

Chairman's Annual Report – 2019-20

Introduction

Foundation for Rabbit-Free Australia is an environmental charity with three mission objectives:

- Support research and researchers,
- Raise awareness and understanding, and
- Encourage on-ground control measures,
- all contributing to our ultimate objective - to eradicate wild rabbits from Australia.

The European wild rabbit is Australia's worst vertebrate pest, being widespread and destructive to natural environments and primary production. Rabbits adversely affect over 300 threatened native species, change landscapes, and cause losses of over \$200 million a year to agricultural production.

Rabbit-Free Australia is committed to rebuilding Australian landscapes, and the eradication of feral rabbits is a crucial step to that end. The Foundation's vision is for productive landscapes, free of their most notorious vertebrate pest (the European wild rabbit), supporting abundant native plants and wildlife.

Research

It is worth re-iterating that any success at controlling wild rabbits in Australia has resulted from focussed and persistent research. Briefly, the release of the myxoma virus in 1950 occurred because of dogged persistence by scientists and insistent appeals by concerned citizens for control of the rabbit plague. As predicted, the effectiveness of Myxomatosis declined and subsequent research for effective biological control focused on the release of Rabbit Haemorrhagic Disease Virus, RHDV1. The v351 strain of RHDV1 has been used since 1996, while a second strain of RHDV1, called K5, has been used since 2017. As research on K5 proceeded, a different variant of RHDV, called RHDV2, was first detected in Australia in 2015 in rabbit populations of north east Victoria. All four viruses are now found in wild rabbits in varying frequency. While RHDV1 and RHDV K5 are registered as legal biological agents, RHDV2 is not. There is current work through the Centre for Invasive Species Solutions (CISS) and partner state agencies (NSW and SA particularly) to show that V2 is effective and safe to be a registered biological control agent for wild rabbits.

It is fascinating to now appreciate that much of the stumbling success of the myxo virus and the "escape" of RHDV1 from Wardang Island was through insects - rabbit fleas, mosquitoes and flies - acting as virus carriers. RFA and PIRSA funding has been used by Dr Adam Croxford, at the University of Adelaide, to investigate a method for optimum extraction of RHDV viral RNA from bulk samples of flies. This has proved to be a good sampling option to understand the spread and interactions between various forms of RHDV. Trapping and transporting flies is a whole lot easier than picking up and transporting whole rabbit carcasses.

Quite recently, some of the monitoring of rabbit populations at Turretfield by Flinders University research associate, Dr Louise Barnett has indicated that there are synergistic effects from the different viruses. The research indicated that while a rabbit may survive a Myxo virus infection it becomes more susceptible to RHDV infection. It is important to acknowledge that the population monitoring at Turretfield is fundamentally important to building an understanding of the dynamics

of the viruses. SA government support for this monitoring has been wavering in the last few years but it is pleasing to note that PIRSA, through Dr Brad Page, Principal Biosecurity Officer, has reaffirmed its support for the program. RFA will remain a strong advocate for the maintenance of the Turretfield monitoring program.

Population genetics work by Amy Iannella, a very welcome new Rabbit-Free Australia committee member, showed that there are six genetic clusters of rabbits around Australia. This work indicates that, contrary to popular belief, there were almost certainly several to many different introductions of wild rabbits into Australia. The genetic differences between regional populations is one possible cause contributing to the observed differences in susceptibility to introduced control viruses. This finding should assist in designing better trials of new biological control agents.

Some complementary work by University of Adelaide PhD student, now CSIRO researcher, Emilie Roy-Dufresne modelled the distribution and population dynamics of wild European rabbits in Australia. The combination of reproductive rates, habitat suitability, dispersal processes and interactions between local rabbit populations has been used to help explain the varying distributions that are observed across our landscapes. Rabbit-Free Australia funds have been allocated to support Emilie's attendance at the Australasian Vertebrate Pest Conference in Melbourne, should it proceed next year. Emilie will present a paper on her research.

During the last year Rabbit-Free Australia has committed support to an exploratory Gene-drive Technology project. Dr Stephen Frankenberg of the University of Melbourne will lead this frontier, 'blue-sky', research to see if it is possible to modify a specific rabbit gene (e.g. one related to fertility) in a way that is self-propagating, thus becoming predominant throughout the population. Gene-drive technology has been used in insects but its wider application remains to be tested through projects like this. Should the technique be effective, there will be many ethical and social questions to work through before it is applied. This work will help the Foundation better understand the prospects of the technology and the complex issues around it. If successful, it may be a 'game-changer' for rabbit control.

In September we were pleased to read that Meat and Livestock Australia (MLA) and CSIRO announced new research into biological controls for wild rabbits through the Centre for Invasive Species Solutions (CISS) [<https://invasives.com.au/>]. The \$7.7 million project will see CSIRO work on revolutionary new technology and scour remote corners of Patagonia in South America for potential additional tools to help stay on top of wild rabbit populations.

As always, we remain open to engage with researchers who can help find improved and new methods of eliminating wild rabbits. For example, we are aware of a potential project by Dr Emma Sherratt at University of Adelaide to study the structural evolution of hares and rabbits in Australia from the time of their introduction to their widespread distribution in quite diverse climatic, plant, soil and predator environments.

Awareness

The need to continuously raise awareness and increase understanding is twofold. First, is the critical need to ensure that all land stewards (governments, owners and land users) appreciate that wild rabbits are still present and as destructive as ever. At best, we have partial control of this insidious invader. Second, we need to promote Rabbit-Free Australia as a focussed organisation that can encourage and catalyse research and its applications to eliminate wild rabbits.

While our membership numbers are relatively small we know that we can be very influential. RFA does not have a direct vested interest, it is not a government agency, and it acts publicly and openly. Its credibility is its strength and we need to use this to promote the cause. During the year we promoted the need for research, community coordination, and post-fire management action to federal and state governments.

This last year has seen a revamping of our membership. Members are now being better informed with a new look and informative Newsletter thanks to the efforts of Bruce Munday and Peter Day. Meanwhile Amy Iannella is testing a new membership platform for our use. Improvements are also being planned for our web page presence [<http://www.rabbitfreeaustralia.com.au/>] that will become apparent in 2021. An objective is to have the Rabbit-Free Australia web page as a first point of reference for all information on wild rabbits, their effects and their control.

One of my intentions as Chair has been to improve engagement with conservation groups. It seems obvious that any group concerned with conserving Australian landscapes and ecosystems should be concerned with getting rid of rabbits. To this end we have begun discussions with the Nature Foundation and Bush Heritage. Other groups will also be consulted. We have tentative plans to help convene a major update forum on rabbit control research and extension that will bring conservation and primary production interests together. Recent discussions have suggested that this may be set within the context of a national rabbit control strategy.

As part of reconnecting with conservation groups we are exploring ways of promoting the “Bilbies not Bunnies” by-line. While a focus on Bilbies is not universally applicable, the idea is conveyed of conserving native Australian fauna and flora while highlighting that wild rabbits are incompatible with such a goal. If this results in more sales of Haigh’s Bilby chocolates we all benefit.

On-ground Action

RFA is neither constituted nor equipped to do research or provide on-ground rabbit control advice or service. Rightly, this is the realm of Government and their agencies. Our objective is to be aware of and to understand how these activities can be encouraged. We have re-established contact with state agencies – NSW, Vic and SA in particular. In doing so, we have been able to question where and how on-ground people get help and information. It is apparent that some further refining and simplifying of information sources is needed, which will be part of our website update.

Operations

Members

While the Foundation struggled last year to attract the minimum 50 members to qualify as a not-for-profit organisation, a concerted effort to identify existing and previous members and to attract new members has been successful. There are currently nearly 80 members. With continued attention to membership and our planned improvements in software we anticipate a gradual increase in membership. The work involved in maintaining our membership will decrease and streamlining the payment of membership fees will simplify the process for members.

To recognise the importance of our membership, the committee is always looking for membership value and satisfaction. The more informative newsletter with featured articles on important rabbit control identities is one improvement. The committee is more than happy to hear from members with ideas on how we might keep you informed and involved in our activities.

Another activity that will provide membership value is the work being done to recognise the history of this organisation. It is important to acknowledge the foresight and subsequent very significant achievements of those who formed the Anti-Rabbit Research Foundation of Australia that was to become the Foundation for Rabbit Free Australia. The great sense of developing the Easter Bilby concept has served the Foundation very well. Many important records have been digitised and Nicholas Newland is helping to sort old photos, some of which will be digitised as an important and accessible record of the organisation and its people.

Finance

Finance is in good shape (we are secure and virtually debt-free) as will be reported by our valued and long serving Treasurer, William Morgan. The Foundation is in a healthy position, but increasing our asset-base to enable more research investment would always be better.

As part of reviewing the Foundations operations, the Executive Officer, Treasurer and I have put together a Background Report and the outline of a Business plan that will be considered by the Committee during the next couple of meetings. The Report sets out the position of the Foundation and the need to improve operating efficiencies and renew, and hopefully broaden, the membership base. Ideas will be canvassed to grow the membership, better communicate on many levels, and add to our presence (e.g. through additional lines of 'Easter Bilby' trade-marked products). I welcome member comment on the type of organisation they would like to see evolve, as additional input to be considered by the Committee.

Committee

The most important part of this report is to acknowledge the contributions from our committee and members. I thank all committee members for their interest and contributions to the Foundation. With Iannella joining in December last year, and two new members at this AGM (Carolyn Ireland and Graham Finlayson) we will have a wider and more diverse experience and skill set. I look forward to interacting with their ideas and perspectives.

With the retirement of Nicholas Newlands and Dean Rasheed it is important to acknowledge the tremendous contribution that they have made to the Foundation. We have been extremely fortunate that these men have brought their experience and insights to Rabbit Free Australia, Nicholas with his deep understanding, administration and government connections, and Dean with his on-the-ground pastoral experience. While they have retired from the Committee we aim to maintain contact and seek their counsel and wisdom as the Foundation continues to evolve.

Administration

I know that it has been very apparent to all members that the Foundations administration has been very active during the last year. I want to acknowledge the fabulous work that Peter and Vicki Day have contributed. They are working at updating, streamlining and documenting standard operating practices to enable easier transitions for office bearers. There is still more to be considered in terms of improving our membership servicing, rationalising bank accounts and setting protocols for financial oversight and reporting. With guidance from our Treasurer, William Morgan, these needs will be dealt with during the next year.

Conclusion

It is my happy duty to report that the Foundation for Rabbit-Free Australia is in a financially and administratively sound position. The Foundation is now poised to significantly raise its profile and to exert its influence to fulfil its purpose - to control and ultimately eliminate destructive wild rabbits from Australian landscapes.