
Arthur
Rylah
Institute
for environmental
research
2026
CALENDAR
VICTORIA
State
Government
Energy,
Environment
and Climate Action

Science that shapes our future

At ARI, our team of over 90 researchers has expertise in the ecology and taxonomy of Victoria's flora and fauna. For more than 50 years, ARI has contributed to a deeper understanding of ecosystem processes and interactions in Victoria, harnessing various forms of wildlife and environmental data.

We use modern techniques, such as thermal imaging, electrofishing, acoustic and radio telemetry, remote sensing and world-class spatial mapping, artificial intelligence and modelling products. These enable us to undertake world-leading, innovative science to address complex management and policy challenges.

We specialise in:

- Ecology - terrestrial, freshwater and estuarine
- Analytical data and spatial data mapping
- Machine learning and AI
- Genetics
- Restoration sciences
- Environmental emergency preparedness, response and recovery
- Behaviour change science
- Collaborative research with Traditional Owners.

Black Browed Albatross, *Thalassarche melanophris*
Photo by Justin Cally (ARI)

Cover - Leadbeater's Possum, *Gymnobelideus leadbeateri*
Photo by Justin Cally (ARI)

ARI on a page

More than **100 staff**

More than **50 unique clients** worldwide

World leading, **trusted environmental science** advice

100% project funded since 2025

More than **300 publications and presentations** per annum

Specialist electrofishing **equipment**

More than **200 projects** per annum

500-600 field trips per annum **statewide**

Laboratory, aquarium and workshop **facilities**

Over **$20m revenue** generated per annum

20 vehicle specialist fleet, >400,000km travelled annually

In-house modelling and software capabilities

Stay up to date with our latest science

ARI Updates keep our colleagues, collaborators, clients, stakeholders and the community up-to-date with the latest research and activities that we are involved in. They highlight recent projects, conference and workshop involvement, seminars, media interviews and releases, publications, videos and other relevant events.

We have three types of communication sign-ups available, which are delivered by email and found on our website.

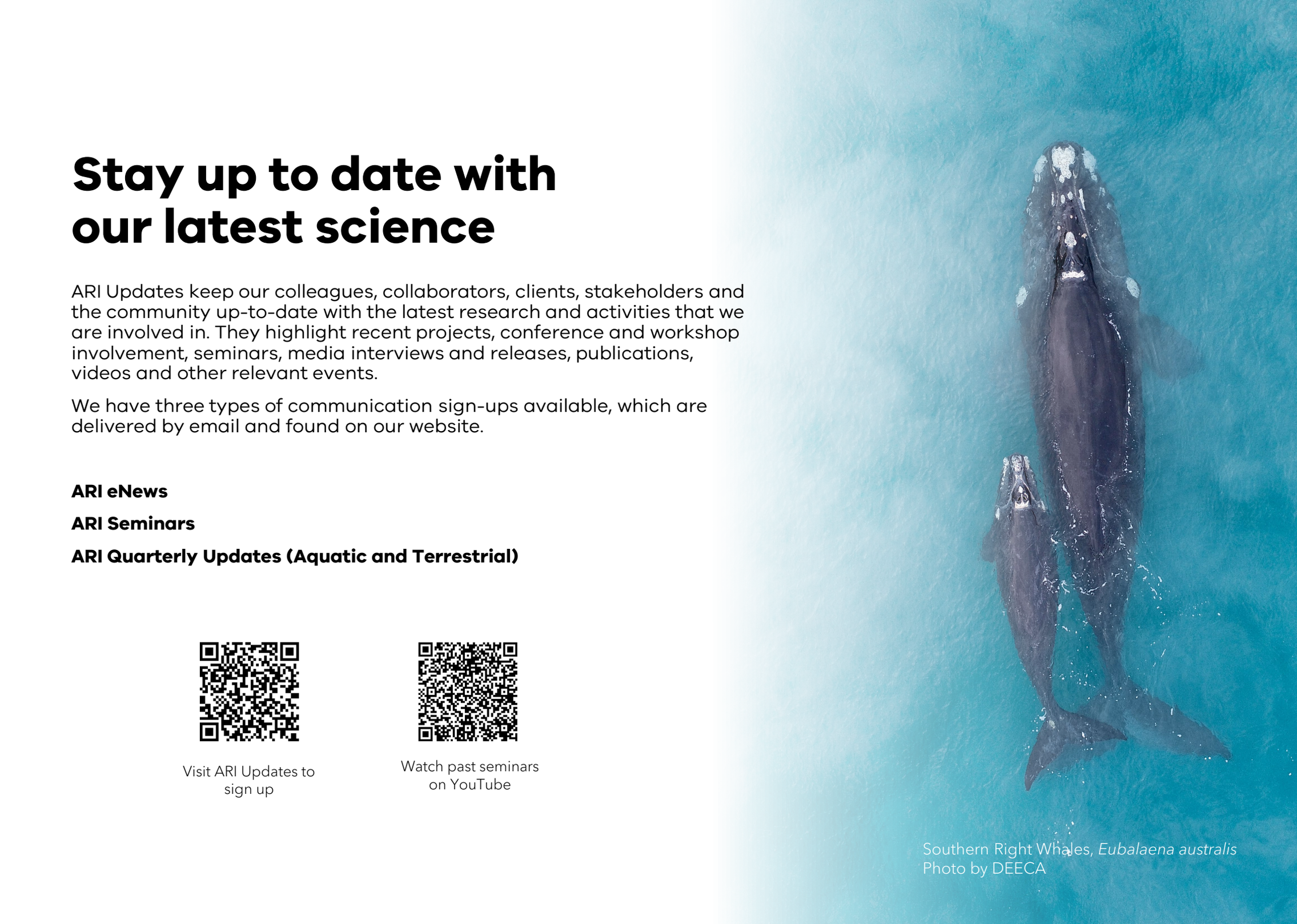
ARI eNews

ARI Seminars

ARI Quarterly Updates (Aquatic and Terrestrial)

Visit ARI Updates to sign up

Watch past seminars on YouTube



Southern Right Whales, *Eubalaena australis*
Photo by DEECA

Bogong High Plains
Photo by Michele Kohout (ARI)

A plant monitoring manual for everyone

With more than 55 years of ecological survey expertise, the Victorian Government's centre for environmental research is uniquely placed to bring together the Plant Monitoring Manual.

To safeguard plants and ecosystems, we first need to understand where they occur and how they are changing. Monitoring reveals which species are present and how many occupy a defined area—but the value of that knowledge depends on the quality of the survey and how well the data can be compared across studies.

That's where the Plant Monitoring Manual comes in. Designed for both citizen scientists and professionals, it provides clear, standardised methods for field monitoring.

The guide outlines key steps to help monitor plant populations with confidence, so anyone can contribute to a clearer picture of Victoria's biodiversity and help protect the ecosystems we all depend on.

Plant Monitoring Manual

JANUARY

SUN	MON	TUES	WED	THURS	FRI	SAT
				1 New Year's Day	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26 Australia Day	27 Term 1 starts	28	29	30	31

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Forest regeneration after fire
Photo by Marcia Riederer (DEECA)

Bushfire recovery

Summers in Victoria are becoming hotter, drier, and more fire-prone. ARI's ecological expertise supports DEECA's emergency response and recovery, helping government and communities understand both the immediate impacts and long-term pathways to recovery after bushfires.

Our science guided urgent wildlife actions during the 2009 Black Friday and 2019–20 Black Summer bushfires, including the rescue of critically endangered fish. Our monitoring and modelling also informed pest herbivore and predator control, giving native species the best chance to rebound in the years that followed.

Today, the role of nature in supporting community resilience through emergency events is increasingly recognised. Our **Nature-led Community Resilience toolkit** is helping communities prepare for and recover from disasters by strengthening their connection with the natural world.

Black summer bushfires

Nature-led community resilience

FEBRUARY

SUN	MON	TUES	WED	THURS	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

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Sloane's Froglet, *Crinia sloanei*
Photo by Andrew Geschke (ARI)

Wildlife call recognition using artificial intelligence

ARI has developed ARISA, a world-leading AI model that can rapidly identify animal calls from real-world data. We have trained it to wade through massive audio datasets to identify the calls of birds, bats, frogs and other mammals.

In 2025, ARISA detected the endangered Sloane's Froglet (*Crinia sloanei* – pictured) at 14 sites. This included eight locations outside its known range - a remarkable 175 km range extension.

To ensure accuracy, our companion tool ARIEL enables the rapid validation of calls, giving researchers confidence while quickly flagging rare or unusual detections.

By making acoustic monitoring more cost-effective and scalable, this research is opening new frontiers; surveying larger areas, unlocking insights from legacy recordings, and revealing species we might otherwise miss.

Find out more

MARCH

SUN	MON	TUES	WED	THURS	FRI	SAT
1	2	3	4	5	6	7
8	9 Labour Day	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

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Brolgas, *Antigone rubicunda*
Photo by Daniel Purdey (ARI)

Science for a renewable future

In partnership with RECAFP, ARI is leading research to help decision-makers protect wildlife while supporting Victoria's clean energy transition.

As a government research organisation, we work hand-in-hand with policy-makers, providing timely advice as new findings emerge. Our renewable energy projects address critical knowledge gaps for biodiversity policy, drawing on global science while also delivering Victorian-specific projects.

Our expertise in species' ecology, wildlife tracking, expert elicitation, and world-class modelling come together to guide decisions. This research directly supports DEECA's policy development for renewable energy facilities, ensuring impacts on threatened birds and bats are carefully managed.

This research has informed the Victorian Government's Renewable Energy Handbook, which provides clear guidance for project proponents, environmental assessors, and decision-makers on balancing clean energy development with the protection of Victoria's biodiversity.

Science for policy

The *Handbook*

APRIL

SUN	MON	TUES	WED	THURS	FRI	SAT
			1	2 Term 1 ends	3 Good Friday	4
5	6 Easter Monday	7	8	9	10	11
12	13	14	15	16	17	18
19	20 Term 2 starts	21	22	23	24	25 Anzac Day
26	27	28	29	30		

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Murray Spiny Crayfish, *Euastacus armatus*
Photo by Scott Raymond (ARI)

10inTen – recovering 10 threatened species in ten years

More than 30 freshwater fish and 20 crayfish species are listed as threatened under Victoria's *Flora and Fauna Guarantee Act 1988*.

10inTen is taking a bold new approach to saving threatened aquatic species by pairing captive breeding programs with on-ground action.

In partnership with the Victorian Fisheries Authority and catchment management authorities, ARI is helping select species, collect brood stock, identify release sites and monitor populations. So far, work has started for 27 species, including small fish, crayfish, and mussels.

This program is critical in protecting our threatened aquatic species from extreme events (such as bushfires, droughts and floods) and complementing waterway rehabilitation efforts.

One standout species is the Murray spiny crayfish (*Euastacus armatus*, pictured). It's the second largest freshwater crayfish in the world and holds high cultural, economic and social values. 10inTen hopes to strengthen these populations.

Find out more

MAY

SUN	MON	TUES	WED	THURS	FRI	SAT
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3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

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Wombat Forest
Photo by Dr Joslin Moore (ARI)

A shared vision for the Wombat Forest

The Victorian Parliament has passed legislation to create the Wombat-Lerderderg National Park, comprised of the existing Lerderderg State Park and large parts of the Wombat State Forest.

Before this announcement, ARI had worked with government agencies and three Registered Aboriginal Parties (Dja Dja Wurrung, Wadawurrung and Wurundjeri Woi Wurrung) to develop a shared vision for the forest and an approach for aspirational co-management arrangements.

Guided by structured decision making and expert elicitation principles, ARI led discussions with co-managers to understand their knowledge, values, and management challenges they face.

The report records the aspirations of the management partners. It was not a plan for management or a plan for governance.

You can find out more about the steps the team undertook to build a joint management vision.

Find out more

JUNE

SUN	MON	TUES	WED	THURS	FRI	SAT
	1	2	3	4	5	6
7	8 King's Birthday	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26 Term 2 ends	27
28	29	30				

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Koala, *Phascolarctos cinereus*
Photo by Justin Cally (ARI)

The Great Victorian Koala Survey

Until recently, we had limited knowledge of the health condition, genetics and numbers of our Koala population in Victoria.

In partnership with Deakin University, Federation University, University of Queensland and University of Melbourne, ARI has delivered Victoria's first comprehensive statewide Koala survey.

This survey informed the latest estimate of Koala numbers and provided insights about the genetic diversity of Victoria's Koalas and the health condition of specific populations.

This research is part of the Victorian Koala Management Strategy and will guide future decisions about Koala management.

ARI frequently delivers population estimates for a range of native and pest species to inform wildlife managers and policy-makers.

Find out more

JULY

SUN	MON	TUES	WED	THURS	FRI	SAT
			1	2	3	4
5	6	7	8	9	10	11
12	13 Term 3 starts	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

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Murray Cod, *Maccullochella peelii*
Photo by ARI

eDNA - an innovative survey method

Environmental DNA (eDNA) is a modern way to detect animals and plants by collecting traces of their genetic material (DNA) from the environment, including from water, soil, or air. Sources of DNA organisms leave behind include skin cells, faecal waste, or pollen.

eDNA is still a new and evolving technology and comes with limitations and uncertainties. Since 2018, ARI has been at the forefront of this evolving technology, testing its use to monitor aquatic plants, quolls, fish, and even invasive species like willow and deer.

Our experts offers guidance in how eDNA surveys can be used in research and monitoring programs and has the capacity for sample processing and eDNA data analysis.

While not all species are suitable for eDNA monitoring, implementation of survey standards will improve data quality, reduce errors, and build confidence in eDNA findings.

Find out more

AUGUST

SUN	MON	TUES	WED	THURS	FRI	SAT
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23	24	25	26	27	28	29
30	31					

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Platypus, *Ornithorhynchus anatinus*
Photo by Doug Gimesy

Helping platypus recover

In 2021, the Platypus was listed as vulnerable in Victoria under the *Flora and Fauna Guarantee Act 1988*.

To secure its future, ARI is coordinating Platy Patch—a four-year statewide initiative co-funded by the Australian and Victorian Governments with Melbourne Water.

Working alongside catchment management authorities and many other partners, the project is restoring streambanks and aquatic habitats across 14 sites and 10 regional centres, benefiting Platypus and other threatened species.

While recovery takes time, Platy Patch is laying the groundwork for thriving Platypus populations across Victoria.

The program also supports Melbourne Water's innovative Smart Water Network on Monbulk Creek, delivering environmental flows to help buffer stormwater and climate change impacts.

Find out more

SEPTEMBER

SUN	MON	TUES	WED	THURS	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18 Term 3 ends	19
20	21	22	23	24	25 Friday before AFL Grand Final	26
27	28	29	30			

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Flooded forest
Photo by Adrian Kitchingman (ARI)

Flood impact and recovery in Victoria

Floods are natural disturbances in Victoria. Many species that live within and around waterways are adapted to flood cycles, depending on them for migration, breeding events and rejuvenation.

In October 2022, heavy rainfall and storms caused major flooding across Victoria, becoming the largest flood event recorded in the last 50 years. This caused significant impacts on both human communities and natural environments.

ARI's ecological expertise provided critical advice on immediate recovery actions and post-flood assessments to understand the impacts and recovery of threatened species.

Our research collected information on freshwater fish populations and their habitat, invasive species impacts (such as Common Carp), threatened plants, mammals, birds and reptiles.

One standout observation - recording the threatened Gile's Planigale for the first time in 11 years in Victoria.

Find out more

OCTOBER

SUN	MON	TUES	WED	THURS	FRI	SAT
				1	2	3
4	5 Term 4 starts	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

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Cattle on a farm
Photo by Dr Lyndsey Vivian (ARI)

Science for agriculture

Agriculture and biodiversity are deeply connected, and ARI's research is helping landholders manage both more sustainably.

Wildlife diseases can threaten native species, disrupt ecosystems, spill over into livestock, and even affect human health. ARI's genetics experts are working with Agriculture Victoria and farmers to better understand and manage these risks, focusing on how feral animals and wildlife interact with livestock.

Separately, ARI is supporting farmers to graze wetlands in ways that protect biodiversity. Long-term monitoring has validated Victoria's wetland grazing guidelines, giving farmers practical advice on how to balance productivity with conservation.

Together, these projects highlight ARI's role in guiding private land management, providing evidence-based solutions that strengthen farming productivity, support biodiversity, reduce disease risks, and build long-term sustainability across Victoria's landscapes.

Wildlife disease management

Grazing in wetlands

NOVEMBER

SUN	MON	TUES	WED	THURS	FRI	SAT
1	2	3 Melbourne Cup	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

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Moorabool Yaluk
Photo by Dr Chris Jones (ARI)

Managed flows for the Moorabool Yaluk

Moorabool Yaluk (Moorabool River) in southwestern Victoria is a culturally significant river to the Wadawurrung People.

The river has been heavily altered by regulation through the construction of reservoirs and weirs, as well as water extraction.

ARI has been supporting the Wadawurrung Traditional Owners Aboriginal Corporation (WTOAC) to track the response of plants and animals in the river to managed flows.

Pre-flow surveys allowed for a snapshot baseline of condition to be compared with post-flow assessments. Short-term benefits were observed for water quality, frogs, and plant communities.

Continued monitoring will reveal more about the effect of multi-year managed flows in shaping the ecological and cultural outcomes for the Moorabool Yaluk.

Find out more

DECEMBER

SUN	MON	TUES	WED	THURS	FRI	SAT
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18 Term 4 ends	19
20	21	22	23	24	25 Christmas Day	26 Boxing Day
27	28 Public holiday	29	30	31		

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We acknowledge and respect the Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it.

We honour Elders past and present whose knowledge, and wisdom has ensured the continuation of culture and traditional practices.

ARI is committed to genuinely partnering with Victorian Traditional Owners and Victoria's Aboriginal community to progress their aspirations.

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