

# Plant Cuttings – December 2023

## **Cost of established pest animals and weeds to Australian agricultural producers – ABARES, 8 November 2023**

Agricultural producers spend money and time managing established vertebrate pests and weeds, and also suffer production losses. In this study we draw on multiple sources of information to estimate what this costs. Estimates are provided both nationally and for states and territories, and for broad agricultural industries. For vertebrate pests we focus on European foxes, European rabbits, feral pigs, wild dogs, and feral goats. Costs arising from the potentially significant environmental and social impacts of pest animals and weeds, and impacts on infrastructure, were not estimated.

<https://www.agriculture.gov.au/abares/research-topics/biosecurity/biosecurity-economics/cost-of-established-pest-animals-and-weeds-to-australian-agricultural-producers>

## **If we do it right, we can replant trees and shrubs to store carbon – and restore biodiversity – The Conversation, 23 November 2023**

This is how carbon farming works. Farmers plant trees on abandoned farmland. The trees take in carbon from the atmosphere as they grow, acting as a natural sink to offset some emissions. For farmers, these carbon-storing plants pay off with carbon credits. It sounds simple. But in recent years, the technique has come under fire over claims the approach is not delivering the carbon credits required to offset Australia's carbon emissions.

<https://theconversation.com/if-we-do-it-right-we-can-replant-trees-and-shrubs-to-store-carbon-and-restore-biodiversity-216734>

## **Night study of native plant survival – Phys.org, 27 November 2023**

With land clearance, bushfires, weeds and climate change, small pockets of native vegetation are important for future plant and animal conservation—but do plants in small reserves struggle with reduced habitat for both plants and their pollinators? This question has led Flinders University researchers to take a close look at whether the reproductive output of a common moth-pollinated plant is lower in small conversation reserves near Adelaide.

<https://phys.org/news/2023-11-night-native-survival.html>

## **3 reasons why removing grazing animals from Australia's arid lands for carbon credits is a bad idea – The Conversation, 28 November 2023**

If you run a large polluting facility and can't work out how to actually cut emissions, you might buy carbon credits to offset your emissions from the Australian Carbon Credit Unit Scheme. These credits are meant to represent carbon taken back out of the atmosphere and stored in growing trees or in the soil. The problem is, these credit schemes can be rubbery in the extreme. One area we must scrutinise forensically are human-induced regeneration projects.

<https://theconversation.com/3-reasons-why-removing-grazing-animals-from-australias-arid-lands-for-carbon-credits-is-a-bad-idea-218129>

## **Australia's endangered gum tree migrated for conservation – CGTN, 29 November 2023**

Morrisby's gum, an endangered tree species endemic to southeastern Tasmania in Australia, was migrated to a new habitat so that it can be saved. Due to stress from drought and wildlife browsing, the species, or *Eucalyptus morrisbyi*, is at imminent risk of extinction in the wild. Its population has declined from around 2,000 trees to just six mature ones in a seven-year period. It is listed as critically endangered in the Red List of International Union for Conservation of Nature (IUCN). To maintain and boost its population, a migration plan proposed by local scientists is underway. Scientists at the University of Tasmania used climate modeling to predict areas that Morrisby's gum could inhabit under climate change. <https://news.cgtn.com/news/2023-11-29/Australia-s-endangered-gum-tree-migrated-for-conservation-1p7OS4EcpqM/index.html>

### **A Legacy of Logging – ABC News, 1 December 2023**

For decades, chainsaws have ripped through the native forests of south-east Australia. Across Australia, Victoria's forests have been logged more than any other mainland state over the past two decades. Now the state is shutting its native logging industry in a matter of weeks, and the forests that were once given to Victoria's state-run logging agency, VicForests, are being returned to the public. By law, the logging agency is required to regenerate the areas it has logged and hand them back to the public in a healthy state. But until now, how much that has actually happened has largely been a mystery. An AI-based analysis of 20 years of VicForests' logging, researchers say, shows the scale of failed regeneration in Victoria's state forests.

<https://www.abc.net.au/news/2023-12-01/ai-analysis-finds-failed-forest-regrowth-after-logging-/103153614>

### **Conservationists, scientists demand answers over prescribed burning of important swamps – ABC South West WA, 4 December 2023**

Conservation groups are demanding the Federal Environment Minister step in to stop WA's Department of Biodiversity and Conservation burning peat swamps in the state's south west.

<https://www.abc.net.au/news/2023-12-04/conservationists-scientists-demand-answers-over-burning-swamps/103185792>

### **Can the government's new market mechanism help save nature? Yes – if we get the devil out of the detail – The Conversation, 6 December 2023**

Australians woke up this morning to discover they had a nature repair market, after the legislation passed late last night. Except it won't be called a market, after amendments by the Greens, and it won't include biodiversity offsets. Many experts have been highly sceptical of using market forces to reverse the damage we've done to nature. There is some truth to this.

<https://theconversation.com/can-the-governments-new-market-mechanism-help-save-nature-yes-if-we-get-the-devil-out-of-the-detail-218713>

### **Plant Profile | Sturt's Desert Pea – Gardening Australia, 8 December 2023**

Clarence shares some tips on how to grow one of Australia's best loved plants, Sturt's Desert Pea or Ngoinga. It's notoriously hard to grow because it's adapted to desert conditions, which can be hard to mimic in cooler parts of Australia.

<https://www.abc.net.au/gardening/how-to/plant-profile-sturt-s-desert-pea/103198052>

### **My Garden Path | Kingsley Dixon – Gardening Australia, 8 December 2023**

We meet Professor Kingsley Dixon, AO, a botanist whose devotion to science has transformed our understanding of native plant cultivation. He lives on a 160-acre garden and bush block an hours south of Perth in the Darling Range. This is the passion project of Professor Dixon, an internationally recognised botanist who revolutionised native plant cultivation and is now cultivating a botanic garden of his own.

<https://www.abc.net.au/gardening/how-to/my-garden-path-kingsley-dixon/103198146>

### **Propagating Sticky Hop Bush – Gardening Australia, 8 December 2023**

When planting a hedge you end up using a lot of plants. You can buy them or you can propagate your own, which is much cheaper, using existing shrubs. Hannah has a few plants of Sticky Hop Bush that act as a windbreak but she'd like to add some more. Cuttings taken from these bushes will be clones of the parent plants, so she knows they will grow exactly the same, which is useful for hedging.

<https://www.abc.net.au/gardening/how-to/propagating-sticky-hop-bush/103198104>

### **Myrtle rust is devastating Australian forests. A new high-tech spray holds out hope for native trees – The Conversation, 15 December 2023**

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. We 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.

<https://theconversation.com/myrtle-rust-is-devastating-australian-forests-a-new-high-tech-spray-holds-out-hope-for-native-trees-219411>

### **NSW Christmas Bush – Gardening Australia, 15 December 2023**

Lots of plants are associated with Christmas - the classic conifer tree, cherries, even mistletoe – but there are also local plants across Australia whose flowering means they have become associated with Christmas. In NSW, Christmas Bush is the name given to *Ceratopetalum gummiferum*, which is a small tree or large shrub to about 5m with a pyramidal shape that produces clusters of white flowers from late spring. These don't last long but, as they drop, the calyx behind the flower swells up and becomes red and papery, looking like a second flower.

<https://www.abc.net.au/gardening/how-to/nsw-christmas-bush/103228120>

### **The genuine love is clear in a new book celebrating Australia's flora – The West Australian, 16 December 2023**

When Georgina Steytler's new book *For the Love of Flora* arrived it stopped me in my tracks. It's beautiful. A study of Australian flora, and published by Australian Geographic, the strength of the body of work is enormous, but the book has another life over and above the brilliant individual images. It is imbued with Georgina's spirit and love of the natural world.

<https://thewest.com.au/travel/the-genuine-love-is-clear-in-a-new-book-celebrating-australias-flora--c-12900982>

### **Private landholders control 60% of the Australian continent – so let's get them involved in nature protection – The Conversation, 18 December 2023**

As the federal government attempts a major overhaul of national environment law, all options must be on the table to prevent the fast deterioration in Australia's natural places. And more than ever before, the efforts of private landholders should be front and centre. About 60% of the continent is owned or managed privately – and 70% to 90% of inadequately protected wildlife is found mostly on such land, which includes farms, pastoral leases and mines. But through what legal mechanism can private landholders be engaged in biodiversity conservation?

<https://theconversation.com/private-landholders-control-60-of-the-australian-continent-so-lets-get-them-involved-in-nature-protection-217450>

### **Fire-retardant native plants used to protect Phillip Island's little penguins from climate change – ABC News, 19 December 2023**

Two months ago, a nature park ranger was running on Phillip Island on his day off when he smelled smoke. Following his nose, he discovered a small patch of newly burned grassland. In it was a dead penguin, still in its burrow next to two small eggs. The island, a popular day-trip location 90 minutes from Melbourne, is home to the largest little penguin colony in the world. Phillip Island Nature Parks, which manages conservation and ecotourism on the island, said the fire that killed the penguin in October was believed to have been caused by lightning and would likely have burned at "a snail's pace".

<https://www.abc.net.au/news/2023-12-19/little-penguins-phillip-island-bushfire-heat-stress-conservation/103227806>

### **Invasive grasses are worsening bushfires across Australia's drylands – The Conversation, 21 December 2023**

As the semi-arid Pilliga Scrub burns in New South Wales, many of us are thinking about fire once again. It's an El Niño summer in the hottest year on record. And there's a remarkable amount of grass drying out and ready to burn. Over the past few years, more rain than usual has fallen over vast regions of Australia's rangelands, the arid and semi-arid regions that account for most of our land mass. These rains have triggered an enormous boom in native grasses. But it's also boom time for introduced species such as buffel grass (*Cenchrus ciliaris*) in the deserts, and Gamba grass (*Andropogon Gayanus*) in the savannas. These fast-growing grasses have outcompeted native grasses in many areas.

<https://theconversation.com/invasive-grasses-are-worsening-bushfires-across-australias-drylands-215530>

## Events and Opportunities

### **Call for Applications for Research Grants - 2024**

The Australian Flora Foundation invites applications for funding of research projects from individual researchers and research teams, to support original scientific studies on the biology, ecology, and cultivation of Australian plants. The Australian Flora Foundation was established in 1981 with the aim of fostering scientific research on Australian plants. It aims to support research that will create improved understanding and greater awareness of the value of the Australian flora, leading to pathways for their conservation and utilisation. Grants will be awarded for research projects to commence in early 2025, with funds available from December 2024.

<https://aff.org.au/grants/grant-criteria/>

### **Victorian Biodiversity Conference 2024 – Burwood VIC, 7-9 February 2024**

The Victorian Biodiversity Conference (VicBioCon) is an annual scientific conference focused on highlighting biodiversity-related research and management projects based in the state of Victoria, Australia. The conference is held over three days towards the beginning of each year and is organised by a dedicated team of post-graduate students and professionals from a number of Victorian universities and organisations.

<https://www.vicbiocon.com/>

### **Rainforest Connections 2024: Conservation, Innovation, Restoration - Ballina NSW, 4-7 June 2024**

Rainforest Connections 2024 is the first conference in over two decades that is dedicated to the restoration, rehabilitation, and management of Australia's unique rainforest habitats. This event will connect more than 200 delegates from a wide range of backgrounds including scientists, program managers, on-ground practitioners, community members and specialists implementing projects in the field.

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

### **23<sup>rd</sup> Australasian Weeds Conference – Brisbane QLD, 25-29 August 2024**

Invasive Species Queensland (formerly the Weed Society of Queensland) is excited to collaborate with the Council of Australasian Weed Societies (CAWS) in hosting the 23<sup>rd</sup> Australasian Weeds Conference (AWC). Join us from August 25 to 29, 2024 at the Brisbane Convention and Exhibition Centre for this significant national event.

<https://icebergevents.eventsair.com/awc24/>

### **3<sup>rd</sup> Australian Biosecurity Symposium – Gold Coast QLD, 27-29 August 2024**

Building upon the groundbreaking ideas and enriching conversations that marked the success of the 1<sup>st</sup> and 2<sup>nd</sup> Australian Biosecurity Symposiums, #BioSym2024 is set to delve even deeper into the future landscape of Australian Biosecurity. This is your chance to be a part of shaping that future. Seize the opportunity to connect with key decision-makers, trailblazing innovators, influential voices, and dedicated researchers within the realm of Australian biosecurity. Mark your calendar, because this is an event you won't want to miss!