

Vision Statement of THE DEER INITIATIVE

Introduction

All species of deer, except Chinese water deer are increasing in numbers and expanding their ranges in England and Wales. Fallow, roe and muntjac deer are now widespread, while red and sika are locally abundant.^{1,2,3,4} It is now believed that deer of at least one species are present in nearly every 10 kilometre square of Great Britain.⁵ This has been encouraged by changes in land use, particularly the expansion of forestry that has increased suitable habitat for foraging and shelter. The Government remains committed to increasing forestry and woodlands in England and Wales with the aim of producing 15% land cover in the next 50 years. This represents a doubling of the present cover and means that a further million hectares of new woodland will have to be planted. Much of this will be broad leaf and many of the new woods will be planted in close proximity to urban and suburban areas. The geographic range of deer species has been increasing by between 1-5% annually for the last 40 years.⁶ Researchers believe that there is currently no reason why the trend in increasing deer numbers and range expansion should not continue.⁷

However, virtually all British Woodlands have evolved in the presence of deer and deer play an important role in creating a diverse environment, which favours many plants and animals. Deer also impact on the tree crop, agricultural and horticultural crops adjacent to the woodland and also in suburban and even urban areas, and may visit and damage gardens. The growth in the number of deer, in conjunction with the growth in road traffic means that there are an increasing number of road traffic accidents involving deer.

It is estimated that there may be around 40,000 deer-related road traffic accidents a year (raising obvious welfare concerns from both the human and animal perspective)⁸.

Yet despite these issues people wish to see deer in the wild. In many areas where deer are considered by ecologists and foresters to be a pest the general public do not believe that they pose a threat to woodlands. The increasing demand for public access and rising deer numbers will inevitably raise the need for sensitive management.

¹ TROUT R.C., PUTMAN R.J., MOORE N., & HART J, (1994) *A Review of Lowland Deer*, Report VC 0308 to Countryside Division LUCC, MAFF, London.

² PUTMAN R.J. (1995) *Status and Impact of Deer in the Lowlands and Options for Management*. Technical Report to MAFF Contract VC 0316.

³ ALBON S. et al (1998) Desk and Limited Field Studies to analyse the major factor influencing regional deer population and ranging behaviour. Technical Report to MAFF Contract VC 0314.

⁴ HARRIS S., MORRIS P., WRAY S. & YALDEN D.W. (1995) *A Review of British Mammals: Population estimates and conservation status of British mammals other than cetaceans*. Joint Nature Conservation Committee, Peterborough; 168pp.

⁵ MAYLE B.A., & STAINES B.W., (1997) *An Overview of Methods Used for Estimating the Size of Deer Populations in Great Britain*, from Population Ecology, Management and Welfare of Deer, Proceedings of a symposium held in Manchester, April 1997, Manchester Metropolitan University.

⁶ GILL R.M.A., (2001) The deer explosion. *Tree News*, Autumn 2001 p22-25.

⁷ FULLER R & GILL R, (2001), Ecological impacts of increasing numbers of deer in British woodland. *Forestry* 74, p193-200.

⁸ RSPCA Science Review 2000, RSPCA, Horsham.

Two of the six species are native to Great Britain (red and roe deer) and their conservation may also be an issue. A policy has already been implemented in Scotland to reduce the possibility of hybridisation between red and sika deer and to preserve the native genome in the Outer Isles⁹. Muntjac are in places competing with roe deer and early indications are that the roe may be losing habitat as a result of this competition. This inter-specific interaction may result in a need for a more sophisticated approach to managing the national deer herd.

Why the Deer Initiative?

The Deer Initiative was set up to bring together all those organisations and bodies with a stake in both the outcome and the issues surrounding deer management. It is a partnership with no statutory authority and working within the various legislative instruments already enacted.

What is our aim?

The aim of the Deer Initiative (DI) is “to ensure the delivery of a sustainable, well managed wild deer population in England and Wales”.

How will we know when we have achieved the aim?

We will have achieved our aim when there is recognisable deer management covering all areas of England and Wales in which wild deer are present. In many areas it will be necessary and appropriate for Deer Management Groups (DMGs) to coordinate this effort. These groups will need to understand and be able to demonstrate the nature of the dynamics of their deer population and what constitutes a sustainable balance at the local landscape level.

Where culling is necessary local deer managers will be applying best practice to the task both of culling and preparing the resulting venison for human consumption.

This will require deer managers who are demonstrably competent, or are directly supervised by those with the requisite competence. A nationally recognised range of standards has already been developed for practitioners and training is available to achieve the required standard.

Best practice will be supported by a research base that is comprehensive over the whole spectrum of deer, their effect on the environment, economy and human interests, and the means of managing them. This in its turn will be underpinned by high standards of humanity and animal welfare.

Finally we must operate in a government, land and deer manager and public arena that understands both the benefits and potential problems that wild deer bring, and understands and accepts the necessity for their management.

How do we reach this state?

The starting point must be a realistic appreciation of the number and range of the six deer species. More importantly perhaps we must be able to demonstrate the likely future trend using scientific methodology to persuade the general public of the need for active management. Counting deer is notoriously difficult, however methods are now being developed that will give us

⁹ Deer Commission for Scotland (2000), *A Policy for Sika Deer in Scotland*, DCS, Knowsley Road, Inverness.

increasing confidence in the size of populations at both the local and landscape level¹⁰. We must continue to refine these methods to allow both the DI and DMGs to justify our management objectives at both the local and national level.

Although the phenomenon is a national one, the impacts are local or regional, in that deer do not spread evenly. A better knowledge of deer population size will allow us to estimate the rate and nature of expansion and, most particularly, models of what constitutes “balance” and “sustainable” in the new local and regional environments. Much of this judgement will depend on views of the nature of the impacts discussed below.

What are the environmental impacts?

Following the ‘Earth Summit’ in Rio de Janeiro, the UK government committed to the sustainable management of forests to provide a wide range of benefits to society. This commitment was detailed in the publications *Sustainable Forestry, The UK-Programme*¹¹; *Sustainable Development, the UK-Strategy*¹² and *Biodiversity, the UK Action Plan*¹³. On a European scale, the Helsinki Resolutions¹⁴ and the Natura 2000¹⁵ programme each make commitments to the sustainable management of forests. A major component of these initiatives is the conservation of biodiversity. There is overwhelming evidence that deer play a significant part in modifying our environment, even though some changes cannot be solely connected to deer.

Deer are an important part of woodland ecosystems and at reasonable densities can prevent dominant plants from out-competing less vigorous ones. Examples of species that benefit from grazing include a number of the pine wood specialists, such as wood ants *Formica rufa* and crested tits *Parus cristatus* and grazed oakwood specialists such as redstart *Phoenicurus phoenicurus*, wood warbler *Phylloscopus sibilatrix* pied flycatcher *Ficedula hypoleuca* and tree pipit *Anthus trivialis*.¹⁶

Moderate grazing and browsing therefore seems to allow the maintenance of diversity, while high or low population extremes modify the environment to an extent that dependant flora and fauna are severely affected also. An absence of deer allows the more vigorous species to dominate, while high deer populations in particular tend to suppress and in some cases remove completely, selected layers of vegetation and particular plant species. Deer densities higher than 10 deer per 100 hectares can reduce botanical diversity.

¹⁰ MAYLE, B.A., PEACE, A.J., & GILL R.M.A. (1999) *How Many Deer? A Field Guide to Estimating Deer Population Size*, Field Book 18, Forestry Commission, Edinburgh.

¹¹ Government Report (1994) *Sustainable Forestry: the UK Programme*. HMSO, London.

¹² Government Report (1994) *Sustainable development: the UK Strategy*. HMSO, London.

¹³ Government Report (1994) *Biodiversity: the UK Action Plan*, HMSO, London.

¹⁴ LOISEKOSKI M., MAHONEN M., PURANEN R & RIZK N. (1993) *Ministerial Conference on the Protection of Forests in Europe, 16-17 June 1993 in Helsinki*. Ministry of Agriculture and Forestry, Helsinki.

¹⁵ Department of the Environment (1995) *The Habitats Directive: how it will apply in Great Britain*. DoE London.

¹⁶ SMART N. & ANDREWS J. (1985) *Birds and Broadleaves Handbook*. RSPB.

In upland situations very high densities can drive a change from heather moorland to grassland and densities higher than 4-8 deer per 100 hectares can prevent the growth of trees.¹⁷

In some lowland woodland areas where deer are present in particularly high numbers they can cause serious damage to ground flora^{18,19,20}. This has a consequent effect on at least some birds, invertebrates, rodents and other small mammals as examples, as well as the flora itself.

One of the many questions we need to answer, however, is the extent to which their impact has a linear relationship to the density of deer. Current evidence suggests that the impact is not linear, but we do not know the true nature of the relationship, save that so called “moderate” densities are preferable.

As it stands, then, we know that deer have an impact on biodiversity, although the nature of the relationship is imprecise. More knowledge, and perhaps more importantly, more direct action based on current knowledge will assist in delivering the UK Biodiversity Action Plan.

What are the economic impacts?

The most obvious direct economic impacts are on forestry, agriculture and horticulture. Not surprisingly deer eat and fray young tree stock, and eat and lie in agricultural and the more valuable horticultural crops to a greater or lesser extent depending on deer species.

There are, however, other economic factors at work. Deer can generate an economic benefit from sporting and associated industry considerations. There are also the more marginal benefits of venison and other by-products, while there are other industries that are adversely impacted, some of which are mentioned below.

It would seem that here too there are balances to be struck, whereby the presence of deer is valued at known cost.

What are the human impacts?

It is in consideration of the human impacts that the picture becomes even more imprecise. The increase in range and numbers of deer in the most highly populated portion of these islands is causing humans to come into increasing conflict with them. Widely publicised examples of deer encroaching into urban gardens and even city centres, highlights our undeveloped ability to extract them firmly and sensitively. The increasing number of deer related traffic accidents, with much consequent deer and human suffering and death, are cause for considerable concern. The

¹⁷ RATCLIFF P.R. (1997), *Woodland Deer Management; integrating the control of their impact with multiple objective forest management in Scotland*; from Population Ecology, Management and Welfare of Deer, Proceedings of a symposium held in Manchester, April 1997, Manchester Metropolitan University.

¹⁸ RACKHAM O (1975) *Hayley Wood; its History and Ecology*. Cambridge and Isle of Ely Naturalists' Trust.

¹⁹ COOLE A.S. (1994a) *Is the muntjac a pest in Monks Wood National Nature Reserve?* Deer, 9: 43-245.

²⁰ COOLE A.S. (1994b) *Colonisation by muntjac deer Muntiacus reevesi and their impact on vegetation in Monks Wood National Nature Reserve, the experience of 40 years 1953-93*. (Massey, M.S. & Welch R.C. eds), pp 45-61. English Nature, Peterborough.

impact is on the individual, family and community, and on related industries such as medical, veterinary, repair and insurance.

Yet again, however, there is a positive impact in that most people like to see deer; they have an aesthetic value.

Finally there is the question of welfare itself. Deer are our largest wild land mammals, sensible and beautiful, adaptable and swift in life, demanding the highest standards of treatment when in need of control.

The requirement is, once more, for balance but through a more robust knowledge of the impact, and actions designed to minimise it, from prevention of occurrence through to alleviation of the consequences in the most humane way.

What is our approach?

The extraordinarily wide nature of the impact of the presence of deer in England and Wales, and the number of organisations with varied interests, suggests that there is no single organisation that is capable of tackling all the issues alone. We believe that a partnership or combined approach such as that adopted by the DI should continue, but will only succeed, however, if all the partners agree to share their actions as part of the whole, and if there is sufficient end product: that is practical deer management.

Our vision points to a desired state some time in the future. It provides a rationale for the wide range of interests of our partners, demonstrating why government and its agencies, animal welfare organisations, conservation bodies, land management, law enforcement and sporting interests among others, should all be represented. We believe that at present there will be no requirement for any statutory powers for the DI and that the use of current or emerging legislation, coupled with the ear of government for sensible legislative change, is the best way forward.

How do we achieve the aim?

The first action is to identify and prioritise those areas of England which have a significant deer presence but which have no deer management of any kind in place. Once the areas have been identified and if action is necessary, we will encourage a collaborative approach. We recognise that it will be necessary, at some stage, also to assess the quality of the deer management in those areas under current known management for improvement potential. In addition, we will seek ways of providing an increased number of competent deer managers and stalkers.

There are many other concurrent activities required. They include continued analysis of the whole research field to identify gaps and duplications and to target priorities for the future, and the fostering of a better stakeholder understanding of what is being done in the name of the DI.

These matters are outlined in the DI's Strategic Plan, looking three to five years ahead, and detailed in a rolling Business Plan that provides the more immediate summary of actions, giving current priorities and the financial and corporate regime to support them. In addition the Deer Accord states the behavioural standards to which the DI partners agree to aspire, providing a moral statement of intent.

Conclusion

It would be tempting to conclude from the above that we do not know enough to act now in an informed way, but this would neither be true nor a sensible reaction. Environmental research must continue to refine our understanding of cause and effect, and to develop predictive

techniques that will allow for better-targeted approaches. Economic and human impact research will determine just how big are these impacts and allow us to use robust measures to monitor change over time, and the effectiveness of, and need for our remedial actions.

Further refining our measures, however, will not alter the fact that we know **now** that some deer populations are beyond sustainable numbers and we must reduce them or accept that some of our most valuable sites will be beyond reclamation.

There are, clearly, areas of England and Wales where the impacts are recognised and action is well established or under way to create or maintain some form of balance. The inevitable conclusion, however, is that there are many places where there is either no effective deer management in place, or what is there is inadequate in some way. The requirement, therefore, is to identify where action needs to be taken and promote it. This leads to an expression of approach that guides the DI in its priorities and work.

The DI has entered a significant new stage in its journey. The staff led partnership approach seems right, but in order to succeed, sufficient resources must be gained and the work must focus on priority actions that will make a difference. It is argued that the DI must concentrate on practical deer management and the supply chain of the end product of this process into the human food chain, while other supporting activities are pursued, not necessarily less vigorously, but with a lesser priority should it be necessary to make choices. Current plans will continue to be evaluated against this discussion.

This will ensure that the aim is demonstrably within reach. In turn it will provide the confidence to stakeholders that it is an aim worth pursuing.