# Annual Report

2025

Melbourne Biodiversity Institute

THE UNIVERSITY OF MELBOURNE



In all that we do, the Melbourne Biodiversity Institute depends on Country.

We acknowledge that Aboriginal and Torres Strait Islander Peoples have cared for and spoken the language of Country for millennia, and remain the leading authorities in the oldest and most successful biodiversity knowledge systems in the world.

Our gratitude for Country and First Peoples is embedded in our commitment to address the impacts of colonialism in our work.

# Melbourne Biodiversity Institute

Melbourne Biodiversity Institute (MBI) brings together researchers and practitioners from across the university and beyond, to create tools and evidence to guide policy makers, communities and industry in nature positive action and transformation.

The purpose of the Melbourne Biodiversity Institute is to nurture, grow, and amplify excellent, transformative, interdisciplinary biodiversity research and researchers. We support partnerships that grow the shared knowledges and drive regenerative practices, prosperity and thriving biodiversity. The Institute shares knowledges through translation and contributions to university, community and corporate learning.

We do this through convening seven interdisciplinary research clusters, funding seed and sapling projects on biodiversity, hosting PhD scholars, hosting panels, workshops and major events.  We provide guidance and advice for a host of external partners and collaborators outside the university in the public and private spheres, including state and federal government, the finance sector, community based organisations and many more.



# From the Directors

Biodiversity; the variety of all life on earth, underpins every aspect of human health and wellbeing. Australia continues to lead all developed nations in the speed and scale of our biodiversity loss. In 2025, 39 species were newly listed as threatened with extinction under our nature laws, while the Commonwealth Government approved more clearing of threatened species habitat in 2025 than any year since 2011. We have a lot of work ahead of us!

Globally, appetite for taking genuine steps toward achieving the Global Biodiversity Framework goals appears to remain steady, with governments signing onto a global strategy to bridge the $700B biodiversity funding gap. And 620 businesses from over 50 countries equating to assets valued at 20 trillion US dollars have committed to nature-related reporting as part of the Taskforce for Nature-related disclosures (TNFD).

MBI is home to a network of leading biodiversity academics creating the tools, evidence and resources that seek to support progress toward the goals of the global biodiversity framework and underpin positive transformations for biodiversity from global to local scales. Our academics have provided significant leadership within the Global Biodiversity Framework, the Intergovernmental Panel on Climate Change, the United Nations Oceans Treaty and the Convention on Biological Diversity. Our cultural leaders are engaging with the UN's Food and Agriculture Organisation; and MBI has invested in supporting networks across the Pacific Islands promoting Indigenous voices in biodiversity leadership. At the national level, our researchers helped guide Australia's nature law reform process, the development of the State of the Environment Report, the Australian Nature Positive Plan, and the Clean Energy Finance Corporation.

MBI's mission is to bring together the diverse cohort of biodiversity leaders from across the University of Melbourne, convene and promote the evidence based research needed to stem biodiversity loss, and incubate the next generation of researchers and academics in biodiversity research excellence. In 2025 MBI invested deeply in our academic community of biodiversity researchers; financing 30 new interdisciplinary research initiatives as part of our inaugural seed and sapling funding round. These research initiatives will be delivered by 160 academics from all nine faculties of the university as well as a multitude of external partners.

Our first early and mid-career symposium packed out, and showcased innovative research from 40 academics as well as performances, posters, and installations, and attracted external participants from stakeholders as broad as the finance sector, media, government, philanthropy and community based organisations. Throughout 2026 we will enhance the impact of these projects through capacity building workshops, platform their work through our media channels and beyond to support the initiatives growing to scale.

We strengthened our partnerships across a range of sectors, working for the first time with the International Council for Mining and Metals, and worked on the next tier of partnerships with Franklin Templeton, Bank Australia, NAB, CSIRO, and Taungurung Aboriginal Land and Waters Council. We made meaningful contributions to state and federal regional planning methodologies with DEECA and DCCEEW. Impactful work with existing partners such as the Australian Conservation Foundation integrating biodiversity mapping with renewable energy planning across Eastern Australia has prompted new partnerships, for example with the Conservation Council of Western Australia, who will commission MBI to undertake detailed biodiversity mapping and scenario analysis for renewable energy transformation across Western Australia in 2026. This work will uplift the mapping laid out in the NZAU2 partnership on renewables and biodiversity between MEI, MBI, and Princeton University, supporting the just energy transition across Australia.

The work of our research clusters continued apace; with over 300 university academics engaged in the regular activities of our seven interdisciplinary research clusters. Some highlights of the clusters' work includes university-wide group submissions to Australia's Strategy for Nature 2024 - 2030, and the Environmental Protection Reforms bill, as well as the National Environmental Standards. The clusters ran multiple engaging events across the university as part of Sustainability week, promoting urban greening, green spaces for health, and biodiversity mapping. We platformed key publications of our leaders; for example the launch of 'Regulating a Thousand Cuts for Researchers, Regulators and Policy Makers' by environmental law Professor Rebecca Nelson; providing guidance about the way we need to think in order to legislate for environmental protection.

The Institute also welcomed four new PhD Scholars into our Nature Academy, enriching our institutional knowledge with deep inquiry into Indigenous sovereignty in ecological stewardship, nature-based solutions in coastal habitats, nature-culture relations in toxicology, and measuring collapse thresholds in biodiversity risk assessments.

As Directors, we are energised by the enthusiasm and the resolve of our interdisciplinary community here at the University of Melbourne, and can't wait to escalate our impact in the coming year.



Professor Brendan Wintle - Director
Dr Rachel Morgain - Deputy Director
**Melbourne Biodiversity Institute**

# 2025 highlights in numbers...

## Investing in research

**17** ARC grant proposals
cited MBI as key infrastructure support

**$953K** invested in projects across MBI portfolio

**$1.34M**
partner investment attracted to MBI projects

## Mobilising the University of Melbourne

**30** seed and sapling projects
MBI financed 30 new interdisciplinary research initiatives

**7** PhD scholars
in MBI's Nature Academy

**300+** academics engaged
Across the 7 MBI research clusters

**15** global bodies, frameworks and initiatives
shaped by MBI Network contributions

**160** academics from all 9 faculties
delivering seed and sapling projects

## Extending the reach of influence

**42** doctoral research positions
doctoral positions with German partners, including 20 new UoM PhDs

**80+** external partner
organisations activated through seed and sapling projects

**370** registrations
for MBI's inaugural *"Everything is Connected"* symposium.
1 in 3 from outside the University



# 2025 Overview: Advancing Biodiversity expertise at University of Melbourne

Photo by August Wylynko

A strong and connected interdisciplinary community is vital to produce powerful research solutions to the complex challenges posed by the biodiversity crisis. Our focus for 2025 was to convene the 300+ community of University of Melbourne academics who had joined one or more of our seven interdisciplinary research clusters.

> **“There is no other place in the university where I can participate in these sorts of conversations, or be in the room with this range of people”**
>
> MBI Cluster participant, reflecting on MBI Research cluster experience

Building on the 7 Deep Dives in 2024, MBI Directors continued to visit and engage with the university's expansive network, running deep dives in 2025 with SAFES, the Vet School, MDHS, the central sustainability team, and the Faculties of Education, Arts, SGEAS, and Engineering/IT. Academics engaged with or interested in biodiversity research came along to network and discuss how the MBI could embed their perspectives and priorities.

From these deep consultations, seven research clusters launched their first in-person meetings in 2025; building the relationships across faculties that underpin interdisciplinary research impact. Cluster activity gave birth to a rich array of projects, including over 50 seed funding applications, group policy submissions, industry-partnered workshops, and beyond.

## Establishing a culture of research excellence

Research excellence relies on strategic and ambitious partnerships across institutions, to train the next generation of impact-oriented biodiversity, energy and climate experts. In 2025, MBI in partnership with the **Karlsruhe Institute of Technology** (KIT); Germany and the **University of Hohenheim, Germany** successfully secured funding from the German Science Foundation for **42 doctoral research positions** tackling challenges at the heart of the dual biodiversity and climate crisis. The funding will also deliver 20 PhD scholarships at the University of Melbourne, strengthening our ability to attract high-quality candidates and further UoM’s commitment to research excellence and impact.

Throughout 2025 MBI platformed the excellent research taking place across the University of Melbourne, through our symposium and publications. We promoted and supported our academics at the International Conference on Conservation Biology (ICCB). An overspilling ‘tok stori’ (dialogue) session following from our 2024 Tambu Symposium launched the **Melanesian Biocultural Network**, amplifying Melanesian voices in conservation efforts. MBI co-sponsored and was invited to open **Australia’s 2025 Citizen Science** peak body conference at Melbourne Connect, engaging a national audience of citizen scientists over a three day period. MBI also engaged and supported speakers at the **Ecological Society of Australia conference** (ESA), **Vic BioCon**, the **Sustainable Finance Futures Forum**, the **National Climate Adaptation conference** and a range of other regional and international platforms.

2025 saw the acquisition of funds to amplify UoM research impact. Emily Nicholson led a successful ARC Linkage Grant to improve ecosystem indicators in collaboration with the IUCN and a number of Australian partners. Brendan Wintle (MBI) and Andrew Dowdy (SGEAS) were joint CIs in a successful ARC Linkage Project titled ‘**Building integrity into the Nature Positive promise**’. Both projects will make vital contributions to the evidence base underpinning international standards and legislation.

2025 saw MBI launch our first **seed and sapling funding round**; aimed at investing in new and emerging interdisciplinary research initiatives. The interest was immense; with over **$1.5m** worth of applications received; demonstrating the concentration of capability in biodiversity within the University of Melbourne, and the incredible opportunity to invest in biodiversity research. MBI awarded funds to 30 innovative new and scaling initiatives; involving 160 academics from every faculty across the university. MBI will continue to work with this cohort throughout 2026; platforming their work, supporting initiatives to scale, and enhancing their reach wherever possible.

Investing in the seed projects has had a profound catalytic effect; enabling the successful recipients to activate partnerships with close to **80 external organisations** as research partners; including government partners, landholders, banks, investment firms, conservation organisations, arts bodies, international universities, First Nations groups, and zoos. The initial funding has leveraged a total of **$1,337,884 in-kind and cash contributions;** an almost 3-fold return on investment of the $503,000 invested in MBI seed funding projects.



# Translating biodiversity research into impact

### Influencing Environmental Policy at a National level

The MBI is proving a valuable driver in coalescing biodiversity expertise into a powerful voice shaping national environmental law and policy. Rebecca Nelson; Professor at Melbourne Law School and lead for the 'Systems for Nature positive transitions' cluster, coordinated a group submission, drawing on 12 academics from SAFES, Law, Biosciences and Melbourne Climate Futures, to the Senate Inquiry into the **Environmental Protection Reform Bill 2025** and six related bills. Rachel Morgain and Rebecca Nelson also coordinated a MBI submission on **Australia's Strategy for Nature**, and cluster co-lead Justin Alger coordinated a university-wide submission on the National Environmental Standards being set under the **EPBC Act**. MBI also worked in partnership with **Environment Information Australia** to advocate to the government about the need for species irreplaceability mapping to support the new nature laws. The reforms that followed directly reflected many of the recommendations made by our network.

The resulting legislation established the National **Environmental Protection Agency (NEPA)** to oversee new **National Environmental Standards** and introduced a range of non-offsettable matters, recognising the continuous compromising nature of offsets and extended exemptions for native forest logging and land clearing under Regional Forestry Agreements. These are concrete wins. However, the 'pay to destroy' model, where industry can effectively pay fines for harms caused during development, persists as a feature of the legislation, and Brendan, alongside a cohort of conservation academics, continues to advocate for the additional reforms needed to eradicate it.

As a result of this body of work, Director Brendan Wintle was invited, alongside experts from three other universities, to give evidence to the Senate Committee Inquiry on the Nature Positive Bills, focused on ensuring the legislation carries real regulatory clout, genuine independence and measurable standards from which to track progress.

### MBI and MEI join forces on NetZero Australia Phase 2

The journey towards neutralising our carbon emissions and halting biodiversity loss is a joint and mutually beneficial mission. Australia has a legislated target to achieve net-zero greenhouse gas emissions by 2050, with an interim 2035 target of 62-70% below 2005 levels. MBI researchers Andrew Rogers and Brendan Wintle, working in partnership with the Melbourne Energy Institute, the University of Queensland and Princeton University Andlinger Center, contributed to the next phase of the Net Zero Australia project (NZAu2) in 2025.

The MBI-MEI project; **'Biodiversity and Energy System Planning'**, aims to better incorporate biodiversity impact avoidance into future renewable energy infrastructure planning by integrating ecological, spatial and cultural data sets with energy infrastructure planning models to help design a renewable energy network that doesn't trade decarbonisation for biodiversity loss.

With this evidence-based approach to planning, the renewable energy sector is empowered to ramp up renewable energy projects while keeping biodiversity safe. The project has attracted over **$2 million in investment to date.** Read the full report here.



**Better outcomes for regions, communities and biodiversity through embedding strategies and engagement in regulatory reforms**

The MBI is committed to using our expertise to support governments at the state and federal level to improve outcomes for planning for nature and community.

The Victoria Government Department of Energy, Environment and Climate Action (DEECA) is working collaboratively with the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) to develop new approaches to regional planning.

MBI researchers Rachel Morgain, Brendan Wintle, Andrew Rogers, Stephanie Chen and Joliette Cooper-Booth worked with Professor Martine Maron and other specialists at UQ and 2Rog consulting - commissioned by the Victoria Government Department of Energy, Environment and Climate Action (DEECA) and the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEEW) - to develop “Strategic Approaches to Ecological compensation and offsets”, a framework helping State and Federal Government partners deliver nature positive outcomes through strategic biodiversity offsetting, addressing the challenge of “death by a thousand cuts”. The approach is designed to facilitate the energy transition, support regional economic development, and ensure Traditional Custodians and communities benefit from and have a say in biodiversity protection and recovery.

**Linking biodiversity, emergency response and climate resilience**

MBI’s nature-led resilience work took centre stage through 2025 at the NSW Nature Conservation Council Bushfire Conference where Dr Jack Pascoe and Dr Rachel Morgain gave invited keynote presentations, while Dr Morgain also spoke at a panel on nature-led resilience at the National Climate Adaptation Conference. At the National NRM Knowledge Conference we promoted connections between nature-led resilience in Australia and the Pacific through facilitating a keynote and panel presentation by MBI researcher Te'o Lau Dr. Viliamu Iese, and forged connections that have laid the foundation for new research collaborations. At the Ecological Society of Australia conference MBI co-hosted a workshop on Nature in Crisis: Embedding the Environment in Disaster Management Frameworks with NRM Regions Australia, Terrain NRM, the Biodiversity Council and the Arthur Rylah Institute.



# Our research leads

Located across nine different faculties, our research leads connect more than 300 researchers into our research clusters, to create interdisciplinary projects led by community and expert need.

**Species and Ecosystems**
Alice Hughes,
Faculty of Science



**Species and Ecosystems**
Tyrone Lavery,
Faculty of Science



**Healthy Country Healthy Communities Healthy People**
Ken Winkel,
Melbourne School of Population and Global Health



**Healthy Country Healthy Communities Healthy People**
Maddison Miller,
Faculty of Science



**Healthy Country Healthy Communities Healthy People**
Lee Skerratt,
Faculty of Science



**Nature-Led Resilience + Nature-Based Climate Solutions**
Judy Bush,
Faculty of Architecture Building and Planning



**Nature-Led Resilience + Nature-Based Climate Solutions**
Rachel Morgain,
Faculty of Arts



**Levers for Deep Change**
Miriama Young,
Faculty of Fine Arts and Music



**Levers for Deep Change**
Ellycia Harrould-Kolieb,
Faculty of Science



**Business and Biodiversity**
Attila Balogh,
Faculty of Business and Economics



**Business and Biodiversity**
Gary Veale,
Melbourne Business School



**Business and Biodiversity**
Glenn Hoetker,
Melbourne Business School



**Systems for Nature Positive Transitions**
Rebecca Nelson,
Melbourne Law School



**Systems for Nature Positive Transitions**
Justin Alger
Faculty of Arts



**Multifunction Landscapes**
Kylie Soanes,
Faculty of Science



**Multifunction Landscapes**
Paul Cheng,
Faculty of Science



**Multifunction Landscapes**
Jagannath Aryal,
Faculty of Engineering and IT





# Adding value; enhancing a culture of research

**Cultivating biodiversity leadership and expertise:**

In 2025 MBI awarded **four strategic research scholarships** to PhD candidates undertaking impactful interdisciplinary biodiversity research initiatives. The new scholars span from the Faculty of Fine arts and Music (FFAM), Medicine Dentistry and Health Sciences (MDHS), Biosciences and the School of Agriculture, Forestry and Ecosystem Sciences (SAFES). Bringing our PhD cohort to seven, marking the beginning of the development of MBI's Nature Academy.

The PhD scholars platformed their work at MBI's mid-year Symposium, engaged across our research clusters with our rich biodiversity community, and meaningfully contributed to workshops, events and seminars throughout the year. We are thrilled to incubate the next generation of engaged, adaptable biodiversity leaders.

**MBI Research Cluster Assistants**

MBI's research cluster network is powered by a team of incredible early career academics providing convening support to each of the research clusters. These seven research assistants (RAs) keep the research clusters on track, bring speakers and projects to the cluster and deepen the MBI's knowledge of our network. After the foundational work the RAs achieved in the first year, we're seeing the impact of the clusters scaling with a full program of workshops, panels, guest talks, publication outputs and symposia planned for 2026.

> **Our RAs are the success factors in MBI's interdisciplinary research clusters. They provide research leaders with invaluable support, and keep collaborations active. Providing opportunities for ECRs to develop cross-disciplinary exposure that grows the next generation of biodiversity leaders.**
>
> MBI Cluster Lead, Judy Bush

**Nature-Led Resilience + Nature-Based Climate Solutions**
Ainslie Macdonald



**Multifunction Landscapes**
Jodie Valpied



**Species and Ecosystems/ Systems for Nature Positive Transitions**
Lara Skerratt



**Healthy Country, Healthy Communities, Healthy People / Levers for Deep Change**
Sarah Medcalf

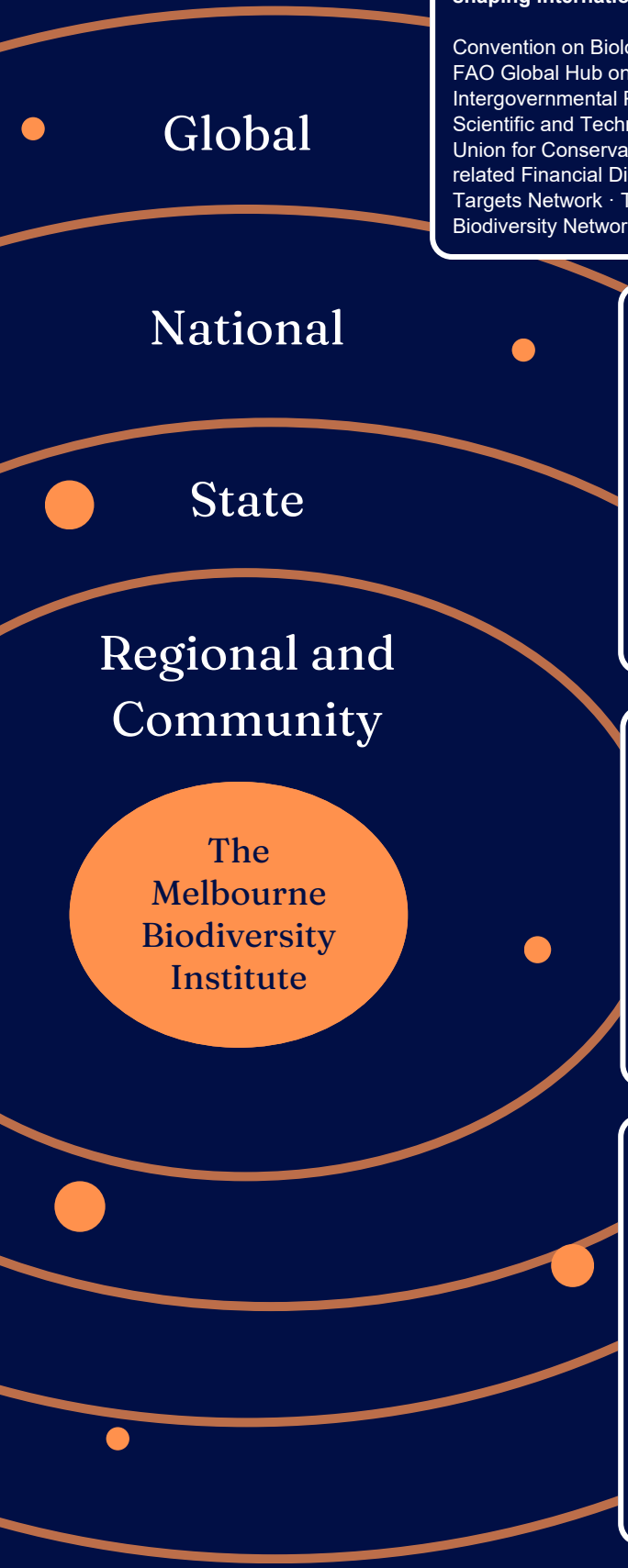


**Business and Biodiversity**
Qingting Liao



# Our influence

Halting biodiversity loss requires evidence-based action at every scale. Throughout 2025, MBI academics coalesced expertise from across the University of Melbourne to contribute to the frameworks, policies and partnerships shaping outcomes for nature, from global convention to community-led practice. Below is a snapshot of the bodies, frameworks and partners MBI engaged with in 2025.




## Global

**Our researchers provide leadership within the global bodies, frameworks and initiatives shaping international ambition for biodiversity.**

Convention on Biological Diversity Global Biodiversity Framework · United Nations Oceans Treaty · FAO Global Hub on Indigenous People's Food Systems · UN Environmental Program · Intergovernmental Platform on Biodiversity and Ecosystem Services · The Subsidiary Body for Scientific and Technological Advice · Intergovernmental Panel on Climate Change · International Union for Conservation of Nature · International Council on Mining and Metals · Task force on Nature-related Financial Disclosures · Task force on Climate-related Financial Disclosures · Science Based Targets Network · The Global Reporting Initiative · International Seabed Authority · Global Youth Biodiversity Network

## National and state

**We build the strategic tools and frameworks that Commonwealth Government and state agencies use to protect biodiversity, plan regional development, and finance ecological restoration at scale.**

Australian & State Ministers for the Environment · Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW) · Indigenous Land and Sea Corporation · Australian Government Department of Treasury · Victorian Department of Energy, Environment and Climate Action (DEECA) · Victorian Department of Treasury · Zoos Victoria · Royal Botanic Gardens Victoria · NSW Reconstruction Authority · Queensland Department of Environment and Science

## Policy processes

**We convene university-wide submissions, give evidence at Senate inquiries and help shape the reforms governing how Australia protects nature and mobilises finance for the transition.**

Environmental Protection Reform Bill 2025 · National Environmental Protection Agency (NEPA) · National Environmental Standards · EPBC Act · Australia's Strategy for Nature 2024–2030 · Australian Nature Positive Plan · Clean Energy Finance Corporation · Nature Repair Market · Orange Bellied Parrot Veterinary Technical Reference Group · Threat Abatement Plan for amphibian chytridiomycosis · Victorian Government Parliamentary inquiry into Wildlife Roadstrike

## Regional and Community

**We partner with First Nations organisations, community networks and health services, embedding biodiversity research on Country and in community.**

Taungurung Land and Water Council · Melanesian Biocultural Network · Code MOANAH · NAB First Nations pilot · Royal Darwin Hospital · City of Greater Geelong · City of Melbourne · Bunurong Land Council · Merri-bek Council · Darebin Creek Management Committee · Melbourne Water · Friends of Merri Creek · REGEN Melbourne · NRM Regions Australia · Goulburn-Broken CMA · North East CMA · Hills and Fleurieu Landscape Board · Alinytjara Wilurara Landscape Board · Healthy Land and Water · Northern Agricultural Catchments Council · Moorabool Shire Council Environment and Sustainability Advisory Committee · Alligator Rivers Region Technical Committee



Song of the Cricket at the Venice Biennale

# Our Projects

**Embedding ecology in constitutional law**

Looking to the future; MBI is investing in new research exploring how to embed environmental protections in our legal frameworks. Australian constitutional law is anthropocentric. UoM researchers from Melbourne Law School, led by A/Professor Lael K Weiss, are developing curriculum resources to integrate an ecological well being perspective into constitutional law teaching across Australia, in collaboration with the Cambridge Centre for Animal Rights Law. Teaching modules, case studies and educator guides will be piloted and refined through workshops at Melbourne Law School and UNSW, in partnership with the Gilbert + Tobin Centre for Public Law. Although the project focuses on constitutional law, the team sees the approach could be adopted in other legal subjects in the core curriculum.

**International Council of Mining and Metals upstream value chain analysis**

In collaboration with The Biodiversity Consultancy and the International Council on Mining and Metals (ICMM), the Melbourne Biodiversity Institute researchers Sam Hickman, Billy Geary, Brendan Wintle, Dr Tim Werner and RMIT's Matthew Selinske undertook a project to assess ICMM members' maturity in understanding how features of their upstream value chains impact nature, and to identify which upstream activities generate the greatest nature-related impacts across members.

Building on this work, MBI will continue to collaborate with The Biodiversity Consultancy and ICMM to develop actionable guidance to help ICMM members better understand their specific upstream value chains and implement measures to reduce their impacts on nature.

**Song of the Cricket**

The Song of the Cricket, Presented at the 19th International Architecture Exhibition – Venice Biennale 2025, is a unique interdisciplinary initiative that enhances biodiversity through modular floating islands designed as portable breeding stations for reintroducing invertebrates and rehabilitating food webs and biodiversity on selected sites. Driven by an interdisciplinary team from five University of Melbourne departments and 10 international organisations. Primary investigators include Professor Alex Felson of ABP, A/Professor Miriama Young (Music Composition), Professor Theresa Jones (Biosciences) A/Professor Alice Kesminas (Infrastructure engineering).The project centres on the Adriatic Marbled Bush-Cricket, an endangered species native to the Venice Lagoon. Once thought extinct, whose seasonal chirping provides a unique bio-indicator of wetland health.

Song of the Cricket is a living ecological artwork and conservation intervention, celebrating the cricket's life cycle and bringing its song back into the Venice Lagoon for the first time in decades. An immersive 'sound garden' and bioacoustic sound installation invite visitors into a sensory experience connecting natural soundscapes with ecological education. By combining scientific inquiry with artistic expression, the project widened public understanding of species conservation internationally and catalysed longer term rehabilitation initiatives including a viable translocation of crickets back into the Venice Lagoon.

**Natural Resource Management and Nature Led Resilience**

Our natural landscapes - land, water, soil, plants and animals, are not only worth protecting within their own right, but also offer the solutions to many of the challenges we're facing locally and globally. MBI's Deputy Director Rachel Morgain co-authored a high-level statement with Indigenous and natural resource management experts, in response to the Wentworth Group of Concerned Scientists Blueprint to Repair Australia's Landscapes, championing a transformative nationwide effort to protect and restore Australia's lands, seas and waterways by scaling up natural resource management and Indigenous caring for Country.

> "I've returned to my region with confidence on how to take small steps in plunging into private investment in nature-based solutions in the desert."
>
> - Kim Krebs, General Manager Alinytjara Wilurara Landscape Board

MBI also convened a landmark workshop with the Sustainable Finance Hub and NRM Regions Australia, exploring case studies of nature based solutions for fire, flood and coastal resilience across Australian landscapes. Speakers from the Investor Group on Climate Change, CSIRO and the Nature Solutions consultancy contributed, and the workshop catalysed new cross-sectoral partnerships, participants and now collaborating on a report sharing its findings.

In November, Dr Rachel Morgain and Dr Viliamu Iese presented at the NRM Knowledge Conference in Cairns, with Dr Iese delivering a keynote on nature-led resilience and community development for agricultural systems in the Pacific and Australia.

**Business biodiversity risk disclosures and First Nations enterprises.**

MBI is working with National Australia Bank (NAB) to develop a pathway to influence global approaches to nature risk under the Taskforce on Nature-Related Financial Disclosures to be more responsive and appropriate when applied to First Nations businesses. In our first project phase, MBI researchers and First Nations leaders Teagan Shields and Cass Hunter provided initial advice to NAB on their approach to applying TNFD across their customer base, and identified key issues where a disconnect between existing TNFD tools and First Nations business practices could create significant challenges for First Nations enterprises.

**Launch of the Melanesian Biocultural Network**

MBI supports the newly established Melanesian Biocultural network (MBCN) and Indigenous-led regional network strengthening conservation, culture and sustainable livelihoods across Melanesia. The network grew from the 2024 Tambu Symposium, an MBI Seed Funding Project that brought together Indigenous knowledge-holders from Papua New Guinea, Bougainville, Solomon Islands, Vanuatu and New Caledonia to build a regional evidence base for the recognition of tambu/tabu customary conservation systems. The group reconvened at ICCB 2025, where Melanesian leaders identified the need for a dedicated regional platform to coordinate action and amplify Melanesian voices in policy and global forums - leading to the formation of the MBCN. In 2025, MBI funded UoM's Tyrone Lavery to continue supporting the network's development, strengthening cultural governance and traditional ecological knowledge.

> **"This…has enabled us to set up a solid network throughout Melanesia, which will gradually grow stronger."**
>
> - New Caledonian researcher in Ecology and Conservation Biology, Conservation Officer of the Northern Province of New Caledonia, President of the Gardiens des Iles association, and Tambu delegate Malik Oedin

**Co-designing multi-purpose nature-based solutions for food sovereignty and health (Code MOANAH)**

Funded through MBI's 2025 seed funding program, this project pilots methods to characterise, analyse and map biodiversity in Indigenous Peoples' food and knowledge systems across the Torres Strait Islands and the Pacific Islands, where climate change and shifting diets are threatening biodiversity and food sovereignty. Led by a multidisciplinary team of UoM researchers from Agriculture, Education, Geography and Social Sciences, the project is co-designing pathways for nature-based solutions to restore biodiversity for food sovereignty, wellbeing and health. Partners include Melbourne Climate Futures, the Oceania Institute, the Victorian Drought and Innovation Hub, PuipiKak Malu and Envirotech Education, with outcomes feeding into the Food and Agriculture Organisation of the United Nations (FAO)'s Global Hub on Indigenous People's Food Systems.

**Barriers and pathways for First Peoples' participation in natural capital and carbon markets and covenanting programs to care for Country**

The MBI and the Taungurung Land and Water Council (TLaWC) have an ongoing partnership embedded in a shared vision of caring for Country and preserving biodiversity. MBI Deputy Director Rachel Morgain and researcher Lara Skerratt provided TLaWC with an in-depth scan of policy recommendations and investment mechanisms, including carbon markets, the Nature Repair Market and Victorian BushBank, to support greater investment in caring for Country, with a particular focus on restoring Taungurung freehold land. Workshops with TLaWC reviewed the findings, feeding into a final report owned by and for TLaWC.

**A vision for biodiverse, multifunction landscapes in Australia**

Addressing the extinction crisis requires us to look beyond protected areas. A multidisciplinary team of UoM researchers including urban ecologists, marine ecologists, landscape architects among others are working on creating a shared vision, research agenda and implementation roadmap for landscapes that genuinely support, and are enhanced by, biodiversity.

Led by MBI Research Lead Kylie Soanes, and supported by an interdisciplinary team with Peter Vesk, John Morrongiello, Tina Parkhurst, and Sarah Hunter; drawing on diverse perspectives across the MBI Multifunction Landscapes Cluster, this project is developing practical pathways forward for land managers, researchers and stakeholders. Funded as part of the 2025 MBI seed funding round, this project is developing for publication a shared vision and research framework to catalyse impactful research in priority focal areas.



Photo by August Wylynko



### *Green spaces in Hospitals*

*Dr Mark De Souza, a specialist emergency physician at Royal Darwin Hospital (RDH), joined MBI as an interdisciplinary PhD scholar in 2024. Five years ago, recognising that RDH's concrete buildings felt unwelcoming amid a changing climate, he bought trees and started digging. His guerrilla gardening inspired the RDH executive and volunteers, with local Larrakia Indigenous elders and knowledge holders choosing plants of significance.*

*Mark is now investigating the impact of green spaces on staff health and wellbeing through the Greenspace 4 Hospital Staff (G4HS) study, the first national survey of nature and greenspace experiences in Australian hospitals. With burnout highest among nurses and doctors in critical care roles, G4HS examines links between workplace experiences of biodiversity and wellbeing, work capacity and job satisfaction. A pilot across 16 Australian hospitals across all jurisdictions (November 2025 to January 2026) generated 117 complete responses, with over fifty health services and 30 peak professional organisations, including professional colleges, now supporting survey distribution. The full study launched on 16 February with a target of 6,600 responses, receiving 1,000 complete responses in its first nine days. Many participating organisations indicated the study aligns with their strategic plans to address staff wellbeing through nature contact and climate adaptation.*

Photo of Dr Mark De Souza
by Rebecca CL Parker

# The next generation of Biodiversity Scholars

**Ellen Hodgson** is an Anishinaabekwe from the Turtle Mountain Band of Ojibwe and a descendant of the Apsáalooke Nation. She is a filmmaker and researcher who grew up on Ngunnawal / Ngambri Country and currently resides in Naarm. Ellen is undertaking a PhD at the University of Melbourne, based across the Biodiversity Institute and the Indigenous Knowledge Institute. Her interdisciplinary research explores film as a tool for Indigenous sovereignty, focusing on the rematriation of Manoomin, the sacred Ojibwe wild rice relative.

**Thomas Connell's** research sits at the intersection of health, narrative, and human–environment relations. Inspired by a personal experience of snakebite envenomation following an unexpected encounter on an inner-city Melbourne beach, his work explores how emotionally significant wildlife encounters shape people's relationships with nature and influence attitudes toward conservation and coexistence with dangerous species. His PhD thesis, Neurotoxic Memories: Meaning-Making, Trauma, and Coexistence after Snakebite Envenomation, investigates how people experience and interpret encounters with venomous snakes in Australia.

**Mia Turel** is a PhD candidate in the School of BioSciences at the University of Melbourne. Her PhD thesis, Learning from Nature to Optimise the Design of Nature-Based Coastal Protection, looks into the increasing interest in the use of nature-based solutions that restore, rehabilitate, or create coastal habitats for coastal protection. These solutions provide a suite of other benefits such as increased biodiversity and carbon sequestration. Interdisciplinary research is required to design successful nature-based solutions. Decision makers require technical guidance on the physical processes that affect ecology to scale nature-based solutions and decrease the extent of coastal hardening.

**Jordan Haber** is a PhD researcher in the Quantitative and Applied Ecology (QAEco) group at the University of Melbourne, supervised by Dr Bonnie Wintle and Professor Emily Nicholson. His current PhD research advances applications of the IUCN Red List of Ecosystems, integrating structured expert elicitation and quantitative modelling to strengthen ecosystem risk assessment and conservation decision-making.

# Investing in our partners

MBI is committed to working with a constellation of partners within and beyond the university to make a difference locally, regionally and globally. Below is a snapshot of partners we invested in and supported in 2025.

**International Congress on Conservation Biology**

In June 2025, 23 University of Melbourne academics travelled to Meanjin/Brisbane to present research on conservation, ecosystems and biodiversity at the International Congress for Conservation Biology, the largest global meeting addressing conservation challenges. MBI platformed the University's research expertise through an exhibitor table and presenter guide, engaging researchers, community members and other stakeholders throughout the week, as a proud sponsor of the event. Over 1,500 conservation professionals from more than 100 countries attended.

**Australian Citizen Science Conference**

Citizen scientists play a paramount role in preserving, monitoring, and promoting biodiversity across all landscapes in Australia. The Australian Citizen Science Association convenes this national movement; sharing knowledge, capacity building and celebrating the fantastic collaborations taking place.
MBI was thrilled to sponsor the Australian Citizen Science Conference in 2025; including a welcoming keynote from MBI Director Brendan Wintle, and can't wait to explore more ways to bring academics and citizen scientists together as we grow.

**University of Melbourne Sustainability Week**

The University of Melbourne's annual Sustainability Week invites our extensive community of students and professionals to build skills and knowledge in contributing to sustainability through a comprehensive program of workshops, talks, and capacity building opportunities.

MBI's constellation of experts formed a core component of the week's activities. MBI delivered a 'Biodiversity Footprinting' workshop attended by an array of staff and students keen on learning how to quantify one's impacts on biodiversity. MBI cluster leads from MDHS, Melbourne School of Design and SAFES came together for a forum on 'Healing Places within Healthcare and beyond'; articulating the many relationships between green spaces and health and wellbeing. Leaders from Melbourne Centre for Cities, MBI and Architecture Business and Planning delivered a fantastic workshop on 'Supporting Nature in the urban jungle'; supporting participants with practical tips on greening their urban homes. MBI's Directors also participated in multiple panels focused on healthy ecosystems and sustainability.

The week was a fun and practical way to reach across the University's community and invite them on the journey to sustainability.

**Sustainable Finance Hub**

The Sustainable Finance Hub (SFH) is a key initiative co-hosted by MBI and Melbourne Climate Futures, led by Simon O'Connor, supporting policymakers and finance leaders to lift the ambition, coverage and equity of the sustainable finance transition. SFH conducts interdisciplinary research on sustainable finance and its impacts, develops tools and frameworks for practitioners and policymakers, and engages decision-makers to adopt science-informed approaches to sustainable financing.

2025 was MBI's first year co-funding SFH. In that time, SFH deepened the finance sector's understanding of the intersection of nature and finance through engagement at the Responsible Investment Association Australasia Conference, participation on the Australian Sustainable Finance Institute advisory committee, and membership of the Federal Minister for Environment and Water's Nature Finance Council.

SFH also engaged broadly across the University, collaborating with Melbourne Business School on blended finance workshops, delivering keynotes at the MBI Interdisciplinary Symposium and Sustainability Week, and briefing faculties including Finance, Business and Economics to develop collaboration opportunities. Several project proposals resulted from this work, laying strong foundations for SFH to scale its impact in 2026.

**Wattle Fellowship**

The Wattle Fellowship is the University of Melbourne's flagship co-curricular program dedicated to cultivating leadership for global sustainability. MBI was pleased to sponsor the Wattle Fellowship showcase event 'Unconventional'; platforming the incredible sustainability projects the Wattle fellows have undertaken. We continue to engage with Wattle alumni across our span of activities.



Image of UoM Sustainability Week workshop

# Connecting Everything *(and everyone!)*

MBI's inaugural early and mid-career symposium 'Everything is Connected' attracted a great deal of interest and enthusiasm from inside and outside the university, leaving us struggling to find room for all those that wanted to come and be part of the event.

The event attracted attendees from the finance sector, media, our not-for-profit partners, philanthropy and government, who were keen to understand what innovative knowledge was being generated across the University on biodiversity. The day featured 38 speakers across 30 speed talks, installations and books on display showcased work spanning law, biology, botany, music and art.

The day was rounded out by a really magical soirée; with dance, soundscapes and songs from artists from the Faculty of Fine Arts and Music, and ECAs chatted with guests about their work.

The day sold out with a waitlist; over 370 registrations were received across the day session and soirée, with roughly one in three coming from outside the University.

**38** speakers across 9 UoM Faculties

**89%** of attendees rated the event as 'excellent'

> "I loved the inclusion of different disciplines alongside science - literature, music, art, finance and law. These brought the event alive - particularly inclusion of arts. A multi-disciplinary approach is very valuable for engagement beyond the university - with government, industry and community"















The 2025 Melbourne Biodiversity Symposium by Grant Treeby





# Celebrating impact

The Marles Medals, named in honour of Fay Marles AM, an alumna and first female Chancellor of the University of Melbourne, recognise significant research impact in HASS, STEM and HMS. **Natasha Cadenhead and Professor Brendan Wintle** were recognised for their profound impact on environmental policy and public awareness through their influential paper Spending to Save: What will it cost to halt Australia's extinction crisis? Their research provided a groundbreaking economic framework for biodiversity funding, shaping parliamentary inquiries, policy platforms and public debate.

**Professor Michael Kearney** was awarded for his pioneering work developing the NicheMapR software package and associated publications. NicheMapR integrates physical, biological and computational sciences to predict species' responses to environmental change with unprecedented precision. Downloaded more than 6,000 times and cited in leading journals including Science and Nature, the software has had a profound impact on global research, conservation strategies and environmental policy.

MBI also warmly congratulates all Marles Medal recipients across the university, including friend of MBI, **Professor Jacqueline Peel** (Melbourne Law School and Director of Melbourne Climate Futures), recognised for her pioneering research on global climate governance and climate change litigation.

# The year ahead

MBI is hitting the ground running in 2026, scaling the impact of our work up and beyond the University.

We're kicking off by hosting Professor Dame EJ Milner-Gulland from the University of Oxford as part of the Miegunyah Fellowship. Professor Milner-Gulland will present a public lecture on biodiversity footprinting and facilitate a 3-day industry workshop bringing together industry leaders and academics on nature positive business, deepening the Oxford-UoM relationship.

MBI will continue to expand its role providing technical and strategic guidance to government, the not-for-profit sector and industry, and grow partnerships across Australia including with the WA Conservation Council on biodiversity mapping. Our cluster leads will amplify this reach, bringing industry, government and academia together to share skills and enhance collaboration.

Building on 30 seed and sapling projects in 2025, we will support the 160 researchers and academics engaged in this work through capacity building in research translation, media training and policy engagement. We will continue to draw on global leaders in our network, including contributors to COP 17, IPCC and IUCN, to train our early and mid-career academics in contributing to global biodiversity policy.

Join us to be part of this adventure!



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