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RFA NEWSLETTER
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Foundation for Rabbit Free Australia

NEWSLETTER CONTENTS

Changes afoot

There have been several changes at the Foundation following the recent AGM.

Former Committee member, Prof. Wayne Meyer has accepted appointment as Chair. Wayne has a long history with rabbits, sound experience in the Foundation, and decades in landscape research and in professional leadership roles. His appointment ensures continuity for the Foundation as well as a fresh set of eyes.

Long-serving Executive Officer, Edwina Grant, retired after ten years of great service. Peter Day, who was retired from the Committee at the last AGM after 5 years of membership, has agreed to take on the role, along with his wife, Vicki. Peter brings a wealth of NRM and committee experience to the role, while Vicki's strong background in project and quality management is a good fit with the duties of Administration Officer, managing membership, accounts and government reporting.

The Committee has also welcomed Dr Amy Iannella. Amy was involved with the Foundation as a member and post-graduate student undertaking rabbit research. The Foundation was pleased to lend a hand to her work as a young researcher investigating rabbit genetics across Australia, to possibly explain any differences in resistance to RHDV. Amy has already made valuable contributions to the Committee with her understanding of the science and her enthusiasm.

Foundation investing in research

Each year the RFA invites scientists with an interest in rabbit control to apply for funding. This year, RFA planned to invest in building researcher capacity building by helping a young researcher attend and present a paper at a national conference (but the event is now subject to COVID19), and in ground-breaking genetic research.

The genetic research is a small, first step into gene-drive technology through the University of Melbourne. The project will explore some fundamental elements to what could be a completely new approach to rabbit control. Any eventual applications will be many years away, but if the technology proves successful and practical, then it could become a major additional tool in efforts to eradicate wild rabbits.

For more information on RFA research investments, see Current Research at the Foundation's website.

Henry Foster - great supporter of RFA

Henry Foster (pictured with an old baitlayer) has been a very generous sponsor of RFA. We are grateful for his contribution to rabbit research and awareness raising and we invited him to reflect on his considerable experiences with rabbits in Tasmania over a long period of time.

Henry's fascinating story is appended.

RHDV-K5 & RHDV2 - both together

There are currently three RHD viruses circulating through Australia's rabbit populations: RHDV that was released in 1995 and commonly referred to as 'the calici virus', RHDV-K5 being a more virulent strain released in 2017, and RHDV2 that was found inadvertently in Canberra in 2014 and which spread through rabbit populations nationally. Unlike the other strains, RHDV2 can fatally infect very young rabbits.

The Centre for Invasive Species Solutions is undertaking research into RHDV2, now the dominant rabbit virus in Australia, which may enable it to be registered for controlled release. This work is summarised at https://invasives.com.au/news-events/latest-research-findings-rabbit-virus-rhdv2/

Turretfield - a national asset

The long-term rabbit monitoring site at Turretfield Research Centre in South Australia provides invaluable intelligence in the war against rabbits. In recent years data from the site has been used to model the impact of rabbit diseases (an aid to future planning), and to see how important genetic differences are to the ability of rabbits to survive diseases. The data includes 'family trees' for individual rabbits as well as information on population numbers and the presence of various diseases.

No other site has been monitored so intensively for so long, so it really is the best before/after comparison for all current and future rabbit biocontrols. It is important that this long-running Turretfield site should not lose the continuity of data gathering. Furthermore monitoring at Turretfield can now help answer questions about what RHDV2 is likely to do: Will it attenuate; are rabbits building resistance; how does RHDV2 interact with K5?

Such is the significance of Turretfield that RFA has sought an opportunity to discuss its future with the Minister for Primary Industries & Regional Development, with a view to securing ongoing commitment for this valuable resource.

Are feral cats 'rabbit-farmers'?

University of Tasmania researcher, Hugh McGregor, spoke to the RFA Committee recently on his research into feral cats at Arid Recovery (Roxby Downs) and other parts of Australia – and his conclusion that rabbit numbers are a key driver to feral cat populations. His observations included:

- Cats seem to be habitual hunters. They'll focus on a preferred food species, and rabbits are a consistent 'belly-full' opportunity. Juvenile rabbits, but not kittens, are regularly found in feral cat stomachs. High rabbit populations sustain high cat populations.
- Populations of bilbies and bettongs decline as cat populations grow. They carry their young in pouches, so when an adult dies, so do the offspring.
- Rabbit numbers can actually increase under cat predation. It appears that cats may act as 'rabbit-farmers' when rabbits are in high numbers; they seem to harvest many without reducing the overall population.
- A possible explanation is that cats are mostly hunting on the surface, but not in the burrows where the kittens are. Rabbits could still be producing lots of young, even though cats are killing adult rabbits on the surface.
- Quolls might prove to be better than cats at controlling rabbit populations, as they seem more effective at hunting underground and might target kittens better.
- It is a 'must' to control cats when controlling rabbits, to avoid short-term prey-switching. However, vegetation (habitat) recovery, and subsequent fauna recovery, after rabbit control appears to more than compensate for any temporary reduction in native animals due to short-term prey-switching.

Hugh would like to explore the 'rabbit-farming' hypothesis further, and study how rabbits fare in areas once quolls re-establish.

For more information about Hugh and his work, see Threatened Species Recovery Hub, and their News article of March, 2020.

Awareness raising

An RFA media release was distributed by Primary Producers SA, attracting interest in several States and resulted in Wayne Meyer doing three radio interviews highlighting the importance of rabbit control in post-fire landscapes. It spoke of the opportunity to tackle warrens while they were bare and the benefits of rabbit control to the diversity and bulk of regrowth. The issue and media release were also raised several times with regional NRM bodies conducting bushfire recovery programs.

Easter Bilbies not Bunnies

The first Easter Bunnies were a tricky way to avoid a papal decree to not eat red meat during lent. A great article from the RFA archives by Foundation Patron Brian Cooke, explains the origins of both Easter Bunny and Easter Bilby. See the full 'Bunnies or Bilbies' article from The Conversation, March 29, 2013, which is appended.

It is timely to also reflect on the enduring partnership between Haigh's Chocolates and Rabbit-Free Australia. Twenty seven years ago Haigh's, in conjunction with RFA, created Australia's first chocolate Easter Bilby. Not only do Haigh's continue to produce high quality chocolate Easter Bilbies, they also continue to support RFA, enabling our investment in awareness raising and rabbit-control research.

News from the RFA website

The Latest News from the Foundation's website includes the following stories:

- Long term benefits from rabbit control - a NZ study of rabbit-control impacts.
- Tassie Devils help bandicoots - because they suppress feral cats.
- MacQuarie Island is rabbit free - and the island's ecology is recovering.
- Rabbits, part of modern environmental problems - even climate change.
- Inaction is a choice - it is selecting invasive species to flourish.
- Rabbit ancestry - could it influence susceptibility to disease?

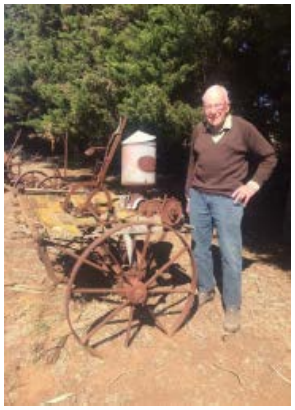
Follow Rabbit Free Australia on Facebook or 'EastaBilby' on Twitter to stay abreast of RFA news and join the conversation.

Membership – bumper stickers for those first in

Annual memberships will be due soon for 2020-21, so please keep an eye out for your invoice. To retain Deductible Gift Recipient status (i.e. keeping donations to RFA tax deductable) the Foundation needs to have at least fifty members each year – and preferably many more. This year, as added incentive for early renewal, the first fifty members will receive a one-off bumper sticker to help spread the word and no doubt impress friends.

Please keep your eyes peeled for the invoice in June and pay it promptly for the best chance of getting a sticker. And, let your friends know they can join RFA at any time, either by emailing for a membership form or via the on-line membership form on Foundation's the website.

Appendix 1. Henry Foster



Henry Foster

Henry Foster (pictured with an old baitlayer) has been a very generous sponsor of RFA.

We are grateful for his contribution to rabbit research and awareness raising, and we invited him to reflect on his experiences with rabbits in Tasmania over a long period of time.

This is his story.

I live on a property southwest of Campbell Town (Tas), which has grown from the original two grants of 500 acres each to my ancestors in 1823 to be now 7770 ha, about 5000 ha being the Macquarie Tier.

Growing up in Hobart I would accompany my father on his visits here or stay for school holidays with my grandparents and two maiden aunts. On these visits I would be handed a few packets of ammo and a .22 single shot Winchester rifle and told to go and shoot rabbits. Well the rabbits were so thick you could hardly miss, but I did upset the two “rabbiters” who were employed because I frightened the rabbits and them as well. My father had little interest in farming but was forced take an interest in rabbits because of the tremendous damage they did to the property that he part owned.

My father was a member of the Tasmanian State Committee of the Council for Scientific and Industrial Research [CSIR] and later chairman before and after the change to CSIRO and before the abolition of state committees. He told me of the many debates and discussion the members had about myxomatosis. Myxo had been brought to Australia in about 1929 but after 20 years of research and trials it had not been successfully introduced to control rabbits; some thought continued research was a waste of time, money and effort. However people with rural interest prevailed and support for research into myxomatosis continued. Finally in the early 1950s myxo took off and the rabbit population in Tasmania declined dramatically. I will never forget walking around dispatching blind rabbits.

While rabbits were a curse to farmers they did serve a useful purpose, supplying meat (underground mutton) for people and fur for felt hats which every man wore. During World War II sheep and beef meat were rationed and so there was a thriving trade in rabbits. In Hobart the “Rabbito” plied the streets in his cart with racks of fresh rabbits.

His bell announced his whereabouts and with money from my mother we would hasten to the bell for a pair of rabbits. But first the rabbit needed skinning which the Rabbito did in the blink of your eye, the skin on the wire frame and a carcass in your hand. It was to be fricassee rabbit for dinner that night, or occasionally roast rabbit. But before dinner it was bath time for the younger children and as mother pulled their clothes off she would exclaim: "skin a rabbit!”. With the introduction of myxomatosis rabbits went off the menu.

In the late 1940s I went on my first and only rabbit shoot. Nigel, head salesman at Cuthbertson's Shoe Shop, invited me to go rabbit shooting one Saturday. Up at about 4.30am and with my lunch and drink I was dropped off and joined the shooting party of a dozen or more men. The drive to the farming property seemed long and I had no idea where we were, but there were masses of rabbits where we entered the farm. On arrival the plan was discussed and as dawn broke we set off in line, some with rifles and some with shotguns. I walked a few yards behind Nigel and at one stage tried my luck with his rifle, but it was actually a lucky day for some rabbits because I never hit any. They were a very disciplined group of shooters, having made many of these expeditions before so I had no fears for my safety. By late morning everyone had had enough shooting – it had been a very successful morning with hundreds of rabbits killed, some of which we kept for eating and pet food.

When I was at school in the 1940s and early 50s, the finals of school sporting competitions were held alternately in Hobart and Launceston. The Tasmanian Railways put on a special return train to which ever city the games were held in. Apart from fly ash in my eyes and the chaotic scramble for a pie and drink at the Parattah Station stop, I was fascinated by the number of rabbits along the train track. The railway reserve was quite wide with gorse and briers making a wonderful sanctuary for rabbits. Their number was enormous and they were well conditioned to trains passing as they seldom moved away, so you had a very close look at rabbits. No one seemed responsible for their control.

I took over the farm management in 1965, at a time when there were still Vermin Inspectors. To justify their jobs they would issue orders to conduct a 1080 campaign on large areas of the property. We didn't kill many rabbits but we had quite an impact on the native animals. Vermin Inspector positions were eventually abolished and farmers left to their own devices to control rabbits. Meantime other myxoma strains were released and later the calici virus and even fleas, all of which had an effect depending season and environment. With no further 1080 poisoning the native animal populations increased dramatically including the Tasmanian Devil that very successfully cleaned out rabbits from warrens and burrows.

On our property rabbit numbers are now very low and for some years we have not taken any action to control them – we sometimes see them around the settlement areas, especially my garden and a few other places. They also live in parts of Campbell Town itself. Eradicating them from populated urban areas is probably difficult and a matter that should be investigated.

As you can understand I still have an interest in rabbits – it would be good if they could be eradicated as on Macquarie Island, but probably the best we can hope for is very good control of their population.

Appendix 2. Bunnies or bilbies? Why animals define Easter.

From The Conversation, March 29th, 2013. Article by Brian Cooke.

This Easter it is worth asking what the Easter Bunny is all about. Indeed, there's more to the furry character than a fondness for chocolate.

Rabbits were first domesticated by monks in the south of France, sometime after 500 AD. This enabled the avoidance of a papal decree prohibiting the eating of red meat during Lent (the six week period before Easter). New-born rabbits, surrounded by fluids, were conveniently regarded as fish. But it didn't stop there. Beavers and tortoises, because of their obvious aquatic habits were also fair game. Barnacle geese, winter migrants in northern France, were believed to begin life under water as barnacles. Being "not born of flesh", they were also eaten during Lent in some monasteries. Other monks considered this practice immoral.

Rabbit keeping eventually attracted wider attention. Norse adventurers and warriors, established along the River Seine, provided the next critical element. Granted land for service as mercenaries they took Frankish wives and adopted the cultural elements of the time: linguistic, culinary and agricultural. Transformed to Normans, they dominated not only northern continental Europe but subsequently conquered Britain and expanded agriculture and introduced new livestock including rabbits.

Rather than being the speciality of monks who broke bread and drank wine, rabbit keeping was suddenly in the hands of entrepreneurs who preferred beer and grain porridge. Furthermore, although domestic rabbits were still kept, more flavoursome, gamey rabbits could be raised. Garennes, essentially areas of pasture, were set aside and surrounded by stone walls, or even moats, to confine the rabbits and deter predatory stoats and foxes. This was done under sovereign right in feudal times and only the most privileged nobility had a garenne on their estates.

The well-conserved 13th century Garenne d'Anneville on the island of Guernsey provides an example of the way the garennes in continental France must have functioned. It is an open grassy area of about a hectare where rabbits still burrow in a well-drained sandy rise covered with gorse and blackberries encircled by a moat once stocked with carp. It provided rabbits and fish for the Manor des Annevilles nearby.

In Britain, at the same time, warreners built burrow-like structures for rabbits with high surrounding walls. A similar culture was also well developed in coastal Holland by 1400. The coastal dunes were managed as warandes by duinmeiers who produced an abundance of rabbits by constructing artificial burrows, providing hay in cold winters and controlling foxes, cats and polecats. Eventually, however, the importance of garennes and warrens declined. Jean I of France, for example, on seeing the need for more intensive agriculture, forbade the creation of new garennes in the 14th century and other social forces eventually saw the abandonment of garennes, leaving rabbits to run wild in areas they had never naturally occupied before.

French hunters still call the wild rabbit "le lapin de garenne" even today. The link between rabbits and Easter has likewise continued despite the twists and turns in the fortunes of monks, kings and warriors.

On seeing La Garenne d'Anneville, any Australian biologist would have a sense of the inevitability about subsequent events. With the European colonisation of Australia it was little wonder that rabbits, carp, black-berries and gorse came too; they were by then programmed into the world picture of our forebears.

All four species notably became serious pests in Australia and subject to costly biological control programs by CSIRO and state pest control organisations.

Yet, despite the hard work to resolve such problems, many Australians still remain oblivious of the economic and environmental threats posed. Rabbits in particular are widely regarded a cute and cuddly pets rather than pests, again reflecting European tradition; an imported Beatrix Potter view rather than a more objective look about.

Indeed, this is why the idea of the Easter Bilby has been promoted. It challenges an unthinking acceptance of rabbits when they remain major economic and environmental pests in an Australian context. And despite criticism that it is contrived or neglects social history, the Easter Bilby concept has gained considerable traction.

Easter Bilbies of the finest chocolate are produced by Haigh's Chocolates in Adelaide and a percentage from each sale is invested through Rabbit-Free Australia to find ways of reducing rabbit impact on native wildlife. Likewise, Kaye Kessing and Ali Garnett from Alice Springs produced two children's books about the Easter Bilby to highlight the plight of native arid-zone animals in the face of competition and predation by introduced animals.

Although it is an interesting part of our social history, the Easter Bunny's origins may be as socially contrived as any promotion of the Easter Bilby, simply to allow the eating of red meat during Lent. More importantly, we should ask whether those Australians who retain ideas most appropriate to the Old World will ever begin thinking about, and caring for, an equally interesting but completely different continent.

The Easter Bilby is a popular Australian version of the Easter Bunny. AAP/Wild Life