

Foundation for Rabbit-Free Australia

Newsletter Volume No 41, June, 2024

Foundation Matters

Updates and notices for Foundation members and partners.

New Research Projects

The Foundation is funding two new research projects, following a recent call for proposals. They are 'Profiling myxomavirus' and 'RATs for rabbit diseases':.

Profiling Myxomavirus.

Myxomatosis has been in Australia since 1950 and still persists with periodic outbreaks, sometimes with significant impact. However, not a lot is known about changes in virus virulence and rabbit resistance since rabbits first developed resistance to myxomatosis, and how the presence of RHDV may influence such changes.

With support from Rabbit-Free Australia, **Kandarp Patel** (pictured below, from the University of Adelaide) will survey outbreaks, collecting samples to analyse for the presence of myxomatosis. Positive tissue samples will be further analysed to better understand any changes in the genetic structure of the virus, and identify any variants suitable for further studies of myxoma virulence and rabbit resistance.

RATs for Rabbit diseases.

Laboratory analysis is currently required to determine if rabbits have had RHDV or other lagoviruses (diseases of rabbits and hares). **Grant Hansman** (pictured below, from Griffith University) aims to develop Rapid Antigen Tests suitable for field application, through a project supported by Rabbit-Free Australia.

The tests will identify the presence of antigens to lagoviruses and be useful in screening infections and their transmission, and in tracking the distribution of viruses like RHDV. As an example of potential applications, quickly determining if specific RHDV variants were already present in local rabbits would be a great help in deciding whether a release of RHDV-K5 was advisable or not.

Banjo Frog leaps off the page.

The launch of '**Banjo Frog's Concert Spectacular**' was a great success with three packed-out events, each attracting media attention - thanks largely to some great work by **ABC Rural**. As one person commented, 'ABC just go the extra mile to link of all the parts of a story together'.

Regional papers were also active in covering the launch. See the **SE Voice** coverage for a lovely interview with Bianca ([here](#)), and the front-page story in the **Fleurieu Sun**, available [here](#).

The book has also attracted **positive reviews**, with '*highly recommended, a very significant conservation message, engaging, clever, bold, creative and an important story*' - just some of the words in a review of Banjo Frog's Concert Spectacular in ReadPlus (a reading list engine for teachers). See it [here](#).

The launches marked the end of a big program of work for the Foundation, led by volunteer Project Officer, **Vicki Linton**, and the creative forces behind the book (Kristin and Bianca), but including numerous ecologists, rabbit managers, linguists, community groups, web-designers and a sub-editor.

It takes us two years to develop, road-test and produce a book and the assistance of countless 'friends' along the way. We think that effort is reflected in the quality of the final **book** (published by [Wakefield Press](#)), and the Easter Bilby's Friends **website** - see [here](#).

The image below, from a launch event at Rapid Bay Primary School in the heart of where the book was set, includes just a few of our 'friends' who made the book a reality.



It is now 'full-steam ahead' for Bianca preparing illustrations for the next book to be released in early 2025, while Vicki and Kristin are well into scoping the location and the plants and animals to include for the 2026 release. We look forward to Easter Bilby's Friends stimulating conversations about rabbits across Australia.

AVPC 2024: Rabbit-Free Australia

A draft Program for the **Australasian Vertebrate Pests Conference** is now available ([here](#)) with loads of rabbit-relevant presentations throughout the conference and a full session devoted to rabbits.

Rabbit-Free Australia is hosting a morning tea at the event and will arrange a venue where anyone with an interest in rabbits can pop-in to catch-up one evening. It will be a chance for members of several networks that we facilitate to meet face-to-face for the first time.

The Foundation is supporting the attendance of four representatives to give presentations and facilitate networking; Brian Cooke, Wayne Meyer, Amy Iannella and Peter Day. Committee member, Craig Magnussen, is also speaking (supported by Darling Downs-Moreton Rabbit Board) as are several Foundation members from other agencies.

Reflections: 30 years of reporting on rabbits

The presentation by **Prue Adams** to the **2022 AGM** is now available for viewing on our YouTube channel, see [here](#). While highlighting moments from her experience and interactions with the Foundation, the presentation is virtually an oral history of the Foundation's origins and, as Prue says, 'entertainment helps the information go down'.



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Membership time

With June 30 approaching, **membership renewals will soon be appearing in your Inbox**. We look forward to your continuing support and encouragement.

To celebrate the launch of '**Banjo Frog's Concert Spectacular**' there is a special **members only** offer of the book, including postage, for \$30.

Buy it online [here](#), or Contact Us to lodge an order. Entertain the kids with your copy of Banjo Frog, just like at the Hamra Centre book launch in the image below.



Rabbit News & Views

Stories about and from Foundation members and partners.

Easter Bilby tours Vienna

A granddaughter of Rabbit-Free Australia member, **John Radcliffe**, was in a Vienna tramcar over Easter and snapped the following image. Thanks to Google translator, we think it reads, '*Hares have a bad reputation in Australia because they outcompete native species such as the bilby. That's why the Bilby took on the Easter bunny job*'. Easter Bilby is certainly getting around!

Image: Katie Lynch



Easter Bilby Books on YouTube

Kaye Kessing, author of the original Easter Bilby books, has kindly shared videos of her reading both 'Easter Bilby' and 'Easter Bilby's Secret'. They are now on our YouTube channel (available [here](#)), and will be joined soon by one of Kristin Martin reading 'Banjo Frog's Concert Spectacular'.



Both books can be purchased from the Rabbit-Free Shop, [here](#). Sign in to enjoy the member's discount.

Effectiveness of K5 and Pindone

A study reported by **Patel et.al** (2024) found that rabbit numbers at **RHDV-K5** release sites increased, as did those at control sites, but a reduction in rabbits occurred at most **pindone** treatment sites. Evidence was found of K5 being transmitted by flies after lethal infection of some rabbits, but existing immunity and high numbers of innately immune young rabbits may explain the results. For more information, see the Ecology & Evolution paper [here](#).

The authors note that although pindone did not reduce rabbit populations by 95% as recommended for effective control, the impact of pindone could be leveraged if conducted in association with other control options such as warren destruction.

Bait-stations for Peri-Urban rabbit control.

Justin Hardy works in livestock research in WA and lives in a well-populated area of small properties near Albany, where rabbits have become a significant problem. The nature of peri-urban areas constrains the control techniques available for rabbit control and additional environmental concerns have led Justin to use home-made bait stations (pictured below) – and his success is now getting the attention of neighbours. Read his story, [here](#).

Image: Justin Hardy



Australian Rabbit Managers Network

ARMN met recently, hearing from 3 very good speakers with a tonne of information to share:

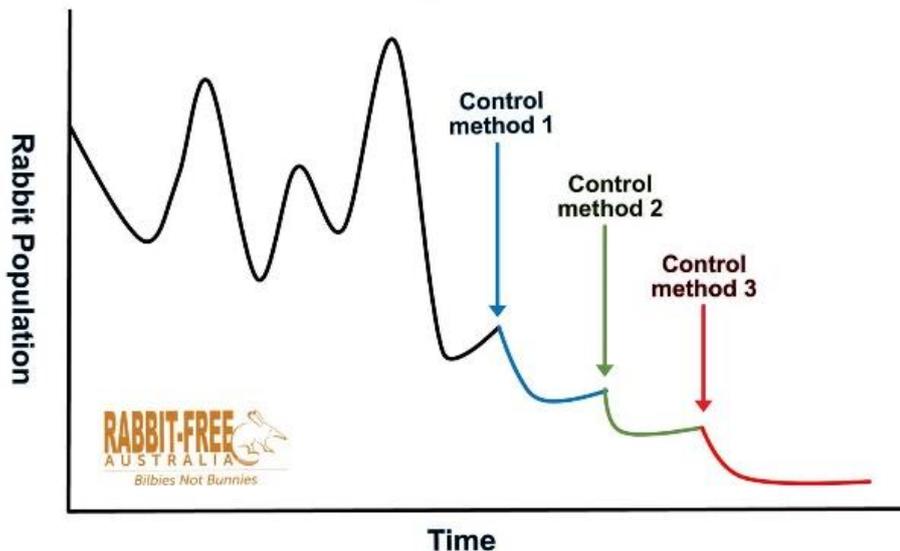
- Pat Taggart: Do land managers apply best-practice
- Andrew Read: RHDV manufacture & Rabbit control in Australia
- Nias Peng: Monitoring RHDV variants in Australia.

Useful references:

- Presentations from [Pat Taggart](#), [Andrew Read](#), [Nias Peng](#)
- [Taggart et al \(2024\)](#) 'Do land managers apply best-practice ..'
- [Rabbit control. More than a silver bullet](#). A summary of Pat's paper.
- [Peng et al \(2023\)](#) '... Surveillance of Lagoviruses in Australia'
- [Williams & Moore \(1995\)](#) 'Effectiveness and cost-efficiency of control..'

Thanks to Jason Wishart (AgVic) for the Williams & Moore reference analysing different combinations of controls and concluding that, when conditions permit, the best option is bait, rip, fumigate and monitor/maintain. It highlights the importance of '*disrupting the habitat of rabbits rather than simply killing rabbits*'.

The Aim of Integrated Rabbit Control



A **bait, rip, fumigate** sequence, followed by ongoing maintenance can be very effective and cost-efficient in temperate areas (Williams & Moore, 1995), but numerous options can be selected for individual circumstances.

After Pat Taggart, 2024

Rabbit Biocontrol Strategy

CISS have released the plan for the next phase of rabbit biocontrol research, available here. It summarises previous phases of rabbit biocontrol research and recommends pathways forward, including:

- Optimising existing bio-controls
- Accelerating the selection of effective RHDV strains
- Bio-prospecting for new biocontrols
- Genetic biocontrols
- Building science capability
- Integration and engagement for better adoption of existing controls.

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Can shifting rabbit carcasses help spread biocontrols?

We occasionally hear of rabbit carcasses being moved about in hope of spreading rabbit viruses, and sought some advice on the practice.

Myxomatosis

'Myxo' is spread by biting insects; rabbit fleas and mosquitoes. They're unlikely to bite a carcass but infected fleas might persist on one for a short time. Once blood starts to coagulate the fleas can't feed and will leave the carcass, so spreading myxo would require 'fresh' carcasses - a day or so old at most.

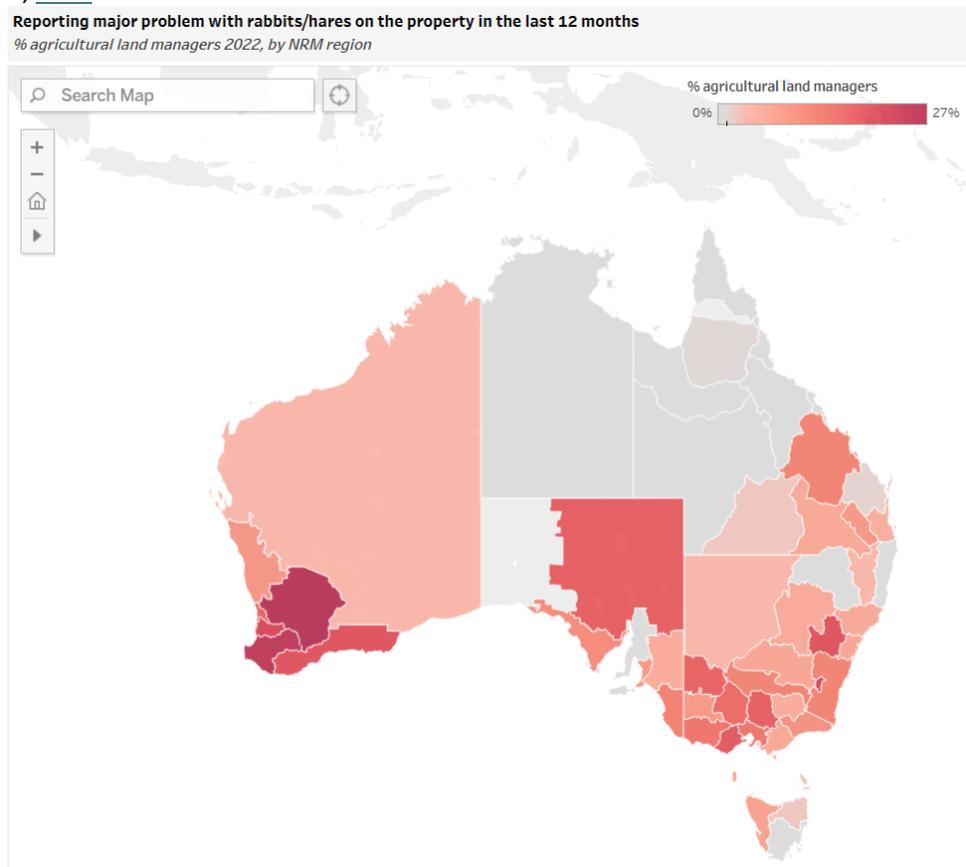
Calicivirus

RHDV is a fairly robust virus and can persist in a carcass for days, or even weeks if the carcass is slow to break down and dry out. Flies are known to spread the virus, so a rabbit carcass could be a source of contagion to other rabbits. The impact would depend on whether it died of RHDV2 (which can infect young rabbits) or RHDV-K5 (which doesn't affect young rabbits) and, regardless of strain, whether the exposed rabbits had any immunity from surviving a previous infection.

Interestingly, a paper by [Elsworth et.al \(2014\)](#) concluded that RHDV had increased in virulence to that time. The transmission of the virus from carcasses by insects (flies) - rather than from live rabbits - was considered to effectively favour the spread of more deadly strains.

So where are rabbits a problem?

Information from **ABARES** 2022 land manager survey is now available in **map** form. along with that for 2016 and 2019, showing where rabbits have been reported as a major or minor problem. See the on-line tool, [here](#).



Snippets

A smorgasbord of news. Please follow the links to the original source.

Bringing back the bush

A great little video from the **Bellarine Landcare Group**, courtesy of **VRAN** (Victorian Rabbit Action Network), demonstrates the value of weed control and rabbit control as foundations for bushland recovery - some of the most valuable steps in promoting conservation. See the short video [here](#).



Rabbit-free Macquarie Island turns 10

Macquarie Island has celebrated the tenth year of being pest-free. See the ABC News report [here](#).

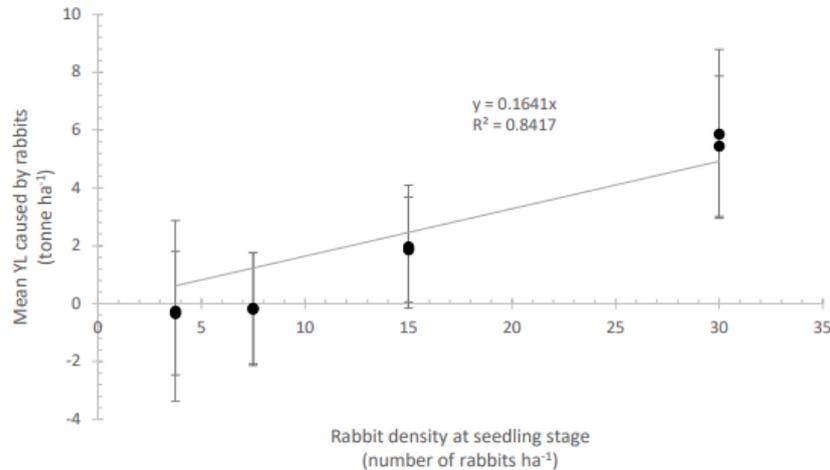
Rabbits on the Radio

ABC Country Hour ran a session on RHDV, citizen science and rabbit management.

- It starts with Nias Peng at 1:10 in [Listen here](#), with a call for people to **submit rabbit samples to CSIRO**. The initial news release from CSIRO is available [here](#).
- Pat Taggart followed up (at 16:40) talking about **rabbit management**, noting that 40% of people used more than one control option but RHDV-K5 was often used in isolation.

Critical rabbit densities - Broccoli

A Masters thesis by Wang (2019) concluded that baiting with 1080 would be cost-effective to reduce yield losses at rabbit densities of 6.5 rabbits / ha. See a key graph (overpage) and the thesis [here](#).



AgVic 1080 Survey

As part of an election commitment to research alternatives to 1080, the Victorian Government is surveying authorised users to understand how 1080 and other pest control methods are being used. See [here](#) for more information.

Trapping by the moon

Predator Free NZ have Posted a story about trapping pest animals in-sync with the lunar cycle; available [here](#). Do you know of any stories about trapping or shooting rabbits in-sync with lunar activity?

Feral Cat & Fox Newsletter

The national feral cat & fox management coordination team have released their latest Newsletter, available [here](#). If you would like to go on the mailing list, click [here](#).

Foxes in the News

There have been a few fox stories in the **ABC News**:

- Annual cull in sw WA ([here](#))
- Never-ending battle ([here](#)), including lots of **references to rabbits**.

New fox control available

PAPPutty is a new control approved for use on foxes and wild dogs by APVMA (Australian Pesticides & Veterinary Medicines Authority), subject to state animal welfare regulations. It is applied to soft cloth on the jaws of a leg-hold trap and, once ingested by a fox or wild dog, causes a loss of consciousness and death. For more information see [here](#).

Good reasons to control rabbits, cats and foxes

Recent analysis indicates that feral cats become bolder when foxes are eradicated (see [here](#)). All the more sense in controlling cats and foxes together - and beginning with rabbit control to lower their numbers to start with and make them hungrier and more likely to take baits.

Invasive species in Australia. Their history

An **on-line Q&A**, courtesy of the **Invasive Species Council**, features a panel of authors and experts on the waves of feral pest introductions to Australia (including rabbits). See '*Aliens Among Us - The ferals that ate Australia*', available [here](#).

Invasive species control: Positive for conservation

A story from Predator Free NZ ([here](#)) cites a paper by Langhammer et.al in Science ([here](#)) which concludes that, for positive conservation outcomes, '*interventions targeted at species and ecosystems, such as **invasive species control**, habitat loss reduction and restoration, protected areas, and sustainable management, are highly effective and have large effect sizes.*

The role of island arks.

Translocating endangered species to islands can work very well with regard to saving the species, but it is not all good news. The translocated species may disrupt (even destroy elements of) the island's ecology, and survival in a 'free range zoo' can't be the end goal. Building **ecosystem resilience** to re-establish native ecosystems (e.g. through **feral animal control**) has a lot to offer in terms of the long-term protection of native species. Read The Conversation article by Rendall et.al, [here](#).

Led by the nose: Saving palatable plants?

A study by Patt Finnerty (University of Sydney) found it was possible to **deter herbivores** (swamp wallabies) from palatable seedlings using odiferous chemicals that mimicked the smell of distasteful plants they usually avoided. See [here](#) for more information. Could it be the start of a new rabbit deterrent?

ALA Biodiversity Data Mobilisation

Atlas of Living Australia (ALA) offers **grants** up to \$20,000 or \$30,000 to support the **digitisation of existing data** to be made available via ALA. See [here](#) for more information. It includes a **Biosecurity Stream**, that is supported by the [CSIRO Catalysing Australia's Biosecurity](#) initiative.

Exploding cans of rabbit meat

A trawl through the archives generated an entertaining and informative story about the historic rabbit canning industry by **ABC News** journalist, Liz Rymill. See the story [here](#). If you're into the history of rabbits in Australia, check out '**Those Wild Rabbits**' by Bruce Munday, available [here](#).

Predators vs lizards

For an interesting set of **graphics** on lizard health inside and outside predator proof fencing; see the **Predator Free NZ** link [here](#). It sparks thoughts of how to better illustrate the benefits of rabbit control.

Feedback

Any thoughts on this Newsletter, technical difficulties with links, things you'd like to see in future editions, or any matters to do with the Foundation - please let us know.