

# Deer Management in Ireland A Framework for Action

















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Co Wexford

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#### 1. INTRODUCTION

There are currently four known species of deer existing in the wild in Ireland – Red, Sika, Fallow and Muntjac – in addition to a small number of Red x Sika hybrid populations.

Over the last decade, evidence suggests that the geographic distribution of all species of deer has increased, but neither the precise distribution nor the population density of these species is currently known. In this context, there is a significant challenge in attempting to balance the demands of agriculture, forestry and conservation with the need to ensure that deer populations occupying the same land resources are managed at sustainable levels, and in a responsible and ethical manner.

Deer are capable of exerting considerable influence on **agriculture**, **forestry and conservation habitats**. Their management must therefore take place within an appropriate regulatory, organisational and spatial environment. This should reflect deer ranging behaviour, habitat scales and the dynamic nature of modern land use practice and objectives, including sporting values.

In the modern Irish landscape, deer are now also more likely to become established in urban and peri-urban areas, leading to concerns over **deer welfare** and their impacts on gardens and public green spaces.

Any management strategy must ensure that deer are managed in accordance with accepted international principles and standards of sustainable deer management. The role of deer as a valuable component of biodiversity must be recognised. However, this must be balanced with an equal recognition of the potential for deer to impact adversely on a range of other biodiversity values, particularly where conservation habitats and their dependent species are concerned.

Sustainable deer management must rely on sound, practical and applied **scientific research**, and any deer management policy must continually support and review developments in scientific research and its application to practical deer management on-the-ground.

A primary goal of any deer management policy must be to ensure that economic losses as a consequence of deer impacts can be minimised, particularly in the agriculture and forestry sectors. An over-abundant deer populations can result in



an increased incidence of road traffic accidents and increase the potential role of deer in the epidemiology of specific diseases. At the same time, policy should seek to maximise the positive contribution of deer management activities to the rural and national economies, particularly where the marketing and promotion of venison is concerned.

All relevant land use policies must take account of the deer management issue and there is a requirement for greatly improved **education and awareness** amongst land use professionals. This will in turn support the implementation of deer management practices within the sectors concerned.

The development of a sustainable and achievable deer management policy is best progressed within a **partnership arrangement** in the form of the Irish Deer Management Forum (IDMF), which will comprise representatives of sectoral interests and stakeholders, overseen and facilitated by the relevant Government departments, i.e. the Department of Agriculture, Food & the Marine and the Department of Arts, Heritage & the Gaeltacht.

The implementation of deer management policies at national, regional and local levels will require a high degree of coordination and cooperation between these departments, and their respective stakeholders.

Deer management is most simply defined as the **integrated management** of deer populations in balance with the carrying capacity and land use objectives of lands where deer exist. It should be based on an **objective and quantitative analysis** of deer populations and their impacts on habitats, and land use objectives within defined catchments.

Deer management plans are the key tool in setting objectives and management actions, and the range of actions include:

Iui	ige of actions include.
	population assessment and impact monitoring
	direct population control
	adaptation of forest and woodland design and management
	protection, physical and chemical deterrents, and scaring devices
	public awareness of deer-related issues, e.g. road safety, animal welfare, heritage.

#### The future of wild deer in Ireland – our vision

The vision underpinning this Framework for Action is that wild deer populations in Ireland are managed within sustainable limits in balance with the ecological, social and economic environment in which they exist.

Deer should be managed responsibly and ethically, minimising impacts on agriculture, woodlands, conservation habitats and sporting values.

### The lead role for managing wild deer lies with landowners and land managers.

This will be achieved through the development of an effective deer management culture across all relevant land use sectors. It will be delivered by appropriately resourced deer management structures that suit spatial requirements, conform to best practice, and comply with existing legislative and policy frameworks.

#### Critical success factors

The following are considered to be the critical success factors for this Framework for Action:

- ☐ Deer management must be fully integrated with existing policy and practice across the range of land use sectors concerned.
- Deer management policy must facilitate and support applied research where wild deer are concerned, as a basis for further policy development and review.
- ☐ Legislative and policy provisions that relate to deer must be reviewed and maintained in a regular manner.

#### 2. STRATEGIC PRINCIPLES

This Framework for Action is based on seven strategic principles:

#### Principle 1

An overall principle in all management considerations and strategies will be recognising the importance of conserving native deer species as part of Ireland's rich natural heritage and biodiversity, in addition to recognising the importance of wild deer in Ireland to our culture, tourism and enjoyment by the public.

#### Principle 2

Wild deer should be managed in a sustainable manner that is safe, legal, humane and ethically responsible, and that enhances the benefits of deer management to society.

#### Principle 3

Lead responsibility for deer management lies with landowners and land managers.

#### **Principle 4**

As wild deer have no regard for artificial boundaries, cooperation at a landscape level is crucial. The management of wild deer must take place within appropriate management, regulatory and spatial structures. These should reflect deer ranging behaviour, habitat scales, and the dynamic nature of modern land use practice and objectives, including conservation and sporting values.

#### Principle 5

All relevant land use policies must take account of deer management issues. Best practice models for deer management in Ireland must be developed and integrated with existing best practice models across relevant land use sectors.

#### Principle 6

Deer hunting, in all its forms, should make a positive contribution to management objectives. It should take place within a structured, best practice environment, having due regard for public safety, animal welfare, and legal obligations, particularly land management objectives on land where the hunting takes place.

#### Principle 7

A strong organisational framework is required, to coordinate appropriate policy, regulatory and administrative functions. It should permit accurate reporting of deer activity and impacts, and enable appropriate prioritisation and allocation of deer management resources to the areas where they are most needed.

Land owners, land managers and other partners will be supported through an integrated sustainable deer management system that includes:

- partnership between stakeholders
- incorporation of existing systems, structures and relationships
- advice and technical support
- support for awareness, education and training
- coordination of policy and regulation
- deer welfare safeguards
- □ support and advice from applied research
- ☐ disease surveillance and control
- appropriate venison processing, marketing and food standards



#### 3. POLICY DRIVERS

Wild deer are a valued part of the wider biodiversity of the Irish countryside. However, the potential for deer to impact adversely on a range of biodiversity values must be fully recognised where management of conservation habitats and their dependent species are concerned. Similarly, deer populations can have long-term adverse impacts on agriculture and forest management values in areas where populations are out of balance with their surroundings and forest management objectives.

Ireland's international commitments to protect forests and habitats may be at risk from deer populations, mainly through impacts on flora and other fauna, particularly in native woodland ecosystems.

These commitments include:

#### International agreements

- EU Habitats Directive (Council Directive 92/43/ EEC)
- EU Birds Directive (Directive 2009/147/EC)
- ☐ International Convention on Biological Diversity (CBD)
- ☐ Food Hygiene Regulations (Regulation (EC) 178/2002)
- Meat Hygiene Regulations (Regulation (EC) 852/2004 & Regulation (EC) 853/2004)
- Pan-European Criteria for Sustainable Forest Management (Forest Europe)

#### National level drivers

- ☐ Ireland's National Biodiversity Plan 2011–2016
- ☐ Food Harvest 2020: A Vision for Irish Agri-Food and Fisheries
- ☐ Forests, Products and People: Ireland's Forest Policy A Renewed Vision (2014)



#### 4. AN AGENDA FOR ACTION

This agenda identifies key outcomes in relation to deer in Ireland, and the action required to deliver these.

Specific short-term actions are set out in Section 5.

The key outcomes are as follows:

- 1. Establishment of the Irish Deer Management Forum (IDMF) to implement short- and long-term deer management objectives.
- Development of an effective and agreed policy, regulatory and administrative framework for deer management, and improved consultation and partnershipworking between landowners, land managers, Government departments, forestry, conservation and sporting interests.
- 3. The protection of economic interests, habitats and wider society from the impacts of inadequate deer management.

- 4. Undertake sufficient research and monitoring to underpin effective deer management policy and practice. Define and implement best practice, based on models from abroad.
- 5. Development of the skills and capacity to deliver effective deer management.
- Ensuring that venison products entering markets are safe, traceable and legally sourced, and that venison is promoted as a sustainably-sourced, premium Irish meat product.
- 7. Securing the conservation status of native deer. Negative impacts of non-sustainable populations of non-native deer species on Ireland's biodiversity to be managed.



#### 5. IMMEDIATE ACTIONS

Immediate action is required to correct shortcomings in stakeholder organisation and disposition at a national level, and also at a local level in areas where deer-related conflicts exist.

#### Irish Deer Management Forum

- An Irish Deer Management Forum (IDMF) will be established to implement short- and longterm deer management and conservation objectives.
- 2. It is the view of the Department of Agriculture, Food & the Marine and the Department of Arts, Heritage & the Gaeltacht that stakeholder participation and cooperation is central to the development of suitable deer management policy development and practice at all scales of implementation.
- 3. The Irish Deer Management Forum comprised the Department of Agriculture, Food & the Marine, the Department of Arts, Heritage & the Gaeltacht, and the main stakeholders concerned will have a role in developing and implementing policy.
- 4. The Irish Deer Management Forum will be chaired by an independent chairperson appointed by the Departments concerned.
- Policy will be implemented on-the-ground and may be guided by the Irish Deer Management Forum and by local level Deer Management Groups, as required.
- Terms of reference for the Irish Deer Management Forum will be provided by the Departments concerned, having regard to conservation and management objectives.
- 7. Medium- to long-term actions in the agenda for action (see Section 4) will be reviewed and agreed by the Forum.
- 8. Project milestones for implementation will be agreed by the Forum.
- 9. Funding for the implementation measures may be applied for by appropriate stakeholder bodies from the Departments concerned and other suitable funding sources.
- 10. The Irish Deer Management Forum will issue an annual progress report to the Departments concerned.

- 11. The composition of the Deer Management Forum will be as set out in Appendix V.
- 12. The implementation plan will comprise a number of immediate actions to be implemented within the first year of the Forum convening. These actions will be followed by a number of medium-term actions (3 years).

#### Other immediate and short-term measures

- 13. Develop and implement action plans for known deer conflict hotspots, using the outline presented in Appendix III.
- 14. Establish procedures for implementing deer management measures and policy at local level.
- 15. Identify and prioritise national hotspot areas and the issues concerned.
- 16. Develop and support regional approaches to deer management at range level.
- 17. Any other measures that may be agreed by the Irish Deer Management Forum.
- 18. Where reasonable to do so, to capture, record and publish existing data streams relevant to deer management and conservation.
- 19. Identify data gaps where relevant, and modify data capture.
- 20. Agree a standard methodology for quantifying deer presence, densities and impacts.



# 6. MEDIUM-TERM ACTIONS (WITHIN 3 YEARS)

### Development of a long-term deer management strategy

1. To develop a long-term sustainable deer management strategy for Ireland, that can be agreed and implemented by all stakeholders.

#### Best practice and training

2. To make available best practice guidance in relation to all aspects of deer management and conservation.

#### Sale and supply of venison

4. To review existing systems and identify areas for improvement to ensure that venison products entering markets are safe, traceable and legally sourced, and that venison is promoted as a sustainable, premium Irish meat product.

#### Research and development

5. Identify applied research requirements based on 1-4 above.





#### Appendix I

#### An Introduction to Deer in Ireland

#### Deer species and associated challenges

There are currently four known species of deer existing in the wild in Ireland – Red, Sika, Fallow, Muntjac – in addition to unknown populations of Red x Sika hybrids. Rumours of recent introductions of other species (roe and Chinese Water deer) are as yet unconfirmed.

The distribution of all species of deer in Ireland has changed significantly in recent decades. A review of deer records was published in 2011 (see below). This review collated records up to 2008 from the Irish Deer Society, the National Parks & Wildlife Service, Coillte, the British Deer Society (in Northern Ireland), consultant ecologists and mammal surveyors, and compared results to previous distribution maps from 1978. Significant range expansions were reported for all species.

#### Red deer (Cervus elaphus)

Current distribution 206 x 10 km squares, up from 31 x 10 km squares in 1978. It is expected that Red deer will continue to expand their distribution and population size under current conditions. However, much of the recent increase in distribution can be attributed to assisted dispersal mostly from captive populations from deer farming enterprises.

Challenges: Protection of the Killarney Red deer population from the threat posed by hybridisation with Sika deer, in addition to threats posed by introduced Red deer of unknown genetic background. Management challenges include negative impacts on priority conservation habitats and species, a perceived threat to agricultural enterprises amongst local landowners, in addition to risks posed to road users in the localities where these deer exist.

#### Sika deer (Cervus nippon nippon)

Current distribution  $213 \times 10 \text{ km}$  squares, up from  $47 \times 10 \text{ km}$  squares in 1978. Sika are the most numerous deer species in the country, accounting for almost 50% of the total deer population. The natural capacity of Sika deer to expand and to adapt to habitat change is greatly exacerbated by land management practices that have combined to create a habitat matrix ideal for colonisation by

the species.

Challenges: Sika deer present a major challenge to sustainable land management. Given the adaptability of the species, it is expected that Sika deer will continue to expand its range and population size for the foreseeable future. To date, culling regimes aimed at reducing Sika deer population densities generally fall far short of requirements for this species. Management challenges include the negative impacts on conservation habitats and species, forestry and agriculture, in addition to the high reproductive capacity of the species and its ability to hybridise with Red deer.

#### Fallow deer (Dama dama)

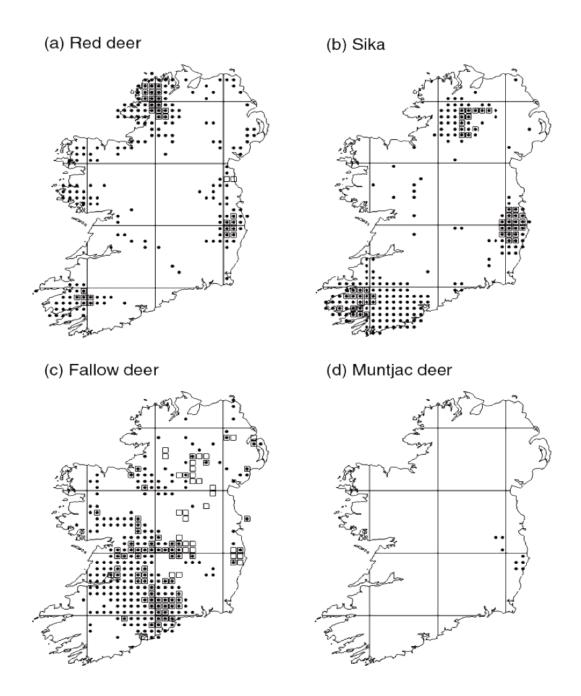
Current distribution 268 x 10 km squares, up from 98 x 10 km squares in 1978. Fallow deer are the most geographically widespread species in the country and account for about 41.1% of the total deer population.

**Challenges:** Under current conditions, Fallow deer are likely to continue to increase in distribution and population size, again due to the increased presence of suitable habitats. At medium to high density, Fallow deer populations are likely to have significant negative impacts on conservation habitats and species, forestry and agriculture.

#### Muntjac (Muntiacus reevesi)

A species recently introduced to Ireland, there have been many reported sightings of Muntjac in different parts of the country. However, the only confirmed records are from Counties Wicklow, Kildare, Cork, Armagh and Down. Due to the deer's secretive nature and small size, the extend of release throughout the country is unknown. Without sufficient surveillance resources, monitoring the spread, potential and real impacts of this species into the future will be problematical.

**Challenges:** Experience from other countries (especially the UK, with similar landscape and climatic conditions to Ireland) has shown that this species can rapidly increase its range and population size, due mainly to its high reproductive capacity and assisted dispersal. Its small size (equivalent to Labrador dog) and secretive nature makes direct detection of this species almost impossible. The current population size estimate is thought to be less than 100 individual animals,



**Figure 1** Distribution maps of (a) Red deer, (b) Sika deer, (c) Fallow deer and (d) Muntjac deer in 10 km squares in Ireland (Carden *et al.*, 2011).

Species	Number of squares occupied in 1978	Number of squares occupied in 2008	Compound annual rate of range expansion	Total increase in range 1978–2008
Red deer	31	206	6.5%	564.5%
Sika	47	213	5.2%	353.2%
Fallow deer	98	268	3.4%	173.5%

**Table 1** Deer distributions (10 km squares) in Ireland in 1978 and 2008, rates of range expansion over 30 years, and total increase in range by the end of the 30-year study period (Carden et al., 2011).

but this figure is likely to increase dramatically over the next 5 years. As highly selective, yet voracious, grazers, future management challenges may include negative impacts on conservation habitats and species, secondary impacts on priority conservation species, in addition to economic impacts on forestry and agriculture.

#### Recent introductions from abroad

There have been two well-known introductions of exotic deer species in the 19<sup>th</sup> century and other more recent introductions within the last two decades. Sika deer were introduced into Ireland by Lord Powerscourt in 1860, and a second introduction of this species was made by Lord Lansdowne in 1897.

Between 1987 and 1995, it is known that almost 7,000 specimens of Red deer were imported into Ireland for deer farming purposes, and a number of these animals were subsequently released or managed to escape into the wild, and now enjoy a widespread existence as feral populations.

It is thought that Muntjac deer was introduced illegally into Ireland by persons unknown sometime between 2000 and 2006. It is unknown if further introductions of this species have taken place or to what extent they have been deliberately released in various parts of the country. Illegal introductions of Roe deer (Capreolus capreolus) and Chinese Water deer (Hydropotes inermis) may have taken place in the last number of years, but this has never been confirmed.

Increased vigilance by relevant authorities in both jurisdictions will be required to ensure that no further illegal introductions of exotic deer species take place onto the island of Ireland, and that existing populations of farmed and captive deer are managed in a secure and accountable fashion.

The National Biodiversity Data Centre maintains the register of confirmed invasive species records in Ireland. See http://invasives.biodiversityireland.ie/

#### Deer distribution and estimated population

Data on deer distribution are derived from Carden, R.F., Carlin, C.M., Marnell, F., McElholm, D., Hetherington, P. & Gammell, M.P. (2011) Distribution and range expansion of deer in Ireland. *Mammal Review* 2011, 41(4):313–325.

Figures for estimated population size are based on

an estimated average annual off-take of between 8-10% of the total deer population (all species). The total numbers of deer shot are submitted at the end of each season by deer hunters on their Deer Hunting Licence returns. However, it is important to note that while the submission of licence returns is mandatory, the information provided on the total number of deer shot is at the discretion of the individual making the return. It is generally accepted that an unknown number of returns contain under-reporting or over-reporting. The accuracy of licence returns is therefore somewhat subjective but is currently the only data source available to the National Parks & Wildlife Service on deer culled within the Ireland. Nevertheless, Deer Hunting Licence returns have remained remarkably consistent over the last 15 years.

#### Appendix II

A Report on the 'Deer Management in Ireland' Consultation Process, 2013

Prepared by Judith A. Annett, Countryside Consultancy, for the Inter-Agency Deer Policy Group

#### The 'Deer Management in Ireland' Process

Prior to the process leading to this report, the Deer Management Policy Steering Group had prepared a draft policy and had circulated it for consultation to a wide range of stakeholders. The initial draft policy can be found at the following link:

http://www.agriculture.gov.ie/forestservice/forestservicegeneralinformation/draftpolicyvisionfordee rmanagementinireland/

Twenty-seven stakeholder responses to the first draft were received and can be viewed at:

http://www.agriculture.gov.ie/forestservice/forestservicegeneralinformation/draftpolicyvisionfordeermanagementinireland/submissionstodeermanagementpolicy/submissionsreceived/

A second draft policy was then prepared in 2012, taking into account stakeholder responses. It can be viewed at:

http://www.agriculture.gov.ie/media/migration/forestry/publicconsultation/draftDeerManagementPolicyVision140912.pdf

Following the second draft, 20 stakeholders responded. See:

http://www.agriculture.gov.ie/forestservice/publicconsultation/deermanagepolicyvision2nddraft/submissionsreceived2012/

#### Interview process

In September 2013, a process of putting in place an action framework to take forward the policy began. The process consisted of:

- the appointment and briefing of an independent facilitator (Judith Annett of Countryside Consultancy);
- a series of interviews with groups of stakeholders at which remaining issues were clarified; and
- a workshop involving all stakeholders, focussing on how the policy should be turned into action.

The interviews were held to clarify key issues and concerns sector by sector, before going into a future-focused workshop. These key issues and points of agreement for the five main sectors were as follows:

Farmers:	<ul> <li>Farmers are increasingly impacted by deer, and in more parts of the country than ever before.</li> <li>Deer grazing on fodder needed for other animals is a significant economic loss to farmers.</li> <li>Deer have caused damage to fences.</li> <li>Farmers are worried about deer transmitting disease to their livestock.</li> <li>Farmers are not satisfied with current deer management and control – uncoordinated and insufficient.</li> <li>Farmers feel there is a lack of responsibility for and ownership of deer, leading to management issues.</li> </ul>
Hunters and individuals:	<ul> <li>Lack of manpower and structure to control poaching – enforcement.</li> <li>Lack of respect by others for the knowledge and experience available within the hunting sector.</li> <li>Need for foresters and land managers to be trained in deer management (including design of forests).</li> <li>Lack of recognition of the potential for deer to provide new opportunities within the tourism and food sector.</li> </ul>

#### Continued...

Academics	<ul> <li>Multiple organisations have a role and responsibility for deer – no coordination or integration between landowners.</li> <li>No joint agreement on the numbers or density of deer.</li> <li>Law often broken and people get away with it.</li> <li>Direct impacts on agriculture and forestry – an economic problem.</li> <li>Indirect impacts on forest planting choices.</li> </ul>
	Deer are an environmental issue.
Foresters	<ul> <li>Deer have a major (and increasing) impact on new planting – particularly of broadleaves. They can completely ruin a long-term crop.</li> <li>Severe economic impact and an unpredictable risk.</li> <li>Not enough done on forest design to provide good attractive habitat for deer.</li> <li>Forest owners get blamed for the presence of deer in the surrounding countryside – but forest owners see deer as a collective problem.</li> </ul>
NGOs	<ul> <li>Focus on maintaining a sustainable native red deer population.</li> <li>Need to monitor and reduce the potential for hybridisation to take place.</li> <li>Need to control the most invasive species of deer.</li> <li>Need for confidence in the numbers/density – for the time being, consider the level of impact as a target (e.g. reduce impact on landowners, foresters and biodiversity) (e.g. deer density on farmland, new plantations, etc.)</li> <li>Lack of coordinated deer management.</li> <li>Problem with poaching (deer welfare, enforcement and long-term sustainability).</li> <li>Problems with road traffic accidents (human and deer welfare).</li> </ul>
Common issues and agreement	<ul> <li>Desire to reduce deer impacts on agriculture and forestry economy.</li> <li>Sense that impact is increasing, even if no agreement on density.</li> <li>More tolerance of red deer – issues largely lie with other species of deer.</li> <li>Agreement that Wicklow has the most acute issues. Some models of management are emerging (e.g. Ballinastoe), but Wicklow is not typical of the rest of the country.</li> <li>Agreement that as well as national policy, there needs to be a capacity for different priorities in regions of Ireland.</li> <li>There is a need for coordination and engagement between a significant number of stakeholders to achieve progress.</li> <li>Need for mutual respect in coming to decisions.</li> </ul>

#### **Workshop process**

The workshop began with a resume of the topics and issues covered in the previous week's interviews with similar groupings of stakeholders. The process then looked at the existing draft policy vision and explored consensus on the meanings of some of the important phrases within the vision. The contribution of the workshop to clarifying the vision consisted of the following comment:

Vision: To develop and maintain an integrated policy framework for sustainable wild deer management in Ireland that fully reflects the desired economic, environmental and social value across relevant land use sectors in the Irish countryside and complies with existing legislative and policy requirements<sup>1</sup>

#### Vision success factors: 2

- 1. Deer management measures must be integrated with existing policy and practice across the range of land use sectors concerned.
- 2. Any deer management policy must facilitate and support applied research where wild deer are concerned, as a basis for further policy development and review.
- 3. It is essential that existing legislative and policy provisions that relate to deer are reviewed and maintained.
- 4. Deer management policy must recognise that, in many contexts, deer are an important and valuable resource in their own right, to be managed for sustainable exploitation, or as an integral component of dynamic natural ecosystems.

#### Exploring the common meaning of the phrases and words in the draft vision

Part of the workshop focused on ensuring that participants attributed the same meaning to phrases used in the vision. The following clarifications were developed.

Vision word / phase	Meaning to those at the Deer Management Workshop
"Integrated policy framework"	<ul> <li>One Government department responsible for the legislative framework surrounding deer management.</li> <li>Single coordinating body with clear cut objectives and clear cut roles and responsibilities. Body should have authority/influence and resources to meet its objectives.</li> <li>Consensus and agreement on the way forward by all stakeholders.</li> <li>Agreed data on the scale and dimensions of the issue.</li> <li>Policy is integrated at national level and at deer range level.</li> <li>Coordination of organisations and actions at national and deer range levels.</li> <li>Respect for the deer as a component of the landscape.</li> <li>Method of accountability and review for coordinating body.</li> </ul>
"Sustainable deer management"	<ul> <li>Reduction in road traffic accidents caused by deer.</li> <li>Farmers able to save sufficient fodder for spring turnout to fields and protect early fodder crops.</li> <li>Tolerance of an agreed level of deer impact within a deer range – from a social, economic and environmental standpoint.</li> <li>Tolerable damage to new forest and woodland plantations.</li> <li>Level of deer impact is quantifiable and verifiable.</li> <li>Forest design is adapted to the needs of deer management.</li> <li>Foresters and land managers are trained in deer management.</li> <li>Respect of activity of deer management by all stakeholders.</li> </ul>

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<sup>&</sup>lt;sup>1</sup> Vision from the Inter-Agency Deer Policy Group Draft Discussion Document.

<sup>&</sup>lt;sup>2</sup> As above.

Desired economic, environmental and social value					
Positive economic	Negative economic (address issue)	Positive environmental	Negative environmental (address issue)	Positive social	Negative social (address issue)
Tourism activity	Damage to crops	Component of Ireland's biodiversity	Hybridisation	Hunting as a positive pastime and as a job	Poaching
Jobs in tourism	Road traffic accidents	Grazing presence	Grazing damage to some habitats	Education opportunity	Safety issue
Hospitality	Damage to property		Damage to other protected species	Healthy countryside activity	Road traffic accidents
Licences	Animal welfare (domestic and wild)		Invasive species (Muntjac)		
Sustainable recreational hunting	Poaching				
Sporting goods					
Venison					

Other comment under economic, environmental and social value:	Deer should be considered primarily as an environmental, social and resource, and not as a liability.  Desire for deer management within a 'deer fence free' environment.		
Relevant land uses to include:	<ul> <li>Forestry</li> <li>Agriculture (including sheep, dairy, beef, arable, tillage and horticulture)</li> <li>Residential</li> <li>Recreational</li> <li>Industrial</li> <li>National Park lands and Nature Reserves</li> <li>Natura 2000 sites</li> <li>Other lands managed for nature conservation and biodiversity</li> <li>Sporting estates and other lands with active shooting rights</li> </ul>		

#### The following proposals for objectives and actions emerged from the workshop:

**Theme 1:** To develop an effective and agreed policy, regulatory and administrative framework for deer management and improve consultation and partnership working between landowners, government departments, forestry interests and other stakeholders towards long term deer management measures.

Principles	Objectives	Actions	Key agencies
A strong organisational framework is required to permit accurate reporting of deer population densities, and to enable appropriate prioritisation and allocation of deer management resources to the areas where they are most needed.	Agree a national and regional structure for deer management.	Develop detailed proposals for an Irish Deer Management Forum (IDMF)	DAFM, DAHG
	Review the progress of the Irish Deer Management Forum	Review every 3 years Provide Annual Progress Report	DAFM, DAHG Consultative Forum
The management of wild deer must take place within appropriate management, regulatory and spatial structures that reflect deer ranging behaviour and habitat scales, and the dynamic nature of modern land use practice and land use objectives.	All stakeholders agree priorities at national and deer range level. All stakeholders taking responsibility for aspects of deer management. Improved communication and trust between deer management stakeholders.	Appoint and convene an Irish Deer Management Forum.  Agree an operational programme and the development of actions at deer range level.	DAFM, NPWS
	To undertake activity that promotes mutual respect amongst stakeholders and increases use of all stakeholders in solving problems and taking advantage of opportunities.	Forum visit to case study deer management site.	DAFM, IDMF

**Theme 2:** To protect life, land uses and economic interests from inadequate deer management.

Principles	Objectives	Actions	Key agencies
Wild deer should be managed in a manner that contributes positively to the national economy and minimises losses due to deer activity in relevant economic sectors.	To achieve sustainable deer management that allows the full utilisation of agricultural and forest resources.	Keep policy and legislation under review. (Including Wildlife Act, Forestry Act, Food Safety Regs., etc.)	DAHG, DAFM IDMF
The implementation of a sustainable deer management programme in Ireland requires the establishment of an appropriate policy, regulatory and administrative framework, capable of supporting and sustaining measures on a long term, consistent, basis and in keeping with best international practice and legislative requirements.	To develop immediate plans to address impact in known key hotspots for deer nuisance.	Develop immediate plans to relieve economic impact of deer where it is most acute.  Motivate or activate key sectors towards deer control, with a priority on areas of high damage to agriculture and forestry.	DAFM, DAHG IDMF
	To develop a coordinated approach between state agencies to solving deer management issues, e.g. NPWS, DAFM (re. disease, meat, forestry), National Roads Authority, Local Authorities, Teagasc, Gardai.	Local Authorities, Gardai and NRA to assist in producing a baseline database on road traffic accidents involving deer.	Road Safety Authority

**Theme 3:** To ensure sufficient information, research and monitoring to underpin effective deer management policy and practice.

Principles	Objectives	Actions	Key agencies
A strong organisational framework is required to permit accurate reporting of deer population densities, and enable appropriate prioritisation and allocation of deer management resources to the areas where they are most needed.	To capture, record and publish all existing data streams relevant to deer management.	To assemble data into integrated format, e.g. cull data, forest impact, agricultural impact, road traffic accidents related to deer, etc.  To publish annual or other statistics.	One body in the lead for data collation. Evidence from: - DAFM - NPWS - Hunting organisations - Teagasc - IFA / ICMSA / ICSA - Coillte - Private forestry interests - An Garda Síochána - Universities - National Biodiversity Data Centre
	Base decision- making on the data.	Ensure access and circulation of data to members of IDMF.	DAFM NPWS
	Identify key data gaps.	Commission research to fill gaps as required.	DAFM
	Decide on effective ways to measure deer impact on grazing for livestock.	Implement research and survey.	IFA Other farming organisations
	Quantify the economic cost (and lost opportunities) of damage by deer to agriculture and forestry (other stakeholders).	Commission research.	DAFM
	Research incidence of TB in deer.	Testing of culled animals and other carcases in high TB areas.	DAFM with local authorities

#### Continued...

Principles	Objectives	Actions	Key agencies
	Produce data on sustainable deer densities across a range of habitat and land-use types.	Commission research, e.g. COFORD project on protocol for impact assessment and management.	NPWS DAFM Universities
	Develop guidelines for carrying capacity under Irish habitat conditions specific to each deer species based on review of best practice.	Case and pilot studies by deer managers and farmers Biodiversity conservation data Development of guidance for decision-making at national and deer range level.	NDMU DAFM / NPWS Regional Deer Management Groups NGOs
	Decide on the most appropriate methodology for establishing deer numbers/density and distribution, and initiate research and reporting.	Survey design. Commission survey. Receive first survey report.	DAFM / NPWS National Biodiversity Data Centre

**Theme 4:** To promote economic opportunities based on deer management.

Principles	Objectives	Actions	Key agencies
Wild deer should be managed in a sustainable manner, that is safe, humane, and ethically responsible, and that maximises the benefits of deer management to society.	Enhance the structure and population dynamics of deer populations within sustainable limits.	Develop deer management action plans for selected regions.	NPWS / DAFM IDMF Regional Deer Management Groups
	Develop quality deer hunting opportunities in Ireland.	Identify and promote quality deer hunting opportunities.	Commercial deer hunters, with tourism trade
	Develop a safe food chain for Irish venison.	Encourage Bord Bia to promote venison as a healthy, price accessible meat. Explore the Introduction of a tagging system for deer carcasses.	Bord Bia IDMF NPWS / DAFM Revenue Commissioners
	Develop a national or regional venison branding initiative.	Identify opportunities for an Ireland or regional venison brand. Develop the brand. Support export of a sustainable product.	Bord Bia IDMF Fáilte Ireland
	Develop an ecotourism (photography and observation) visitor product for Ireland. (Red) deer as an iconic species.	Identify and promote quality deer safari and photo opportunities.	Tourism trade Commercial photographers
	Achieve cultural acceptance for deer management.	Provide accurate and unbiased information about deer management issues.	IDMF
	Consider other economic spin-offs from deer.	Commissioned report on opportunities	IDMF

**Theme 5:** To maintain and enhance the contribution of Ireland's native red deer herd to biodiversity and reduce the impact of non-native species on Ireland biodiversity.

Principles	Objectives	Actions	Key agencies
Wild deer should be managed in a way that conserves native wild deer, maximises the benefits of their grazing activity to biodiversity; and prevents damage to Natura sites.	Active conservation and management of upland and lowland deer habitat.	Provide guidance on maintaining good deer habitat.	NPWS / DAFM IDMF
	Provide appropriate forest design to facilitate deer management.	Guidelines on forest design for deer management. Training in forest design for deer management.	Forest Service COFORD
		Monitoring of deer grazing in all Natura 2000 sites.	NPWS
	Collaborate with Invasive Species Ireland on measures to control invasive species.	Develop and implement agreed policies on controlling and monitoring invasive deer species.	NPWS Coillte Landowners Other state agencies and Departments, e.g. Bord na Móna, Department of Defence
	Management to protect native Red Deer and reduce/remove hybridisation risk.	Ensure continued conservation of native Red Deer in Kerry. Killarney National Park maintained as a refuge for source population. Look at other alternatives to translocate native Red Deer, e.g. offshore islands.	NPWS
	To prevent introduction of non-native deer (increase deterrents).	Keep under review arrangements to prevent further deer species introductions.	IDMF

**Theme 6:** To develop the skills and capacity to deliver effective deer management.

Principles	Objectives	Actions	Key agencies
Recreational deer hunting should make a positive contribution to desired deer management objectives, and take place within a structured, best practice environment, having due regard for public safety, animal welfare, legal obligations, and the management objectives of lands where hunting takes place.	To advise on and provide deer management training / accreditation for land managers.	Provide training opportunities for land managers. Provide or adapt a suite of training materials for land managers, including farmers and foresters. Provide a specific deer management training course for foresters to include forest design for deer management. To expand relevant competency programmes for hunters and deer managers, to provide appropriate training in deer management. To provide a consultation response to guide the Minister for Arts, Heritage and Gaeltacht on competency and regulation under the Wildlife Act.	DAHG / DAFM Forest Service Coillte Other training providers IDMF

**Theme 7:** To learn from benchmarking and best practice examples of deer management.

Principles	Objectives	Actions	Key agencies
Wild deer in Ireland will be managed in accordance with accepted international principles and standards of Sustainable Deer Management.	To develop a knowledge base and source of information for deer management.	Website and other materials on deer management.	DAHG IDMF
Wild deer will be managed in a sustainable manner, that is safe, humane and ethically responsible, maximising the benefits of deer management to society.  Recreational deer hunting should make a positive contribution to desired deer management objectives, and take place within a structured, best practice environment, having due regard for public safety, animal welfare, legal obligations, and the management objectives of lands where hunting takes place.	Develop educational policy / strategy for sectors, including an 'in-one-place' account of legislation.	Review best practice and provide case studies and recommendations. Preparation of agreed materials to be distributed through sectoral links, once deer density and deer impact data are available.	All sector groups

#### Priorities and early wins

The following key actions were agreed amongst stakeholders at the workshop as being priority actions for implementing an Irish Deer Management Policy. These would become the action plan for any Forum convened.

Priorities and early wins	Details	Key agencies	By when?
Early establishment of a permanent Irish Deer Management Forum (IDMF).	The IDMF should be representative of all key stakeholders and be a forum for advice and developing consensus between stakeholders.  The body may require an independent chair / facilitator in the early stages.  The forum should be independent. It should operate under its own brand with a single cohesive message. The secretariat should be provided by Government.	DAFM / DAHG	Early 2015
Review the progress of the Irish Deer Management Forum.	Provide Annual Progress Report. Review every 3 years.	DAFM IDMF	Report early 2016 Review 2018
To develop immediate plans to address impact in known key deer hotspots.	Develop immediate plans to relieve the economic impact of deer where it is most acute.  Motivate or activate key sectors towards deer control, with a priority on areas of high damage to crops, plantations and fodder.	DAFM / DAHG and IDMF	First action of IDMF, 2015
To capture, record and publish all existing data streams relevant to deer management.	To assemble data into integrated format, e.g. cull data, forest impact, farm impact, road traffic accidents related to deer, etc.  To publish annual or other statistics.	One body in the lead for data collation. Evidence from DAFM NPWS Hunting orgs Teagasc IFA / ICMSA / ICSA Coillte Private forestry interests An Garda Síochána Universities National Biodiversity Data Centre	Autumn 2015

#### Continued...

Priorities and early wins	Details	Key agencies	By when?
Decide on an appropriate methodology for establishing deer numbers and distribution and initiate research and reporting.	Survey design. Commission survey. Receive first survey report.	DAFM / DAHG Biodiversity Data Centre	First baseline estimate of numbers published 2017
To develop and support regional approaches to deer management at deer range level.	The IDMF develops proposals where regional approaches should be developed, and recommends structures and practice.	DAFM / DAHG IDMF	Up to four regional groups underway by mid-2016
Define scale of the illegal hunting problem.	Collate data on the scale of the illegal hunting problem with cooperation from all sectors.  Develop recommended actions.	IDMF Game dealers All sectors DAFM NPWS Coillte An Garda Síochána	End 2015
To influence greater control over the sale of venison, to ensure that poached game cannot reach the marketplace.	Explore the introduction of a deer tagging scheme to enhance traceability of venison, to protect the food chain, and to promote sustainable game from Ireland,	Bord Bia with IDMF	Early 2016
Develop educational policy / strategy for sectors, including 'inone-place' account of legislation.	Review best practice and provide case studies and recommendations.  Preparation of agreed materials to be distributed through sectoral links, once deer density and deer impact data are available.	All sector groups	2016
To undertake activity that promotes mutual respect amongst stakeholders and increases use of all stakeholders in solving problems and taking advantage of opportunities.	Forum visit to case study deer management site.	IDMF DAFM	2015

Priorities and early wins	Details	Key agencies	By when?
To develop agreement on acceptable levels of impact from deer with farmers, foresters and DAHG managers.	Joint paper between IFA, Coillte, DAHG and private foresters quantifying and providing examples of damage. Proposal for acceptable limit to the forum.	Facilitated by IFA with support from Teagasc	2015
To advise on and provide deer management training / accreditation for land managers.	<ol> <li>Provide training opportunities for land managers.</li> <li>Provide and / or adapt a suite of training materials for land managers, including farmers and foresters.</li> <li>Provide a specific deer management training course for foresters, to include forest design for deer management.</li> <li>To expand relevant competency programmes for hunters and deer managers, to provide appropriate training in deer management.</li> <li>To provide a consultation response to guide the Minister for Arts, Heritage and Gaeltacht on competency and regulation under the Wildlife Act.</li> </ol>	NPWS DAFM Forest Service Coillte Other training providers IDMF	First programme commences 2015
To develop a knowledge base and source of information for deer management.	Website and other materials on deer management	IDMF	2016
To motivate and energise all sectors towards fulfilling their roles in effective deer management.	Develop plans to motivate crucial sectors (e.g. licensed hunters) through national and regional means.	IDMF	2015 - 2018
Develop research objectives and quantify the negative impacts of deer (baseline) and the benefits of deer (baseline).	This is an immediate action in advance of quantifying deer densities.	DAFM / DAHG IDMF	First baseline provided 2016

#### Other issues

Issues that were flagged up at the workshop but not discussed in detail or agreed amongst all parties:

- ➤ A desire to have a single Government Department managing all policy and legislation for deer management a clear steer from a Department coupled with the engagement of multi-stakeholder involvement at local level.
- Seeking an agreed tolerable level of impact by deer.
- Weighting the involvement of stakeholders with suggestions that those impacted most should have the greatest say and influence.
- A desire that farmers should stay in control of all activities on their own lands.

These issues need to be addressed and resolved within a new consultative forum, once it is up and running and once trust has been established between stakeholders.

#### **Structures**

A recommendation was made and agreed at the workshop for an integrated structure for deer management to be set up immediately to deliver on the deer vision, policy and objectives in Ireland. The Irish Deer Management Forum referred to above is a working title for this group. The roles and actions of each of the stakeholders and their commitments to an agreed operational programme to deliver the vision should be the subject of a Memorandum of Understanding or some other form of agreement forged through the Forum. The Forum would need a formal relationship with Regional Deer Management Groups.

The Irish Deer Management Forum will require terms of reference, decisions on relevant membership, and an agreed operational programme for 2015 - 2018. The workshop recommended the appointment of an independent chair for the Forum.

The Forum will drive the framework for developing regional groups and will provide a template for Regional Deer Management Group action planning.

# Appendix III Deer Hotspot Areas

#### What is a 'deer hotspot'?

Deer hotspots can be defined as localised focal points for significant, sustained activity by deer populations, where significant economic losses, or adverse impacts on land management objectives and related conflicts, are regularly experienced.

#### Where are hotspots located?

Using initial data collected from key stakeholders during July 2012, provisional hotspot areas have been identified in the following Counties: Clare, Donegal, Galway, Kerry, Waterford, Wicklow, Limerick, Roscommon and Tipperary. Further work is required in refining these areas, including consultation with local stakeholders and spatial analysis of combined datasets. Provisional hotspot locations are presented in Figure 2.

# Development of pilot Deer Management Groups in hotspot areas

Existing pilot studies in Co. Wicklow strongly indicate that collaborative approaches between landowners and land management interests, in conjunction with licensed hunting interests, offer the most effective approach to implementing sustainable deer management. Based on the outcomes of these studies to date, the following recommendations should be applied:

 Concurrent to data analysis above, a template for the development of Deer Management Groups (DMGs) nationally will be developed, based on the experience of the Wicklow Deer Management Group and Ballinastoe Project, and other suitable international practice models. Pilot DMG areas will be used to define and test population management data capture and data handling requirements and to determine the optimum geographic area for operational DMGs on-the-ground. These are both critical elements in the development of long-term deer management programmes at larger scales. An outline of the Wicklow Deer Management Group and its operation is presented in Appendix VI.

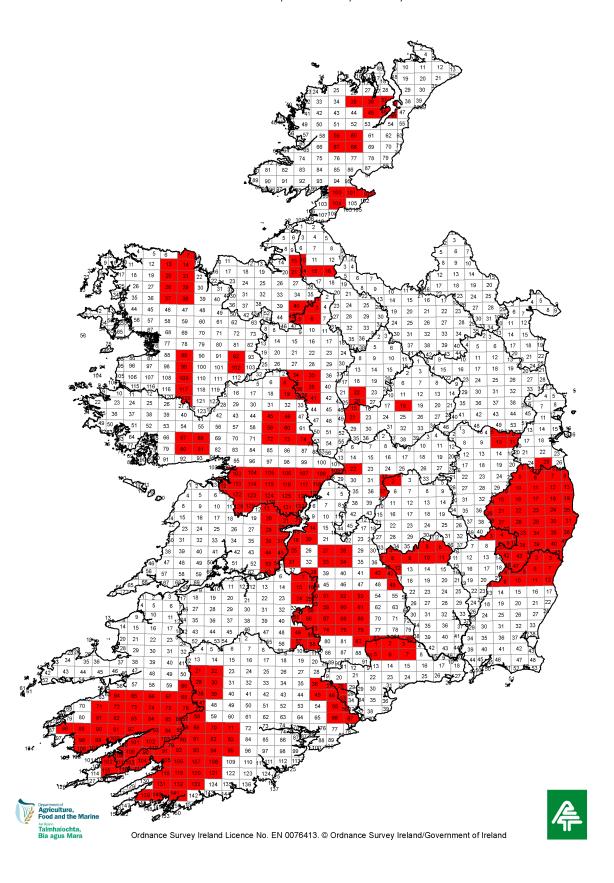
- □ Suitably competent local level coordinators, drawn from land management professionals, will be appointed and trained to support DMG development in selected hotspots. Key elements of this role will be the development of standardised local DMG structures and defined operating areas. It will include the implementation of standardised measures in relation to data collection and sharing, the establishment of baseline data and objective damage levels. Coordinators will assist in determining appropriate cull levels and developing collaborative action plans between landowners and key stakeholders.
- ☐ Training for DMG coordinators will be overseen by the Department of Agriculture, Food & the Marine and the Department of Arts, Heritage & the Gaeltacht.
- General awareness programmes aimed at landowners and managers, using webbased platforms, literature, social media and television, will be undertaken. Awareness and scoping meetings with rural development organisations in pilot deer management unit areas in relation to future funding requirements, will also be undertaken.

# Determination of deer population levels and appropriate cull levels

Estimates of deer population density for pilot DMG areas will be determined using faecal pellet counting and accumulation techniques. This indirect assessment method provides a solid basis for determining population levels, and is applicable under a wide variety of weather, terrain and land use conditions. Faecal pellet counts will be augmented by observational counts conducted by landowners and hunting interests within DMG areas, and Coillte population assessments, where available.

Deer Management Plans will be developed using the deer management planning template produced by the Inter-Agency Deer Policy Group.

**Figure 2** Provisional deer hotspots in Ireland, based on OSi 6 Inch Map Sheets by County.



#### **Appendix IV**

#### Stakeholder Identification

#### Stakeholder group

As part of a public consultation exercise carried out in October – November 2011, groups and individuals concerned with deer management issues were invited to present submissions to the Department of Agriculture, Food & the Marine for consideration prior to the commencement of policy development.

In addition, expressions of interest were invited from groups or individuals who wished to be considered for further participation in the development of deer management policy, in conjunction with the Departments concerned.

Following from this, a list of stakeholders have been identified:

Irish Farmers Association

Irish Creamery Milk Suppliers Association

Teagasc

Mr. John O'Reilly

Ms. Saskia De Jong

Mr. Joseph Morrissey

Birdwatch Ireland

Irish Wildlife Trust

Irish Deer Society

Wild Deer Association of Ireland

National Association of Regional Game Councils

Wicklow Deer Group

Countryside Alliance Ireland

Irish Timber Growers Association

Society of Irish Foresters

Irish Environmental Network

Mr. Dermot Houlihan

Mr. Paul Cullen

Mr. Declan O'Neill

Association of Game Shoot Operators

Irish Forestry & Forest Products Association

Woodlands of Ireland

Mr. Al Butler

Coillte Teoranta

Deer Alliance

Mr. Brendan Lacey

Woodland Contractors Ltd

Wicklow Deer Society

Mr. Donal Whelan

Wicklow Deer Management Group

Roundwood IFA

Manor Kilbride IFA

Mr. John Fenton

Association of Irish Forestry Consultants

Sporting Rights Owners Association Ireland

Mr. Jim Walsh

Capt. Neil Forde

Dr. David O Brien

Dr. Tom Hayden

Mr. Denis Bergin

Mr. Daragh Little

Mr. Paul Carbery

Ms. Geraldine O'Sullivan

University College Dublin

Dr. Paddy Sleeman

Mr. Jim Walsh

Food Safety Authority of Ireland

# Appendix V Composition of the Irish Deer Management Forum

It is recommended that the Irish Deer Management Forum (IDMF) should comprise of a total 18 members and an independently appointed chairperson from outside the stakeholder groupings.

The IDMF should be drawn from the stakeholder grouping that made comments or indicated an expression of interest during the public consultation process on a national deer management policy.

The IDMF would also comprise of number of representatives from the Department of Agriculture,

Food & the Marine (DAFM) and the Department of Arts, Heritage & the Gaeltacht (DAHG). The IDMF, along with DAFM and DAHG, would be responsible for the implementation of the Framework for Action outlined in this document, and subsequent actions arising from it.

Through its chairperson, the IDMF would report directly to the Minister of Agriculture, Food & the Marine and the Minister of Arts, Heritage & the Gaeltacht.

The recommended IDMF composition is outlined below.

Stakeholder Group	Number of seats	Allocation of seats
Regulatory / Legislation	6	DAFM  1 - Food safety (FSAI, etc.)  1 - Animal health (DVO/Wildlife Unit)  1 - Forest Service  DAHG  1 - Research  1 - Regional management/ Operations  1- Species regulation
Agriculture / Forestry	5	Forestry 1 - Coillte 1 - From private forestry NGOs Agriculture 3 - From farming organisations
Hunting / Conservation	4	Conservation 1 - From conservation NGOs Hunting 2 - From hunting NGOs 1 - Professional/ commercial interests
Deer Management Groups	1	From existing DMGs
Research	1	Research interests
Training / Education	1	From existing training providers, e.g. Teagasc, HCAP, NARGC

**Table 2** Recommended composition of the Irish Deer Management Forum.

#### **Appendix VI**

# Case Study: Wicklow Deer Management Group

The Wicklow Deer Management Group is a partnership group aimed at devising and implementing collaborative strategies for the management and control of deer species in Co. Wicklow.

Conflicts between deer and land management interests have been acute in Co. Wicklow for many years, and the collaborative approach of this group is aimed at enabling consensus between relevant stakeholders on the implementation of appropriate responses.

The Wicklow Deer Management Group was formed over 16 years ago. Members of the group are representatives of the following organisations:

Irish Deer Society
Irish Farmers Association
Irish Timber Growers Association
Coillte Teoranta

■ National Parks & Wildlife Service

■ Wicklow Deer Society

Since its formation, the group has provided an essential forum for key stakeholders to discuss deer management issues, to improve understanding and respect between the different interest groups, and to agree common direction for the sustainable management of deer in Co. Wicklow.

To date, the Wicklow Deer Management Group operates a single study area, with professional inputs from forest managers, land management advisory services, the National Parks & Wildlife Service and Coillte. Initial pilot study works were funded by the Heritage Council.

A professional coordinator assists the group in drawing up and overseeing the implementation of Deer Management Plans in specific areas of interest. The coordinator also facilitates meetings of the group and its stakeholders, and collates and manages data collected on behalf of the group, in the form of counts, harvest and other observations. This data is then analysed and an agreed management strategy is formulated by the group.

Similar deer management group structures have been in use across the UK for almost a decade, and provide a useful forum for stakeholders to accurately define local deer management problems, in addition to permitting the sharing of data, expertise and physical resources for long-term deer population monitoring and control.

At its simplest, a Deer Management Group can:

- act as a forum, both for sharing experience, skills, best practice and training
- inform on, and address, local and national deer issues, such as changes to legislation or rural crime issues.

In most cases, the deer range extends across multiple land ownerships. Where there is a consensus to manage deer with some degree of collaboration, a Deer Management Group can also:

- support the achievement of common management objectives
- promote compromise in the management of a shared resource
- enable the cooperative use of common or shared facilities or marketing strategies.



