

**SUBMISSION TO LEGISLATIVE COUNCIL INQUIRY  
INTO THE WILD FALLOW DEER POPULATION IN  
TASMANIA**

**From  
John G Toohey  
29 May 2016**

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**Signed:**

*John G Toohey*

## **Personal Background**

During the 1980s I was State Secretary then National President for five years of the Australian Deer Association Inc. (ADA). My work career over 40 years included a land manager at the former Hydro and Manager Crown Land Services. In the latter I gave numerous briefings to the Legislative Council on legislation and issues. I have a Bachelor of Business degree from UTAS and Company Director's Diploma.

Several of the points I make in this submission may be regarded as incidental to the principal Terms of Reference but I would argue that those points are homogeneous with environmental, commercial and regulatory issues.

It is my contention that a knowledge of the background to the current deer scene in Tasmania is also relevant to the Terms of Reference. I feel qualified to comment on the background since the early 1970s which is when I became formally involved.

This paper contains my views and not those of the ADA.

Note that I am willing to give evidence to the Committee in person but will be overseas and unavailable from 2 June 2016 until 26 September 2016 and generally not contactable during that time.

I ask that if the Committee publishes my submission then my telephone number and address are not included in the publication.

## **Brief Background to the Tasmanian Deer Scene**

Leading landowners, hunters, successive Governments and officials have worked hard over many years to develop the flexible and responsible regulated hunting regime that exists in Tasmania today.

The 1970s and 80s were fraught with conflict between landowners, hunters and the Government over the management of Fallow Deer in Tasmania. Tensions were high as some herds flourished to over population on private property while others around the margins of the traditional deer range diminished. The use of 1080 poison by private landowners to reduce deer herds was not uncommon. The advent of commercial deer farming and proposals to trap wild deer for farming added to the tensions. There were regular battles in the media between the diverse groups.

The Tasmanian Deer Advisory Committee (TDAC) was created to provide a consultative body consisting of representatives of the Tasmanian Farmers & Graziers Association (TFGA), hunting organisations and the then Parks & Wildlife Service (PWS) which was responsible for hunting regulation and management. Unfortunately the conflict continued while the TDAC struggled to identify a long term management strategy satisfactory to all parties.

Recognising the struggle and being cognisant of deer management programs overseas, the ADA in the 1980s sponsored a visit to Tasmania by highly regarded Australian wildlife biologist Max Downes to talk to representative bodies. This led to the ADA through its investment arm the Australian Deer Research Foundation Ltd (ADRF), sponsoring several visits by American wildlife biologist Joe Hamilton. Joe met with all the representative bodies and toured private properties in the deer range with landowners. The objective of these visits was to take a more scientific approach to deer management.

Joe's visits spawned the idea of Property Based Game Management (PBGM) and a re-invigorated TDAC. The question then arose as to how to implement PBGM with many of the parties still in conflict and not trusting each other.

It was resolved to retain a practising wildlife biologist from the USA (a person neutral to all the Tasmanian interests) familiar with PBGM and Quality Deer Management (QDM). Consequently after an open selection process Brian Murphy from Georgia in the USA was retained for three years by the TDAC as its employee on a salary paid by the TDAC. The TDAC had previously been granted the money raised by the Government as royalty paid by the inaugural trapping of 1200 deer to establish the deer farming industry.

Brian Murphy's tenure in Tasmania was extended by the Government as an employee of the Government to look at the organisation structure of the wildlife management regime on private lands and resulted in the current Game Management Services Unit within the Department of Primary Industries, Parks, Water and Environment (DPIPWE).

### **Deer Farming**

The proposal to farm deer was highly contentious in the hunting fraternity. It also caused some angst in the PWS which was fearful of deer escaping from farms to populate areas of the State outside the traditional deer range. A fear that has unfortunately come to fruition.

In recognising that deer farming was potentially a new business opportunity for landowners and a positive for Tasmania, myself and another hunter drafted a deer farming policy under the auspices of the TDAC and presented it to the Government department. Around 90% of our document was adopted.

It was agreed with landowners that 1200 wild deer could be trapped on two properties (*Connorville & Beaufront*) with high population numbers to seed the industry. From memory a royalty of \$20 per deer was payable to the Government as wild deer are owned by the Crown. Landowners via the TFGA and TDAC determined that there would only be five initial deer farms. Once the industry was widened there was a rush on developments and new entrants paid hundreds of dollars for fallow does and a thousand or more for good bucks. Deer farms and hobby deer farms were established across the State from the North West to Dover in the south. Unfortunately predictions that there was long term demand for the industry did not come to fruition and it essentially crashed in a similar way to the lily of

other enterprises such as goats, emus, ostriches etc. Escapees and deliberate releases from farms and hobby herds are thought to have contributed significantly to the geographic spread of the deer population. Nothing to do with hunters.

As I understand it there are few active deer farms now operating although if one believes ABC radio interviews by Lenah Game Meats (LGM) there has been a significant demand for venison for some time and he is importing deer carcasses from mainland Australia. He wants wild shot deer that otherwise would/could be taken by legitimate recreational hunters for their own use. I suggest that in pursuing wild shot deer the proprietor perceives a cheaper less risky access to venison than if he promoted and supported legitimate Tasmanian deer farming enterprises.

### **Property Based Game Management**

While the concept of PBGM was developed by Joe Hamilton, Brian Murphy was retained to put the concept into action. He did so by literally hundreds of group meetings and one-on-one discussions with all stakeholders including landowners, hunters, deer farmers, regulatory bodies and representative organisations. He produced a final report [Murphy B P, 1998, Tasmanian Deer Advisory Committee Inc., Fallow Deer Project Final Report (1993 - 1997)] which should be available to the Committee from the DPIPWE.

PBGM recognised that landowners' property/farming objectives are paramount and wildlife (deer, wallaby, possum, wombats, various bird species, feral cat control) require responsible management preferably without the aid of 1080 poison. The PBGM regime also provides the management data required by the Commonwealth for the export of wallaby and possum products.

I am sure that the Game Management Services Unit (GMSU) within DPIPWE and others will appraise the Committee of the workings of PBGM and its benefits, and so will restrict my input to reinforcing my support of PBGM.

Together with a progressive landowner I wrote the first PBGM Plan (PBGMP). Brian Murphy consequently developed a comprehensive template now in use by many landowners across the State including the Bass Strait islands. PBGM is not limited to private properties containing deer.

PBGMPs empower landowners to formally organise wildlife management control utilising the resources of recreational hunters and in some cases commercial wallaby and possum hunters. Of course nothing prevents a landowner from controlling pest wildlife himself/herself or by utilising employees rather than recreational hunters.

There are broad ranging benefits for all parties to PBGMs but importantly in an historical context there is little if any conflict now between landowners, hunters and Government on the control of wildlife on private land. The only grumbles I ever hear have more to do with

the efficiencies of cull permit processes an issue that the TDAC and GMSU have under constant review.

The strategy is overseen by the GMSU which I suggest has widespread support for its excellent facilitation and education services.

A critical element in the success of PBGM is the opportunity for recreational hunters to take fallow deer which are Tasmania's premier game animal. This opportunity is their incentive to invest hundreds of hours into controlling wallaby and possum numbers often in miserable weather and at night; at considerable personal expense for fuel, equipment and ammunition in addition to property access fees as high as \$1,200 per annum. In addition under PBGMPs hunters often provide non-financial support by undertaking fencing, track maintenance, providing professional, technical and trade skills, security monitoring, firewood cutting etc. for the landowner. The PBGMPs also provide for the hunters to have public liability insurance cover.

An extract titled "Deer Management Strategies for Landowners and Hunters" from Brian Murphy's course "Fallow Deer Biology And Management, November 1995" is attached for the Committee's further reference.

Also attached for further reference is a copy of a story from the *Tasmanian Country* of 9th May 1997 announcing quite positively the formation of the GMSU.

The Tasmanian PBGM model has been adopted in other Australian states and has also been mooted as a model to apply to inland fishing access to private lands and other recreational pursuits.

### **Quality Deer Management**

Quality Deer Management (QDM) is an approach to wild deer management seated in their biology. It was conceived and flourishes in the United States where Brian Murphy is now its Chief Executive Officer. While Brian was in Tasmania I, like others, undertook Brian's formal Fallow Deer Biology and Management Short Course. The course introduced QDM.

QDM is a distinctly hands-on approach to the management of a deer herd on the ground. It is often confused with PBGM. Many properties in Tasmania under PBGMPs profess to follow QDM principles. Contrary to what I have heard on ABC radio (supposedly live and unedited) from the former head of the TFGA and a professor at the University of Tasmania whose name alludes me, QDM does not promote large deer herds. On the contrary, its objective is to achieve and maintain high quality in terms of health and wellbeing rooted in the natural biology of the fallow deer, and in a herd size consistent with the landowner's objectives and the carrying capacity of the habitat. Also contrary to popular belief it is not all about achieving large trophy antlers.

While big antler trophies may be one objective an alternative objective may be venison production if that's what the landowners and hunters want.

A starting point to achieving QDM is a focus on improving the sex ratio of a herd. While one mature male to one female might be the perfect match this is never likely to be achieved in the wild. From memory Brian Murphy indicated that a ratio better than about eight does to one mature male is unlikely to be achieved in Tasmania. On many properties a ratio of 30 does to a mature male is common and does not produce a quality herd. Fallow deer do not breed in the same way as sheep. In this case the ratio indicates that the doe population should be culled substantially.

In referring to bucks the emphasis is on the word "mature", as maturity takes five or six years of male growth hence the slogan during Brian Murphy's work "Let Them Go, Let Them Grow". In general mature bucks have the biggest antlers and are the prime breeders. Unfortunately the largest percentage of bucks taken in Tasmania are less than four years old.

An extract from Brian Murphy's training course of 1995 "Will Quality Deer Management Work in Tasmania" is attached for further reference.

### **Environmental Impacts**

Yes, fallow deer can have a minor impact on the environment but it can be difficult for the casual observer to determine whether the damage was caused by deer, wallabies, wombats or possums.

Bucks in hard antler do rub antlers on small trees and shrubs and they make scrapes in the ground as part of rutting behaviour during March to May. Deer also damage fences preferring to go under rather than over a fence and as creatures of habit will follow the same trails at times much like sheep. Often the damage under fences is caused by wombats and then utilised by deer.

Deer will also naturally feed on landowners' crops. It was foreseeable that crop damage would escalate in total impact with the expansion of irrigation across the State. The crop protection permit system is in place managed by the GMSU to allow landowners to deal with crop damage.

Private landowners have the ability to be "compensated" by their hunters for any damage via property access fees and in-kind work as mentioned previously. The quantum is a matter for the individuals involved.

Deer also have a positive impact on the environment. They are the key incentive to the success of PBGMPs. As mentioned previously PBGMPs have contributed to the diminution of the use of 1080 for wildlife control, hunters report to the GMU on data sheets to satisfy

State and Commonwealth wildlife management plans and report observations of endangered species such as wedge tailed eagles, the Tasmanian devil and quolls.

Hunters are the only control on feral cats in the rural environment. On properties that I have hunted we have humanely shot dozens of feral cats. Through this action I have seen black ducks return to breed on farm dams and an increase in the quoll population where I currently hunt. Most hunters will go well out their way to despatch feral cats.

It is my view that deer should not be countenanced in the World Heritage Area (WHA) or other ecologically sensitive reserves of public land outside the traditional deer range. The most economical means of eradicating fallow deer from the WHA and reserves is to allow legitimate licensed deer hunting as does the Tasmanian Land Conservancy.

The Victorian Government allows deer hunting in certain National Parks.

### **Commercial Use of Wild Deer**

There is existing commercial benefit to having wild fallow deer and hunting in Tasmania.

Under PBGMPs landowners have the ability to charge access fees as another source of income and/or as "compensation" for carrying deer on their properties. For example, early on in Brian Murphy's work while collecting data I personally witnessed a large landowner pocket around \$2,000 cash in \$50 notes one Friday afternoon from hunters accessing the property for one weekend. There are now six weekends in a buck season and demand for access is high. I am aware that some properties currently charge up to \$1,200 annual access fee per individual in addition to requiring other game management activities and physical works.

Along with other recreational pursuits hunters access small business in regional towns helping to maintain these businesses that without recreational visitors might otherwise struggle to break even and survive to provide services to locals.

I am aware that some old work has been undertaken to identify the dollar value of deer hunting but do not have the figures to report here. I'm sure they will be presented in the submissions of others. A very basic and rough estimate of direct hunter expenditure might be calculated by multiplying 5050 licences sold in 2016 with a rough say \$2,000 direct expenditure each per annum equalling around \$10.1 million without applying a multiplier effect. The benefits of this expenditure by hunters is spread across the community.

Deer hunting guides operate in Tasmania as small business people.

Hunters come from mainland Australia to hunt Tasmanian deer.

There is a thriving taxidermy small business sector that relies on deer hunting.

Herne Lodge operates as a guided hunting enterprise combining deer hunting with five star accommodation and gourmet food and beverages.

If there is un-met restaurant demand for venison then there is the opportunity to revitalise the deer farming industry. If the demand is as high as Lenah Game Meats claims I am surprised that local landowners have not already taken up the opportunity. Perhaps the pragmatic prediction is that like many other foods and as in the past, longer term demand is fickle ?

If the objective is to take wild fallow deer by shooting for commercial use I contend that it places at significant risk the whole deer hunting scene and a return to the conflicts of the 1970s and 1980s. I am concerned that the objective is a quick profit from a perceived low cost primary input with little job creation and a high social and cultural cost and public conflict.

If recreational hunters lose the incentive provided by the deer hunting opportunity via commercial harvesting then the whole PBGM system is at risk; the market value of deer hunting access will fall; landowners will have increasing wildlife control costs, increasing trespass and perhaps a return to demand for 1080 poison use.

I believe that one argument put forward by LGM for commercial harvesting lies in the persistent rumours that a few landowners have shot large numbers of deer on their properties and because of commercial restriction have bulldozed the carcasses into the ground. I have been unable to factually determine the rumours or otherwise, however if it has occurred it is a disgraceful waste. Responsible hunters do not waste venison.

Another push from time to time emanates from a select few restaurateurs seeking wild shot venison as distinct from farmed venison. "Slow cooking" and "Paddock to plate" have become marketing catch-cries to the contemporary food industry and the subject of television programs. Hunters of course have been practising this since ancient times.

Some consumers also consider that they can determine the taste difference between farmed and wild shot meats. Wallaby in Tasmania is wild shot harvested and sold to the restaurant industry via a strict health and hygiene regime, and it seems that a few restaurateurs want venison harvested in the same way. Erroneously in my view. They also perceive wild harvesting as low cost.

Anecdotal evidence indicates that the restaurateurs only want select cuts and there is considerable wastage from any wallaby or deer carcass; the wastage attracting a minimal price as pet food.

Might I suggest that the Committee seek input from *Doo Town Games Meats* at Eaglehawk Neck which supplies venison and wallaby to the Hobart restaurant market.



It is noteworthy that the Victorian Government publicly acknowledges the significant economic and social values of deer hunting. Many Tasmanians travel to Victoria annually to hunt deer, more often than not with vehicles via the Spirit of Tasmania ships.

### **Partly Protected Status of Fallow Deer**

In my view the current legislation should remain and is adequate. As the management regime is contained within formal regulations the Minister has the flexibility to adjust seasons and annual take of deer as demonstrated with the season changes this 2016 year. I perceive that the GMSU, TFGA and TDAC are pro-active in identifying efficiencies in the systems that underpin the regulations. For example, the recent change to crop protection returns being extended to five years for wallaby and possum.

I am aware that a minority of interests have been pushing for total de-regulation of deer hunting. I suggest that the first affect of de-regulation will be widespread private property and reserved lands trespass as happened in the early 1970s. It would also destroy the incentive within the PBGM system and perhaps bring PBGM down altogether.

I perceive that the greatest push for deregulation of deer management is ideologically based, not practical or socially and culturally responsible. The ideologues would have the Committee believe that the Government funding of the GMSU and policing are excessive. On the contrary I am confident that the economic, social and cultural values of deer hunting far outweigh the actual Government costs.

Regulated deer hunting has significant social and cultural benefits. I strongly support the Committee making a recommendation to the Government that it undertake a professional research project to determine the true economic dollar and social/cultural values of hunting to Tasmania and its community with particular reference to deer.

A reduction in status would have the same negative affects as mentioned above if commercial hunting is permitted although perhaps far more immediate and catastrophic for responsible wildlife management.

### **Population Statistics & Over Population**

There seems to be an inordinate focus on identifying the total number of deer in Tasmania. The UTAS professor I heard on a couple of occasions interviewed on ABC radio seemed to be intent on establishing this figure.

I suggest that a total figure is irrelevant, even as a trend measure. Of more importance are individual herd populations across the geographic range which is critical knowledge to real deer management. The GMSU has been collecting observation data from properties on an on-going basis since its establishment and the modernisation of the crop protection permit system.

If the permit system is working efficiently I cannot see any excuse for a landowner having more deer on his/her property than their comfort level. Sometimes however this may arise from a sudden change in farming practices such as the installation of irrigation and new crops but more often than not, I suggest it is because a neighbour carries a larger herd that knows no property boundaries.

While PBGM clearly operates on individual property boundaries, Brian Murphy encouraged adjoining landowners to cooperate with one another to manage herd numbers to each owners' satisfaction. In my view it is imperative that neighbouring landowners cooperate with one another.

The biology of the deer can be a cause for migration between properties. Bucks after the activity of the April rut require immediate nutrition to survive the winter. They collect together into bachelor groups where in general they stay until the following March. They will focus on the best feed known to them away from the does and can suddenly turn up on a property out of nowhere. In general does are less migratory but will herd together and also look for the best feed to survive the winter as their foetus grows within and then after births in November/December to suckle their young. This behaviour can lead to a property owner requiring cull permits urgently to minimise damage to crops.

I have no doubt that there are numerous reasons for increasing deer numbers. A personal observation during 45 years of hunting in the Central Highlands has been the impact on deer of the change in weather patterns. Historically in the 1970s and 1980s winters were cold and wet: cold, wet snaps could occur from March to December. In those years we noticed many dead fawns killed by December weather snaps, whereas now it is rare for such weather events and rare to find a dead fawn, contributing to population growth.

#### **Deer on Public Land**

There is very little public land open to hunting. The GMSU ballots hunting on some rough marginal areas among hunters with nowhere else to go.

I am aware that deer are now within the World Heritage Area and other reserves from the North West to Dover in the south. This is not a new phenomenon; deer have been in the south of the Western Lakes for many years. I do not personally support the presence of deer in reserves particularly the WHA. While a past Government dedicated substantial resources to eliminating feral goats from reserves including the WHA, I suggest that it should be possible at minimal Government cost to organise responsible recreational deer hunting in at least some of the reserves now containing deer with the objective of eradication over time.

As mentioned previously the Victorian Government supports deer hunting in select National Parks and Reserves.

## **Hunting Access**

I am personally aware of around 20 young responsible hunters who have nowhere to hunt but would jump at the chance to hunt deer. One of the disadvantages of PBGM is that it tends to close the access door on new entrants unless they are related to an existing participant and then usually only if there is a vacancy on that property.

At the same time I have heard landowners complain that their existing hunters don't perform all their wildlife management responsibilities/obligations. My response is - well replace your hunters with new ones who will perform.

## **Illegal Deer Hunting**

The war with illegal deer hunting of bucks is an annual event between the months of February when bucks go into hard antler, and October when the bucks lose their antlers. Trespassers kill bucks for their antlers, cutting the heads off and leaving the carcasses to rot.

It is widespread and occurs on any day of the week. They trespass with firearms on private property, often cutting fences and smashing gates, unlike legitimate ethical hunters who respect landowners and honour the deer they take by utilising the entire carcass. Some are repeat offenders, often they do not have firearm licences, use unregistered firearms and unregistered vehicles with stolen numberplates. In recent times culprits have been caught in possession of illegal drugs.

There is no doubt that if deer are deregulated or a wild shot commercial industry established that trespassing on private property and reserves will increase markedly.

Landowners and legitimate hunters should not have to feel nervous at the chance of being accidentally shot through not knowing who is on private property or where. It is even more scary to think of an armed trespasser under the influence of drugs.

Underfunded Police and wildlife rangers do a great and dangerous job trying to support landowners and legitimate hunters by apprehending offenders, but they need much stronger support from the law and the courts. Penalties are miniscule compared to the anguish the culprits cause.

Landowners and legitimate hunters invest substantial monies and time into implementing PBGMPs and QDM only to lose the fruit of their efforts to these criminals. At times landowners and hunters can feel so despondent that they question their own efforts.

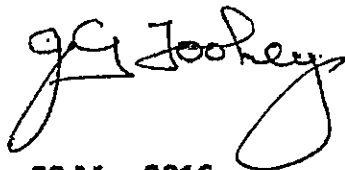
Illegal deer hunting is a significant risk to the PBGM system.

I strongly encourage the Committee to give consideration to the penalties that apply to breaches of the law in the absence and very low likelihood of increased funding to policing.

## Summary and Recommendations

1. Leading landowners, hunters, successive Governments and officials have worked hard over many years to develop the flexible and responsible regulated hunting regime that exists in Tasmania today. It is a regime that is recognised internationally.
2. The environmental impacts of deer are minimal. Deer should be removed from the World Heritage area, preferably by responsible recreational hunting.
3. There is existing commercial benefit along with significant social and cultural benefits to having wild fallow deer and hunting in Tasmania. I strongly support the Committee making a recommendation to the Government that it undertake a professional research project to determine the true economic dollar and social/cultural values of hunting to Tasmania and its community with particular reference to deer.
4. The ideologues would have the Committee believe that the Government funding of the GMSU and policing are excessive. On the contrary I am confident that the economic, social and cultural values of deer hunting far outweigh the actual Government costs.
5. In my view the current legislation should remain and is adequate. As the management regime is contained within formal regulations the Minister has the flexibility to adjust seasons and annual take of deer as demonstrated with the season changes this 2016 year. I perceive that the GMSU, TFGA and TDAC are pro-active in identifying efficiencies in the systems that underpin the regulations.
6. Managed correctly and responsibly the PBGM system is capable of taking care of any over populations of deer.
7. As illegal deer hunting is a significant risk to the PBGM system I strongly encourage the Committee to give consideration to the penalties that apply to breaches of the law in the absence and very low likelihood of increased funding to policing.

Signed:



29 May 2016

**DEER MANAGEMENT STRATEGIES**

**FOR**

**LANDOWNERS AND HUNTERS**



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## INTRODUCTION

The purpose of this guide is to aid landowners and hunters in the selection of the appropriate strategy to meet their deer management/control objectives within a Property-based Game Management Plan (PBMP). The potential advantages and disadvantages of each management regime are discussed. It is recognised that this document does not cover all available strategies and that one strategy is not necessarily exclusive of another. It does, however, provide a useful starting point for the basic understanding of how to manage wild deer and deer hunters on private property in Tasmania.

## FALLOW DEER IN TASMANIA

Six species of deer currently inhabit Australia including chital (*Axis axis*), fallow, hog (*Axis porcinus*), rusa (*Cervus timorensis*), sambar (*Cervus unicolor*) and red (*Cervus elaphus*). In Tasmania, several species of deer were released during the 1800's, but only fallow were successful in becoming established. Today, fallow deer can be found on more than 100 private properties spread across nearly one-third of the State. The current population is estimated to be around 15,000 animals and reasonably stable. While many of the large herds in the State have been reduced in recent years, many smaller herds have expanded in size and others have moved into new areas never before containing deer. Approximately 3,500 hunters harvest about 1,500 deer (male and female) annually during the legal seasons with additional does being harvested under crop protection permits.

## WHY SHOULD LANDOWNERS BE INTERESTED IN MANAGING DEER?

It should first be pointed out that "managing" deer does not necessarily imply increasing deer numbers. On the contrary, it means maximising the benefits from the deer herd while achieving other land use objectives. In some cases, a reduction in herd size is necessary to meet landowner needs or to improve herd quality.

Compared to other livestock, wild deer have proven to be a low impact species (apart from crop damage) capable of producing consistent economic returns. Deer hunting in Australia is a substantial industry contributing an estimated 77 million dollars to the national economy each year. In Tasmania alone, hunters spend over 2 million dollars each year on deer hunting activities. In many parts of Australia, deer hunters are increasing at a rate of nearly 10% per year and it is likely that demand for hunting opportunities will exceed supply within a few years. This situation has already occurred for hog deer and, to a lesser extent, fallow, chital, rusa and red deer. In response, the value associated with hunting these species has increased with the decreasing opportunity. In Tasmania, it is becoming increasingly difficult for hunters to obtain property access and more and more are willing to pay and/or to provide other services for hunting opportunities.

## DEER MANAGEMENT OBJECTIVES

The first step in developing a property-based game management plan involving deer is to decide whether the herd is to be managed for quantity, quality or a combination of both. Nearly every deer hunter would like to have both high deer numbers and numerous trophy bucks. Unfortunately, even with the best deer management, this situation is rarely achieved. Good deer management requires a number of trade-offs.

### Deer Herd Objectives:

#### 1. Maximum Population Objective

The Maximum Population Objective results in the largest deer herd possible for a given property. This situation is both undesirable and unstable because the herd is held at or above the carrying capacity of the habitat and is greatly influenced by seasonal conditions. This type of management results in a deer herd that is in poor physical condition with a low reproductive rate and poor antler development. The Maximum Population Objective is achieved by harvesting nearly every buck and no does.

**Advantages:**

- A). A large number of deer are seen while hunting.

**Disadvantages:**

- A). Poor antler development.
- B). Poor body condition in most years.
- C). Poor reproductive success.
- D). Sex ratio highly skewed towards does.
- E). Severe habitat and crop damage in some years.
- F). Fewer deer harvested than under objectives 2 or 3 due to the decreased production, survival and recruitment of fawns.

**2. Maximum Harvest Objective**

The Maximum Harvest Objective achieves the highest sustainable deer harvest for a given property. The harvest is comprised of nearly every legal buck and a low to moderate number of female deer. The desired number of deer to be harvested each year is set equal to the number of new fawns recruited into the herd.

**Advantages:**

- A). Large number of deer harvested each year.
- B). Young bucks in good condition with good antler development.
- C). Little or no habitat damage or damage to long term food supply.

**Disadvantages:**

- A). Fewer deer seen while hunting than option 1.
- B). Few trophy bucks harvested because most bucks are taken at a very young age.
- C). More crop damage than options 3 or 4.

**3. Quality Management Objective**

The Quality Management Objective achieves both a relatively high deer harvest and quality bucks. This approach is similar to option 2

except that hunting pressure is reduced on the young bucks and slightly increased on the does. It involves passing young bucks (first and some second heads) to allow more to mature. As in option 2, the number of deer harvested each year is set equal to the number of new fawns recruited into the herd (assuming the herd is at the desired population size).

**Advantages:**

- A). Relatively large number of deer are harvested.
- B). Bucks have good antler development and body weights.
- C). A more balanced buck:doe ratio within the herd.
- D). Improved age structure in the bucks (more trophy bucks harvested).
- E). Less crop damage than options 1 or 2.

**Disadvantages:**

- A). Fewer deer seen while hunting than option 1.
- B). Some nice young bucks must be passed up while hunting. Hunter education and training generally needed.
- C). Much of the harvest will be comprised of does.

**4. Trophy Management Objective**

The Trophy Management Objective produces bucks with maximum antler development. This approach involves the harvest of only the fully mature bucks (6.5-9.5 years old) and large numbers of female deer. The total deer herd must be kept at a very low level to ensure maximum availability of high-quality forage for every animal in the herd. This ensures that the individual fitness of every animal is maximised.

**Advantages:**

- A). Antler development of bucks is maximised.
- B). Buck age structure is maximised.
- C). Very tight buck:doe ratio within the herd.
- D). Least crop damage of available options.



#### Disadvantages:

- A). Very few deer seen while hunting.
- B). Relatively low total deer harvest.
- C). Many bucks must be passed up while hunting.
- D). More bucks die of natural causes and poaching.
- E). Accurate field judging of antlers is required.
- F). Very large areas (over 4,000 ha) are required.
- G). Strict penalties for violating harvest rules must be imposed and enforced.

Once a deer management option has been selected, a harvest strategy must be designed to achieve your herd goal. There are essentially two ways for landowners and hunters to manage their deer herds: 1). **Habitat Management**; and 2). **Harvest Management**.

*Habitat* management involves the manipulation of the land to improve its ability to increase the quantity or quality of the deer on the property. Habitat management involves activities such as food plantings for deer, fertilising native vegetation, strategic burns and timber stand manipulation. Obviously, these activities have associated costs and, unless they are routine practices within your farming operation, they are generally not economically feasible.

*Harvest* management involves the manipulation of the deer harvest to achieve pre-determined herd objectives. This is achieved by controlling the number of hunters, the number of deer taken or the timing and length of the hunting period. As a general rule, 20% of a fallow deer herd can be harvested each year to maintain a stable population. For example, if you have a herd of 100 deer, a balanced harvest of 10 bucks and 10 does will keep the herd at a constant level. However, an unbalanced harvest favouring either bucks or does would produce a different result. Essentially, there are three harvest strategies available to achieve the different herd objectives:

- 1). Stabilise the herd by using a balanced either-sex harvest where the total harvest

equals the annual fawn recruitment.

- 2). Increase herd size by harvesting no does or limiting the doe harvest to a level below the annual fawn recruitment.

- 3). Decrease herd size by increasing doe harvest to a level that exceeds the annual fawn recruitment.

After you have decided how to manage your deer herd, you have to determine the best way to manage your deer hunters. The two most important factors to consider when making this decision are; 1). should you use an organised group of hunters or individual hunters; and 2). what type of fee-access system (year around, seasonal or daily) is appropriate for your property. As you would expect, each has advantages and disadvantages.

#### ORGANISED HUNTING GROUPS VS. INDIVIDUAL HUNTERS

To achieve the objectives of a property-based game management plan, hunting clubs or organised groups of hunters are generally preferable to individual hunters. Where hunters already have access to the property, every effort should be made to organise them into a group before seeking outside hunters. Organised hunting groups provide a stable contingent of dedicated hunters whereas individual hunters are typically less dedicated and have a higher annual turnover rate. Hunting groups provide a source of cohesion between individual hunters which instils a sense of unity and dedication to a property-based game management program. Furthermore, organised hunting groups typically engage in annual or season-long property access agreements which provide a sense of ownership and long term outlook. Individual hunters, on the other hand, often have a "me this year" attitude. There is little incentive for these hunters to participate in a management program because they may only be on the property a few days each year and may never hunt the on the property again. Hunting groups also have the infrastructure to perform many of the administrative duties generally conducted by the landowner.

## TYPES OF FEE-ACCESS SYSTEMS

There are many types of fee-access systems whereby hunters gain access to private properties for hunting. The most common systems are listed below although many variations of these approaches are currently used.

### 1). Annual Agreements/Access Fees

Annual agreements or annual access fees are agreements between landowners and hunters which grant specific rights for activities on the landowner's property during the entire year. However, certain periods of the year such as lambing may be excluded. Hunting clubs or groups of individual hunters are most commonly involved in this type of arrangement. This arrangement typically grants hunters access to hunt a range of specified game and vermin species and may also include fishing, camping, accommodation and wood cutting. The access fee is generally charged on a per-hunter basis, per-acre basis or on a perceived value relating to the number and quality of deer and other game present. Typically, greater fees can be charged for annual access agreements than for other arrangements. The three most commonly used approaches to annual agreements include:

- A. Gentleman's agreements
- B. Informal written agreements
- C. Formal (legal) agreements

*Gentleman's agreements* are when a hunter and landowner verbally agree on the appropriate compensation in return for hunting access and activities allowed on the property. *Informal written agreements* outline in writing all aspects relating to the compensation, hunting and other activities. Similarly, *formal (legal) agreements* are designed to outline specific activities allowed on a property and provide a measure of legal protection for the landowner and hunter. A well-written formal agreement protects the interest of both the landowner and hunter. They are generally designed by a solicitor and, when used in conjunction with the appropriate insurance cover, provide the landowner with the greatest protection against legal action if a hunter is accidentally injured

or killed on his/her property. However, no legal contract negates landowner responsibility in the case of negligence. Although gentleman's agreements are most commonly used, informal or formal written agreements are recommended. Simply having the property rules and allowable activities on paper reduces confusion, misunderstandings and the need for landowners to verbally inform each hunter of their responsibilities while on the property.

#### Advantages of annual agreements:

- A). Better control of trespassers.
- B). Greater degree of concern shown for the property (provides sense of ownership)
- C). Better co-operation from hunters and work crews.
- D). Better quality hunting resource.
- E). Provides quality recreation for the maximum number of people that the property/herd can support.
- F). Less time consuming for landowners compared to other fee-access systems.
- G). Landowner knows exactly who is allowed on property and what areas and period of year certain activities can occur.

#### Disadvantages:

- A). Provides recreation for smaller group of hunters than some other access systems.
- B). Some hunters may begin to feel that they own the land and interfere with the landowner's management activities.
- C). Hunters have access to property during the entire year (except at certain times such as lambing, planting, etc.).

### 2). Season Agreement/Access Fees

Same situation as above except that hunters are permitted on the property only during specified hunting seasons. This may be for a single species such as deer or a combination of species such as deer, wallabies and ducks. This type of arrangement can be utilised by either hunting clubs or individual hunters.

#### Advantages of season agreements:

- A). Hunters have access to property for specified periods only.
- B). Requires little time and effort from landowner.
- C). Ability to provide quality hunting resource.
- D). Landowner knows exactly who is allowed on property and what areas and period of year activities can occur.

#### Disadvantages:

- A). Total property revenue from hunting is generally decreased (compared to option 1).
- B). Ability to control poaching is less than with annual agreements.
- C). Sense of property ownership and pride not as high as with annual agreements.
- D). Provides fewer recreational hunting opportunities.

#### 3). Daily Permits/Access Fees

In this situation, landowners issue individual permits to hunters which allow hunting for a specified number of days during the hunting season. Permits can also be used to restrict hunters to specific areas (runs) of the property; although hunters can also be restricted under the other access systems. Typically, the permit system maximises the hunter effort (number of hunters) on a given property. If the number of hunters is not wisely regulated by the landowner, however, the hunting pressure can often exceed the capability of the herd and few bucks will reach the older age groups where they produce trophy antlers. The permit system therefore generally caters to the Maximum Harvest approach rather than the Quality Deer Management approach. This system is used almost exclusively for individual hunters rather than hunting groups. The fee charged per individual is generally lower under this system while the number of total hunters is higher than any other fee-access system.

#### Advantages of daily permits/access fees:

- A). The landowner has ability to regulate hunter numbers in a given area during hunting season which reduces the possibility for hunting accidents.
- B). The landowner knows exactly who is on his/her property at all times.
- C). Provides reasonable economic return.
- D). Provides hunting opportunities for larger and more varied group of hunters.

#### Disadvantages:

- A). Most time and labour intensive fee-access system.
- B). Variable annual income.
- C). Less control over the quality of hunters.
- D). Difficult to achieve objectives of property-based game management plan.
- E). Often leads to an over-hunted, poor-quality hunting resource.
- F). Strict rules must be developed and enforced by landowner.

#### 4). Guided Hunting

Guided hunting operations cater for a small segment of the hunting community typically from interstate and overseas with a high disposable income. Special amenities and services are generally associated with guided hunts including transportation, lodging, meals, guides, game processing and even entertainment. Guided operations require a high-quality hunting resource with adequate numbers of mature bucks available for harvest. Intensive habitat and harvest management are often needed to achieve and maintain a deer herd of this quality. This type of operation should only be considered on large properties where illegal hunting activities can be kept to a minimum.

#### Advantages:

- A). Substantial economic return during some years.
- B). Few hunters allowed on the property.

- C). High hunter success.
- D). Well managed deer herd.

**Disadvantages:**

- A). Substantial economic investment often required.
- B). Difficult to control poaching.
- C). Extremely time and labour intensive.
- D). Variable annual income.
- E). Often results in poor relations with neighbouring landowners and hunters.
- F). Little or no wildlife/vermin control by hunters.

**SUMMARY:**

Since all game species in Tasmania can be found on private land, they can provide unique opportunities for landowners when properly managed. Property-based game management plans are strategies developed between landowners and hunters to manage the wild game while achieving specific property objectives. A well-managed group of hunters can be a valuable asset to landowners capable of accomplishing nearly any realistic objective required by the landowner.

Wild fallow deer are a valuable public resource and the key component in many PBGMP's. There are numerous approaches to managing both the deer herd and deer hunters on a given property and each has advantages and disadvantages. However, written agreements with organised hunting groups involving a Quality Management Approach generally meet the widest range of landowner and hunter needs. This combination of approaches provides a balanced economic return while requiring the least time and labour of available options. It also ensures that the quality of the deer herd is maximised while the damage caused by deer is minimised.

Property-based game management plans are tailored to specific property needs and provide landowners with the best opportunity to make the wild game on their property an asset rather than a liability. For more information on deer management, contact the TDAC game biologist, Brian Murphy, at the address listed on the inside front cover of this document.

TASMANIAN COUNTRY, FRIDAY, MAY 9, 1987

# Damage by game animals curbed by management unit

GAME animals cause benefits from wildlife while inflicting negative in millions of dollars in damage to the agriculture and forestry industries in Tasmania each year.

To help alleviate this financial burden and encourage methods of control, the American Wildlife Biologist Brian Murphy was put in charge of the PWS to manage the unit for four years.

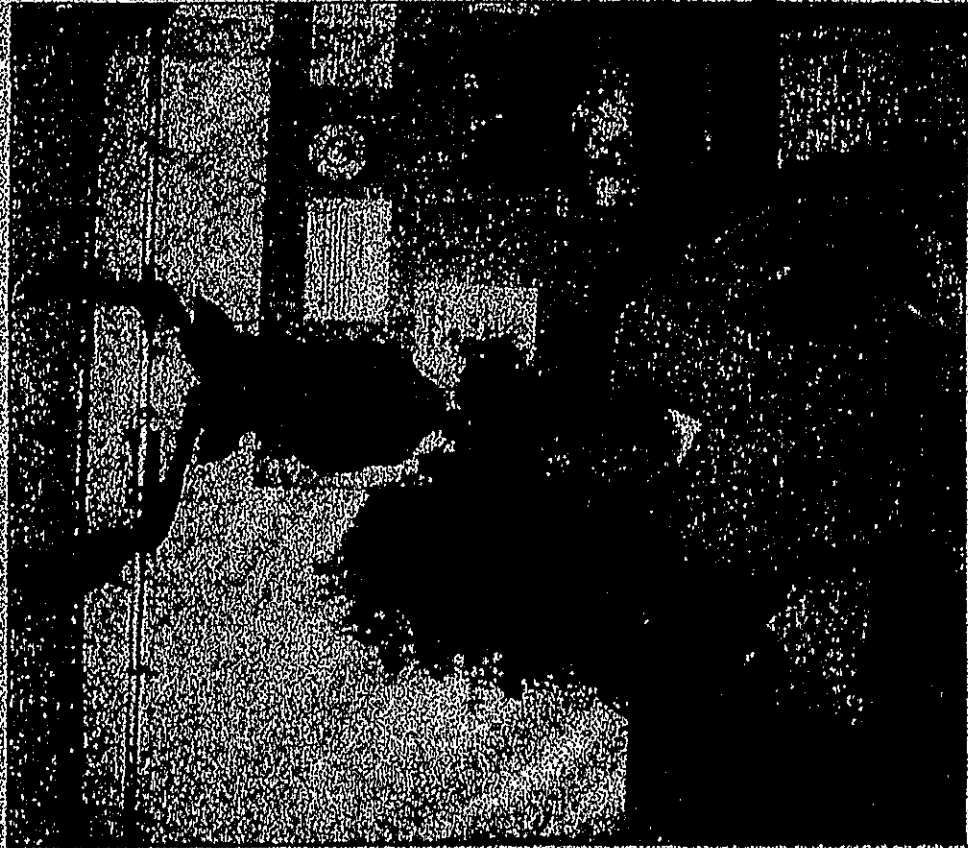
Mr. Murphy returned to America after this year after his four year stay in Tasmania.

On July 1, 1986, Tasmanian became the second state to have a Game Management Unit.

Mr. Murphy said at a press conference that the aim was to encourage hunters and conservation managers working together to achieve a mutually acceptable balance between the management and use of wildlife.

The program encouraged responsible and humane hunting and harvesting practices that were consistent with state and federal wildlife management and conservation programs.

Throughout the year in Tasmania, Mr. Murphy has been able to assist a farmer by working closely with land owners and hunters to develop and implement strategies such as fencing and game management plans in return for po-



Mr. Murphy has been in Tasmania for four years, working closely with land owners and hunters to develop and implement strategies such as fencing and game management plans in return for po-

# WILL QUALITY DEER MANAGEMENT WORK IN TASMANIA?

By Brian Murphy

## WHAT IS QUALITY DEER MANAGEMENT?

Quality Deer Management is somewhat difficult to define because hunting is largely an individual sport that means different things to different people. However, a simple working definition of Quality Management would be the voluntary use of restraint in harvesting young bucks combined with an adequate harvest of antlerless deer necessary to maintain a healthy population that is in balance with existing habitat conditions. This level of deer management involves the production of quality deer (bucks, does and fawns), quality deer habitat, quality deer hunting and most importantly, quality deer hunters. Hunters involved in Quality Management undergo a transformation from that of mere consumers to that of managers. The progression from education, to awareness, to understanding and finally to respect for the deer bestows an ethical obligation upon the hunter to practice sound deer management. The following passage illustrates the change in hunter mentality necessary to succeed in a Quality Deer Management program.

*'Quality deer management is first and foremost an attitude, a means of self-expression. The hunter views the deer not just as a resource for recreation and food, but as a part of nature to which he or she willingly belongs. A self imposed restriction to take an antlerless deer while allowing young antlered bucks to pass provides the hunter with opportunities to study deer, learn their behaviours, and sharpen hunting skills. Deer hunting is the experience of giving to as well as taking from the deer.'*

— Dr. David Gwynn,  
Deer researcher/hunter, USA

Quality Deer Management also involves balancing the objectives of the landowners and hunters with the ability of the resource to meet those objectives. As with most groups, landowners' views on deer management range from total eradication to total protection; although most enjoy the sight of deer and like having a reasonable number on their property. However, economic times are tough and many landowners can no longer justify large numbers of deer on their crops or in their paddocks. Hunters must accept the fact that in many areas significant numbers of antlerless deer must be harvested not only to meet the needs of the landowner, but also to improve the overall quality of the herd. However, a reduction in herd size does not mean that few bucks will necessarily be taken. Actually, under a Quality Deer Management program, more mature bucks can be harvested from a lower total population than can be harvested from a larger herd under traditional management (heavy harvest of young males, and little or no antlerless harvest).

Participating hunters enjoy the tangible benefits including higher quality deer, larger antlered males and more venison for the freezer, but more importantly, they enjoy the intangible benefits including an increased knowledge of deer, respect, and satisfaction. Pleasure is derived from each hunting experience regardless of whether a shot is fired or an animal harvested. For many, simply the opportunity to match their hunting skills with a mature buck is more important than the actual harvest. Many hunters take to the field each year in hopes of taking that 'buck of a lifetime', but on many areas they simply don't exist because of excessive hunting pressure. The Quality Management approach allows more bucks to reach the older age classes which are essential for exceptional

body growth and antler production. When a quality buck is taken under a Quality Management system, the pride can be shared by all club members because it was they who produced it by allowing it pass as a young buck.

## HISTORY OF QUALITY DEER MANAGEMENT

The concept of Quality Deer Management originated during the 1960s and '70s in the brush country of southern Texas; an area home to some of the best white-tailed deer hunting in the United States. This concept was created by two wildlife biologists, Mr. Al Brothers and Mr. Murphy E. Ray, Jr., who were among the early pioneers in deer management in the US. The publication of the book entitled *Producing Quality Whitetails* in 1975 enabled other states the opportunity to consider this novel approach. Less than a decade later, other southern states including South Carolina, Georgia and Mississippi followed suit and gave the Quality Management approach a try. This was the beginning of what now is considered a 'movement' in the United States of involvement in Quality Management. Currently, this 'movement' is taking place in more than 20 states and involves thousands of people. For example, in South Carolina alone there are approximately 1000 properties encompassing over 2.0 million acres under Quality Deer Management guidelines and this number is increasing every day. In many areas, bucks which had held the top position in the state record books for many years are now being replaced nearly every year. Why has this approach been so successful? Quite simply — because it works!

## IS QUALITY DEER MANAGEMENT FOR ALL DEERHUNTERS?

No, it isn't! But, there is a growing number of hunters who have matured to a stage in their hunting that reflects a change in values. Involvement in Quality Management is simply an alternative to traditional harvests which consist primarily of young bucks and few, if any, does. Quality Deer Management is a program proven to meet the needs of hunters, landowners, and deer and is undoubtedly the 'wave of the future' in deer management worldwide.

## WILL QUALITY DEER MANAGEMENT WORK IN AUSTRALIA?

Yes, without a doubt, if the people are ready for a change in the way they think about and hunt deer. The biological aspects of Quality Deer Management are not extremely difficult to achieve because deer populations generally respond to management in a predictable manner. The success of Quality Deer Management in Australia and elsewhere will depend entirely upon the people. This program will work in with any deer species anywhere in the world and especially with fallow deer in Tasmania. Tasmania has the longest history of deer management in Australia, the largest per capita hunting population and arguably the largest contiguous population of fallow deer remaining in the world. With proper management, Tasmania has the potential to become the world's foremost provider of top quality fallow deer hunting. Fortunately, many hunters and landowners agree and believe that Quality Deer Management is an idea that's time has come.

## WHY IS IT 'NOW OR NEVER' FOR TASMANIA?

During the past 25 years, many approaches to deer management in Tasmania have been attempted, although none have achieved any measure of success. Why? This can be attributed to the lack of sound biological deer management techniques attempted, but most importantly because the people were not ready to accept change and restrict themselves from harvesting young bucks while voluntarily taking antlerless deer. Many of the self-proclaimed 'trophy' hunters are the first ones to drag a young buck out of the bush on opening day. When asked why, they provide a laundry list of excuses including:



*A fine fallow buck with his does. Tasmania's fallow deer represent a unique and world-class tourist hunting attraction. Only the dedication and commitment of deer hunters will ensure that these magnificent animals are guaranteed a home in the Tasmanian countryside.*

Photo: Brian Murphy

'If I didn't shoot him another hunter would have', 'If I didn't shoot him a poacher would have, just got him anyway'. 'He was a genetically inferior cull buck'. 'I'm just a meat hunter', 'I thought he was much bigger'. 'He was so old he was going downhill' and the list goes on. While some bucks will inevitably be taken by poachers, it is the thousands of legal deer hunters who annually 'tape' the young male segment of the herd who are responsible for the scarcity of mature bucks. The days of excises are over; it is time for a revolution in deer management in Australia.

Fortunately, today many Tasmanians appear ready for transition from traditional management to Quality Management. The opportunity for this transition now exists in Tasmania with the recent transfer of government funds from the previous deer live-capture operations to the Tasmanian Deer Advisory Committee Inc. (TDAC). The TDAC is an advisory body to the government in regard to wild fallow deer management and is comprised of representatives from the Tasmanian Farmers and Graziers Association, Deer Farmers Council, Forestry Commission, Division of Parks and Wildlife, eight hunting organisations and a non-affiliated hunters' representative. The TDAC has essentially been given two, possibly three years to establish a dynamic deer plan which will maintain Tasmania's wild fallow deer in a high quality state, in harmony with farming and the environment, and to manage for sustainable, ethical harvesting. If cooperation and compromise from all parties does not occur and the project fails the future management of wild deer in Tasmania is unclear. One definite possibility is the removal of fallow deer from the list of partially protected wildlife and reclassifying them as 'vermin'. This system would allow hunting during the entire year with no season or bag limit. Undoubtedly, this system would create chaos, invite unethical hunting activities and effectively eliminate legal sport hunting in Tasmania.

The time has come to become involved in saving the future of hunting for yourself.