

Deer Management Plan

for

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Background

Wicklow Uplands Council submitted a tender in partnership with the Wicklow Deer Management Partnership for the provision of Deer Management Services in Co Wicklow. This project which is funded by the Forest Service, NPWS and DCHG will put sustainable deer management within the county on a more professional basis and facilitate and promote knowledge transfer within the county and wider. The long-term vision for this project is for it to be replicated outside of Wicklow in other conflict areas and allow for sharing of knowledge and best practice beyond Co. Wicklow

- The project will identify candidate DMUs for the purposes of carrying out management measures and will scope any additional opportunities for additional sites.
- Establishment of deer management units (DMU's) in the County Wicklow region and neighbouring counties as a minimum
- Preparation and implementation of structured deer management plans for each of these deer management units (a single management plan can cover all DMU's). This document will represent a collaborative action plan between landowners, hunters and key stakeholders and will be an active document insofar as records are logged and used throughout the management period for key decision making

• Establish DMUs engaging the various stakeholders – landowners, private forest owners, Coillte, NPWS, hunter

Deer Management Unit (D.M.U)

Operation

The sustainable management of deer requires a collaborative approach. For this reason, Deer Management Units (DMUs) have been suggested and established in Wicklow.

The diversity of ownership and management objectives is now a feature of most DMUs and as a result, delivering effective management of the deer across a group area also requires positive, proactive engagement.

Deer management currently delivers probably unknowingly, a range of benefits which should be referred to as the "Public Interest."

DMUs should be open, transparent, inclusive and publicly accountable.

Deer managers already deliver a level of Public Interest as a result of their private management objectives. DMUs are being tasked with seeking 'additional' Public Interest through modification of the management of some private interests

To deliver these Public Interest Actions DMUs need to function effectively and have an effective deer management planning process in place. Effective planning is a dynamic process based on setting objectives and targets, carrying out actions, monitoring and reviewing.

DMU Actions to demonstrate delivery

- Establish a baseline by collating information on current activity/ extent / or actions. This can be used to establish the current DMU contribution and also provide the basis to measure the effectiveness of future actions.

Suggested actions

- Grassland loss/damage assessment and measurement.
 - Woodland loss/damage assessment
 - Monitor TB outbreaks in areas of high deer population
 - Cull / Sightings monitoring
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- Identify and plan actions which will contribute to the delivering the outcome. These should be contained or be annexed to the Deer Management Plan.
 - Implement the agreed actions – Likely to be done at the individual land holding basis but should seek to use collaborative approaches where possible.
 - Monitor effectiveness of the actions through comparing progress against the established baseline.
 - Review actions and decide to continue /amend /change these in light of new information.

Deer Management Groups - delivering public interest.

identify a number of areas of that upland Deer Management Groups (DMUs) can be expected to contribute towards delivering in managing populations of deer at a landscape scale.

DMUs will need to demonstrate how they contribute to this delivery through reporting on a series of actions which can be prioritised and agreed on a local basis. Deer managers will be delivering a level of public benefit as a result of their private management interests. DMUs are being tasked with acknowledging existing and identifying where 'additional' public benefits may be delivered through some modification of the management of private interests.

Public interests may be grouped into but not limited to

- Environment,
- Economy,
- Social Well-being
- Deer Welfare.

Facilitating the reduction of deer impacts where this is contributing to habitat degradation.

DMU will manage deer impacts to deliver and sustain favourable condition to improving biodiversity. DMUs may also be able to directly influence non-deer issues for designated sites due to the land management role of their members

Contribute to Government forestry expansion targets through identifying areas for further woodland creation and managing deer impacts to allow for successful establishment of new woodland.

Priority should be given to expansion opportunities where this improves habitat networks.

Manage deer to retain existing native woodland cover and improve woodland condition in the medium to long term.

The Native Woodland Survey. This maps non-designated native woodland cover, reports condition and highlights herbivore impacts which threaten medium to long term condition of these important woodlands. It is expected that the DMUs will implement management to reduce the proportion of native woodland area identified within the 'High' and 'Very High' categories of herbivore impact.

Monitor and manage deer impacts in the wider countryside (not improved agricultural land) by establishing monitoring throughout wider countryside habitats assessing herbivore impacts and manage those impacts within acceptable ranges

Optimise economic benefits of Deer Management by establishing and quantifying current benefits within DMU areas, determining opportunities for increasing economic benefit, particularly where collaborative opportunities exist, and through seeking and promoting investment opportunities

Minimise the economic cost of deer through identifying issues and implementing management to reduce or mitigate deer impacts where this results in an economic cost.

DMUs will be active in understanding where deer are having an economic cost particularly with regard to forestry and agricultural impacts, deer vehicle collisions, and seek to plan and work collaboratively to reduce these costs

Contribute to delivering higher standards of competence in deer management through promoting and offering opportunities for members to take up formal training opportunities, continuous professional development and ensure Best Practice guidance is adopted in deer management activities throughout the DMU.

Public health and wellbeing benefits associated with deer and deer management.

DMU should raise awareness of road safety issues associated with deer to reduce the risks of road traffic accidents, co-ordinate action to minimise deer-related human disease risks

Ensure effective communication on deer management issues within the DMU, within the wider community and promote better awareness and education of deer and deer management. Ensure DMUs are inclusive, open and transparent, and can articulate and communicate public benefits being delivered through deer management activity

Welfare

Ensure deer welfare is taken fully into account at individual animal and population level through effective planning and delivery of deer management activities. DMUs should carry out an assessment of the state of deer health and promote positive welfare.

Develop effective mechanisms to manage deer.

DMUs should improve representation and membership of DMUs to ensure there is greater integration of different land-uses at a local level. DMUs should also ensure that the deer management planning process is consultative, transparent and open.

..... **Deer Management**

The overall objective of The Deer Management Unit is to bring together all those landowners who have and wish to have **some part to play in the management and conservation of deer**, whilst recognising the objectives and constraints of the various landowners and agencies.

A collaborative approach to the management of wild deer is most appropriate
The main losers from deer damage are landowners, the onus is on them to take control
It is therefore proposed that landowners collaborate, coordinate and control deer hunting and lay down terms for hunter practises, performance and reporting

The choice of hunter (Deer management teams) remains with each individual land-owner. Information on sightings and culls will be collected by the project co-ordinator. Who is responsible for the secure storage of this information. It is envisaged that individual land/owners will be entitled to data relating to their holdings only. In all other cases the data will only be see as total for the D.M.U.

As it would be expected that from **a safety/requirement issue all** hunters/deer management teams will have a mobile phone when on lands within the D.M.U., the simplest method of information on sightings /culls etc would be (as used by many professional hunters) a photo sent to the co-ordinators secure phone of the culled deer, this would enable the breed, sex and location of the cull to be determined. This will give each landowner proof of cull and fully traceability.

The co-ordinator will act as an **independent depositary for data** collected in the form of counts, cull data, impact assessments and other observations. The co-ordinator will document protocols for the establishment of new deer management areas which can be used in replicating such areas elsewhere in Wicklow and Ireland. The co-ordinator will also conduct assessments on data collated which will provide guidance for the ongoing development of the deer management plan from year to year.

The project coordinator will facilitate a greater degree of input from stakeholders in management units and greater levels of communication between those involved in implementing the plan, particularly land owners and hunters.

Liaise with and assist each group to establish a Memo of Understanding which will

1. Develop liaisons between landowners and hunters and improve co-operation and co-ordination
2. Increase awareness for landowners around the mechanisms for control and management of deer. Firstly through the effective utilisation of the Open Season and where necessary outside this within the Section 42 (Wildlife Act 1976) process. Where necessary co-ordinate the application and use of Section 42 and assist landowners with this process.
3. Collate deer management related data in the county including logging deer sightings locations, deer kills, deer traffic accidents, and measure damage to grass, crops, trees and gardens
4. As resources allow **promotion information and knowledge transfer outside of Wicklow to other areas that may have current or emerging deer management issues.**

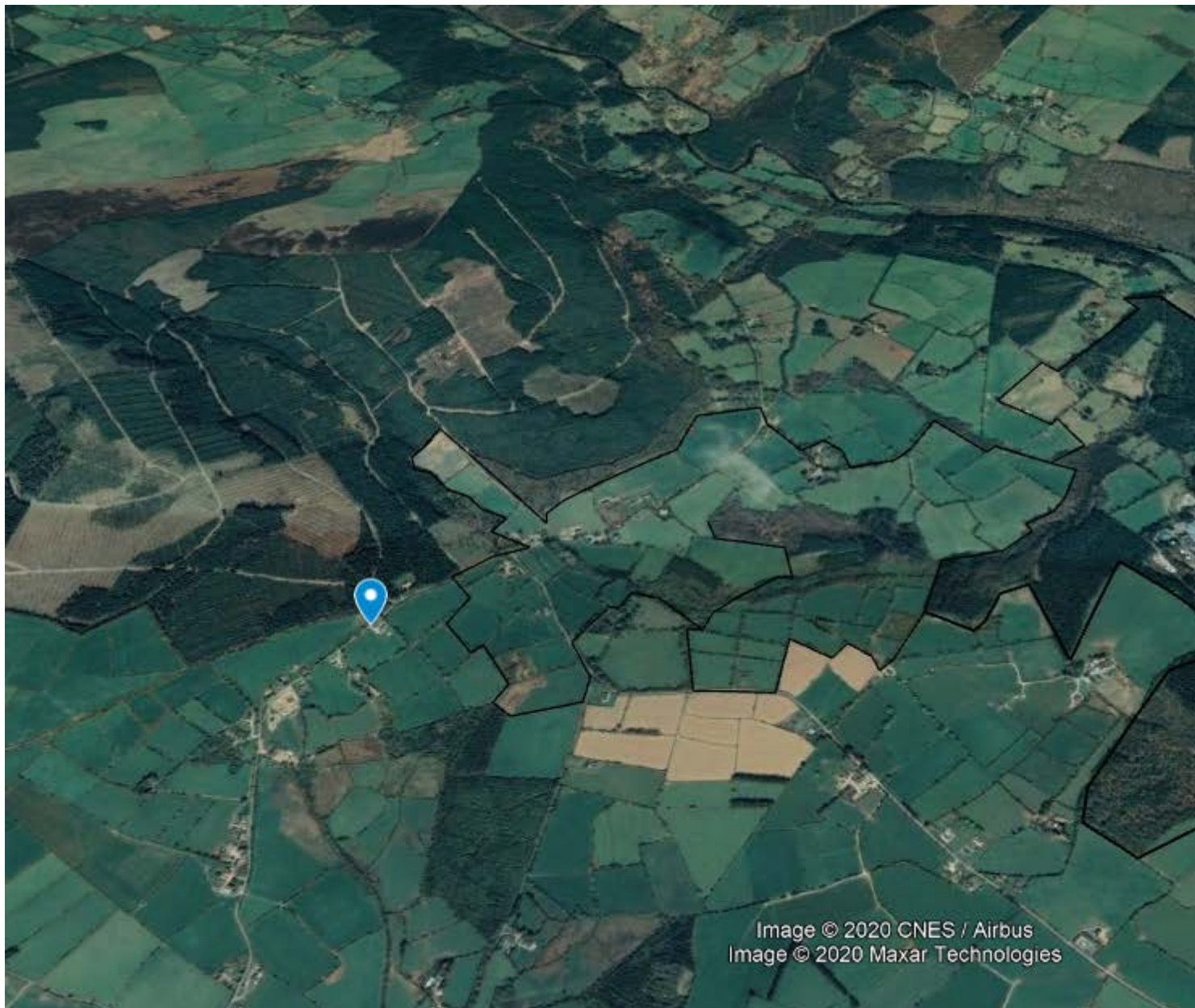


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The purpose of the plan is to provide:

- An agreed statement of the shared views of the Group Members about the management of wild deer within the area covered by the Management plan
- An agreed set of actions to achieve those shared views and protocols to ensure they are done and their effectiveness monitored.
- A reference for Members and funding organisations

Group Area

..... Deer Management Group is situated on the outskirts of and adjoins It extends to approximatelyha. The majority of the farmed land would be of a dry high rising secondary nature. Commercial farming consists of dairying and dry stock. The area includes commercial forestry (Coillte) nature reserve (NPWS) and high-quality private afforestation which includes natural regenerated forestry.

Guiding Principles

The Members have adopted the Principles of Collaboration created by a memorandum of agreement

- to acknowledge what they have in common - namely a shared commitment to a sustainable and economically management of wild deer
- to make a commitment to work together to achieve that commitment;
- To foster best practice in all aspects of deer management.
- To ensure full participation throughout the Group
- Minimise the incidents of deer poaching.
- to achieve a relatively stable deer population capable of sustaining good biodiversity
- to ensure an effective system of communications is in place both within the Group and with the general public and to engage positively and actively.

The majority of deer are culled in season. Occasionally however when deer become a problem out of season for farmers and foresters the use of Section 42 should be used to control and members are encouraged to share information on any out of season and night shooting authorisations obtained to help control damage and numbers.

Cull Data will be held by the Deer Management Project Coordinator and will be available to members in the following ways

- Each member is entitled to the cull data held for his holding.
- Each member is entitled to the cull data for the Group as a whole
- Any member seeking the cull data for another member must request that data from that member. Under GDPR and hunter agreement the coordinator is not permitted to share individual members data.

Contacts

.....	Phone	Map	M.O.U. Sign	
		X	X	Sct 42
		X	X	Sct 42
			X	
			X	Sct 42
		X	X	Sct 42
		X	X	Sct 42
				Sct 42
			X	Sct 42

Location

Estimated area	
Grass	
Forest	
Private Forest	
Nature Reserve	

Deer

Species	Est. Density	Trend	Likely to appear in next 3 years ?	Estimated numbers	Census method
	High, Mod, Low	→ ↑ ↓			
Red					
Sika	High	↓	↑		
Fallow					

Current impacts

	Tick as appropriate			Deer species most responsible	Comments
	low	mod	hi		

Grassland			x	Sika	
Woodland		x		Sika	
Fence		x			
Deer Vehicle Collisions		x			
Biodiversity		x			
Garden	x				
Disease			x		

Current deer management

<i>Deer Management</i>	Yes	No	Estimated number of man/days	Comments
Individual Stalker	x			
Sct 42 culling	x			
Night shooting Sct 42	x			
Deer Mgt. Group meetings	x			
High seats		x		
<i>Protection</i>	Yes	No	Est area	Comments
Deer fencing		x		
Tree guards				
Chemical Protection				
Other				

Obstacles to achieving effective deer control

Obstacles to effective deer management	How does this affect deer management?	How could obstacle be addressed?
Unpredictability of deer movements	Timing of cull ever changing.	Requires deer managers observations and ability to change routine
Lack of collaboration with neighbours	Deer have no boundaries	DMU discussions. Education Peer pressure.
Insufficient time or man power available	Increased numbers.	Increased availability of experienced trained deer Mgrs.
Hunter training or experience	Health and safety	Training.
Lack of High seats Logistics of carcass handling e.g. extraction, larder facilities		
Other (state)		

Future Management

Land Management Objectives and Monitoring

	Targets	By when	Method of monitoring	Monitoring period and frequency	Who is responsible
Agricultural Crop Damage	<i>Reduction</i>	<i>2021</i>	<i>Grassland Measurement Tree Damage Assessment Trail Cameras</i>	<i>Monthly Quarterly</i>	Landowners
Fence Damage	<i>Fence Damage Elimination</i>	<i>2021</i>	<i>Physical Observations</i>		Landowners
Road Traffic Accidents	<i>Elimination</i>	<i>ongoing</i>	<i>Garda system</i>		
Other					

2.2 Deer Management Objectives

	Targets	By when	Method of monitoring	Monitoring period and frequency	Who is responsible
Deer Cull	<i>To be decided</i>	<i>mid 2020</i>	<i>sightings & cull</i>		<i>Landowners / Deer managers</i>
Deer Health	<i>Monitored</i>	<i>Start 2010</i>	<i>Observations and TB screening where necessary</i>	<i>Ongoing</i>	<i>Landowners / Deer Mgrs Dept Agriculture DVO.</i>
Venison production					
Other					

Deer Management Action

Deer Management	Est. Annual number of man/days	Comments
Individual Stalker		Yes
Collaborative culls with neighbours		No
Night shooting Under Licence only Sct 42		Yes
Out of season culling. Under licence or Sect 42 only		Yes
Deer Mgt. Group meetings		Yes

Protection	Comments
Deer fencing	
Tree guards	
High seats	

Health & Safety issues

(The list below is a guide only)

Complete/delete as applicable	Risk assessments in place (tick)		Actions required	Comments
	Yes	No		
Access	x		All landowners have agreed that all deer managers will be fully insured, licenced and have HCAP ?Similar in place.	
Stalking	x			
High seats	x			
Use of firearms	x			
Meat hygiene				
Lone working	x			
Other (state)				

Costs/Income

(Summary of items required, actual values may be omitted)

“One off” or capital costs

E.g. Deer Fencing, high seats, deer larder

Ongoing costs

E.g. Contract stalking, Ride maintenance

Income sources

Cull Summary

Appendix

- Memo of Understanding (M.O.U.)
- Deer Returns
- Deer Hunter code of practice
- Landowner code of practice
- TB
- Manor Kilbride Deer Management Group TB leaflet
- Grass measurement procedure

TheDeer Management Unit D.M.U.

Memorandum of Understanding (MOU)

Introduction

“The Department of Culture and Heritage has said that they do not own the deer and that is up to the farmers to control any deer on their own lands.” Deer are never limited to one land holding. A more collaborative approach to the management of wild deer is most appropriate across an area of multiple land ownership.

This DMU is a land-owner membership group.

The main losers from deer damage are landowners, the onus is on them to take control

A collaborative approach to the management of wild deer is most appropriate

It is proposed that landowners collaborate, coordinate and control deer hunting and lay down terms for hunter practises, performance and reporting

A local DMU should include a number of properties, ideally adjoining, within a defined geographic area known to be adversely impacted by deer. This area can be added to later as circumstances dictate

The size of the DMU area can be determined by local knowledge of deer behaviour.

It is not proposed to introduce new hunters to shoot over the ground of any participant, **grant of permission remains the exclusive decision of each owner**

Measures to be agreed by landowners to coordinate hunter activity and monitor performance

The Framework for Action report published in 2015 highlights the need for wild deer populations in Ireland to be managed within sustainable limits in balance with the ecological, social and economic environment in which they exist, this requires a representative landowner structure with shared commitment. To address this important issue, this ad hoc group agree to the establishment, by way of a Memorandum of Understanding, The Deer Management Unit.

The overall objective of TheDeer Management Unit is to bring together all those landowners who have and wish to have **some part to play in the management and conservation of deer**, whilst recognising the objectives and constraints of the various landowners and agencies.

The overall **objectives** of The Deer Management Unit are the guiding principles of good deer management which include but not limited by

- Population control of deer population to sustainable and tolerable level
- Improve performance, coordination and reporting of hunters
- Monitor and record deer impact, numbers, culls, etc
- Measure impacts on pasture, crop, forestry, other
- Biosecurity
- Biodiversity

Basis of MOU

The landowners in this MOU acknowledge that each has come to this process in a spirit of collaboration; that the basis of this MOU is partnership and that consensus should be the basis on which all decisions are taken and all progress made. Each landowner will provide maps and defined areas covered by this M.O.U.

Parties to the MOU

Membership of this D.M.U. is limited to landowners impacted by deer numbers.

Additional members may join subject to

- Agreement of existing membership
- Accepting of the terms of this M.O.U. and any other agreements allied to this group

Constitution of

TheDeer Management Unit,

Each landowner will be entitled to be present at all meetings of the DMU. Each landowner shall be entitled to one vote. While each landowner will be entitled to cast one vote the partnership will have consensus as its core modus operandi. Where a landowner cannot attend, they can nominate another member of this D.M.U. to carry their vote by proxy. Non-members cannot attend or vote.

Business of the DMU

The business of the DMU will be to coordinate and implement the objectives stated by the means listed below but not limited to

- Management of numbers
- Fence
- Extend usage of S42 out of season hunting licenses
- Commitment by landowners to agreed programme
- Agree on protocol for hunters. Suggested Guidelines:
- MKDMP Code of Practice for Landowners & Hunters 2016
- **D.M.U. Area of Responsibility**

The DMU landowners shall collaborate to achieve the stated objectives.

Landowners Requirements

To undertake, record and report deer sightings and numbers

To drive and participate in measuring of deer impacts

Landowners to agree what is required of hunters in achieving agreed objectives.

Each landowner chooses their own hunter(s) and deals directly.

Set ground rules. Rules will minimize misunderstandings and make the experience better for everyone

Make it clear that you own the land, and that you control access and activities. If you prefer to not have hunters out on a given day, be sure they understand that.

Landowners to ensure hunter requirements

Require hunters to actively take part in a planned recording process of deer sightings
Record all deer seen in the course of agreed access
Record of all deer shot, photo and GPS location
Date
Time of day
Number of deer seen
Species,
Age
Gender
Health of deer shot)
Hunter education improvements/opportunities:

Duration of Commitment

The commitment of the landowners to this MOU is for a period of three years and this period will be extended with the agreement of the parties.

Decisions of the D.M.U.

It will be the aim of the DMU to reach all decisions by consensus. If consensus is not achievable, decision will be by majority vote.

Review of the Agreement

The MEMORANDUM OF UNDERSTANDING shall be reviewed three years from date of signing of the agreement and every three years thereafter.

Withdrawal from the Agreement

Any landowner to the MEMORANDUM OF UNDERSTANDING may withdraw from the agreement following 12 months notice. All monies due up to specific projects or initiatives at the withdrawal date must be paid in full.

The MEMORANDUM OF UNDERSTANDING may be terminated, at any time, by all parties by mutual agreement

Signed:

Deer Management Returns

In order to facilitate the provision of deer management as set out by agreement with Wicklow Uplands Council two main requirements of the deer control managers will be nm

1. Observation and return of numbers of deer sightings.
2. Return of deer culls to the programme coordinator.

These returns will be made via mobile number to the programme coordinator.

A photo of the cull with the time and location of the cull will suffice.

As the relationship is solely between the landowner and his deer control manager the programme coordinator will not require the ID of the control manager.

The total sightings and culls for a D.M.U. will be provided to the funding organisations as a matter of form in an overall context.

The landowner will be given details of culls on their holdings.

The programme coordinator is fully committed to General Data Protection Regulations.

Signed

(Programme Coordinator)

Code of Practice for Hunter

- a. Respect that landowners own the land and therefore need to give permission to hunt
- b. Annually show Firearms Certificate and provide copy of insurance to landowner
- c. Provide evidence of training and competence in best-practice management and culling of wild deer through HCAP or equivalent
- d. Abide by good hunting practices including gralloching, disease examination, reporting findings and gralloch disposal
- e. Communicate with landowners to avoid wasted journeys when other hunters also permitted
- f. Commit to hunt regularly and to provide evidence of pre-agreed numbers shot
- g. Inform farmer by text before entering and at departure
- h. Inform landowner after each visit on numbers shot and abnormalities found
- i. Have clear respect for landowners situation and concern on TB risk by responsible offal and blood disposal
- j. Use regular texting/calling for communicating
- k. Give feedback to landowners on deer impact, damage
- l. Advise landowner early to enable earlier application for post season Section 42's.
- m. Demonstrate numbers of deer culled with evidence eg. Pair of ears, lower jaw etc.

Code of Practice for Landowner

- a. Acknowledge that a good hunter is a worthwhile partner
- b. Have zero tolerance for unlicensed hunters or bad practices
- c. Avoid permission for multiple hunters as this is counterproductive
- d. Allow fewer but better hunters on the land, including hunters trained and certified to HCAP standard or equivalent
- e. Reduce number of casual hunters
- f. Agree hunting plan, target numbers and regular reporting procedure with hunter and help the hunter with information on deer activity, damage and sightings
- g. Demand feedback from hunters and agree numbers to be removed in advance
- h. Refuse renewal permit to hunters not meeting performance targets
- i. Focus on removing hinds preferably in a ratio of 4-5 hinds to 1 stag**
- j. Support co-ordination and grouping of neighbouring lands into hunting units

TB and reducing the risk posed by deer:

A policy of reducing deer density throughout the country, combined with a deer population reduction programme near TB outbreaks has been proposed.

The current situation is that farmers are already empowered to cull deer on their land, or to get deer hunters to do this for them. The NPWS has confirmed that poaching of grass constitutes crop damage and thus is grounds for granting a section 42 licence to cull out of season. Under the National Deer Management Strategy (developed by farming organisations, Coillte, NPWS, DAFM and others), lead responsibility for deer management lies with the landowner. In Wicklow, where there are high numbers of deer and high levels of TB, a local steering group to enable farmers to coordinate and organise culling of deer has been established in Calary, supported by DAFM and NPWS, and involving the IFA and Coillte, thereby achieving a farmer-led deer population reduction programme in areas with both high bovine TB and high wild deer populations. Further local deer management groups have been established in other parts of Wicklow, supported by DAFM, to enable farmers to manage deer on their land in a coordinated manner.

Within Wicklow, research carried out by DAFM has found the same strains of *M. bovis* circulating in cattle, badgers and deer in the Calary area. A study in 2016 found a TB prevalence of 16% in deer in Calary; a follow up study using slightly different methodology (so not directly comparable) has found interim results of 8.3% (10/121) in deer shot on farmland and 0% (0/32) in deer shot in a control area in the national park in Djouce (the final study results will not be available until later in 2019).



Manor Kilbride Deer Management Project

Advice on improving biosecurity on TB risk farms

The Manor Kilbride Deer Management Project suggests that farmers take the following precautions to minimise risk of TB infections on their farms arising from badgers, deer or other wildlife:

1. Put electric/barbed wire fencing around any known badger sets/latrines on your land

Reason: These are sources of infection and disease could be ingested from grazing or nasal discharges on infected areas

2. Ensure shed doors are closed if you're ground feeding fodder or meals

Reason: (i) While healthy badgers are unlikely to enter sheds diseased ones may do so.

(ii) Deer may enter sheds at night to consume fodder and pose a disease risk

3. Request all hunters to disinfect their boots before going onto your land to avoid contamination from other farms that they may have visited before

4. Minimise nose to nose contact at all costs, particularly around ring feeders

Reason: This is the highest risk for disease transmission from animal to animal – deer to cattle, cattle to deer

5. Raise drinking troughs above badger drinking/bathing height (only possible on non-sheep farms)

Reason: (i) believed to be a serious cause of TB transmission

(ii) to avoid risk of diseased nasal discharges from badgers

6. Clean drinking troughs on a regular basis

Reason: Many pests and diseases can survive for a long time in water until they find another host. TB organism survives in water

Grass Measurement Procedure

The purpose of this project is to establish the extent of deer damage to grassland by measurement of samples and compiling data

1. Measuring Box: 1m long x 1m wide x 50cm high. (?) Constructed sturdy enough to deter deer with mesh or netting wire on sides and top. Mesh opening should be close enough to deter deer grazing but open enough not to cause an artificial sheltering effect on grass growth. Unit should be rigidly secured to ground for the period of the study.
2. Locations: These will be selected in co-operation with a number of landowners where deer are adversely impacting on grass growth for grazing or saving winter fodder. One or more sites per farm. Sites should be in a quiet area distant from disturbance adjacent to a forest and close to a known deer path.
3. Livestock: Fields selected must be stripped of farm livestock for the duration of the study – usually up to mid April or until just before livestock grazing re-commences. Co-operating landowners should advise in advance, minimum 1 week, in order that the grass will be measured both inside and outside the box before livestock are returned to the lands. This will provide information to quantify grass loss and analyse damage caused by deer.
4. Methodology: Grass will be measured when the grass box is installed and again at the end of the period when measurements will be taken inside and outside the box using an established process.
5. Results: The results from all sites will be collated according to a standard approach and the information will be widely available.

Deer Impact on Grass – Standard Assessment Method

Timing	Action
1. Anytime from end of Grazing Season with stock off land	Lay down small 50cm x 50cm quadrat on grass and cut using a shears or equivalent all grass in quadrat to a height of 4cm and place in bag. Location of quadrat to be mid-distance from headland accessed by deer and approximate field centre.
2. Immediately After Cutting	Weigh, using a spring balance (5g accuracy), the net weight of grass in bag (i.e. weight of grass and bag minus weight of bag). Record net weight on field sheet.
3. Immediately After Cutting	Create Deer Exclusion Plot (minimum dimensions 1.5m x 1.5m) adjacent to where initial quadrat was taken. This can be either : <ul style="list-style-type: none"> • a cage as currently used or • a small fenced enclosure that deer will not jump into Location of deer exclusion plot to be mid-distance from headland accessed by deer and approximate field centre.
4. On Returning Home	Dry a 50gm sample (use electronic kitchen scales) of the grass in a microwave for 5-6 minutes. Weigh the dried sample (using electronic kitchen scales) (Dried weight in grams x 2 = %DM of grass) Record all data on field sheet.
5. Just in advance of Grazing Season	Lay down small 50cm x 50cm quadrat on grass adjacent to deer exclusion plot and cut using a shears or equivalent all grass in quadrat to a height of 4cm and place in a bag labelled "outside plot". Location of quadrat to be mid-distance from headland accessed by deer and approximate field centre.
6. Immediately After Cutting	Weigh, using a spring balance (5g accuracy), the net weight of grass in "outside plot" bag immediately after cutting. (i.e. weight of grass and bag minus weight of bag). Record net weight on field sheet.
7. On same day as 5 above	Remove / open deer exclusion plot. Lay down small 50cm x 50cm quadrat on grass that was inside deer exclusion plot and out of reach of grazing. Cut using a shears or equivalent all grass in quadrat to a height of 4cm and place in a bag labelled "inside plot".
8. Immediately After Cutting	Weigh, using a spring balance (5g accuracy), the net weight of grass in "inside plot" bag immediately after cutting. (i.e. weight of grass and bag minus weight of bag). Record net weight on field sheet.
9. On Returning Home	Dry a 50gm sample (use electronic kitchen scales) of the "outside plot" grass in a microwave for 5-6 minutes. Weigh the dried sample (using electronic kitchen scales) (Dried weight in grams x 2 = %DM of grass) Record all data on field sheet.
10. On Returning Home	Dry a 50gm sample (use electronic kitchen scales) of the "inside plot" grass in a microwave for 5-6 minutes. Weigh the dried sample (using electronic kitchen scales) (Dried weight in grams x 2 = %DM of grass) Record all data on field sheet.

Deer Impact on Grass – Standard Assessment Method - Field Sheet

Farm	
Townland	
Assessor	

Date of 1st Measurement When Closed off Inside and outside of fenced off area	
1. Weight of Bag (g)	
2. Gross Weight of Grass + Bag (g)	
3. Net Weight of Grass (2 - 1) (g)	
4. Dry Weight of Microwaved Dry Grass (g) (remember – only weigh 50g sample)	
5. % Dry Matter of Grass (Dry Weight x 2)	
6. Kg Dry Matter / Hectare (Net Weight of Grass x % Dry Matter x 40)	

	Outside Plot	Inside Plot
Date of 2nd Measurements Before Grazing begins Inside and outside of fenced off area		
7. Weight of Bag (g)		
8. Gross Weight of Grass + Bag (g)		
9. Net Weight of Grass (2 - 1) (g)		
10. Dry Weight of Microwaved Dry Grass (g) (remember – only weigh 50g sample)		
11. % Dry Matter of Grass (Dry Weight x 2)		
12. Kg Dry Matter / Hectare (Net Weight of Grass x % Dry Matter x 40)		

