SUBMISSION

To

HOUSE OF REPRESENTATIVES STANDING COMMITTEE ON AGRICULTURE, FISHERIES AND FORESTRY

On

THE IMPACT ON AGRICULTURE OF PEST ANIMALS

By the

TASMANIAN FARMERS AND GRAZIERS ASSOCIATION

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INTRODUCTION

The Tasmanian Farmers and Graziers Association (TFGA) is Tasmania's peak representative body for farmers. Membership totals some 5 500 enterprises. Members are involved in the wool, meat, vegetables, dairy and cereals and seeds industries, but interests also include poppies, berries and pyrethrin production. Notable in the context of this inquiry is the large proportion of members whose enterprises include forest management and wood production, in both natural forests and plantations.

Animal pests in relation to Tasmanian agriculture include both vertebrates and invertebrates but the focus in this submission will be on the former. In particular the submission will concentrate on larger browsing animals, such as wallabies, pademelons, possums and rabbits, which can have a serious impact on pasture and crops and on the early stages of plantation and native forest seedling growth.

BACKGROUND COMMENT

As a group wallabies, pademelons, possums and rabbits probably represent the most serious pest animals that Tasmanian farmers face. The fact that the first three of these are native animals makes effective control even more problematic, given attitudes in some parts of the community to the killing of native animals.

Current control methods include a range of fencing types (conventional and electric) and shooting, but also, where these methods do not provide effective control, the use of 1080 poison. 1080 is used very much as a measure of last resort and only under permit from the State Government.

1080 is used widely in Australia and New Zealand to control introduced vertebrate animal pests including foxes, cats, pigs, rabbits and (in New Zealand) possums. However, apart from its use to control dingos in some mainland states, it is really only in Tasmania that it is used to control native animals.

There are on going efforts by activists to have the use of 1080 banned in Tasmania regardless of the economic impact of browsing damage on farmers. This is based on an emotional response to the manner of death in poisoned animals, the fact of use with native animals and the occasional death of domestic dogs from eating the carcases of poisoned animals. Also of relevance is the fact that the forestry sector is an important user of 1080 in Tasmania (about 50% of usage) and the campaign against 1080 use has become part of wider campaigns against production forestry in the state. This mixture of factors can lead to some major inconsistencies in the case made for a ban on 1080. Most important among these is the fact that 1080 is seen as a much more acceptable control method for introduced animals than for native animals, regardless of the fact that the manner of death and the risk to domestic dogs is the same.

There is no evidence that populations of target native species are in any way threatened by the use of 1080. Indeed, the ineffectiveness of fencing and shooting where 1080 is

necessary is testimony to the very healthy state of those populations in those areas. Nor is there evidence that there is any significant effect on non target species.

The following comments present the TFGA's position on 1080 as a means for controlling browsing animal damage.

TFGA POSITION ON THE USE OF 1080

The loss of pasture, crops and tree seedlings to browsing animals is a serious problem for farmers in Tasmania. Animal species which do most damage are Tasmanian Pademelons, Bennetts Wallabies, Brushtail Possums and Rabbits. Department of Primary Industry trials in 1994, which measured uncontrolled losses to browsing in pasture and oats, recorded the following results:

- 10 out of 11 test sites lost more than 40% of dry matter
- 7 out of the 11 sites lost more than 50% of dry matter
- 4 out of the 11 sites lost more than 75% of dry matter

Losses of this magnitude are simply unacceptable to enterprises which have to compete on their own merits in national and global markets.

Farmers address the problem of browsing animal control with a suite of measures including fencing, shooting and the use of 1080 poison. 1080 is only used under strict Government control and only where other measures do not provide effective and economic control.

Among available poisons 1080 is preferable to other options because:

- it is a naturally occurring substance
- it is easily administered
- it does not accumulate in body tissues
- it is biodegradable in soil and water
- it is far less indiscriminate in its effects than options such as strychnine and arsenic.

The TFGA believes that 1080 must remain available to farmers as a means of controlling browsing animal problems, but that its use needs to be part of an integrated approach to control which also includes the use of fencing and shooting. The appropriate mix of control measures for any given property must necessarily be determined by the specific circumstances of that property. The fundamental objective must be to secure effective control at acceptable cost.

1080 USAGE IN THE FARM SECTOR IN TASMANIA

1080 is used by farmers in all parts of Tasmania. It is particularly important for the Dairy, Cropping and Mixed Farming Sub-Sectors. Most usage occurs in the higher rainfall areas where these sub-sectors tend to dominate but it is also used, if to a lesser extent, in the drier, grazing areas of the midlands, where the nature of the vegetation

(more open) and terrain and the larger size of target species (Bennetts Wallaby) makes shooting a more feasible option.

The primary impact of browsing is through the loss of biomass. However, a second and serious impact is through the soiling of crops and pasture by animal faeces, and the tainting of product as a result.

Applications for 1080 permits by farmers are more frequent in winter and spring and are driven by a need to protect scarce winter feed for stock, and newly established and vulnerable crops and pasture.

1080 is also used by farmers to protect tree seedlings, both in the context of wood production forestry (commercial plantations and native forest) and where seedlings have been planted for windbreak and environmental rehabilitation purposes.

There appears to have been some decline in 1080 usage in recent years, with a related increasing use of fencing and shooting.

Commercial pressures on farmers, reflected for example in recent falls in milk prices, reinforce the need for browsing control measures which are commercially sustainable as well as effective.

Total 1080 usage in Tasmania is currently somewhat less than 10 kg per annum, of which some 50% is used by farmers for the protection of pasture and agricultural crops. The balance is used in forestry applications, some of which are farmer owned and managed.

Landowners who wish to use 1080 to control native browsing animals must comply with Tasmania's ***Code of Practice for Use of 1080 Poison for Native Browsing Animal Control.*** Key provisions of the Code are as follows:

- a permit is required from the Parks and Wildlife Service, before a landowner can use 1080 to control native species;
- DPIWE – Food Quality and Safety Branch, controls the actual application of 1080;
- the landowner is obliged to notify neighbours and display notices, to the effect that 1080 is being laid, and to lay it in a way which minimises risk of adverse effects on people, pets, stock and the environment;
- permits will only be issued by Parks and Wildlife if it is satisfied that there is an unacceptable risk to a crop or pasture, that there is not an unacceptable risk to non-target species and that alternative control measures have been considered and are not practicable;
- all poisoning operations must be supervised by a State approved "Competent Officer", who maintains a register of applications which he has supervised;

- uneaten baits must be covered or collected and destroyed on the property within 7 days of mixing, or as instructed by the "Competent Officer";
- the site must be visited within 24 hours of bait laying and all reasonable effort must be made to recover carcases.

The following case studies illustrate the circumstances of use in Tasmania.

Case Study 1:

- *Property description:* Typical Upper Derwent Valley mixed farm with sheep, cattle and cropping.
- *Usage:* 1080 used to be used frequently but is now only used once or twice per year. It has been used in recent years to protect tree seedlings (windbreak plantings) and pasture. Pasture protection has been particularly important in times of drought, when grass is scarce and browsing pressure from wild animals increases. The farmer can see himself having to use 1080 to protect grain and poppy crops on occasion.
- *Alternatives:* Fencing is used on occasion, but to be effective it has to be to "rabbit proof" standard and that makes it very expensive (up to $3 000 /km). Shooting has also been used but does not result in effective control because browsing animals adapt to shooting patterns and carry on browsing. Shooting also involves significant cost. Fencing and shooting can reduce the need for 1080 but neither can eliminate that need.
- *Protection of dogs and stock:* The farm dogs have never been affected because they are closely managed when 1080 is being laid. In particular, they are well fed and kept in sight when they are working and at heel when they are not. Risk to stock is controlled by exercise of care in bait laying and cleanup.
- *Consequence of a 1080 ban:* In the absence of 1080 the farm would have to have access to an alternative poison or suffer unacceptable pasture and crop losses. More persistent and dangerous poisons, such as Strychnine, would re-emerge to address the problem.

Case Study 2:

- *Property description:* Dairy farm in the Ringarooma district and, until recently, dairy, wheat, barley, potatoes and poppies in the Mathinna district.
- *Usage:* 1080 was used every year on the Mathinna property, and is used every two years on the Ringarooma property. It was used at Mathinna to protect the grain crops in particular, but also the potatoes, poppies and pasture. At Ringarooma it is used to protect pasture. The impact of browsing is through the loss of biomass and the soiling of pasture and crops and consequent tainting of product. Browsing problems are most extreme in parts of the farm which adjoin bush.

- *Alternatives:* Fencing is used but is too expensive at the standard necessary, to be considered as a stand alone approach. Shooting is also used but is also inadequate by itself. The problem animals very quickly learn to time their browsing to avoid shooters.
- *Protection of dogs and stock:* Risk to dogs is managed by keeping close control of them during poisoning events. Similarly, stock are controlled so that they are not exposed to baited areas.
- *Consequence of a 1080 ban:* A ban on 1080 would simply force farmers to use "off the shelf" poisons, with far less ability to control non target impacts.

Case Study 3:

- *Property description:* Mixed Farm in the English Town – Blessington district, with beef cattle, sheep, deer, vegetables (canning peas, seed potatoes), barley, oats and wheat. Fodder crops are also grown, including turnips and short rotation rye grass. The property also contains forests managed for wood production, including both native forest and plantations.
- *Usage:* 1080 is used from time to time as necessary, and as a last resort. Usage is less nowadays than in the past. It is used mainly to protect fodder crops in winter, and tree seedlings, including environmental rehabilitation plantings, at planting.
- *Alternatives:* The farm is in process of developing a Property Based Game Management Plan. The first response to browsing damage within that plan will be shooting, as has been the case in the past. An ongoing relationship has been developed with a group of recreational shooters and this group is invited on to the property when browsing problems develop. However shooting does not provide adequate protection on all occasions. Fencing is also used on occasion, but this involves substantial cost (up to $3 000 /km) to establish and calls for constant maintenance in the face of damage by wombats in particular. Plastic tree guards have been tried, to protect seedlings, but these are frequently inadequate in the face of determined possums and wallabies.
- *Protection of dogs and stock:* There has never been a problem with dogs being affected by 1080, because dogs, including neighbours dogs and the dogs of friends which are brought to the farm for exercise, are controlled when it is used. Stock have never been affected because animals are controlled when bait is laid.
- *Consequence of a 1080 ban:* A ban on 1080 would have a significant impact on the enterprise because of the evident inadequacy of shooting and fencing as control measures. A ban would seriously forest management activities and could lead to cessation of tree planting related to environmental rehabilitation.

Case study 4:

- *Property description:* Large mixed farming property in the Circular Head district with dairy (and dairy agistment), dairy bull beef, beef cattle, prime lambs and cropping (poppies and forage crops). There is also a significant extent of shelterbelt establishment.
- *Usage:* There was extensive usage of 1080 in the past but less so in recent years. However at least some applications have to be made every year. It remains essential to use 1080 to protect poppies and forage crops and new pasture, particularly when a season is marginal and browsing pressure is high. Usage is also essential where crops and pasture adjoin the many areas of native vegetation which occur on the property, and which provide shelter for animals.
- *Alternatives:* There have been extensive trials of fencing over the years. However, the fundamental problems remain of high establishment cost (up to $3 000 /km), because of the need for close mesh fences with bottoms buried in the ground, and constant maintenance in the face of wombat damage. A further problem is the deterioration of fences in the face of salt laden winds in coastal areas. Shooting is ongoing on the property, with recreational and professional shooters being used, as well as employees. However, there is simply no way that shooting will adequately address the problem where animal numbers are high, given the fact that animals quickly adapt their behaviour to avoid shooters.
- *Protection of dogs and stock:* No dogs have been lost to 1080, because they are kept under close control when applications are being made. Likewise stock are managed intensively to avoid accidental taking of bait.
- *Consequence of a 1080 ban:* A ban on 1080 would mean an increase in management costs because of a more intensive shooting program. There would also be an inevitable withdrawal from some cropping and from some intensive pasture management. Basically, a ban would mean that farm management costs would increase, and the value of production at the farm gate would fall.

ALTERNATIVES TO 1080 USAGE ON FARMS

1080 is only one of a suite of measures used to control browsing animals in Tasmania.

Farmers who wish to use 1080 must demonstrate that alternative measures will not provide adequate browsing control, before they will be issued with the necessary permits.

Widely used alternatives are fencing and shooting. However, while both of these measures have their applications, they both also have their drawbacks.

Fencing is a practical option in particular situations, and is widely used, but has characteristics which make it impractical elsewhere.

- Effective fencing is a relatively expensive option (installation cost of up to $3 000/km), because it needs to be netting fencing of a relatively small

mesh, effectively fastened to the ground (if not buried in the ground) along its entire length, and with a "floppy" top where possums are a problem.

- Fencing needs ongoing inspection and maintenance in light of possible damage from wombats and falling trees and tree limbs.
- In more remote areas fencing materials are liable to theft.

Shooting is an effective option in some situations and is widely used but, like fencing, has attributes which limit its effectiveness.

- Shooting, to be effective, calls for repeated visits, at different times, over a number of nights, because animals will quickly associate spotlights and shooting with danger and will adapt their behaviour (including timing) to counter this.
- This can make it very difficult for farmers, where they have a full workload during the day, to do the shooting themselves.
- This in turn calls for the availability of outside shooters (recreational or professional) who will address the problems of particular farms effectively.
- Shooting has become somewhat more problematic since the introduction of tighter gun laws since the Port Arthur shootings of 1996.
- There is a significant cost attached to an effective shooting program.

A number of other techniques have been tried, by forestry interests in particular. These include:

- *electric fencing* – expensive to install and maintain, given needs of power sources, liability to damage by falling tree limbs, etc, and liability to theft;
- *noise devices* – effective initially, but animals quickly become used to them and they lose their effectiveness;
- *repellent* – applied to foliage; effective for a period, but does not persist sufficiently to see plants through their vulnerable stages.

1080 USAGE IN TASMANIA COMPARED WITH USAGE INTERSTATE AND OVERSEAS

Total usage of 1080 in Tasmania in recent years has been less than 10 kg per annum. Currently approximately 50% of this is used to protect pasture and agricultural crops, and 50% forestry crops (some of which are owned and managed by farmers).

1080 is used in all States and Territories in Australia to control a range of problem species, including rabbits, dingos and foxes. Total usage in Australia is some 150 kg per annum.

Some 2000 kg of 1080 is used annually in New Zealand, to control possums, rabbits, deer, wallabies, ferrets, stoats and feral goats.

In the USA, where 1080 is manufactured, it is used to control a number of pest species, including native species such as coyotes.

Application in Tasmania is strictly controlled by DPIWE, with baits being laid from the ground. Control measures are at least to the standard of control in other states, and in a number of cases would appear to be better.

Application in mainland states and New Zealand is controlled by Government.

CONCLUSION

Browsing damage by wallabies, pademelons, possums and rabbits is a serious problem for Tasmanian farmers.

Control measures include fencing and shooting but it is clear that these are inadequate by themselves. Supplementary use of 1080 is essential for cost effective control where other measures do not work.

Opposition in some parts of the community threatens on going access to 1080 for browsing animal control.

Government must maintain access to 1080 use for farmers in the absence of an efficient and cost effective alternative.