

GREETINGS LANDCARERS



Humidity: The air is thick, the bugs, frogs and fungi seem to respond well as do most plants.

We are predicted to have a wet summer.

Humans often find high humidity draining, why?

When the air is humid it makes the environment feel hotter than it actually is, which creates a sensation of exhaustion and fatigue; our bodies must work harder to maintain a comfortable internal temperature.

The moisture in the air makes it harder for our bodies to shed excess heat through sweating.

On a positive note, recent rain will help to replenish swimming holes and creeks; a great place to cool off.

Check out this amazing Double Headed Hawk Moth *Coequosa triangularis* located at Mullumbimby Creek.

It tricks potential predators with the illusion of having two heads.

Click on the link to learn more about this beautiful caterpillar that epitomizes a cute yet disgruntled looking creature in a sleeping bag.

<http://lepidoptera.butterflyhouse.com.au/sphi/triangularis.html>



Photo credit: P Ryan

With thanks to our retiring Locality group leaders and committee members

Special thanks to retiring BVL committee members Jo Green and Jude Alcorn. We would like to acknowledge the contributions you have both made over the years to BVL. These two women have imparted so much knowledge, hard work, advice and incredible cakes! Jude is also retiring as leader of the Mullum Town Landcare Group and the ever capable John Tann is taking her place.

Thanks and acknowledgement goes out to Veda Turner who has committed so much time and hard work with the green, clean awareness team and dune care in Byron and Suffolk Park; a truly amazing effort and commitment over the years.

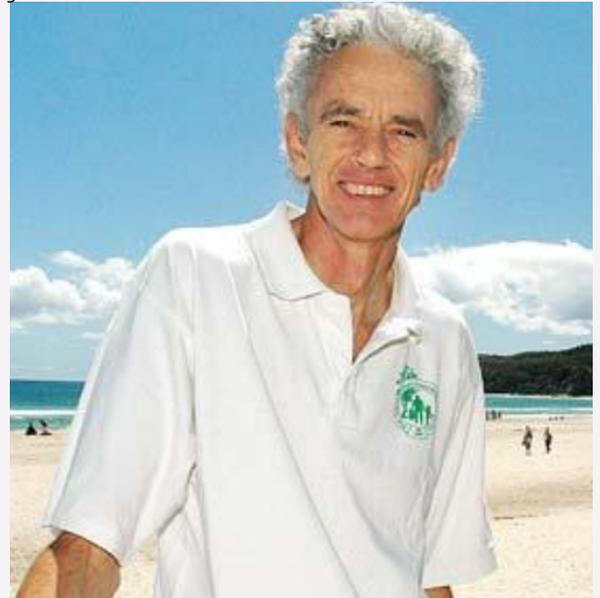
We would like to thank all the amazing locality group volunteers out there working hard over the years to improve biodiversity and our natural environment.

Your work and dedication has made such an improvement to so many reserves and bushland remnants, with out you many areas would not be as healthy and beautiful as they are now!

THANK
YOU



Jo Green



Veda Turner



Jude Alcorn

NCRLN Hollow Hog induction and training day

Thank you to the North Coast Regional Landcare Network project and to Emma Stone at Border Ranges Richmond Valley Landcare Network for organising and hosting the hollow hog induction workshop at Whian Whian on behalf of NCRLN.

We learned how to create hollows in trees and fallen logs with an innovative tool.

This tool is amazing at creating life like hollows in live and dead trees, providing a valuable contribution to habitat creation.

For more info

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

This Landcare Led Bushfire Recovery Project has been supported by the Australian Government's Bushfire Recovery Program for Wildlife and their Habitat.



One of the attending arborists using the Hollow Hog to create a hollow.



Wild bnb, BRRVLN & BVL with the suite of nest boxes
Photo credit: Locky Cooper



Media release

Byron Shire Council



Council backs targets set out by UN Climate Conference (COP26)

Byron Shire Council is on track to achieve net zero emissions for Council operations by 2025, aligned with the goals set out by the UN Climate Conference (COP26) in Glasgow (31 October to 12 November).

“Despite the recent challenges faced by our community – bushfires, floods and COVID-19, combatting climate change remains a top priority for Byron Shire Council and we are proud to be part of the global effort to take action,” Council’s Sustainability Team Leader, Julia Curry said.

“The ‘Think Global, Act Locally’ philosophy has never been more important,” she said.

“Byron Shire Council is a member of international organisations ICLEI (Local Governments for Sustainability) and the Global Covenant of Mayors (GCoM) and we closely follow and align to the goals of the UN Climate Conferences held annually.

“In addition to striving for our net zero emissions goal for Council Operations by 2025, our work with community group, Zero Emissions Byron (ZEB), is ongoing as we move towards the ultimate goal of net zero community emissions,” Ms Curry said.

ZEB’s most recent initiative includes research that tracks community emissions in the Byron Shire from 2015. They are now inspiring more action in the uptake of renewable energy, better buildings, electric vehicles, low carbon living and sequestering carbon through native plantings. See zero Byron.org for ideas on what you can do.

On the local front, Council is taking direct action with the Byron Shire Council Climate Change Adaptation Plan, with 100 Adaptation Actions aimed at improving resilience in Byron Shire. The Plan is based on the latest climate projections for our local area and will continue to be implemented over coming years.

To find out more about Council’s climate change mitigation and adaptation actions, head to Climate change - Byron Shire Council (nsw.gov.au).

Find out more about Zero Emissions Byron and their work at www.zero Byron.org

Handy hints for responsible cat ownership now on Council's website



Did you know domestic cats are estimated to kill around 53 million reptiles and 61 million birds in Australia each year?

Council's website (www.byron.nsw.gov.au/cats) now has lots of handy hints to help people keep their cats healthy and happy, while also reducing the impact of their pets on our precious native wildlife.

"There's a lot more involved in looking after pet cats than people may initially think, and if you want to be a responsible pet owner there's quite a bit you need to know," Council's Biodiversity Team Leader, Liz Caddick said.

"Cats that roam are much more vulnerable to snakes, ticks, parasites and diseases like Feline Aids. They are also more likely to be hit by a car, particularly at night. Keeping your cat indoors, especially at night, is the best thing you can do to protect your cat, and also helps protect native wildlife," Ms Caddick said.

"And an indoor cat doesn't have to be a bored cat, as long as its owners make time to give it lots of attention, and a variety of toys to play with. Our new web page includes tips on building your own enclosed cat outdoor play area, or 'catio' (example pictured above), as well as video links explaining how to train your cat to explore the outdoors on a lead," she said.

Byron Shire Council is one of 11 NSW councils working with the RSPCA on a joint project to reduce the impacts pet cats have on native wildlife.

If you'd like to find out more about where your cat goes at night, you can get involved and nominate your pet to wear a GPS tracker for a few days, or you can host a remote sensing camera on your property to find out what critters are out and about.

See Council's website for all the details: www.byron.nsw.gov.au/cats



Matt Kean
Treasurer
Minister for Energy and Environment

Adam Marshall
Minister for Agriculture
Minister for Western NSW

MEDIA RELEASE

Monday, 1 November 2021

DRAFT MARINE PARK MANAGEMENT PLAN RELEASED

The NSW Government has released a draft Management Plan for the NSW Mainland Marine Park Network (2021-2031) for community consultation (media release attached).

Over the next three months we are seeking community advice on this draft plan and the future management of the five mainland marine parks that make up just over 30% of the NSW coast, including:

- Cape Byron
- Solitary Islands
- Port Stephens-Great Lakes
- Jervis Bay
- Batemans

NSW marine parks are highly valued by the community, and we need your advice to ensure we effectively manage them into the future to conserve their spectacular marine life and habitats, and the important part they play in our lifestyle, livelihood and culture.

The draft 10-year plan identifies the environmental, social, cultural and economic values to be conserved by marine parks, the threats to those values and a road map for their future management. It sets out a simpler and more consistent approach to managing the network of marine parks along the coast of mainland NSW while also taking into account their unique issues and needs.

The draft plan seeks to use the most effective tools available to manage priority threats. It identifies certain issues that may benefit from the use of rules and zoning, but it does not include any specific rules or zones. The detail of any rules or zones will be developed in stage 2, after the plan is finalised. A range of information has been developed to support the community to comment on the draft plan.

Visit www.marine.nsw.gov.au/yoursay to access the draft plan, videos, fact sheets and answers to Frequently Asked Questions. Interested organisations and individuals can choose to provide advice by completing a simple survey or making a more detailed online submission up until 31 January 2021.

Please have your say and help improve the management of NSW marine parks into the future.

If you require more information after reviewing the web site, please email contact.us@marine.nsw.gov.au.

DID YOU KNOW?

Mushrooms that eat plastics

Eleanor Hildebrandt

Research is still being carried out after the discovery some years ago that mushrooms can digest plastic turning plastic waste into mycellium. Hopefully in the not too distant future we will be incorporating these amazing organisms into our recycling.

Pestalotiopsis microspora has the ability to digest and break down polyurethane plastic, even in an air-free (anaerobic) environment—which may make it effective at the bottom of landfills.

Aspergillus tubingensis, is capable of colonizing polyester polyurethane (PU) and breaking it down it into smaller pieces within the span of two months. (PU often shows up in the form of packing foam—the kind of thing you might find cushioning a microwave or a new TV.)

Pleurotus ostreatus (Oyster mushrooms) and **Schizophyllum commune (Split gill mushrooms)** Over the course of a few months, the fungi fully degraded small pieces of plastic into mycellium.



Flickr: Tim Sheerman-Case

<https://leaps.org/plastic-eating-mushrooms-let-you-have-your-trash-and-eat-it-too/particle-2>

Mushrooms trained to 'eat' cigarette butts

ABC Illawarra By Justin Huntsdale, Lindsay McDougall, and Melinda James

According to environmental organisation No More Butts, about 4.5 trillion cigarette butts are tossed away as litter worldwide every year.

The group says that in Australia, each year 8 billion butts are discarded into the environment — about a third of the total number of cigarettes consumed.

"It's the biggest issue we've got when it comes to litter," the group's spokesperson, Shannon Mead, said.

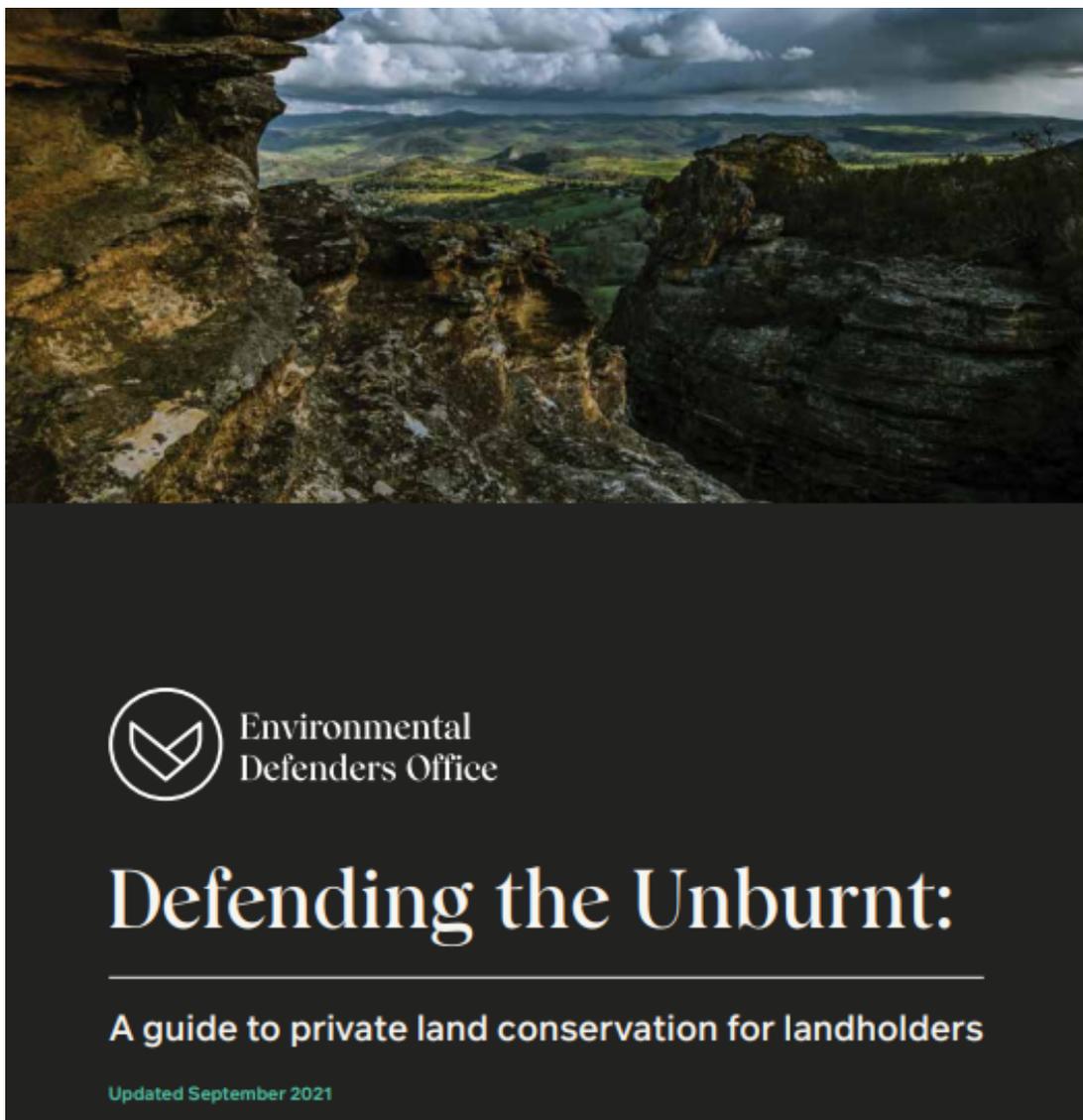
Oyster mushrooms are being trained to feast on cigarette butts to break down their microplastics and create a reusable product

In an Australian first, Wollongong City Council will partner with researchers to address the waste issue

<https://www.abc.net.au/news/2021-11-12/mushrooms-trained-to-break-down-cigarette-butts/100609804?>



Flickr Rosewoman



The NSW private land conservation scheme is well developed and offers landholders several options to choose from:

1. Conservation Agreements
2. Biodiversity Stewardship Agreements
3. Wildlife Refuge Agreements
4. Land for Wildlife
5. Wildlife Lands Trust (national)
6. Commonwealth Conservation Agreements (national)
7. Indigenous Protected Area (national)

The first three options are through the same provider – the Biodiversity Conservation Trust (BCT).

The Biodiversity Conservation Trust The BCT is a statutory body set up by the NSW Government to encourage and support conservation on private land.

Landholders with Conservation Agreements can access technical support from BCT staff and ecologists, such as advice on management issues, technical guidance on management options and assistance with identifying species and monitoring ecological outcomes. The BCT also runs workshops and field days and links landholders to other organisations involved in conservation.

[https://www.edo.org.au/wp-content/uploads/2021/09/EDO PLC Report Updated-Sept-21_.pdf](https://www.edo.org.au/wp-content/uploads/2021/09/EDO_PLC_Report_Updated-Sept-21_.pdf)
A guide to private land conservation for landholders - Environmental Defenders Office ([edo.org.au](https://www.edo.org.au))



Increasing the resilience of our Nations with a professional network of Indigenous Fire Practitioners

Since the devastating bushfires of 2019/2020, the increasing demand for Cultural Fire services from Indigenous communities, councils, private landowners and agencies across Australia has highlighted the urgency to grow the professional workforce of Indigenous Fire Practitioners. Our goal is to mentor and certify 100 Indigenous Fire Practitioners in seven priority regions by 2023.

<https://www.facebook.com/firesticksalliance/posts/1320257091736858>



National Indigenous Fire Network

@firesticksalliance · Non-governmental organisation (NGO)

AN OBSCURE DARWIN IDEA COULD BE KEY TO SOLVING THE CLIMATE CRISIS

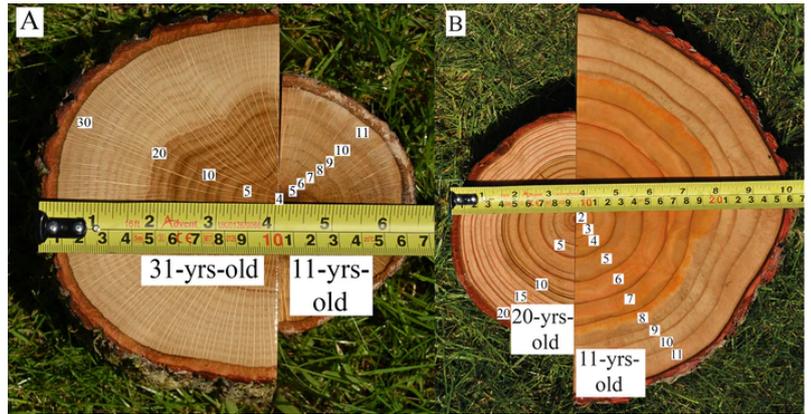
The Conversation by Rob MacKenzie and Christine Foyer at University of Birmingham.

It's really a no brainer to people who have a basic understanding of ecology. Healthier trees capture more carbon.

MORE THAN 150 years ago Victorian biologist Charles Darwin made a powerful observation: that a mixture of species planted together often grows more strongly than species planted individually.

It has taken a century and a half — ironically about as long as it can take to grow an oak to harvest — and a climate crisis to make policymakers and landowners take Darwin's idea seriously and apply it to trees.

Forests following this model promise to grow two to fourfold more strongly, maximising carbon capture while also maximising resilience to disease outbreaks, rapid climate change and extreme weather.



Images showing how trees grow more strongly when planted in diverse forests, compare the size of the trees at 11-years-old. The trees are oak (left) and larch (right). The tree half-disc on the right of each image was planted in a more diverse area. All trees come from the same estate and were grown under otherwise similar conditions. Rob MacKenzie and Christine Foyer .

<https://theconversation.com/a-150-year-old-note-from-charles-darwin-is-inspiring-a-change-in-the-way-forests-are-planted-170909>

HOW DOES THE OCEAN AFFECT CLIMATE AND WEATHER ON LAND?

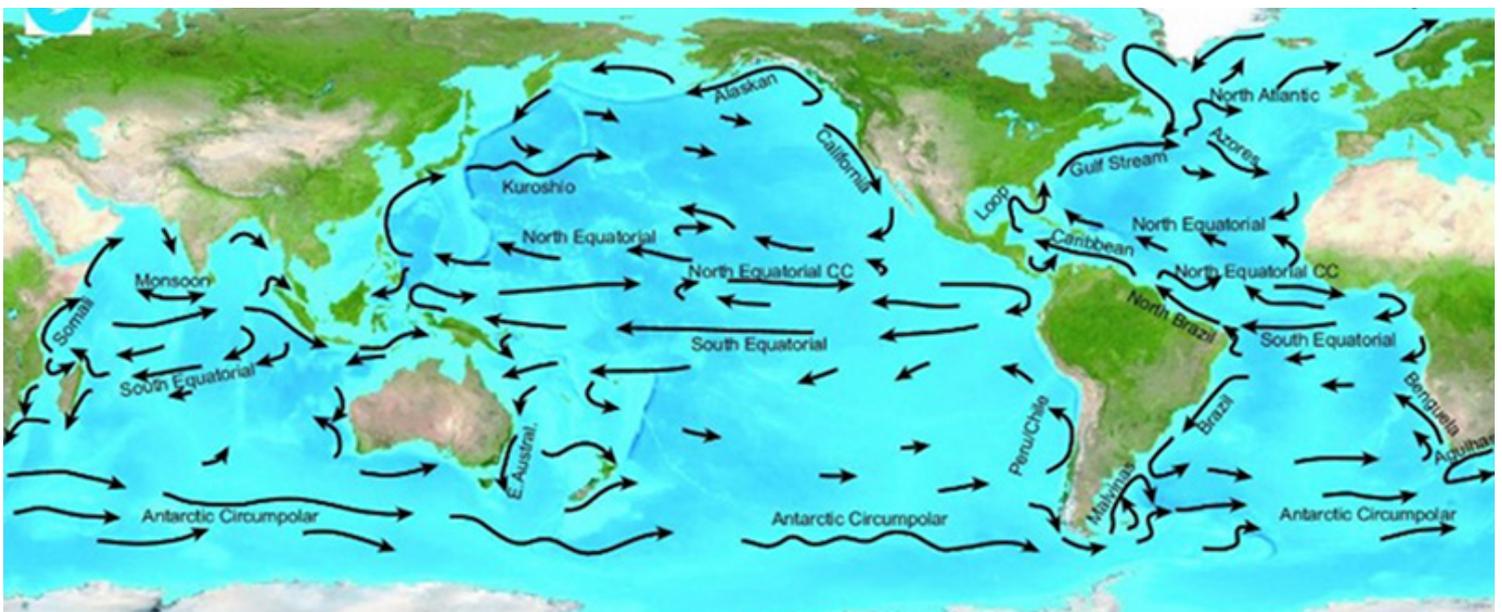
The ocean influences weather and climate by storing solar radiation, distributing heat and moisture around the globe, and driving weather systems.

Outside of Earth's equatorial areas, weather patterns are driven largely by ocean currents.

Ocean currents act much like a conveyor belt, transporting warm water and precipitation from the equator toward the poles and cold water from the poles back to the tropics.

Major current systems typically flow clockwise in the northern hemisphere and counterclockwise in the southern hemisphere, in circular patterns that often trace the coastlines.

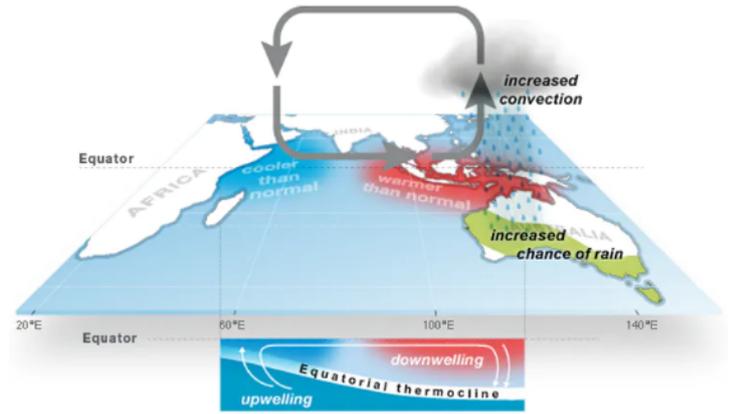
<https://oceanexplorer.noaa.gov/facts/climate.html>



WHAT IS THE NEGATIVE INDIAN OCEAN DIPOLE?

The Indian Ocean Dipole is a natural climate phenomenon that influences rainfall patterns around the Indian Ocean, including Australia. During a negative phase, waters in the eastern Indian Ocean (near Indonesia) are warmer than normal, and the western Indian Ocean (near Africa) are cooler than normal.

<https://newsroom.unsw.edu.au/news/science-tech/wet-winter-soggy-spring-what-negative-indian-ocean-dipole-and-why-it-so-important>



Indian Ocean Dipole (IOD): **Negative phase**

© Commonwealth of Australia 2013.

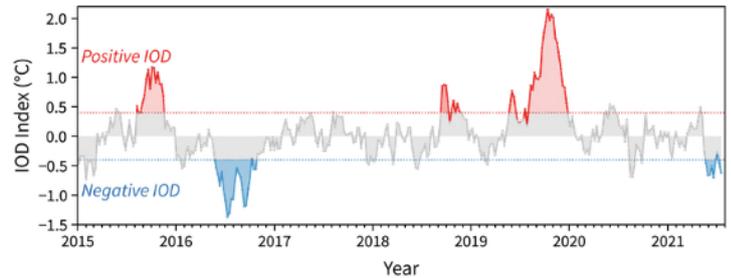
The negative phase of the Indian Ocean Dipole. Bureau of Meteorology.

Tropical cyclone outlook for 2021–22

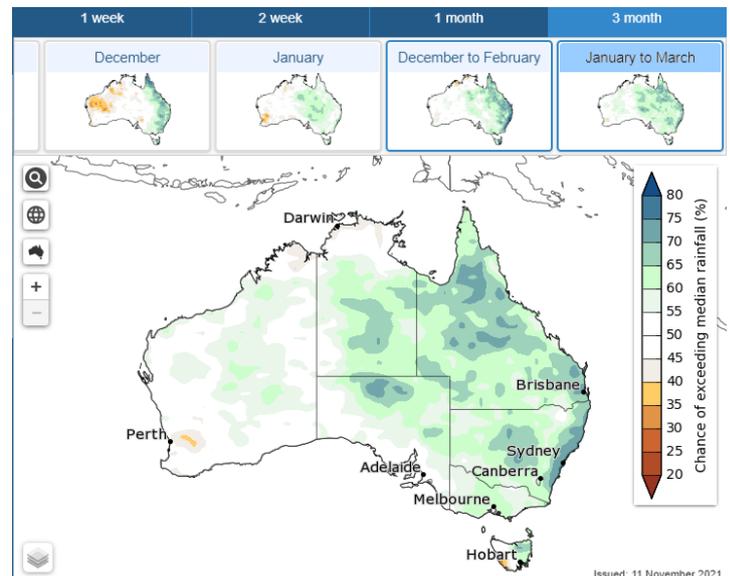
The Bureau of meteorology predicts a 65% chance of an above-average number of tropical cyclones (TC) in the Australian Region this season. The average number of TCs per season since 1970 is 11, although this number has declined in recent decades, with an average number of 9 per season since 2000. Tropical lows (systems which remain too weak to be classified as TCs, or that remain over land), are predicted to be average to above-average.

The main influences are the water temperature patterns around northern Australia and the Pacific Ocean. The current, weak negative Indian Ocean Dipole (IOD) and a developing La Niña are the climate drivers associated with these ocean temperature patterns.

<http://www.bom.gov.au/climate/tropical-note/>

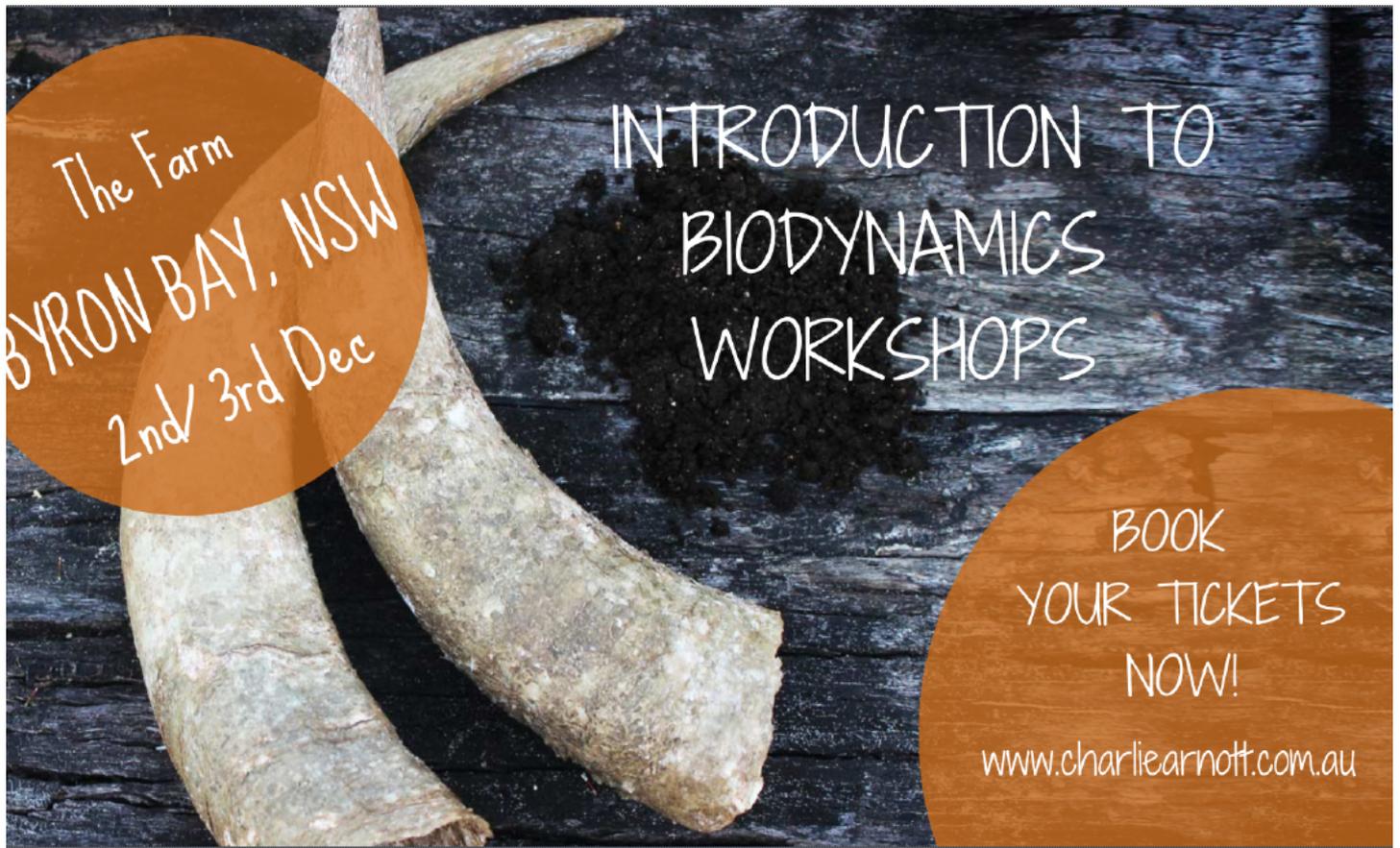


The Indian Ocean Dipole (IOD) index, used to track the variability of the Indian Ocean Dipole. An event occurs after the index crosses the threshold for 8 weeks. Bureau of Meteorology



Chance of above median rainfall - BOM

SEMINARS AND WORKSHOPS



'Healing soil, plants, animals, people, and planet'

@CharlieArnottBoorowa and Hamish Mackay are running a 2-day Introduction to Biodynamics workshop on 2nd & 3rd December @the farm at Byron Bay

The workshop is suitable for home gardeners, those working in horticulture, viticulture, agriculture, and anyone who is interested in where their food comes from .. & so, if you are interested in learning more about the benefits of biodynamics and adding biodynamic methods to your regenerative tool kit head to : www.charliearnott.com.au/events/ & find out more...



REGENERATIVE AGRICULTURE

SIMPLE BUT EFFECTIVE LANDSCAPE REHYDRATION

ABC Rural By Maddelin McCosker

Landholders know how erosive surface water flows can be, removing precious topsoil, nutrients, seed stocks, and rendering pastures to low fertility. And sad looking landscapes. This has been a generational issue; especially where soil cover is minimal due to vegetation clearing, and perhaps overgrazing, often then combined with drought. Removing permanent vegetative cover from our soils is one of the "no-no's" of regenerative land management.

For years we have realised that slowing the sheeting of water across our landscape to replace the effects of full vegetative soil cover can greatly assist in the rehydration and restoration of our landscapes. Increasingly, we are also realising that by slowing, holding, then releasing (not damming) surface runoff across denuded landscapes, amazing things happen!!

Long-forgotten native vegetation can reappear, diversifying pastures, soil is provided with cover, pastures stay longer, grazing management is made easier, biodiversity reappears, farm economics improve, our landscapes look healthy a win win all round.

In the face of future uncertain weather patterns and climate "averages", this article highlights the work done by some Queensland graziers to rehydrate landscapes, successfully and economically.

https://www.abc.net.au/news/rural/2021-11-02/land-rehydration-projects-south-west-queensland/100579288?utm_campaign=abc_news_web&utm_content=link&utm_medium=content_shared&utm_source=abc_news_web



Photo credit: Anthony Glasson



ABC Rural: Kallee Buchanan)



Photo credit: Anthony Glasson

FARMERS HAIL INCREASE TO DAM CAPACITY ALLOWANCES. CONSERVATIONISTS NOT CONVINCED

ABC Rural By Keely Johnson and Kim Honan

The state government has announced a 30 per cent increase in harvestable rights for farmers on the coast

Farmers were previously allowed to store 10 per cent of the rain that fell on their property

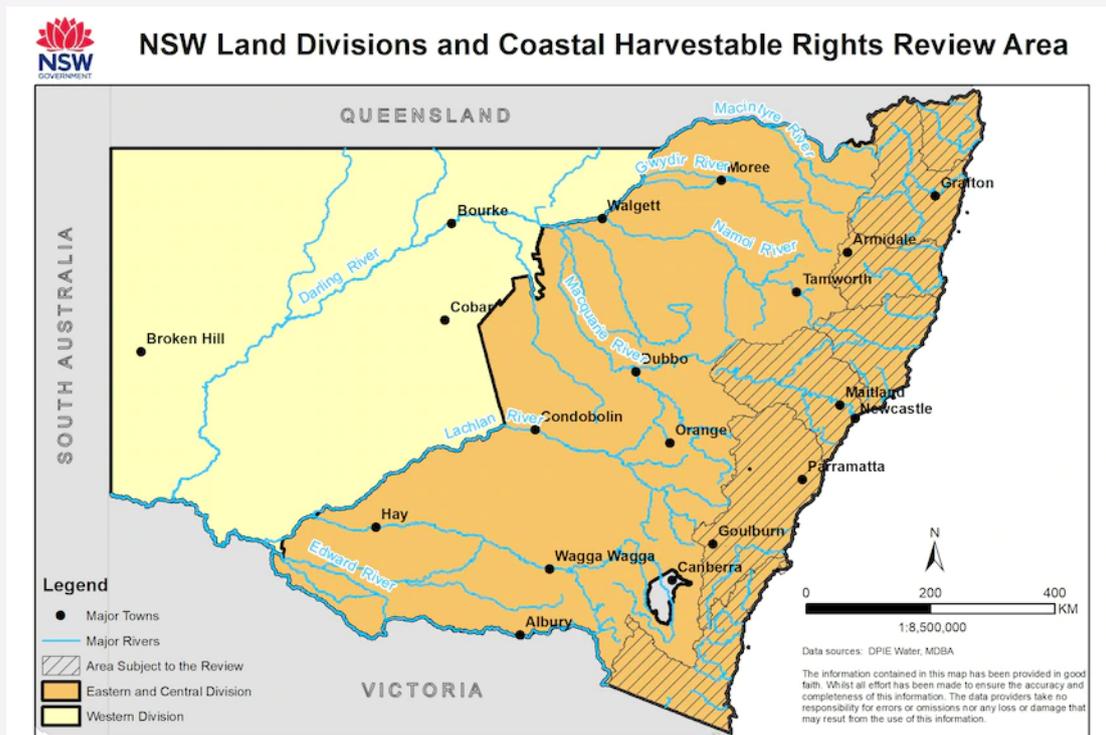
Ms Pavey said the state government will be undertaking detailed assessments of each individual coastal catchment over the next year to confirm the new limit is appropriate at a local level.

Conservation council concerned

Nature Conservation Council chief executive Chris Gambian said tripling coastal water harvesting rights puts coastal rivers, lakes and communities at risk.

[https://www.abc.net.au/news/rural/2021-10-28/rainwater-harvesting-to-triple-to-prepare-communities-bushfires/100575250?](https://www.abc.net.au/news/rural/2021-10-28/rainwater-harvesting-to-triple-to-prepare-communities-bushfires/100575250?utm_campaign=abc_news_web&utm_content=link&utm_medium=content_shared&utm_source=abc_news_web)

[utm_campaign=abc_news_web&utm_content=link&utm_medium=content_shared&utm_source=abc_news_web](https://www.abc.net.au/news/rural/2021-10-28/rainwater-harvesting-to-triple-to-prepare-communities-bushfires/100575250?utm_campaign=abc_news_web&utm_content=link&utm_medium=content_shared&utm_source=abc_news_web)



FUNDING



Open for applications — Our Marine Park Grants - Round 3

The Australian Government is inviting applications in an open process to the third round of Our Marine Parks Grants.

This grant opportunity is part of the Australian Government's \$39.9 million investment in Australian Marine Park partnerships and forms part of the broader \$100 million Ocean Leadership Package announced in April 2021.

This grant opportunity will support community organisations, Indigenous communities and industry to engage in the management, protection and conservation of Australian Marine Parks.

Applications close at 9:00 pm AEDT on 16 December 2021.

Information about applying for this round can be found on the Community Grants Hub website and GrantConnect.

[Home](#) | [Community Grants Hub](#)



WEED OF THE MONTH

Silver Desmodium / Velcro weed

Desmodium uncinatum

Long-lived scrambling, sticky vine with stems up to 1.5 m long.

Stems are densely covered with sticky velcro-like hairs and adhere to skin or clothing.

Leaves are compound, alternate with three leaflets and are borne on stalks 2-5.5 cm long.

Leaflets (2-10 cm long) have pointed tips and their upper surfaces have a distinct silvery stripe.

Flowers are pea-shaped, pink or purplish and arranged in elongated clusters at the tips of the stems or in the upper leaf forks.

Pods (1-3 cm long) are covered in hooked hairs, and readily separate into 3-10 small one-seeded segments.

This weed has a tough tap root and the stem readily snaps when hand weeding, only to regrow if not removed correctly. The tap root progressively becomes enlarged. (see control techniques).

There is anecdotal evidence that frogs and other small animals can get stuck on the sticky stems of this plant with potential of causing injury.

Control techniques:

Crown out tap root with a sturdy knife.

Cut scrape paint with 1:1 Glyphosate + 1g Metsulfuron methyl /1L.

Foliar spray 1:50 Glyphosate + 1g Metsulfuron methyl / 10L + surfactant or penetrant like pulse.

<https://weeds.brisbane.qld.gov.au/weeds/silverleaf-desmodium>



Photo credit: Sheldon Navie



Photo credit: Sheldon Navie



Photo credit: Sheldon Navie



Photo credit: Sheldon Navie

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 bangalowlandcare@gmail.com 0431200638 66874470

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: 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 John Tann

CONTACT: John Tann johntann99@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

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 jmcmurtry@bigpond.com

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 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 www.envite.org.au
- 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 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/>

**For information about Landcare or other natural resource issues in Byron shire please contact
Landcare Support Officer, Alison Ratcliffe 6626 7028
(Mon, Tues, Wed)**

aratcliffe@byron.nsw.gov.au

Project Officer, Rochelle Merdith 6626 7201 rmerdith@byron.nsw.gov.au

www.brunswickvalleylandcare.org.au

