THE PORT DOUGLAS DECLARATION ON PLANT CONSERVATION

Adopted by attendees of the 15th Australasian Plant Conservation Conference (APCC15)
Port Douglas, Queensland, 24–28 August 2026
Theme: Culture, Collaboration and Change

"*NGALPAN IGILILNGA NGOEDHE KEDHA PUY MIIDH NOENGA BATHAYNGA INURIYA KAPUNGU NGAPA PUY ADHA PADHAN A KOESIMIZ, DHADHA GOEYGINU PUY POEGAYPA, MAMU MINA KOEY MALGUYLNGA AYDEN THAYIZ, AYDEL PARAYMIN, KAYN KAPU THAYAN, KAYN KAZIPA, PAWPA KUTAPA NISAL NOERIDHOEMOEYN KALANU KOEY PUY PUDHIZ*"
"Our life is like a plant from infancy to maturity – flowering and fruiting – so let's use leadership and collaboration to protect our plants and our people"
Arthur Gibuma, The Torres Strait Regional Authority, 25 August 2026, APCC15

Acknowledgement of Country

We acknowledge the Eastern Kuku Yalanji People and Djabugay Nation as the Traditional Owners and custodians of the land on which APCC15 was held and pay our respects to their Elders past and present.

We extend that respect to all First Nations peoples across Australia and the wider Pacific whose knowledge, custodianship and leadership inform so much of the work described in this Declaration.

The Imperative

The Port Douglas Declaration sets out what delegates to APCC15 believe must change, what the plant conservation community can do, and what governments and funders must do if Australia is to retain its extraordinary flora, habitats and ecosystems.

Why Australian Plants Matter

Australia's flora is exceptional by any global measure. Recent comparative research estimates that 88 per cent of Australia's plant species are unique to this country, the highest proportion recorded for

any continent (Gallagher et al. 2023). This extraordinary diversity is the product of deep evolutionary history, long isolation and a continent of ancient and highly varied landscapes. This exceptional diversity is at risk. Plants also provide the ecological foundation for much of Australia's animal diversity. Many animals depend on particular plant species and communities for food, shelter and breeding habitat, so the loss of plants inevitably has consequences far beyond the flora itself.

The significance of our flora is especially apparent in the Wet Tropics, where APCC15 was held. The region contains an exceptional concentration of plant diversity and ancient lineages, including elements of Australia's Gondwanan heritage. At the other side of the continent, the Southwest Australian Floristic Region contains around 8,000 vascular plant species and is recognised globally for its extraordinary plant diversity (Nge & Skeels 2025). Together, places such as these underline the global responsibility Australia carries for plant conservation.

Yet Australia's exceptional plant diversity is not matched by the investment needed to conserve it. As of 2021, 1,514 plant species were listed as threatened under the EPBC Act, representing 71 per cent of Australia's nationally listed threatened species. Fewer than 40 percent of Australia's unique plant species have had their extinction risk formally assessed, compared with 87 percent in both New Zealand and South Africa (Gallagher et al. 2023). Much of Australia's irreplaceable flora therefore remains poorly assessed, even as habitat loss, disease, climate change and other pressures intensify.

Plants are also inseparable from Australia's cultural history and contemporary livelihoods. First Nations peoples have managed, used and cared for Australian plants for tens of thousands of years, and Indigenous knowledge and custodianship remain fundamental to their future. Healthy plant communities provide services that are rarely fully valued in conventional markets, including climate and water regulation, biodiversity protection and cultural benefits (Coyne, Williams & Sangha 2022). Native plants and vegetation systems are irreplaceable national assets.

The challenge is therefore both urgent and long-term. Many species are running out of time for intervention to matter, while the work needed to secure them, germplasm collection, resistance breeding, ecological research, translocation and genuine partnership with Traditional Owners, often takes time. Delegates recognise the urgent need to change the way we approach plant conservation.

What We Are Asking For

Australia does not need to build plant conservation capability from scratch. It needs to recognise, coordinate and properly resource the considerable expertise that already exists, while building the next generation needed to sustain it. APCC15 attendees call for a step change in national investment and coordination for plant conservation, centred on five priorities:

- **Stop the continuing loss of irreplaceable native vegetation**, with avoidance of habitat loss taking precedence over restoration and offsets.
- **Commission, implement and permanently resource a National Action Plan for Australian Plants**, providing the sustained national framework already afforded to other major groups of threatened species.
- **Invest for the long term**, including secure funding for research, germplasm conservation, restoration, translocation, disease resistance and the people and institutions that deliver this work.
- **Strengthen environmental biosecurity and preparedness**, including nationally coordinated action on myrtle rust and emerging pests and pathogens.
- **Build conservation through enduring partnership with Traditional Owners**, with early involvement, shared decision-making and support for Traditional Owner-led conservation.

Preamble

We gathered in Port Douglas from 24 to 28 August 2026 for the ***15th Australasian Plant Conservation Conference***, under the theme Culture, Collaboration and Change. Researchers, First Nations rangers and knowledge holders, government scientists, conservation managers and practitioners, botanic garden staff, consultant ecologists and botanists, community volunteers and students came together to assess the state of plant conservation across Australasia and to identify where action is most urgently needed.

The evidence presented at APCC15 was confronting and sobering.

Myrtle rust disease continues to threaten hundreds of native Myrtaceae species, while other pathogens and invasive weeds are placing increasing pressure on native plant communities. Continuing loss, clearing and fragmentation of native vegetation compound these pressures, reducing habitat, connectivity and the resilience of plant populations and ecological communities. Cyclones, bushfires and shifting rainfall patterns are testing ecosystems once regarded as relatively stable. Small and fragmented populations are losing genetic diversity, and restoration and translocation efforts still fail too often because basic ecological knowledge and monitoring are missing.

But the conference also demonstrated what is possible. Australia already has substantial plant conservation expertise and capability. Plant Conservation Australia and its members bring together researchers, practitioners, botanic gardens, seed banks, land managers, First Nations partners, community organisations and volunteers with deep expertise across the plant conservation spectrum. This national network provides a strong foundation for coordinating knowledge, translating science into practice and delivering conservation action at scale. The challenge is not to build this capability from scratch, but to recognise, connect, resource and mobilise the expertise that already exists.

The task now is to take these approaches to the scale and duration that the problem demands.

This Declaration records the challenges and priorities identified at APCC15, but also reflects the considerable expertise, knowledge and commitment that already exist across Australia's plant conservation community. It identifies actions that delegates and organisations can advance through their own practice, while calling on governments and funders to invest in the capacity needed to keep pace with growing conservation demands.

It also establishes a set of measures and benchmarks against which collective progress can be assessed at the next Australasian Plant Conservation Conference to be held in Sydney 2028.

1. Key Challenges Identified

Delegates identified ten key interlinked challenges facing plant conservation across Australia.

Disease and biosecurity

Myrtle rust (*Austropuccinia psidii*) was the most pressing disease threat discussed at APCC15, affecting around 400 native Myrtaceae species and placing some at risk of extinction. Its impacts extend beyond individual species: Myrtle rust threatens the integrity and resilience of plant communities, can undermine restoration and natural regeneration, and poses a significant threat to World Heritage values, including those of the Wet Tropics.

Other established and emerging threats, including *Phytophthora* dieback and Polyphagous shot-hole borer, demonstrate the scale and diversity of environmental biosecurity risks facing native plants and ecosystems. Australia's pre-border environmental biosecurity arrangements, a Commonwealth responsibility, remain poorly matched to threats of this scale, including serious threats yet to arrive that are already recognised on national priority pest lists (Australian Government Department of Agriculture, Fisheries and Forestry 2020, 2024). Agricultural and economic biosecurity have established funding and response pathways; environmental threats have gained less traction, particularly once eradication is no longer feasible and long-term containment, research and ecological recovery are required.

Climate change and extreme weather

Cyclone Jasper and the Black Summer bushfires were repeatedly cited as direct causes of native plant population loss and as drivers of new conservation problems, including the loss and decline of culturally significant plant species. Catastrophic events of this kind will occur again, and conservation planning must anticipate repeated disturbance rather than treat such events as isolated emergencies. Warming temperatures are shifting germination windows and thermal tolerances, while rising sea levels are placing low-lying island vegetation in the Torres Strait at increasing risk.

Changing fire regimes are also exposing historically fire-sensitive species to pressures for which they have little evolutionary history (e.g. The Wollemi Pine, *Wollemia nobilis*). These changes will not affect all species equally: some may benefit from altered conditions or opportunities for range expansion, while others will decline. In remote regions, however, limited research, monitoring and access can leave emerging threats poorly documented or effectively invisible until losses are well advanced. Understanding where species are declining, persisting or benefiting, and building resilience before the next catastrophic event occurs, will be critical to targeting conservation action effectively.

Habitat loss, fragmentation and land-use conflict

Many of Australia's most irreplaceable plant habitats have been cleared, fragmented or degraded, including in some areas that are formally protected. Australia's commitment to protect and conserve 30% of land by 2030 is an important opportunity, but hectares alone are not enough: new protected areas must capture poorly represented ecosystems and places of exceptional plant diversity and conservation significance. Development pressure on biodiversity-rich private land can also create conflict where significant conservation values are identified only after purchasers or landholders have made major commitments.

Biodiversity offsetting is not always delivering its intended conservation outcomes, particularly where like-for-like habitat is scarce or cannot realistically be recreated. In these circumstances, financial payments in lieu of securing equivalent habitat can facilitate development without compensating for what is lost, contributing to an ongoing net loss of habitat and conservation values.

Genetic erosion and small population risk

Many threatened plants now persist in one or a handful of small populations. Low genetic diversity, reproductive sterility, mate limitation and hybridisation with naturalised relatives can all undermine recovery, yet these risks are not consistently incorporated into threatened species management. For many species, the basic reproductive and genetic information needed to recognise these problems is simply not available, and funding for the research needed to obtain it is limited. If these constraints remain undiagnosed, on-ground recovery programs cannot be expected to manage them, even where substantial resources are invested in conservation action.

Plant blindness

Plant blindness, the tendency for plants to be overlooked relative to animals, remains a significant barrier to plant conservation in Australia. It influences public awareness, research priorities, funding

and policy, allowing plant declines to proceed with little attention. Addressing it requires stronger botanical education, greater visibility for plants in conservation programs and communication, and recognition that plants underpin the ecosystems and cultural values we seek to conserve.

Knowledge and capacity gaps

Around 30 per cent of threatened plant species cannot currently be safeguarded through conventional seed banking, while many others have dormancy or storage requirements that remain poorly understood. Taxonomic uncertainty persists in groups including orchids, ferns and tropical taxa. Fungi, while not plants, are key mutualistic partners for many plant species, yet their ecological roles are often poorly incorporated into plant conservation planning. Large parts of Australia also remain incompletely or inconsistently surveyed.

Translocation and restoration effectiveness

Reintroductions and translocations continue to fail too often because fundamental information about germination, ecology, pollination, genetics or microhabitat is missing, while ongoing monitoring and management after establishment are frequently inadequate or poorly funded. Restoration plantings can also rely on a narrow suite of easily propagated or fast-growing species, producing canopy cover, without recovering the understory diversity, structural complexity and ecological function of the vegetation being restored. Successful restoration requires not only getting plants into the ground, but sustained management, monitoring and adaptation as restored communities develop.

Governance and equity

Plant conservation cannot be separated from people, Country and governance. We recognise that genuine partnership with First Nations communities, rather than consultation alone, must be a foundation of plant conservation in Australasia. This means engaging Traditional Owners from the earliest stages of project development, before priorities, questions and approaches are fixed, and maintaining that partnership through implementation and evaluation. It requires shared decision-making, respect for rights, knowledge and cultural values, and sustained support for Traditional Owner-led conservation.

Ex-situ conservation

Ex-situ plant conservation is one of the most cost-effective tools to prevent plant extinctions and support species research and recovery across Australia. Greater traction is needed with significant collection gaps in bioregions of Northern Australia. With extinctions risk accelerating, coordinated investment in seed banking, living collections, research and restoration-ready germplasm is urgently needed. Queensland in particular, with plant community level threats from myrtle rust, has no state-led program or facility for conservation seed-banking.

Timeframes and funding cycles

Conservation is constrained by two very different clocks. Some species and ecological processes are running out of time for intervention to matter. Yet many of the actions needed to reverse decline, including germplasm capture, resistance breeding, genomic assessment, ecological research and translocation, require sustained effort over many years. One, two and three-year grants are poorly suited to this work, and the positions they support are often similarly short term.

The resulting turnover can mean the loss of expertise, institutional knowledge and continuity just as programs begin to gain momentum. Short funding cycles are especially damaging where meaningful partnership with Traditional Owners depends on relationships that may take years to establish, and on trust, continuity and shared decision-making that must be built and sustained over time rather than compressed to meet a grant deadline.

2. Agreed Priorities for Conservation

We agree that the following priorities should guide plant conservation effort across Australasia now and in the years ahead.

- **Embed First Nations rights, leadership and Indigenous Ecological Knowledge**, including cultural fire management, as a foundational element of conservation practice rather than an add-on to it.
- **Protect intact, irreplaceable vegetation** as the first priority, recognising that protection is more cost-effective than attempting to recreate complex ecosystems. Where habitat or conservation values are genuinely irreplaceable, loss should be avoided rather than offset, as neither restoration nor financial compensation can recreate what is lost.
- **Match funding terms and project timelines** to the biological and partnership timeframes the work actually requires.
- **Accelerate proactive, precautionary germplasm capture** for Myrtle-rust-affected and other high-risk species, using shared frameworks such as the Seed Banking Conservation Ladder to track progress and expose gaps. Establish nationally coordinated, sustained funding for myrtle rust resistance screening and breeding, linking germplasm collections, research, propagation and restoration so that resistant material can ultimately be returned to affected populations and ecosystems.
- **Integrate and embed genetic and genomic assessment** as an early and routine part of threatened species management, translocation design and recovery planning rather than a specialised extra.
- **Lift the success rate of reintroductions and translocations** by investing in the underlying ecology (including germination, pollination and microhabitat requirements), on which good site and technique selection depends.
- **Design restoration for long-term resilience** by favouring natural or facilitated regeneration in the first instance and then sites near remnant vegetation, enhancing connectivity across landscapes, broadening the range of species used, and planning explicitly for future fire and climate risk.
- **Pursue resistance breeding and other genetic responses** to Myrtle rust and capture future emerging pathogens alongside stronger environmental biosecurity arrangements.
- **Close taxonomic and data gaps**, including better documentation of Australia's flora and greater recognition of the ecological roles of fungi in plant conservation, including mycorrhizal associations, nutrient cycling, decomposition and plant establishment, health and resilience.
- **Back the community-base,** including volunteer networks, Land and Sea Ranger groups, Landcare organisations and citizen scientists with long-term funding to deliver a large share of conservation action on the ground.

3. Commitments for the Plant Conservation Community

Attendees commit to advancing the following actions through their own practice and, where possible, within their organisations:

- **Continue and expand community- and Traditional Owner-led training and survey programs**, including models such as the Queensland Threatened Plant Network, so that more groups have the skills and resources to lead recovery work on their own Country.
- **Fund conservation for the time and cost it genuinely requires**. Set project and partnership timelines around the needs of the work and the relationships involved, rather than short grant

cycles. Government funding agencies should recognise a management and administration allowance of at least 20 per cent as a basic cost of delivering projects effectively, including governance, financial management, reporting and organisational support, rather than expecting these essential costs to be absorbed by conservation organisations.

- **Sustain coordinated, proactive germplasm collection** for threatened Myrtaceae and other at-risk taxa, building on the collaborative model demonstrated through the Myrtle Mayday project.
- **Embed conservation genomics more routinely** in species management and extend workable approaches to additional jurisdictions and taxa.
- **Deepen co-designed research** with Traditional Owner corporations and ranger groups, building on partnerships underway in the NT, Torres Strait, Cape York, the Wet Tropics and northern New South Wales.
- **Share restoration knowledge** openly among organisations, including successful high-diversity planting methods and the lessons of long-term monitoring, so that hard-won expertise is not confined to a single project or region.
- **Apply consistent standards**, including the Seed Banking Conservation Ladder and practice aligned with the UN Declaration on the Rights of Indigenous Peoples, across seed banks and ex-situ collections nationally.
- **Publish and share negative and inconclusive results**, including propagation and translocation failures and unexplained population declines, so that the sector learns from failure as well as success.
- **Invest in fundamental surveys** to understand species distributions for poorly known taxa.

4. Calls to Governments and Funding Bodies

We call on Australian, state and territory governments, and on philanthropic and industry funders, to:

- **Commission and permanently resource the PCA** to prepare a comprehensive ***National Action Plan for Australian Plants***, assessing threatened taxa against consistent criteria on a regular update cycle and building on the ***Action Plan for Australia's Imperiled Plants***. Plants comprise around seventy per cent of Australia's nationally listed threatened species and warrant the same sustained, comprehensive treatment already given to mammals and birds. Conserving plants also underpins the conservation of animals, many of which depend on particular plant species and communities for food, shelter, breeding habitat and other essential resources.
- **Reform environmental biosecurity funding and governance** so that environmental threats are resourced on a footing comparable to agricultural and economic biosecurity, including ongoing management when eradication is no longer feasible.
- **Provide secure, long-term funding for ex-situ conservation** infrastructure and proactive germplasm capture. Myrtle rust alone is likely to place increasing pressure on the capacity of major botanic gardens and seed banks.
- **Redesign grant terms and reporting cycles** so that they reflect the real duration of conservation work, including multi-year seed banking, breeding, genetic research, ecological research and restoration, and the sustained engagement required for respectful partnership with Traditional Owners and other Indigenous collaborators.
- **Fund Traditional Owner-led conservation**, ranger programs and biocultural knowledge documentation as core conservation infrastructure rather than short-term or supplementary activity.
- **Invest in fungal taxonomy and research**, including the ecological roles of fungi in plant establishment, health and resilience, and build taxonomic capacity for under-documented flora across Australia.

- **Stop the continuing loss of native vegetation**, particularly threatened species habitat, threatened ecological communities and other irreplaceable vegetation. Australia cannot restore its way out of continuing habitat destruction. Between 2000 and 2017, 7.7 million hectares of potential habitat for terrestrial threatened species were cleared or substantially degraded, with 1,390 terrestrial threatened species experiencing habitat loss, and 93 per cent of this loss was not referred to the Australian Government for assessment (Ward et al. 2019). Strengthen and enforce Commonwealth, state and territory vegetation protections so that avoiding habitat loss is the first priority, rather than relying on restoration and offsets after clearing has occurred.
- **Strengthen planning and disclosure requirements** so that significant biodiversity values on private land are made clear to purchasers before they commit to a property.
- **Support innovative financing**, including environmental markets and green-economy approaches, where these can make restoration and long-term stewardship viable for Traditional Owners and other land managers without weakening conservation standards.
- **Remove unnecessary barriers to conservation collecting** by streamlining and harmonising permit systems across jurisdictions, reducing duplication and delays, and developing fit-for-purpose approvals for qualified conservation practitioners collecting plant material for research, seed banking, propagation and threatened species recovery.
- **Invest in national data infrastructure**, including a comprehensive threatened flora inventory and shared trait databases, so that conservation priorities can be set using the best available evidence.
- **Invest in the next generation of plant conservationists** by supporting education, training, mentoring and secure early-career pathways that build and retain expertise in plant identification, ecology, genetics, seed science, restoration and conservation management.

Closing Statement

The Port Douglas Declaration reflects the conference theme of Culture, Collaboration and Change. Securing the future of Australasia's flora will require different organisations, disciplines and knowledge systems to work together, but collaboration must lead to action.

This Declaration is not intended as a record of APCC15. It establishes priorities against which the plant conservation community, governments and funders can be held to account. Plant Conservation Australia will report against these priorities at the next Australasian Plant Conservation Conference to be held in Sydney 2028, including where progress has and has not been made.

Signed
Em Professor Caroline Gross,
President, Plant Conservation Australia
on behalf of the APPC15 attendees



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