

Tabled at Hearing 22/05/2013

Statement of:

Mr John Murray

In Support of:

Combined Canterbury Provinces, Federated Farmers of New Zealand (320)

Federated Farmers of New Zealand High Country (293)

In the matter of:

Submission on Proposed Canterbury Land and Water Regional Plan (2012)

Section 42A Report - Volume 2

Introduction

My name is John Murray. I am a high country farmer on The Wolds Station in the Mackenzie Basin.

I have been farming since I graduated from Lincoln College in 1975 and have owned and farmed The Wolds since the death of my father in 1977. The Wolds winters 11500 stock units comprising of 7,000 Merino ewes and replacements and 450 cattle.

We have always had a problem with rabbits on The Wolds and there have been 1080 applications by air most years I have been here, except for the 10 years following the outbreak of the RHD virus, and the last two years

Pest Problem

In the time I have been farming, the rabbits were the worst in the autumn of 1991. At the time a scientist working for Landcare research, John Robertshaw, estimated there were around 230,000 rabbits on our 8,000ha farm. It was not possible to poison the whole property that winter and the part that was left for another 12 months was in a bad way. Rabbits had grazed the tussocks to ground level and rabbits digging up the ground caused severe dust storms whenever the wind blew. Every time there was a nor-west breeze, dust would come off the central part of the Mackenzie Basin in thick clouds, so bad at times you could not even see the hills to the east. Fortunately the tussocks were not killed and grew back following a successful rabbit control operation using 1080 the following year. Since rabbit controls using 1080 in the early 90's, there have been very few dust storms to the same scale. This is because the population has reduced and consequently the effect of rabbit burrowing has been significantly reduced.

Rabbits are very good at stripping the vegetation out of an area when populations explode and food sources are reduced. Despite putting up rabbit fencing around the garden they managed to strip the roses completely and I have seen them strip the lower foliage of pine trees up to around 4m in height when stressed for food supply. After long periods of time the effect of rabbit grazing can modify the types of vegetation that will grow in an area and only shorter, hardier plants will survive. This can have a serious effect on the quality of native vegetation in a rabbit infested area. This ability to clear vegetation quickly is of particular concern in areas where pasture is grown for sheep. Rabbits tend to graze pasture grasses to levels which are shorter than sheep would normally graze to. This reduces the amount of grass available for sheep to graze and affects how well pastures can grow back.

Pest Controls

I have used most methods of rabbit control that are available including the use of 1080 via aerial application. In my opinion the only effective and economic method of rabbit control in the dry parts of the south island is by aerial 1080 programs. The other methods such as shooting, gassing and trapping are only of use as follow up after a 1080 program when rabbit numbers are very low. The use of an aerial 1080 program allows for the control of rabbits over a large area of land at a relatively low cost when compared to other, ground based methods. Also the use of a 1080 program ensures a good kill rate and allows access to land which cannot be controlled by using ground control methods.

I am aware that research into alternative methods over the last fifty years has not given us a viable alternative. I have seen attempts at fumigation of burrows to kill off rabbits in the Mackenzie Basin, however due to the porous nature of the soils, even if all the entrances to warrens were covered up, the fumigators ended up almost dosing themselves as fumes seeped up through the soils. Given the extent of our rabbit problem over most of our 8,000ha property, small scale methods such as fumigation are simply not practical.

In the aerial 1080 operations we have undertaken, we have obtained the necessary consents from Ecan and the Health Department. We have notified neighbours of the proposed aerial drop and used the required buffers from boundaries, public roads, water supplies and waterways. We ensure that a buffer area around the house and yards as well. We are extremely careful with our dogs which are highly susceptible to both 1080 and the effect of eating a rabbit carcass where death is as a result of 1080 poisoning. Dogs are generally taken from their kennels to the back of the ute and taken to land which has not been subject to a 1080 program for exercise, until such time as it is safe for the dogs to be back

on that land. Dogs are also generally trained to not scavenge rabbit carcasses to avoid secondary poisoning.

In my experience with using 1080 in the Mackenzie Basin there are no observable effects on other wildlife except for a small drop in species such as quail and chukka. Pindone has resulted in some deaths of hawks.

Costs of Rabbit Controls

The cost of the rabbit control operation using 1080 on my property in the early 1990's was \$270,000 plus GST, of which 70% was paid by the, then Rabbit and Land Management Program.

Today with no support from a Rabbit and Land Management Program, I am fully responsible for the costs of rabbit control operations on my land. Costs are generally higher than in the early 90's. I spent \$39,800 on a 1080 program in 2011, \$41,300 in 2010 on 1420ha and \$56,000 on a program across 1900ha in 2009. The 2011 program covered about the same area when it was last poisoned in 1990, however despite the sowing rate of carrot being less than half, the cost was about the same. This is because the costs of carrots have significantly increased and the costs of engaging an aeroplane have almost doubled, therefore is it not economical to apply baits too heavily. This may have the adverse effect of reducing the number rabbit kills. In my experience if a rabbit gets a sub-lethal dose of 1080 they will tend to shy away from baited carrots for the remainder of their life. There is a concern that this may mean that ineffective control programs can impact on the ability for future programs to be successful.

As part of the costs of our rabbit control program we had to obtain a consent from the Canterbury Regional Council. This involved engaging a specialist expert to write the application on our behalf. This cost about \$2,500 and took approximately 3 months to obtain. We also had to get Health Board approval for each operation. On top of the process to obtain the resource consents there are ongoing consent monitoring costs and requirements which are significantly higher. If the Ecan consent to use aerial 1080 was changed to a discretionary, it would greatly add to the cost of obtaining a consent, especially as the application would likely to be notified and require a hearing given the hysteria that is generated by a consent application in the Mackenzie Basin. More importantly it would result in delays that could result in missing contracting carrot for bait or the short time available to poison when rabbits are short of feed. The effect of delaying a poison for a year because a consent could not be obtained would be to add greatly to the cost of the operation, the

financial loss from a further years grazing by rabbits and a greater reduction in the biodiversity we all value.

In addition to the 1080 program I spend another approximately \$11,000 per annum on other control methods such as night shooting, gassing and pindone. These methods ensure that rabbits which are not killed under the 1080 program are managed between program years and to aid in reducing the flow over of rabbits from adjoining land into my property after a 1080 program.

It is very difficult to estimate the cost of rabbits to the property beyond the immediate rabbit control costs, but I would guess at \$80,000 to \$100,000 each year. This would include the costs associated with loss of grazing leading to loss of return on stock and having to run less stock per ha and having to cultivate paddocks which would not normally require cultivation because the rabbits have caused so much damage with burrowing. There is also an environmental impact on areas of native vegetation which, if remaining after severe browsing by rabbits is usually of a much reduced quality than that which would otherwise exist.

Quantity of bait used

I have been asked to comment on quantity of bait required per hectare for effective knockdown of rabbits. It is critical that an appropriate amount of bait is used to achieve an effective operation and to avoid problems such as bait aversion which significantly detracts from the effectiveness of future operations for up to ten years.

A typical rabbit poisoning results in an application of 10 to 25 kg per hectare of baited carrots or 10 to 25 kg per hectare, repeated three times, for pindone. Up to forty or thirty kg per hectare respectively might be used if a higher dosage rate is required, for example in the case of a serious infestation of rabbits or if conditions are not optimal at the time of the operation. These quantities equate to two to eight grams of active ingredient per hectare for 1080 and up to 150 grams of active ingredient per hectare for pindone. If oats are used to poison rabbits with 1080, then 400 grams of active ingredient per tonne are used with similar application rates to carrots. If carrots are used to control possums, the strength is doubled. Wallaby pellets have 2% 1080 per Kg at a rate of 3 to 5 Kg of pellets per hectare, i.e. 60 to 100 grams of 1080 per hectare.

Conclusion

It has been my experience that rabbits, if left unmanaged can have catastrophic effects through vegetation loss and soil erosion. While the aerial use of 1080 to control rabbits is not

an ideal solution to the rabbit problem, I have found it to be the most effective and economically viable control method currently available. I consider that changing to an expensive and lengthy discretionary consent would be detrimental to long term rabbit control.

The reality for me is that even with the effects of the RHD virus, the threat to my farming business from rabbits has the potential to make my land so uneconomical, that I cannot sustain farming it. I need to be able to plan and execute a timely 1080 control operation in a relatively short time.

John Murray

12 May, 2013.

