Shooting and Hunting Effectively - Right Approach, Right Gear, Right People

Game Services Tasmania
Department of Natural Resources and Environment Tasmania

Tasmanian Government

Species

Shooting is the most common form of wildlife browsing control undertaken in Tasmania, and is applicable to all the wildlife species that cause crop and pasture losses.

This does not mean that all shooting is effective in achieving crop protection. A recent survey of crop protection activities on farms showed that only 1% of landholders found their shooting to be completely satisfactory, and only a further 11% found it satisfactory. That means that 88% of landholders surveyed found their current shooting effort to be either partially or wholly unsatisfactory in achieving crop protection control.

Shooting Options

Shooting covers a broad range of control options. It can be done during the day using teams of shooters and dogs to flush animals, or at night with the aid of spotlights.

Most landholders and their immediate families in Tasmania undertake their own shooting control, but others use commercial harvesters or use the presence of game species on their property to encourage external shooters onto their property to undertake crop protection efforts. A small, but increasing number of landholders, are starting to pay, or at least subsidise, shooting efforts on their properties.

This booklet looks at all of these options in an attempt to provide landholders with different options they may not have considered for wildlife control.

What Makes An Effective Shooting Strategy?

Probably more than any other control option, it is really important to know what you want to achieve from your shooting control effort, because of all the control strategies shooting is the easiest one to just implement and hope it's working, and not realise that it isn't. Several trials carried out under the Alternatives to 1080 Program have shown that even apparently intensive shooting strategies where very large numbers of animals were culled have had little or no positive effect on pasture growth.

So if you are going to implement a shooting strategy, you need to monitor it and make sure it works. If you're shooting to protect new crops, it is going to be important to ensure that your shooting strategy is reducing local population numbers in the area where you're intending to plant your crops before these crops are planted.

You need to plan ahead, don't wait for an emerging crop to be put under pressure from browsing wildlife and then attempt to control the damage.

If however your strategy is based around protecting existing pasture, then it's important to know where your pasture losses are. Commonly 40-80% of you property's financial losses will be in the pasture areas in the first 200 metres from the bush edge. So an effective shooting strategy has to reclaim this area – it's no

Bennett's wallabies are one of three key browsers.

good shooting the small number of Bennett's wallabies or a few Forester kangaroos that are ranging out across the property, if they are having a minimal impact.

You have to concentrate your shooting effort where the damage is occurring but also understand where the animals are coming from and determine what sort of shooting will deliver the desirable results such as a recreational dogging team in small remnant vegetation areas inaccessible to spotlighting.

Also, like cropping, there are certain times of year that pasture availability is more important, so concentrating your effort before and during these periods will likely result in better pasture protection outcomes.

Understanding the species breeding and dispersal cycle can lead to more effective control. For example extra shooting effort during winter and early spring, prior to joeys leaving the pouch, will be well rewarded as this can result in considerably less work from mid – December on as you then don't have to deal with both the existing adult population and their dispersing young.

Farm Setup

If shooting as a control tool is your primary choice, then it makes sense to set your farm up for shooting. This might involve ensuring vehicle access to all areas, making adjustments to wallaby proof fencing designs like adding wings or doors in the fence to reduce the incidence of fence breaches as well as facilitating wallabies to be held inside the fence on set nights to increase shooting efficacy. Shooting against a barrier such as a fence will improve results markedly with little additional effort.

It is always worth discussing control options with your neighbours to see if collaborative strategies can be formed.

Barrier fences can be an essential part of a shooting program.

Try and eliminate problem patches of vegetation – such as gorse and blackberries that can harbour game and adversely affect your shooting effectiveness.

Measuring Losses

If you get nothing else from this brochure then hear this message:

'You need to monitor your pasture losses to wildlife to know where you are losing pasture, if your controls are being effective or not, and whether wildlife grazing really is an issue on your property that needs control.'

Counting animals or historical information will give you an insight into possible wildlife losses, but the only real way to quantify pasture loss is to measure it.

The Alternatives to 1080 Program has monitored farms which have shooting strategies in place which are still losing 60-80% of their pasture in the first 100 metres from the bush edge. If this is your property, then this could be one of your largest management problems.

The Basics Of An Effective Shooting Strategy

Shooting can be done with the best of intentions, but actually achieve very little. The reality is that unless the right approach to shooting is adopted for a property and then implemented well, the regular activity of just shooting may not provide any real benefit in terms of pasture protection.

The main cause behind an ineffective shooting strategy is simply not undertaking enough effort, especially initially, to get the local population levels down. In simple terms if a property is 'feeding' a population of hundreds, or even thousands of native animals, and borders onto areas which are also likely to be supporting similar population densities, then any shooting strategy needs to both reduce the resident local population to a level where pasture losses are acceptable (initial knockdown) and then must sustain the ongoing effort at a level where the number of animals culled is equal to or greater than numbers moving onto the property.

Shooting 10-20 wallabies once a fortnight may sound like it is achieving something, but if a property has a population in the high hundreds, the reduction of 250-500 wallabies is very unlikely to have any significant pasture protection benefit. The Alternatives to 1080 Program GPS collared wallabies in north east Tasmania, then implemented several control options. The results showed after an initial shooting effort the remaining populations of wallabies began spending more time on the pasture areas.

So in framing a shooting strategy, realise that if you believe you have a problem that has got out of hand then you

Recreational hunters can be part of a shooting strategy, at no cost to landowners.

will need to plan for a lot more effort up front to reduce the problem to an acceptable level. For example, it might be necessary to shoot effectively twice a week for a 12 months period, or longer, or attract outside assistance such as recreational hunters and dogging teams until such time that exclosure plots are demonstrating that pasture lost to browsing animals has been reduced to an acceptable level. It may be that a one off 1080 poison operation could be implemented to help in knocking down the population followed by a sustained shooting effort to keep on top of the problem and reduce losses to an acceptable level.

Then you need to implement an ongoing shooting effort, and it is also a good time to look at the option of installing strategic wallaby fences around the property to protect high value areas or to block up those areas where animals are coming from. Good quality and reliable recreational hunters who are willing to come onto your property to shoot animals for various purposes can be a real asset in these maintenance phases, but always monitor, monitor, monitor and if losses are increasing, review and amend your strategy.

One particular issue to be aware of is that surviving animals will learn avoidance behaviour to shooting, and again this is why pasture monitoring is so important, just counting animals may be giving you a false confidence about your strategy's effectiveness. Good shooting practices and varying the way you shoot will also help get around this, as will encouraging dogging teams onto your property, or trapping occasionally.

Shooting Approaches

There is no best way of shooting, and whilst commercial harvesters are the only shooters who have to pass competency tests in Tasmania, there are many excellent recreational and professional shooters in the State.

The approaches used by different shooters can vary immensely. For instance a recreational wallaby hunter may use dogs and a shotgun and be an invaluable tool for property areas with open forest vegetation or gullies across the property where wallaby populations can build up and which are hard to shoot using spotlighting techniques. Recreational deer hunters often pay property access rights and perform wildlife culling in return for property deer management and deer hunting rights, sometimes at no cost to the landowner, and at other times the landowner supports the wildlife culling due to the

magnitude and cost of the job, for instance, ammunition reimbursements. Recreational hunters are strong advocates for utilising shot game.

Culling contractors will cost more money, but often for that cost you will get someone who will come on site and employ very effective shooting techniques learned from many years of experience.

Recreational Hunter Management

Recreational hunters are only as effective as a landowner and the hunter group allow themselves to be, and when these relationships fail it is generally due to poor communication between the hunter groups and the landholder.

The properties that work well under a landowner/hunter agreement are those that communicate, set clear goals, monitor and provide reward for effort.

Therefore it is important to discuss with any hunter group the objectives you want to get out of the effort, and for you to clearly understand what they want out of the relationship, whether it be access to the site at certain times, exclusion of others from the site, or access to game.

The importance of establishing and maintaining a good hunter – landholder relationship is essential.

Day Time Hunting

Day time hunting usually involves a group of hunters with trained dogs who flush wallabies, and to a lesser degree possums, from bush areas. There are a wide range of these groups across Tasmania ranging from individuals who have a few dogs, to extremely large groups of hunters and animals.

This approach can be more effective than spotlighting in terms of reward for effort on both wallaby species, especially in areas where wallabies are easily able to flee into adjacent bushland or reedy areas during spotlighting. As a knockdown tool before crop plantings or at key times of year, this method can really come into its own. It's also very effective where spotlighting may not be practical (where spotlighting poses safety, terrain, vegetation, shy/educated population constraints) or be done in conjunction with a spotlighting program across a property.

You do of course have to be able to attract such a team onto your property, and if you do not have direct contact with a dogging group Game Management Officers within the Wildlife Management Branch may be able to assist.

If you do get in contact with a good group, it is worth developing a relationship with them as the most effective

Quality Deer Management is implemented on many Tasmanian properties.

crews are those that know the property intimately (more specifically things like the gully systems), and how to approach a shoot on any given day so they can be efficient and as such adopt the 'shoot effectively' philosophy.

No technique is a panacea. If using dogs then activity is usually restricted to operation during cooler months, and there are also hunter management, coordination and safety issues to consider. Again Game Management Officers should be able to assist with a number of useful pro-formas.

Finally, wallaby shotgun shooting has been stopped in all states now except South Australia and Tasmania because of welfare concerns with the practice. Whilst animal welfare and good shooting practices should be a foremost priority in all shooting practices, this is particularly the case with day time shooting, so make sure that any group that comes onto your property has a good ethic and shoots within the code of practice.

Property Based Game Management Strategies

Landholders who have fallow deer, or other game, on their property can choose to manage their browsing animal management problems with recreational game hunters in the state who are seeking access to game on properties.

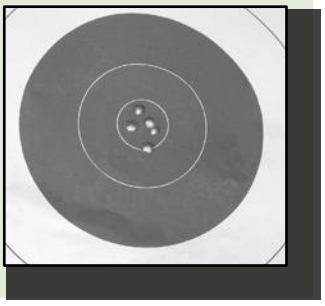
The essence of this approach to wildlife management is that landholders and hunters or hunting groups enter into agreements where the landholder agrees to provide for sustainable hunting opportunities on their properties, usually linked to quality deer herd management, and in exchange the hunters undertake various tasks, usually including a commitment to undertaking a prescribed number of visits to the property to control browsing

The Good Shooter Test

Here's a very simple test to know whether you should let someone on your property to shoot.

Draw small 3-5cm circle targets on a few pieces of paper (the size of a wallaby's head) and place them at the distance that they'll be shooting. Get them to sit in the vehicle they'll be shooting from and shoot each target 5 times. If they can't place their shots (in ideal conditions) inside that circle then their effort is unlikely to be effective. They should consider ways to improve their accuracy.

A good shooter will never "blast away at them". They'll only take shots they know they'll get, with the knowledge that they'll get another chance at the ones that they didn't wing or scare away another day. Injuring an animal is inhumane; missing one is just teaching it to hide.



animals, as well as property maintenance and property security to reduce trespass and illegal hunting. Properties interested in this approach, can use the attachments (Appendix 4 Planning Guide) to the property based wildlife management plan which contains pro-formas for hunter agreements, compliance with codes of practice, safe firearm use, legal waivers, property protection principals etc. Game Management Officers are available to help landowners and hunters in drafting these plans and setting up such a process.

Commercial Harvesters

Commercial shooters utilise shot game for either human or pet meat consumption. Commercial shooters provide the highest level of humaneness in lethal control options as they are required to cleanly head shoot animals and they must obviously collect shot animals so they can be sold.They will however have a tendency to target properties with high animal numbers as their objective is to harvest a required number of animals in the shortest possible timeframe.

The relationship between commercial harvesters and landholders is often therefore a short term relationship as the two have very different objectives.

Commercial harvesters may be useful as part of a knockdown strategy, or as a supplement to other control activities when numbers on a property are adequate.

Incentive Based Shooting

Incentive based shooting is becoming more popular across Tasmania, as landholders realise the impacts of wildlife damage on farm productivity, and look for ways to increase their control effectiveness.

At the extreme end of incentive-based shooters, are the contract culling contractors who are paid to shoot designated areas.

These contractors often have years of experience, good equipment, and the incentive to achieve good shooting results. It is a good idea to ask for references prior to granting access.

Encouraging Shooters

1. **Ammunition.** If you have shooters on your property, providing ammunition and/or a tank of fuel to encourage shooters to come out and shoot particular species (eg. brushtail possums) or to shoot at certain times of the year;
2. **Accommodation.** If you've got some form of accommodation such as shearers quarters on the property, doing this up a bit so that recreational groups can come away for a weekend can attract shooters to your property;
3. **Bartering.** A bit of bartering for a few sheep or cattle at slaughter time could be enough incentive for shooters to put in a bit of an effort;
4. **Dollar value.** With shooters you know and trust, putting a dollar value on each animal shot can be as effective as game access incentives – even if it is just $2 or $3 per animal, it might produce a bit of extra effort or time on your property. You can also get more sophisticated in this, for example if you're about to plant a crop, let shooters know that there will be an extra
$1 or $2 paid per animal for the first 200 animals shot during the next month in this area;
5. **Neighbours.** If you have neighbours or forest companies who are undertaking shooting programs on adjacent land, consider seeing if they might be interested in shooting on your land as well. Forest companies in particular which may be suffering forest damage, may see shooting on your property as an excellent way of controlling their plantation browsing, or at worst the shooter may be willing to spend an hour or two on your property whilst they're out there and only charge you for time spent shooting, not travel to and from the site.

These are just some ideas, the key to any incentive based program is to know what you want to achieve, and then finding out what would attract a shooter onto your property to achieve that.

The Importance of Good Shooters and Good Gear

The best shooting strategy will still fail, if it isn't implemented well, and the key to an effective shooting strategy is to only let good shooters with good gear onto your property – and that includes yourself and your family.

Quality shooting will deliver much more effective results than just lots of shooting. It's better to have 3 or 4 good shooters on your property than 20 average shooters, especially if those other 16 shooters are just making it hard for the good shooters to do their job.

> It is a worthwhile exercise to train yourself to judge distances correctly at night. This is essential for accurate shooting. Greg Blackwell – Project Officer

If you don't have the skills, time or inclination to learn to shoot effectively, look at other options such as encouraging recreational shooters onto your property, or even paying someone to do the shooting for you. Alternatively look into whether you could get a dogging team to do the work, or if none of these are viable, look at other options like fencing and trapping.

Get The Right Gear

If you're looking to do the shooting yourself, and you know you can't pass the good shooter test, then it might be time to buy yourself a new rifle or scope.

> A good scope should cost at least as much, if not more, than the rifle.

The key to this is to buy a good rifle and buy a darn good scope with good mounts. The reason for this is simple: you can't shoot what you can't see.

Selecting a rifle and scope is not as easy as it sounds. Do your homework. Consider the target species and the

An ATV setup with rifle holder, shooting rest and spotlight with a coloured filter.

regulations including animal welfare, to ensure your firearm selection is the most appropriate and cost effective choice.

Make sure that mounts for the scope are good quality.

A good rifle and scope combination will come into its own as you knock down the population and the game get harder to shoot. A good scope will allow you to view and shoot your target without the spotlight having to be pointed directly on the animal. A quality rifle and scope is also probably tax deductable. Depending on the species present, you may need several different firearms.

An ATV clip on shooting rack for transport of shot game.

A bolt on shooting rest with ammunition storage.

Plan And Organise Your Vehicle

Set your ATV or vehicle up for shooting. The best shooter with the best rifle and scope, hanging out a window, whilst trying to hold onto his spotlight, and who has to stop and fumble around in his glove box for ammunition isn't going to be effective.

Install good shooting racks and rifle rests to your vehicle. Buy or build a good quality spotlight holder, and think about where to store ammunition so it is easily at hand.

Clean And Sight In Your Rifle Regularly

A poorly maintained rifle won't consistently shoot straight.

It is necessary to take the time to become proficient with your 'outfit' – rifle and scope, vehicle, shooting racks and spotlight. Primarily this means your rifle and scope, and secondly, your ability to operate your outfit and correctly judge distances.

The reality of adverse weather conditions and terrain also need to be considered.

Think Safety, Safety, Safety

Shooting at night from either a vehicle or ATV can be dangerous. If you have others on your property, you are also likely to have a duty of care for their safety. Make the effort to ensure anyone shooting is doing so safely.

If you have concerns about this, then we'd recommend contacting Workplace Standards Tasmania.

Vary Your Approach

Even if you can't get others onto your property to help with shooting effort, if you are just spotlighting, varying the way you shoot can be the difference between an effective shooting strategy and an ineffective one. Here are some ideas to try to improve your shooting strategy:

1. **Vary your route each time you go shooting.** Don't become predictable. If you normally just do a single lap around your property, every now and then do a second lap. Shooting trials have shown that it can take as little as 40 minutes before the animals are back out again. One simple option if it is hard to vary your route is to drive it in different directions.
2. **Vary the time you shoot each night.** At one Alternatives to 1080 Program monitoring site, weekly counts of wildlife were being done one hour after sunset, and consistently counting 15-25 animals on the site. One night a count was done at midnight and at 3 am and at both times more than 140 animals were counted.
3. **Use a coloured filter on your spotlight.** Or consider putting coloured filters over your vehicles headlights. Some professional shooters just shoot with a small rimfire rifle, a very quiet bike, and use a red spotlight to just sneak around sites shooting animals off grain feed lines. This strategy is particularly suitable for smaller sites.
4. **If you can, use different vehicles.** Muffle your engine or occasionally go shooting on foot. Animals will learn to associate specific fear cues such as your engine noise with the need to flee, so anything you can do to vary this may help your shooting effectiveness.

A light, but continuous line of feed can be effective.

5. **Consider different strategies.** Driving around at dusk and sprinkling out grain will encourage animals to feed. The best approach is to very lightly sprinkle out a continuous line of feed (add aniseed or cinnamon if you have some) along the bush or creek edge where they tend to come out from. This strategy is particularly effective during times when there is little feed around, and has the advantage that if it is done over the course

of a few weeks the animals start to associate your engine noise with food, not shooting.

6. **Record conditions.** Record moon phases, seasonal variations, crop plantings and weather conditions in your shooting logs, or keep a diary or wall planner, and see if you can see patterns when greater or smaller numbers are seen. Use this to guide future shooting efforts.
7. **Use your fences.** Shooting against fences, creating one way gates and other techniques will greatly improve the life of wallaby fences, whilst at the same time cut down on your maintenance effort.
8. **Understand where the animals are coming from.** Determine what sort of shooting will deliver a desirable result, for example the use of shotguns and dogs during daylight hours as opposed to spotlighting at night. Remember, the amount of effort that can be afforded to shooting effort is reflected in the results and further to that the right timing of this effort can result in a better return for the effort.
9. **Timing is important.** Effort prior to joeys leaving the pouch will be well rewarded as this can result in considerably less work from mid December on.
10. **Keep a shooting log for evaluation purposes.** Include such things as property area, hours spent hunting, plus species seen and shot.

Be Legal, Be Ethical

Firearm's licence. Ensure your firearm's licence is current, specified categories are correct, firearms and equipment used are registered, legal and compliant.

Whilst inconvenient for landowners who have property divided by a public road, compliance with firearm and ammunition transportation requirements is essential.

Permits. Obtain crop protection permits prior to embarking on a shooting program. They are required for most of the species in Tasmania that cause browsing damage to crops and pasture and are obtainable from the Wildlife Management Branch.

Game licenses. Are available for wallaby, wild duck, fallow deer, ringneck pheasant, brown quail and muttonbird. Most hunters in Tasmania are required to purchase a wallaby game licence for use in conjunction with a wallaby crop protection permit. Some exemptions do apply.

Firearm calibre. Ensure firearm calibre used is species appropriate.

Codes of practice. Hunting codes of practice exist for several hunted species in Tasmania. Ensure shooting practices are within the guidelines specified within these codes.

Legal Requirements

Bennett's wallaby and Tasmanian pademelons (rufous wallaby) can be taken during the day or night with the appropriate licence or permit.

All agents (hunters) other than full-time employees or members of the property owner's or manager's immediate family, *or person under the age of 18 years who is not shooting*, must hold a current wallaby licence during the open season. This means that those individuals who are 18 years and over, who may be involved in spotlighting, driving or carcass collecting require a wallaby licence, whilst those under the age of 18 involved in the fore mentioned activities do not.

There is no bag limit for either of these species. Non-commercial or commercial licences are available, but only a commercial licence authorises the sale of wallaby products.

Harvesting wallabies at night from a vehicle with the aid of a spotlight requires the landowner to obtain a crop protection permit and issue copies of this permit to the property hunters.

In 2003 the 'Animal Welfare Standard for the Hunting of Wallabies in Tasmania' was approved under the *Animal Welfare Act 1993*.This standard is a set of recommendations designed to provide guidelines for the hunting of wallabies in Tasmania and accommodate the special circumstances and environment that impact on wallaby hunting in Tasmania.

Further Information and Contacts

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A Sub-Catchment Approach Coordinating Browsing Damage Management

Farmers in Pyengana in Tasmania's northeast have participated with NRM North in a project to see what alternative opportunities can come from integrated browsing management at a catchment scale.

A sub–catchment approach involves adjoining farm businesses working together.

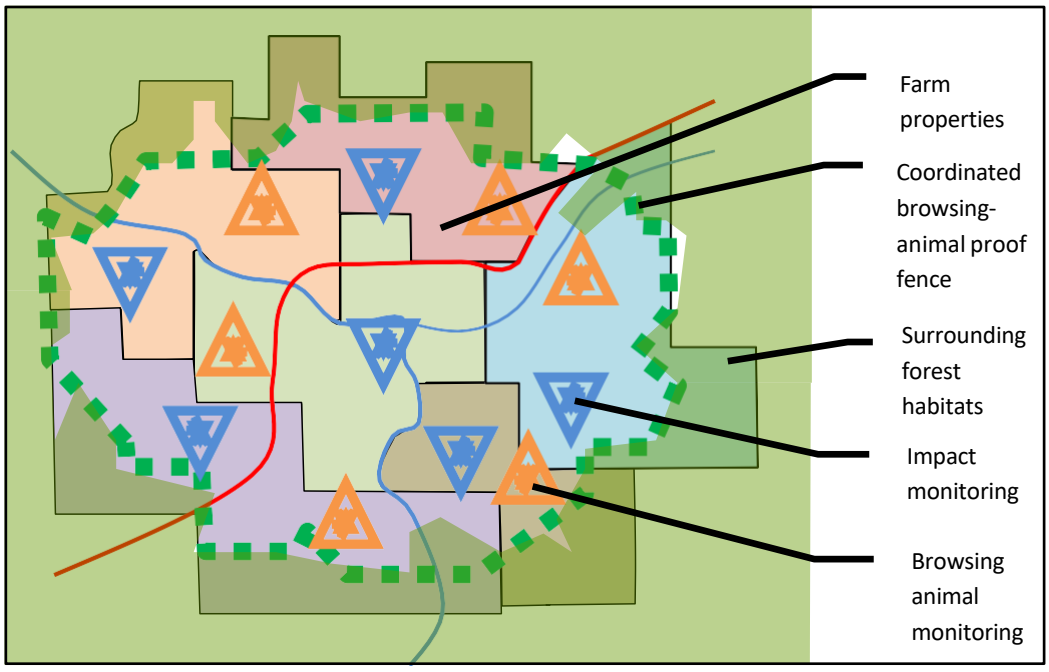
Pyengana farmers on a field day as part of their integrated browsing management project. Photos: Polly Buchhorn NRM North.

Management at the property scale remains important, but the project is coordinating fencing efforts across the highly productive pastures of Pyengana valley and has engaged enterprises in the latest in best practice research and experience to ensure profitability and animal welfare go hand in hand.

A sub–catchment approach involves adjoining farm businesses working together on understanding their browsing management experiences, answering the question: 'what impact is browsing having on farm production?', and planning smart and coordinated efforts. Three key strategies have emerged from the Pyengana experience:

- monitor and evaluate browsing impact on the farm enterprise
- coordinate browsing animal proof fencing across the sub–catchment to separate high productivity land from animal populations
- adopt best practice browsing animal population control, including monitoring

By working as a group farmers may be able to attract the support and information needed to plan more efficient and cost effective fencing and the additional browsing management strategies required.



NRM North
Natural Resource Management in Northern Tasmania

For further information: NRM North.

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