina and Byron Shires and while this female didn't lay any eggs, the experts think she may have been looking for a nesting site," Chloe Dowsett, Council's Coast and Biodiversity Coordinator, said.

"It's possible she will move towards a beach in the Byron Shire and if NSW Turtle Watch and Australian Seabird and Turtle Rescue are aware of a nest, they can put measures in place to protect it," Ms Dowsett said.

Council is supporting NSW Turtle Watch which has the big job of promoting the long-term conservation and recovery of marine turtles in NSW.

"Five species of sea turtles are found in the waters off the Byron Shire and some of these are endangered so it's important we protect and support these wonderful animals," Ms Dowsett said. "If people see turtle tracks on the beach, they should take a photo and contact NSW Turtle Watch and report it," she said.

Zoe White, Council's Waste Education and Compliance Officer said picking up rubbish while walking on the beach is another way people can help turtles and other marine species. "We are asking people, who don't already take a bag, to make an early New Year resolution and collect rubbish every time they go for a walk," Ms White said.

"Whether the litter is on the beach, in the bush, or on the footpath, there's a good chance that it will end up in the ocean so save a marine creature and pick it up before it gets there," she said. Information about NSW Turtle Watch is on the <u>Australian Seabird and Turtle Rescue</u> website.

There is also an article on sea turtle hatchlings on Seven Mile Beach, Lennox Head here https://www.revivethenorthernrivers.com/stories/green-turtles-on-seven-mile-be



BYRON SHIRE COUNCIL NEWS

EIS for major Byron Bay wetland project now on exhibition

After many years of planning, the restoration of the degraded Sandhills wetland in Byron Bay is progressing with an Environmental Impact Statement (EIS) now on public exhibition. The Sandhills wetland covers 1.8 hectares on the fringe of the Byron CBD, bordered by Massinger Street and Lawson Street. The area was extensively sand mined in the 1930s destroying the natural wetlands and a lot of the native vegetation.

Project Manager, Chris Soulsby, said the restoration of the wetland is one of the most significant environmental projects to be done in Byron Bay in recent years.

"The restoration of the wetland will have enormous benefits for the environment generally and will improve the quality of stormwater and provide local flood storage," Mr Soulsby said. "Importantly, we have designed this project in consultation with the Arakwal and Tweed Byron Aboriginal Land Council using an approach that respects the cultural significance of the area and improves the health of Country," he said.

The EIS identifies and assesses the environmental, social, and economic impacts of the project and proposes measures to mitigate and avoid any adverse impacts.

It is on public exhibition until 19 February 2024.

"We would like to award a tender in the early part of 2024 to enable the work to be done in the middle of the year which is typically the dry season," he said.

When the project is completed there will be a network of paths through the wetland connecting the centre of Byron Bay to the skatepark and up to the Cape Byron Lighthouse.

People can review the EIS and make a submission by visiting Environmental Impact Statement Sandhills Wetland project on Council's website.



BYRON SHIRE COUNCIL NEWS

Feedback sought on Guardian Animals

Byron Shire Council is seeking to engage with members of the local community who have experience using guardian animals, such as Maremmas, Llamas, Alpacas, and Donkeys, for pest animal management on their farmland or property.

If you have insights to share regarding the benefits or constraints of employing these animals for pest control, we invite you to get in touch with Claudia Caliari, Council's Biodiversity Project Officer. You can reach Claudia at ccaliari@byron.nsw.gov.au or by calling 6626 7054. Your input is valued and will contribute to Council's efforts in implementing effective pest control strategies.



Flying-fox management plan on exhibition

Byron Shire Council's Draft Flying-fox Camp Management Plan is on public exhibition. Flying-foxes are native mammals and play a vital role as pollinators, however because of habitat clearing, some of their camps are well-established in urban areas of the Shire.

The draft plan provides a framework for how Council will respond to community concerns about flying-foxes, whilst recognising their importance to the natural environment. There are currently 20 identified flying-fox camps in the Byron Shire, with eight of those in urban areas in Mullumbimby, Bangalow, Ocean Shores and Byron Bay.

The closing date for submissions is 22 February 2024. An information session will be held on 7 February from 5:30pm to 7:30pm at the Council Chambers in Mullumbimby. People can make a submission, or find out more by visiting <u>Flying-fox Camp Management Plan</u> on Council's website.

Community at the heart of projects supported by Mayoral Fund

Byron Shire Mayor, Michael Lyon, has announced the six community projects being supported by the Mayoral Fund in 2023/24.

Grants from \$200 to \$500 have been awarded to the six projects including to Goonengerry Public School – to buy cooking appliances and <u>establish an indigenous food garden</u> for the students who cook lunches using produce from their school garden.

"The aim of the Mayor's Fund is to support small projects being run by local not-for-profit groups and schools that can foster a sense of community, happiness and delight and I think the recipients of the 2023/24 grants will do just that," Mayor Lyon said.

WILDLIFE FRIENDLY FENCING

Recently, WIRES Northern Rivers has experienced a significant increase in native wildlife caught in barbed wire, in particular bats & birds.

This is a call for Wildlife-Friendly Fencing!

Many native species struggle to navigate past barbed wire fences, leading to thousands of preventable deaths a year.

- It's crucial for wildlife to roam freely, so here are some things you can do to help:
- Swap barbs for plain wire or cover with split poly pipe.
- Enhance visibility with white nylon wires.
- Spread the word! Talk to neighbours, councils, and fencing contractors about wildlife-friendly options.
- Monitor barbed wire fences in your local area and report any entangled animals.
- Caution: Don't approach trapped animals as it is likely to struggle and do more damage; let experienced carers handle rescues with minimal harm.

Read more at https://www.wires.org.au/wildli.../wildlife-friendly-fencing

For more wildlife friendly fencing & netting options visit www.wildlifefriendlyfencing.com

For injured native wildlife contact:

- WIRES ph 1300 094 737 or fill in the online rescue form https://www.wires.org.au/report-a-rescue
- Northern Rivers Wildlife Carers ph 6628 2866
- For Koalas contact Friends of the Koala 6622 1233

FIRE ANTS NEWS

NSW gardener in blistering pain after discovering new outbreak of dangerous fire ants at flood pod village

The accidental discovery of red imported fire ants by a gardener in Wardell has raised

concerns about how the pests were introduced during construction of temporary flood housing, following the flood disaster of 2022.

The gardener was badly bitten and suffered blistering and pain, after disturbing a nest at Wardell, south of Ballina.



Jack Gough, director of advocacy at

the Invasive Species Council, says the biggest concern is how the fire ants got so far south into NSW. "This is a really alarming development; 85 kilometres south of the border, so it's a long way," he said

Read more from the abc https://www.abc.net.au/news/2024-01-20/fire-ants-detected-wardell/

For everything you want to know about Fire Ants, see https://www.fireants.org.au/stop-the-spread/how-fire-ants-arrived-in-australia

Red imported fire ants

Fire ants can sting people, pets and livestock, cause allergic reactions, damage electrical and agricultural equipment, destroy ecosystems and kill native plants and animals.

They can stop us from using our backyards, parks, playgrounds and beaches.

Fire ants are dark reddish-brown ants with a darker black-brown abdomen, 2 to 6 mm long. Aggressive, swarming out of the nest if disturbed or poked with a stick.



Look for nests:

Fire ant nests are mounds of loose, crumbly or fluffy looking soil, like honeycomb, up to 40 cm high with no obvious entrance holes.



Sunny, open grassy areas, disturbed soil, rotten logs, gardens, backyards, parks, roadsides, paddocks, fence lines and cropped land, under piles of leaves and along pavers and walls.



▲ Fire ant shown on a matchstick



▲ This is what happens 48 hours after fire ant stings

Seen them? Call us 1800 680 244

Protect people, parks, pets and wildlife

www.dpi.nsw.gov.au/fire-ants









Celebrating over a year of success, the ground-breaking <u>Which Plant Where</u> online tool has blossomed into a must-have for Australians. As the nations' first climate-driven plant selector, it's tailored for Australian streets, gardens and landscapes.

In breaking news, the Which Plant Where tool is now FREE, waving goodbye to subscription fees. This means unlimited access to the extensive plant database and climate insights, making climate-ready plant selection accessible to all.

Sign up to access information on over 2600 species, varieties and cultivars. View climate suitability of species at three time periods at post-code level, view climate suitability maps, access the palette creator and calculate co-benefits of your selected species palette – Its FREE!

Myrtle rust is devastating Australian forests. A new high-tech spray holds out hope for native trees

Around a decade ago, an invasive fungal disease called myrtle rust reached Australia and began to spread like a plague through certain plants. The disease affects plants of the Myrtaceae family, which includes eucalypts, paperbarks and lilly pillies, and makes up 10% of Australian plant biodiversity.

In only a few years, myrtle rust has changed ecosystems by destroying trees and their canopies, wiped out whole species in certain areas, and taken an economic toll on industries that grow trees such as lemon-scented myrtle and tea tree.

The disease is a slow-moving ecological wrecking ball: surveys suggest it may drive at least 16 species of rainforest tree to extinction in the wild within a generation, with another 20 species at risk.

Researchers at University of Queensland have used RNA technology similar to that in COVID vaccines to create a highly targeted treatment for myrtle rust: a spray that can restore even severely infected trees to health in around six weeks.

Further reading https://theconversation.com/myrtle-rust-is-devastating-australian-forests-a-new-high-tech-spray-holds-out-hope-for-native-trees

RANGERS AND RIVER HEALTH

(From Richmond River Keeper)

As part of Jagun Alliance's Guung Butherun (water stories) project and with training from the Richmond River Ecological Health Program, Rangers from Ngulingah Local Aboriginal Land Council Rangers, Jagun Alliance, Jali Local Aboriginal Land Council, and Minyumai IPA now have the skills to assess and monitor the health of streams and rivers across the Richmond River

Catchment.

The Rangers newfound skills in riparian and river health assessment empower them to play a vital role in maintaining, restoring and preserving the ecological balance and biodiversity of our precious waterways. With their deep connection to the land and their communities, these rangers are uniquely positioned to make a significant impact.

Brendan Cox from the Richmond River Ecological Health Program showing the Rangers the river health assessment ropes. Photo: Michele Lockwood



Jargun Alliance News

It's been a big year for Jagun Alliance. From the humble beginnings of just two staff only 12 months ago, we've grown to a team of 16 managing a diverse range of projects to care for country across the lands and waters of the Northern Rivers.

Through the Connecting to Jagun program we've been able to:

- Run 15 community workshops
- Implement 44 cultural burns across the Northern Rivers
- Connect with mob across the Northern Rivers
- Share knowledge with hundreds of engaged community members and private landholders.

Jagun Alliance will continue to work with local communities and landholders across the Northern Rivers with Good fire workshops and through site action plans until the end of March, while we continue to look for ongoing funding and support to continue our work in 2024.



Latest water quality results now available on new public dashboard

In December 2023,East Coast Flood Project - delivered under the EPA Flood Recovery Program for Water Quality Monitoring - launched the East Coast Flood Recovery Dashboard. The dashboard provides information about the condition of the waterways during long-term recovery from floods. It brings together data from our monthly and event-based water sampling, hosts links to our 8 telemetered water quality loggers and presents waterway grades for each of our focus sites.



44 Volunteers become trained citizen scientists on the Brunswick River

Positive Change for Marine Life have launched two new citizen science projects on the Brunswick River. 28 volunteers joined a successful training day in Upper Main Arm to learn how to assess the ecological health of the river. Participants will monitor five key sites across the catchment each Spring and Autumn. In partnership with MangroveWatch and EarthWatch, 18 volunteers were also trained to survey the estuarine extent of the river using the Shoreline Video Assessment Method (SVAM). The first SVAM survey has been completed, and participants observed healthy mangrove communities alongside areas of riverbank erosion and mangrove dieback.



Above: Conducting SVAM surveys by boat on the Brunswick River to monitor mangrove habitat. Photo credit: PCFML

Left: Volunteers collecting macroinvertebrates during the Healthy Rivers training session. Photo credit: Rebecca Goldberg/DPE



COD HOTELS OPEN ON THE CLARENCE

Innovative cod hotels or 'nest' boxes - first trialled in 2022 - are continuing to demonstrate their success, helping produce a new generation of Eastern Freshwater Cod on the NSW North Coast for the second time in two seasons.

Following preliminary trials at the NSW Department of Primary Industries (NSW DPI) Grafton Fisheries Centre last year, a partnership project developed a purpose-built 'nest box' with the goal to increase breeding sites for this iconic fish.

In an exciting development, it has been confirmed that one more spawning event has taken place this breeding season in one of last year's boxes. Further reading https://comms.lls.nsw.gov.au/link/



MEET THE FERALS

When it comes to pest animals, it is important that you know what to look for and how to report sightings. Once you know you have a pest animal issue, you then need to understand what control options you have when you first see the signs of pest animal presence on your land.

Local Land Services Invasive Animals team have produced <u>a series of seven videos</u> introducing you to the North Coast Ferals.

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FROM GREENER SPACES, BETTER PLACES:

The Root of Urban Wellbeing

What's one simple action city leaders could take to reduce obesity and depression, improve productivity, boost educational outcomes and reduce incidence of asthma and heart disease among their residents? Urban trees have the potential to deliver these public health benefits and more. This white paper identifies street trees as one of the most overlooked strategies for improving public health in our cities.

We've Got it Made in the Shade

Infamously known as the 'skin cancer capital of the world', Queensland is promoting urban greening as part of a strategy to maximise shade provision and potection from UV exposure. Brisbane City Council is already on board, having committed to planting hundreds of trees at bus stops across the city to help commuters stay cool and sun safe. The planting of 900 trees at more than 200 bus stops will grow Brisbane's reputation as the country's greenest capital city.

<u>Healthy Places, Healthy People Shade Tree Planting Resources</u> and the CanopyCast tool are now available online thanks to the great work of the Prevention Strategy Branch, Queensland Health.

University research explores health and wellbeing benefits of landholders in private land conservation

It's often quipped, with studies to back it, that being in nature has a positive impact on our health and wellbeing.

We know too, that landholders across NSW, be they primary producers, hobby farmers or lifestyle property owners, say they feel a deep connection with the land they manage.

In fact, research for NSW Local Land Services in 2021 found "achieving pleasure, enjoyment or happiness" from the land was a top motivator for supporting land management practices to improve land quality. (Landholder benchmarking research 2021: Prepared for NSW Local Land Services August 2021, Ipsos)

And, almost half of that study's participants said a "healthy outdoor life" was among their business goals for the property.

A new study led by the Queensland University of Technology, supported by the NSW Biodiversity Conservation Trust through its research strategy, and partially funded by the Australian Wildlife Society and the Society for Conservation Biology, aims to learn more about the health and wellbeing benefits of private land conservation, with landholders from across NSW and through networks such as the Australian Landcare, participating in the study.

Principal researcher Erica Nolasco said the study would explore how we could measure health, wellbeing and life satisfaction gains from protecting threatened habitats and species alongside the biodiversity gains on conservation sites.

Erica said this research would consider indicators to measure health, wellbeing, and life satisfaction gains from protecting threatened habitats and species, and whether they could inform program design or policy direction for future private land conservation initiatives.

"I genuinely believe we can have healthy land and water along with prosperity," Erica said.

Further reading https://www.landcarer.com.au/browse/blog-articles/blogviewer

Feel the Flow for health and wellbeing

Thankfully not as good as real nature, but noticing even digital nature has positive effects on your health and wellbeing. Watch this short video to learn how the sights and sounds of water increase a range of neurochemicals that promote wellness, increase blood flow to the brain and

heart, and stimulate relaxation by clearing the mind. Nature Fix now offer a range of nature connection videos and soundscapes, for those times when you just can't get into nature but need a little nature fix.

Watch the video https://www.naturefix.life/feel-the-flow



SGARS - what are they and why are they bad?

(courtesy Tweed Landcare and Tweed Shire Council)

We've talked about this before, and here is a reminder about the negative impacts that second-generation anticoagulant rodenticides or 'SGARS' are having on our apex predators. The alternative to SGARS is their safer counterpart, first-generation rodenticides or FGARS. This type of rodenticide has a short half-life and does not accumulate in the animal's system the way that SGARS do. As a consumer, making this simple choice will help protect native wildlife across the Shire.

What are SGARS and how do they work?

<u>SGARS</u> are lethal rat poisons readily available at our local supermarkets, hardware stores and farm suppliers. One would not think that something you could purchase at Coles or Bunnings could pose such a threat to our predatory bird species. As stated in an <u>article in The Conversation</u>, "brodifacoum is the most widely available SGAR in Australia. It is highly potent and can stay in the body for more than 100 days. That means animals can accumulate more in their bodies as they continue to eat poisoned prey."

When a rodent consumes this anti-coagulant rodenticide, they don't immediately die but rather, their blood stops clotting, causing slow but steady internal haemorrhaging. All the while, they continue to consume more rodenticide, which accumulates in their system making them lethargic and easy prey for raptor species such as our Boobooks and Barn Owls, as well as other predator species like Tawny Frogmouths, Wedge-tailed Eagles, goannas, snakes, and quolls. The more contaminated rodents they consume, the more likely they will fall victim to it.

Prevention over poison

Predators keep our ecosystems in balance, so when we lose these species to lethal poisons such as SGARS, that balance becomes disturbed, and the food web weakens which can lead to more vermin in our environment.

The best way to approach a rodent problem is with preventative measures such as sealing up entry points, maintaining cleanliness around your home or property, properly disposing of garbage, and keeping all garbage storage areas clean. If that is not enough, trying manual control using traps set indoors may help. If all else fails, the use of FGARS or first-generation rodenticides may be used with caution. FGARS work more slowly than their more lethal SGAR counterpart and they don't build up in the animal's system.

FGARS contain coumatetralyl, warfarin and/or diphacinone.

SGARS contain brodifacoum, bromadiolone, difenacoum, difethialone and flucoumafen.

These chemicals have a devasting effect on our local wildlife population and should not be used. Always read the label!

NOTE: A helpful way to distinguish between SGARS and FGARS is by their labelling. If a poison contains dangerous chemicals such as bromadiolone, it is required by law to be labelled 'POISON' (SGAR). However, if a bait has ingredients that are less toxic, it will be labelled 'CAUTION' (FGAR). This is an easy way to help identify which products to use. Not using poison is always the best option, but if it is needed, opt for those with a 'CAUTION' label.



TRAINING AI TO HUNT FOR WEEDS

A consortium led by North Coast Local Land Services, in collaboration with Charles Sturt University and Southern Cross University, is leveraging AI technology to combat the invasive plant Tropical Soda Apple (TSA) in northern NSW.

The project, achieving significant milestones, involves training an AI model on drone imagery, demonstrating an impressive overall accuracy of 96-97%, offering a promising and cost-effective solution for TSA detection in rugged grazing landscapes.

Further reading https://www.lls.nsw.gov.au/regions/north-coast/key-projects/plant-and-animal-biosecurity/weeds-action-program-2020-2025/training-ai-to-hunt-for-weeds

New AI-powered app set to transform weed management in Australia



The new <u>WeedScan</u> app was launched in December - Australia's first Al weed identification, reporting and management app!

It's free & easy to use – simply snap a photo of a suspected weed & upload to identify and report...download WeedScan from the App Store or Google Play and get started today.

WeedScan is powered by a CSIRO Al identification model trained on more than 120,000 weed images and tested across Australia by scientists, farmers, community groups,

agronomists, rangers, weeds and natural resource management officers.

It's an identification, recording and alert system for over 450 priority and other weeds, backed by the latest management information to support cooperative weeds action Australia-wide. (Common garden weeds are not a focus of the app.)

Funded by the Australian Government's National Landcare Program and developed by the Centre for Invasive Species Solutions, CSIRO, NSW DPI, the Atlas of Living Australia and the South Australian, Queensland and Victorian Governments: truly a team effort.

Did you know it's National Eucalypt Day on 23 March 2024?

Find or host an event to raise awareness of eucalypts and celebrate the important place that they hold in the hearts and lives of Australians.

REGENERATIVE FARMING

Parliamentary agriculture committee makes 35 recommendations for Australia's food security

Appointing an Australian minister for food and establishing a food council are some of the ways the nation could improve food security, the Australian Parliament's agriculture committee has found.

A year-long inquiry released its findings late last year, after examining ways to strengthen and safeguard Australia's food security, focusing on production, supply chains, and key inputs as well as climate change, biosecurity, and food insecurity.

Committee chair, Meryl Swanson, said it was the most substantial inquiry into Australia's food systems in a decade. "We talked to farmers, food tech people who are involved in science and soil [and many more fields], and we've come up with 35 very solid recommendations to address food security in our country," she said. "We absolutely grow a lot of food; we export about 70 per cent of what we produce.

Further reading https://www.abc.net.au/news/rural/2023-12-08/food-security-report-government-pests-biosecurity-climate-abares/

Animal Integration in both Agroforestry and Pasture based farming systems workshop - soon!

Animal Integration in both Agroforestry and Pasture based farming systems. Bunya Halasz and Oliver Bora who run their farming enterprises at The Farm in Ewingsdale will share some of their insights into using animals as a tool for improving soil whilst producing food.

- Bunya Growing roots Permaculture is one of our highly regarded local educators and growers with a wealth of knowledge to share. Will be great to see how he is incorporating animals (mainly chickens) to assist his abundant food system. Growing Roots Permaculture
- Oliver is a local legend entrepreneurial farmer getting his Pasture raised egg operation going at the tender age of 17 whilst still at school and has built a great little operation feeding our community. Olivers hens are rotationally integrated with the cattle to help build fertility and improve pasture growth. - <u>Oliver's Hens (olivershens.com)</u>

WHEN Saturday 10th February WHERE: The Farm Ewingsdale. COST: free

Please bring appropriate walking closed shoes, sun protection and water bottle. Tea, coffee, and snacks will be provided.

Spaces are limited. Please RSVP to <u>agriculture@byron.nsw.gov.au</u> we also ask that by RSVP'ing you commit to the day and ensure you can make it. Or please let us know if you can't \bigcirc

TUFF workshop by Henry Goodall, in support of Rural Men.

A workshop for farmers, fishers and rural blokes. All workshop, food, accommodation expenses are covered. Farmers only need to cover expense of transport to Barrington Tops.

WHEN: 13th and 14th Feb

WHERE: Barrington Tops - Riverwood Downs

Register https://forms.office.com/pages/responsepage

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Living Agroecology Course

This workshop is ideal for new or existing landholders seeking better understanding of soils, what to plant when and how to work with land for better ecological functions and food production. Now in its 6th year of running past participants have had great things to say about this course with a wealth of local knowledge from the array of great teachers.

WHEN: March 20 to June 5th

For more info and booking: <u>Living Agroecology Course</u> - <u>March 20 to June 5 2024 at The Living Classroom @The Farm, Byron Bay — Growing Roots Permaculture</u>

Paddock Project Valentines Day

WHEN Feb 17th 9am – 3pm WHERE The Paddock Mullum

64 Argyle Street

LOVE is back in town.

Thanks to Byron Shire community and friends, the 'LOVE' sign has been rebuilt.

An inclusive day for the whole family.

Come and enjoy live music, workshops, garden tours, stalls, food, flower picking and arranging, arts craft and more!

Come and celebrate with us!

9am - 3pm

PREE COMMINITY EVENT

A guide to feeding wild birds in Australia

(From Birdlife Australia)

Feeding wild birds is a controversial issue, especially in Australia. In some countries, it's actively encouraged – but in Australia, official advice from councils, environment departments and conservation and wildlife rescue groups warns against the dangers of feeding wild birds. In Western Australia, it's even illegal to feed native fauna, including birds, without a licence.

Note Brunswick Valley Landcare and Birdlife Australia do not encourage the feeding of wild birds.

Still, millions of well-meaning Australians continue to enjoy feeding the birds in their backyard. Unfortunately, many don't realise that feeding wild birds can do more harm than good for our feathered friends – and if done incorrectly, can lead to serious problems including malnutrition, disease and unbalanced populations.

In an ideal world, people wouldn't feed wild birds at all – but with <u>as many as 30 to 50% of Australian households feeding birds</u>, it's important that people are aware of the risks of wild bird feeding and how to avoid harming the same wildlife they want to help.

So, if you are going to feed wild birds, Birdlife Australia outline how to do it properly.

DON'T feed birds:

- Bread, crackers or other human snacks
- Mince and raw meat
- Honey and sugar

Image: Chris Blunt, Birdlife Australia



You CAN feed birds:

- Bird nectar mix (suitable for honeyeaters and lorikeets)
- Fresh fruit and vegetables (suitable for fruit-feeders such as parrots, pigeons and doves and bowerbirds)
- Earthworms, mealworms and insects (suitable for insectivores like fantails, fairy-wrens, flycatchers and whistlers, and some carnivores like magpies and butcherbirds)
- Seeds, nuts and grains (suitable for parrots (including cockatoos, Galahs, corellas and rosellas), pigeons and doves and finches)

Read the detailed advice here https://birdlife.org.au/a-guide-to-feeding-wild-birds-in-australia

SNIPPETS

How to store fruit, veggies and other groceries to keep them fresher for longer and cut down on waste

From soggy lettuce to shrivelled carrots, a fridge full of food that's gone off can make anyone feel the price pinch. The issue doesn't just lie with what we buy at the supermarket — it's with what we do when we get home.

For example, did you know, as a rule of thumb, keep fruit out on the bench until it ripens — then put it in the fridge once it's ripe to slow down potential over-ripening. Also, generally speaking, fruit does best in the drawer with ventilation and veggies are better in an airtight crisper.

For more specific advice, the ABC went to Sustainability Victoria's online guide for storing fresh produce and put all its tips into two tables — one for fruit and one for veggies.

Read more here https://www.abc.net.au/news/2023-07-20/how-to-store-fruit-veggies-make-them-last-longer-fridge-pantry/

New School Of Thumb Episodes

School of Thumb is the horticultural video series by Greener Spaces Better Places that features a group of plant experts and comedy queen Claire Hooper to help **solve the public's gardening guesswork**, Australia wide.

New episodes, filmed in Queensland, have just been released. The experts cover how to create a poolside paradise, a savvy and stylish patio, and how to bring in cooling canopy to the hot suburbs.

Check out the series on YouTube https://www.youtube.com/@greenerspacesbetterplaces

Should Australia Switch to 'Cool' Roads?

Los Angeles and other US cities have embraced lighter-coloured "cool roads" in response to climate change and heatwaves. So why isn't Australia doing the same?

About a third of any outer suburb in Australian cities is thermally dense black asphalt that can reach 75 degrees Celsius, according to Professor Pfautsch, an expert on urban heat at the University of Western Sydney. "If I had a magic wand, I would make the road surfaces lighter in colour," he says in response to the question of how to cool Australian cities in summer.

Read more https://www.abc.net.au/news/science/ 2024-01-24/why-australia-builds-dark-roads-despite -heatwaves-climate-change/



Could some fungi be an alternative to pesticides and fertilisers?

(Cosmos Magazine and The Echo)

For the first time a large scale trial has shown that mycorrhizal fungi might provide an alternative to mineral fertilisers and pesticides on farms.

It is well known that arbuscular mycorrhizal fungi (AMF) can enhance plant nutrient uptake and reduce plant stress. It is available for the home gardener. It improves the supply of water and nutrients, such as phosphate and nitrogen, to the host plant.

But large-scale field inoculation trials with AMF are missing, and so far, research has been unpredictable or in fact negative. But a European on-farm experiment, in 54 fields in Switzerland, quantified the effects on maize growth and found some very positive results. The data, published in Nature Microbiology, showed that while highly variable, in some cases they improved yield by 40%.

Researchers from the universities of Zurich and Basel, Agroscope, and the Research Institute of Organic Agriculture (FiBL) mixed the fungi into the soil before sowing crops on 800 trial plots at 54 maize farms in northern and eastern Switzerland. "On a quarter of the plots, the mycorrhizal fungi enabled up to 40% better yields. That's huge," says the study's co-lead, Marcel van der Heijden, a soil ecologist at the University of Zurich and at Asgroscope.

"The mycorrhizal fungi act as a kind of protective shield against pathogens in the soil that would weaken the plants. In contrast, mycorrhizal fungi had only a minor effect on fields that were not contaminated with pathogens.

Read more https://cosmosmagazine.com/news/could-fungi-be-alternative-to-pesticides-and-fertilisers/

Not just El Niño: Here's what's been pulling the strings on Australia's weather recently

Over the past six months, Australia has gone from a parched landscape on the brink of extreme drought to flooding rains in summer. In the background, several climate drivers have been helping guide the weather.

Read how the Indian Ocean Dipole and the Southern Annular Mode plus other weather phenomenon have been influencing our weather recently. https://www.abc.net.au/news/2024-01-21/whats-been-driving-australia-climate-recently-weather/

HANZAB digitised

HANZAB Online brings the invaluable Handbook of Australian, New Zealand and Antarctic Birds into a modern digital form, extending reach beyond what could be achieved with the original publication. Our aim is to provide a single source of foundational, scientific knowledge on all birds in our region to develop recommendations and strategies for effective conservation of the Australasian and Antarctic environments. While a <u>login</u> is required, access is free.

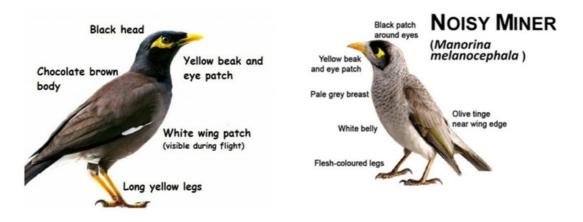


One of the world's 100 most invasive species, expands territory in Australia

When Indian mynas move into an area, they force native birds out of their wood hollows and kill their chicks.

A surge in detections of the Indian myna, or common myna, has raised concerns that one of the world's most invasive birds is expanding its territory in Australia.

The bird, not to be confused with the Australian noisy miner, has been spotted moving further inland, prompting concern from the Invasive Species Council.



The Indian myna bird (left) and Australia's native species, the noisy miner. (Supplied: Queensland Murray Darling Committee)

Council conservation and biosecurity analyst Lyall Grieve said the pest, which normally favours urban areas, was now being seen in rural parts of Australia.

"People in rural areas are seeing them spread along the highways," he said.

communities could help native birds by planting native trees, which Indian mynas were not as fond of.

Read more https://www.abc.net.au/news/2024-01-31/indian-myna-spread-rural-australia-invasive-species-council/

CSIRO study shows marine heatwaves have significant impact on microorganisms

A new study led by Australia's national science agency, CSIRO, shows that marine heatwaves (MHWs) are altering the microorganism communities that form the base of the marine food chain, disrupting coastal ecosystems.

Australia has recently experienced a number of marine heatwaves off the East Coast and Tasmania.

They are prolonged oceanic warm water events that can have significant impacts on marine life, including fish, coral reefs and kelp forests.

Further reading https://www.nature.com/articles/s42003-023-05702-4

EVENTS & WORKSHOPS





Federal Landcare doing the catering at the next film night at Federal on Saturday February 10th to fundraise.

Film: Past Lives starts 8pm Dinner from 6pm \$18, Tea/Coffee/Cakes \$5 Raffle and plants to give away



Bangalow Film Festival will host the world premiere of our tribute to fungi at the iconic A&I Hall. This film event is perfect for the whole family.

BUY TICKETS FOR FOLLOW THE RAIN

It's appropriate that <u>FOLLOW THE RAIN</u> will debut in our local area, as the story begins in the breath-taking endangered lowland subtropical rainforests of the Big Scrub on the NSW North Coast.

It then follows the rain to some of Australia's wildest and most ancient landscapes. Catherine Marciniak, filmaker says, "we met the composers of FOLLOW THE RAIN, Romano Crivici and Carla Thackrah, during the 2023 Bangalow Film Festival when they screened their documentary THE LAST VIOLIN. We were captivated by the layered, ethereal, and yet powerful string compositions, which we thought would be perfect for our fungi time-lapses. This led to a beautiful creative collaboration, and the feedback on the score from those who have previewed the documentary has been nothing but glowing."

Stephen and Catherine will be available for a Q&A session following the screening, with the much-loved Liz Ellis leading the conversation.

WEED OF THE MONTH

We've probably been doing more in our own home gardens over the summer months than in the bush, due to the hot and humid weather we've been experiencing. So we thought we'd take a look at plants that are often **garden escapee's** into local bushland and alternatives you could grow in your home gardens instead.

Butterfly Bush (Buddleia davidii)

Who would think that this plant with its delightful name would become an environmental weed? Arching stems carry sprays of tiny gold throated, mauve flowers in spring and summer and is attractive to butterflies. It was also very popular as a quick growing privacy plant, however there are now many better, non invasive alternatives.

Two alternatives are:

Buddleia 'Spring Promise'

Buddleias are usually summer flowering shrubs and a bit too vigorous for the average garden, however, here is a smaller one which flowers from introduction and is an Australian-raised variety. the middle of winter through to spring. With masses of long slender stems of white flowers with a delicious fragrance. It can be grown in full sun or part shade, grows quickly and will tolerate quite dry conditions when established. A non invasive hybrid.



Buddleia 'Wattle Bird'

This deciduous Buddleia is a shrub growing to 2m wide by 3m high. It is a relatively recent It bears elongated spikes of yellow flowers, in late summerautumn and is also Butterfly attracting.



Information and photos from https://www.growmeinstead.com.au/plant/butterfly-bush.aspx

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 group 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

CONTACT: Noelene Plummer <u>bangalowlandcare@gmail.com</u> 0431 20 0638 6687 4470

Frends of Lilli Pilli (Byron Bay)

WHEN: 1st Saturday of the month 3:30pm - 5:00pm

WHERE: At entrance to Lilli Pilli (contact Deb).

CONTACT: Deb Jorgensen <u>deborah.jorgensen60@gmail.com</u> 0434 254 802

Green and Clean Awareness Team, Byron Bay

WHEN: 3rd Sunday of the month 9:00am

WHERE: Meet Main Beach, Byron Bay

CONTACT: Peter Farmakis <u>peter.farmakis@gmail.com</u> 0488 715 565

Heritage Park Landcare, Mullumbimby

WHEN: Saturdays 9:00am – 11:00 am WHERE: Heritage Park, Mullumbimby

CONTACT: Diana Hughes <u>bromspot@gmail.com</u>

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: Morning of last Sunday of the month

WHERE: find out from John Tann

CONTACT: John Tann johntann99@gmail.com

Ocean Shores Landcare, Ocean Shores

WHEN: each Thursday at 8.30 – 11.00 am (8.00am DST)

WHERE: corner of Yallakool Drive and Warrambool Road, Ocean Shores

CONTACT: David Kemp <u>dnkemp77@gmail.com</u> 0427 650 861

Suffolk Park Dunecare

WHEN: 8.30 - 10.30 every fourth Sunday of the month

WHERE: find out from:

CONTACT: Rebekah O'Flaherty <u>rebekahoflaherty@gmail.com</u> 0428 942 903

Tallowood Ridge Locality Landcare, Tallowood Ridge Mullumbimby

WHEN: Second Saturday of the month from 3pm (winter), 4pm (summer).
WHERE: Gathering Tree Pocket Park, Cockatoo Cres Tallowood Ridge Estate

CONTACT: Joanne McMurtry <u>jmcmurtry@bigpond.com</u>

Tyagarah Landcare

WHEN: Each Thursday 9:00am – 11:00am

WHERE: 23 Prestons Lane, Tyagarah

CONTACT: Bela Allen <u>bela_allen@yahoo.com</u> 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

LINKS

- Arakwal http://arakwal.com.au/
- Australian Association of Bush Regenerators http://aabr.org.au
- Border Rangers Alliance http://www.greateasternranges.org.au/border-ranges/overview/overview/
- Bangalow Koalas http://www.bangalowkoalas.com.au/
- 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 <u>www.envite.org.au</u>
- Environmental Trust http://www.environment.nsw.gov.au/grants/envtrust.htm
- Friends of the Koala www.friendsofthekoala.org
- Federal Landcare Inc federalandcare@gmail.com
- Local Land Services www.northcoast.lls.nsw.gov.au
- North Coast Local Land Services http://northcoast.lls.nsw.gov.au/
- Border Ranges Richmond Valley Landcare <u>www.brrvln.org.au</u>
- 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

Landcare

- Tweed Landcare Inc. http://www.tweedlandcare.org.au/
- Wilson's Creek Huonbrook Landcare http://www.wilsonscreeklandcare.mullum.com.au/

For information about Landcare or other natural resource issues in Byron shire please contact Landcare Coordinator, Alison Ratcliffe 0421 244 640

<u>info@brunswickvalleylandcare.org.au</u>

Community Liaison Officer, Joanne McMurtry 0409 925 330

jmcmurtry@brunswickvalleylandcare.org.au

www.brunswickvalleylandcare.org.au

