Plant Cuttings – November 2024

Using pollen to solve crimes – Blueprint for Living (ABC RN), 25 October 2024

Liam Shaw, Wellcome-funded research fellow at the MacLean Lab in Oxford, delves into the incredible science of forensic palynology where the analysis of pollen is used as evidence.

This interview was first broadcast in November 2023.

https://www.abc.net.au/listen/programs/blueprintforliving/using-pollen-to-solve-crimes/104510820

VIDEO: Volunteers needed to save Victoria's grasslands – ABC News, 2 November 2024

There are growing calls for more volunteers to save 17 endangered plants in western Victoria's grasslands.

https://www.abc.net.au/news/2024-11-02/volunteers-needed-to-save-victorias-grasslands/104553698

Surging demand for native seeds could fuel illegal harvesting, experts warn – ABC News, 3 November 2024

Lynn Webb frowns at a fallen gum tree. The photographer is standing in a remote corner of the Great Western Woodlands, 700 kilometres east of Perth. The tree, which he believes is a *Eucalyptus salubris* or gimlet, has clearly been cut with an axe or chainsaw. He suspects rogue operators were after its seeds.

Demand for native seeds has exploded, as companies become increasingly interested in rehabilitation, fuelling a rise in seed prices. According to online seed merchant Nindethana, gimlet seeds are now selling for \$1,000 a kilogram. The seeds of the salmon gum, also found in the region, have hit \$8,000 a kilogram.

https://www.abc.net.au/news/2024-11-03/illegal-harvesting-concerns-amid-surging-demand-for-native-seeds/104537360

Timber industry leader calls for country of origin labeling on imported products – ABC News, 6 November 2024

Timber industry advocates are calling for extra scrutiny after a quarter of products tested in a verification trial were found to be "potentially misleading".

Department of Agriculture, Fisheries and Forestry acting director Madeleine Osborn said illegal logging was "one of the most profitable trans-border environmental crimes in the world", with devastating impacts on climate, nature and people.

"Between 15 and 30 per cent of all timber traded globally is potentially illegally logged, and 10 per cent potentially in the Australian market that's illegally sourced," she said.

Under new laws, government officials can test some imported timber products to check species and country of origin.

https://www.abc.net.au/news/2024-11-06/timber-industry-leader-calls-country-origin-labeling-imports/104536952

Insurance population of endangered Bulberin nut planted after fire threatened entire species – ABC News, 7 November 2024

Dappled sunlight falls on a collection of potted saplings ready for planting that could change the course of a native species' survival. The Bulberin macadamia nut, *Macadamia jansenii*, is extremely rare, found only in Bulburin National Park near Miriam Vale, six hours north of Brisbane. Just 200 known plants grow there and in 2019 bushfires almost wiped them out.

"The fire demonstrated just how vulnerable this species is in the wild," University of the Sunshine Coast associate professor of vegetation and plant ecology Alison Shapcott said.

https://www.abc.net.au/news/2024-11-07/insurance-populated-of-endangered-bulberin-macadamia-planted/104545320

Booderee Botanic Gardens - Gardening Australia, 15 November 2024

"Wadawani - G'day in the Dhurga language," says Clarence. "I'm here at Booderee National Park, home to the Yuin Aboriginal Nation. 'Booderee' in Dhurga means 'Bay of Plenty' and it's not hard to see why."

Booderee is about three hours south of Sydney on Jervis Bay. Of the 6500 hectares of diverse wilderness, 80 hectares have been set aside as a botanic garden.

Bernie McLeod is the curator and the third generation of his family to work here, and he loves the connection to country. "I've been here just over 20 years. I reckon this garden is special because it's the only Aboriginal-owned botanic garden in Australia, if not the world - and it's one of the best gardens you'll ever see for interpreting Aboriginal plant use."

The botanic garden was first created in 1951 as an annexe to the Australian National Botanic Gardens in Canberra. "In line with Kakadu and Uluru, the land was given back to the traditional owners in 1995," says Bernie.

https://www.abc.net.au/gardening/how-to/booderee-botanic-gardens/104607168

Spiky blue devils and chocolate lilies: Victorian grassland bursts with wildflowers after ecological 'reset' – The Guardian, 24 November 2024

Thousands of native daisies, aromatic lilies, milkmaids, billy buttons and rare orchids have blossomed in a pocket of north-east Victorian grassland in one of the best wildflower displays in years. Glen Johnson, an ecologist at Wild Research, said Boorhaman reserve, located north of Wangaratta, was "an amazingly diverse environment from the knees down".

"Thousands upon thousands" of native wildflowers and herbs in purples, pinks, yellows and blues appeared between tussocks of native grasses at the site in a burst of springtime colour that was rare to see, he said. About 70 native plant species could be found within the site, including spiky blue devils, purple-petalled broughton peas and four endangered species of orchid.

https://amp.theguardian.com/environment/2024/nov/24/spiky-blue-devils-and-chocolate-lilies-victorian-grassland-bursts-with-wildflowers-after-ecological-reset

Albanese kills off deal with Greens to pass 'nature positive' legislation after intervention by WA premier – The Guardian, 27 November 2024

Anthony Albanese has killed off a potential deal with the Greens to pass the government's "nature positive" legislation after an intervention by the WA premier, Roger Cook.

At a press conference on Wednesday, Cook said he had spoken to the "highest level" of the federal government on Tuesday to reiterate his view that the bills in their current form "should not be progressed". "I'm confident that that particular situation has prevailed," he said. "I won't go into the details of private conversations, but can I just say I've had conversations at the highest level of the federal government."

The prime minister was already disinclined to support the Greens' compromise deal before Cook added his voice to those opposing it, under pressure from the mining industry and big business, and fearful of federal Labor's electoral fortunes in WA.

https://www.theguardian.com/australia-news/2024/nov/27/albanese-kills-off-deal-with-greens-to-pass-nature-positive-law-after-intervention-by-wa-premier

Cop16 ends in disarray and indecision despite biodiversity breakthroughs – The Guardian, 3 November 2024

A global summit on halting the destruction of nature ended in disarray on Saturday, with some breakthroughs but key issues left unresolved.

Governments have been meeting in Cali, Colombia, for the first time since a 2022 deal to stop the human-caused destruction of life on Earth. Countries hoped to make progress during the two-week summit on crucial targets such as protecting 30% of the Earth for nature and reforming parts of the global financial system that damage the environment.

Negotiations were due to finish on Friday evening but ended in confusion on Saturday morning after almost 12 hours of talks. Governments failed to reach a consensus on key issues such as nature funding and how this decade's targets would be monitored. Many were forced to leave the talks early to catch flights, and negotiations were suspended at 8.30am when fewer than half of the countries were present, and the meeting lost quorum.

https://www.theguardian.com/environment/2024/nov/03/cop16-ends-in-disarry-and-indecision-despite-biodiversity-breakthroughs

'Unbelievable' renaissance of rare cloud forest as unique species reclaim paradise – ABC News, 23 November 2024

Mist hangs in the air, embracing the giant mosses and clusters of tree orchids that adorn the summit of the majestic Mount Gower on Lord Howe Island.

Ascending into this rare island cloud forest is like stepping into a fairytale — a hushed and secret world, carpeted in a tapestry of rich greens, rare palms, and twisted trees veiled in lichens. As the canopy closes over, an otherworldly place emerges, an enchanting reward for those who have made the rugged and arduous climb to the island's highest peak.

"There are not many islands in the world with very tall mountains that stick up so high into the atmosphere they create their own cloud, so it is pretty special," the island's resident biologist and naturalist, lan Hutton, said.

Officially known as the Gnarled Mossy Cloud Forest, the ecosystem is classified as a critically endangered ecological community, a known biodiversity hotspot. In recent decades the ecosystem has struggled to survive, threatened by rodents and climate changes. It's five years since a widescale, \$15 million eradication program rid the island of more than 300,000 mice and rats.

Mr Hutton said the program laid the groundwork for a swift and remarkable environmental resurgence, highlighted by the recovery of more than 30 species of threatened flora and fauna, including birds, insects and snails.

"We are just now, five years later, seeing the beginning of [an ecological] renaissance of this island," he said.

https://www.abc.net.au/news/2024-11-23/lord-howe-island-cloud-forest-rare-ecosystem-species-return/104407260

VIDEO: A diver explores a giant kelp forest in southern Australia – ABC News, 14 November 2024

Kelp forests around Australia, and the world, are under threat, but researchers are worried people don't know about the vital marine ecosystems.

https://www.abc.net.au/news/2024-11-14/giant-kelp-forests-under-threat/104592544

Australian-led project to grow plants on the moon scheduled for takeoff in 2025 – The Guardian, 11 November 2024

An Australian-led project to grow plants on the moon has secured a ride on a lunar mission scheduled for takeoff in 2025. Plants and seeds ensconced in a carefully engineered capsule will make the 380,000km trip aboard an Intuitive Machines lunar lander.

The mission – the Australian Lunar Experiment Promoting Horticulture (Aleph) – is one of the first Australian-led moon missions and is being led by startup Lunaria One, in collaboration with research institutions, non-profits and industry partners.

https://www.theguardian.com/environment/2024/nov/11/australia-aleph-plants-on-the-moon-project-launch-date

'Catastrophic declines': massive data haul reveals why so many plants and animals suffer after fire – The Conversation, 11 October 2024

The megafires that tore through Australia's forests in 2019–20 burnt more than ten million hectares. The tragedy prompted a massive research effort to understand how plants and animals were affected.

So what did it uncover? Research published today in the journal Nature set out to answer that question. In a collaboration involving more than 100 scientists, we brought together data for more than 1,300 animal and plant species. As far as we know, it's the world's largest dataset of biodiversity responses after a single fire season.

We found populations of some species declined, while other species became more common after the fires. Importantly, the results depended strongly on the condition of the land before the fire – especially how frequently it had been burned before the megafires.

https://theconversation.com/catastrophic-declines-massive-data-haul-reveals-why-so-many-plants-and-animals-suffer-after-fire-241691

Corpse flowers and flesh flies: why so many plants and fungi stink like death warmed up – The Conversation, 13 November 2024

Right now, people are lining up at the Geelong Botanic Gardens to see and smell the giant corpse flower, a rare plant that stinks like a dead body. This is the titan arum. It's a plant that makes news whenever it flowers in a botanic garden around the world. It's sometimes called a lily, but it's an arum, a genus not closely related to true lilies.

The huge arum might only bloom once a decade. It spends huge amounts of energy preparing to flower. And when it does, it's spectacular. Its huge flowering structure (the spadix) can be up to three metres in height and one to two metres across, which is why it has the wonderfully apt Latin name of *Amorphophallus titanium*, which translates as "giant misshapen phallic-like". But the spadix is actually not a flower – it's an inflorescence. Its true flowers are small and hidden from view at the base.

But why would a plant spend so much time and energy doing this? The answer is reproduction – the titan arum needs pollinators such as flies, and flies like dead things. Many other plants use the same tactic to get insects to pay attention.

https://theconversation.com/corpse-flowers-and-flesh-flies-why-so-many-plants-and-fungi-stink-like-death-warmed-up-243572

Deal to protect Australia's native forests blocked amid 'bullying' claims – Yahoo News, 27 November 2024

Talks to end native forest logging in Australia were on the precipice of being secured yesterday, sources have told Yahoo News. The Albanese government had been negotiating with the Greens on a deal to include the measure in promised environmental protection laws.

Before last week, Greens Senator Sarah Hanson-Young had insisted the laws should include a "climate trigger", a reform that would have seen all new development projects referred for

federal government assessment if they were likely to be highly polluting. But after Labor appeared to show no interest in this plan, she proposed ending native forest logging instead, a measure which would have helped protect endangered animals like the greater glider and koala.

https://au.news.yahoo.com/deal-to-protect-australias-native-forests-blocked-amid-bullying-claims-031816212.html

Warning over invasive garden 'monstrosity' in Aussie yard that can cause brain dysfunction – Yahoo News, 21 November 2024

Australians in every state and territory are being reminded to steer clear of an invasive, "highly poisonous" plant species — deadly to both people an animals — after an east coast gardener said she has repeatedly battled to remove the "monstrosity" from her yard. Online this week, a NSW woman, from Port Macquarie on the state's Mid North Coast, pleaded for help from her local community to remove the toxic shrub green cestrum from her garden.

A photo of the offending plant shows the huge green bush towering over the woman's back fence, with branches and yellow flowers growing in all directions. Green cestrum poisoning has been branded a "horrific experience", with experts warning it can cause severe liver damage and brain dysfunction.

Speaking to Yahoo after viewing the scene, Patricia Lu-Irving from the Royal Botanic Gardens in Sydney encouraged anybody who comes across green cestrum to remove it safely, and report the encounter to the relevant local council. "Like many weeds, green cestrum is a non-native species that was deliberately introduced as a garden plant," Lu-Irving told Yahoo.

https://au.news.yahoo.com/warning-over-invasive-garden-monstrosity-in-aussie-yard-that-can-cause-brain-dysfunction-235834527.html

Aussies delighted by 'amazing' and rarely seen species: 'Impossible to grow at home' – Yahoo News, 12 November 2024

The Elegant Hyacinth Orchid is endemic to Queensland – but actually seeing it is a rare treat. Australia is full of fascinating nature. But to the untrained eye, so much of it can go unnoticed — especially when some of the "hidden gems" in the outback only show themselves for a few days a year. While only appearing in bloom for about a week each year, another reason spotting them in the wild is such a delight is because they simply can't be grown in your garden.

It's not the first time this season Aussies have been wowed by a rare orchid. Government officials in South Australia made a "special" find a few weeks ago by coming across bayonet spider orchids in bloom. The flower is a special species that "has been recently confirmed at only two locations in the world", flora ecologist Jack Casley-Smith told Yahoo News Australia.

https://au.news.yahoo.com/aussies-delighted-by-amazing-and-rarely-seen-species-impossible-to-grow-at-home-011815797.html

Events and Opportunities

Draft Conservation Advice for dry rainforest of south east New South Wales and east Gippsland, Consultation closes 5 December 2024

You are invited to provide your views and supporting reasons about:

- the eligibility of Dry rainforest of south east New South Wales and east Gippsland for inclusion on the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) list of threatened ecological communities, and
- the necessary conservation actions for this ecological community

Questions are embedded within the Draft Conservation Advice to guide comments, including requests for additional information that can be provided to support the listing assessment and help define and conserve the ecological community.

Responses are welcomed from any interested person.

https://consult.dcceew.gov.au/draft-conservation-advice-for-dry-rainforest-of-south-east-new-south-wales-and-east-gippsland

ESA 2024 – Melbourne VIC, 9-13 December 2024

The conference will showcase the science of ecology in Australia – across all its varied forms – and be an opportunity to explore the connection between science theory, science research, science policy and science on-ground outcomes.

The conference of the Ecological Society of Australia (ESA 2024) will be an in-person conference but a limited number of online options will be offered, including live-streamed plenaries, some live-streamed symposia and some of the presentations being made available online after the conference.

https://esa2024.org.au/

NSW Nature Conservation Council, 14th Biennial Bushfire Conference – Surry Hills NSW, 21-23 May 2025

Can we burn to learn? Sustaining people, nature and Country

This will be an in-person event held in Sydney, at the Teachers Federation Conference Centre, 37 Reservoir St, Surry Hills NSW 2010.

There will also be hybrid options available, however we would encourage you to attend in person in order to fully enjoy the conference offerings, with a conference dinner, poster session and field day to be included.

https://www.nature.org.au/bushfire conference 2025

XII International Rangeland Congress 2025 – Adelaide SA, 2-6 June 2025

The Australian Organising Committee of the XII International Rangeland Congress, on behalf of the Australian Rangeland Society and the International Rangeland Congress Continuing Committee, invites you to participate in the International Rangeland Congress to be held June 2-6, 2025 at the Adelaide Convention Centre, Adelaide, Australia.

https://irc2025.rangelandcongress.org/

International Congress for Conservation Biology 2025 – Brisbane/Meanjin, 15-19 June 2025

ICCB is a global forum for addressing conservation challenges and for presenting new research in conservation science and practice.

With ~1,500 conservation professionals and students in attendance, ICCB is the major networking event for anyone interested in conservation.

SCB's 32nd International Congress for Conservation Biology (ICCB 2025) will take place in Brisbane/Meanjin, Australia at the Brisbane Convention & Exhibition Centre (BCEC) from 15-19 June 2025!

https://icriforum.org/events/iccb-2025/

15th Biennial International Society for Seed Science Conference 2025 – Perth WA, 15-19 September 2025

The International Society for Seed Science fosters research, education, and communication in the scientific understanding of seeds, and the ISSS 2025 will bring together, for the first time, two of the Society's premier events as a joint conference to celebrate seeds and to inspire synergies across the seed science community.

https://isss2025.com.au/

5th International Congress on Biological Invasions – Perth WA, 21-24 September 2025

From Threats to Solutions: Advancing Biosecurity

The 2025 Congress program builds around the following core themes:

- Advancing Global Biosecurity Policy
- Addressing the Impact of Climate Change on Invasive Species Threats
- Engagement of First Nations in Invasive Species Management
- Citizen Science Engagement for Effective Invasive Species Management
- Technological Advancements in Invasive Species Management
- The Ecology and Evolution of Invaders

Emerging Biosecurity Threats/Issues.

https://www.icbi2025.com/

2025 National Landcare Conference – Gold Coast QLD, 24 September 2025

The program dates for 2025 are:

Sunday 21 September – First Nations Gathering and NextGen Summit

Monday 22 September - Conference and Welcome Reception

Tuesday 23 September - Conference and 2025 National Landcare Awards Gala Dinner

Wednesday 24 September – Field Trip Program.

We welcome Landcare champion and ABC TV presenter, Costa Georgiadis, as the master of ceremonies for both the National Landcare Conference and National Landcare Awards events.

https://nationallandcareconference.org.au/

Australasian Seed Science Conference 2025 - Horsham VIC, 22-25 September 2025

Hosted by the Australian Grains Genebank and Australian Seed Bank Partnership, the ASSC2025 is a leading conference exploring research and innovation across the agricultural and biodiversity conservation sectors. This conference provides a platform for Australasian seed researchers, industries, policymakers, and communities to promote research, insights, technologies, and exchange ideas on how we can address similar scientific, legal and policy challenges.

https://www.seedpartnership.org.au/events/assc25/