

Management of Deer on National Trust Land

September 2000

Introduction

The Trust manages between 4000 and 5000 (see footnote in Section 2) deer in 12 parks in England and Wales and 1 in Northern Ireland.

Management of deer is also an important aspect of the Trust's work in the countryside. Deer are an accepted and often welcome part of UK biodiversity but mature deer have no natural predators. As a result populations can increase and cause damage to wild plant communities and crops. Numbers of most deer species are increasing and two species, Roe and Muntjac, are extending their range.

Adjustment to agricultural and forestry programmes can help to minimise any damage caused by the deer but as part of this management programme deer usually have to be killed.

This paper sets out a framework of policy and principles for managers and those responsible for public information and education. It is presented under the following section headings:

- Guidelines on the Management of Wild Deer;
- Guidelines on the Management of Park Deer;
- Minimum Standards for Stalkers and Conditions of Employment;
- Health and Safety and Hygiene Requirements in the Culling of Deer and the Capture of Live Deer.

There are some other key publications which all managers should have readily available. These are highlighted in the Selected Bibliography which is provided at page 17.

Information about close seasons and permitted firearms is provided at page 16.

Guidelines on the Management of Wild Deer

Introduction:

These guidelines have been prepared with the purpose of:

- *establishing the need* for management of wild deer on Trust land;
- *defining the Trust's policy* and identifying appropriate management objectives;
- *promoting high standards* in all aspects of deer management.

British Deer Species:

Red Deer (*Cervus elaphus*). Native, widespread in Scotland, scattered throughout England with concentrations in Devon, Somerset, Cumbria and Norfolk. Absent from Wales.

Sika (*Cervus nippon*). 19th century introduction; large numbers locally in southern England, also present in north-west England and Scotland. Capable of interbreeding with Red Deer.

Roe Deer (*Capreolus capreolus*). Native, large numbers concentrated in southern England and north from Yorkshire and Cumbria into Scotland, also East Anglia. Absent from Ireland.

Fallow Deer (*Dama dama*). Early introduction, present throughout most of England, concentrated in the south and east. Also found in parts of Wales and Northern Ireland.

Muntjac (*Muntiacus reevesi*). 19th century introduction, population centred on and concentrated in south east and central England, but spreading west to Devon and north to Derbyshire. Still uncommon in Wales and absent from Ireland.

Chinese Water Deer (*Hydropotes inermis*). 20th century introduction. Rare and largely confined to the Cambridgeshire fens and Norfolk Broads.

The Need for Management:

In Britain and Ireland the large carnivores which contributed to regulating population levels of deer have been persecuted to extinction. Changes in land use, particularly the creation of new forested areas, have provided extensive and often favourable habitat for deer. So, without management, the size of deer populations is limited largely by the availability of food.

In extreme conditions, deer will die of malnutrition or associated diseases. More typically there is a reduction in reproductive rate and an increase in pre and post-natal mortality.

These responses, in themselves, are insufficient to prevent population growth. Increasing numbers and the spread of deer to new areas can result in environmental or commercial damage. The perception that damage is occurring prompts management, usually involving culling.

Many deer are killed on the roads. Measures to reduce the incidence of road traffic accidents caused by deer may also be necessary in some places.

Objectives of Management:

On National Trust properties deer are generally a welcome and acceptable component of the fauna. The Trust's objectives in managing wild deer are:

- ***To protect valued wild plant communities.*** The protection of many such communities depends on maintaining specific levels of grazing and browsing.
- ***To contain damage to commercial crops (farming and forestry) and to ornamental produce.*** Excessive damage does occur and must be contained. The Trust is aware of its obligations towards tenants and neighbours.
- ***To reduce the incidence of road traffic accidents involving deer.*** It is not always possible to take effective action, but at particular black spots some measures are realistic.

Health is generally not a management issue in relation to wild deer in England, Wales and Northern Ireland.

In achieving its objectives the Trust will aim:

- *To carry out all operations in a safe and humane manner.* Any culling is to be carried out with full regard at all times for the safety of visitors and staff; the welfare of livestock and other animals, and the clean despatch of deer to be culled. (Model Risk Assessment WRK - 004)
- *To co-operate with neighbours in the preparation of management programmes.* Herd deer such as Red, Fallow, and Sika, habitually move over large areas and effective management is only possible in this way.

The Trust does not

- Maintain populations of deer to maximise their revenue potential in any way.
- Sanction the capture and sale of wild deer.
- Permit commercial stalking on its land.
- Permit the hunting of deer with dogs on its land. (Though a trained dog may be used to track an injured deer so that it can be humanely killed)

Management Principles:

Damage caused by deer

The usual reason for managing wild deer is to contain their impact on wild plant communities and crops to acceptable levels. It is the impact rather than an estimate of population size, which normally determines any necessary management. Population size is difficult and costly to estimate reliably and, without reference to the impact of the deer on their environment, provides no indication of appropriate management.

The impact of deer on their environment varies according to the species, the habitat, competition for food and the season. Some aspects of this can be considered damaging. It is essential to evaluate the true cause, significance and extent of reported damage before planning a management programme.

Management

An assessment of the impact of deer on their environment may indicate the need for management.

Management options fall broadly into four categories:

1. habitat management;
2. protection of vulnerable areas or plants by use of fencing or guards;
3. use of reflectors or other deterrents to reduce road casualties;
4. culling.

A combination of these usually provides the most effective strategy. The resulting strategy for the management of deer will be fully integrated with all related aspects of management and incorporated into the property management plan.

In order to reduce the occurrence of road accidents a combination of vegetation management and reflectors will usually be necessary.

Culling

In cases where culling is necessary the assessment of the cull target will involve consideration of:

- the extent of damage directly attributable to deer;
- a current estimate of changes within deer population in terms of numbers and gender.

Where the control of deer population is undertaken, a designated member of staff, *the deer manager*, should monitor the progress of the cull programme and ensure that correct procedures are followed by all stalkers at all times.

Responsibility for the implementation of any cull programme will rest with stalkers. Minimum standards of competence must be demonstrated (see Section 3, *Minimum Standards for*

Stalkers and Conditions of Employment). Stalkers must be party to the Trust's standard Deer Management Licence and Firearms Licence.

Continuous monitoring and assessment of the programme is necessary. The effectiveness of deer management can only be gauged by monitoring the levels of crop damage and vegetation changes over a period of years.

Records must be kept on all major aspects of the programme:

- Damage level reports need to be retained for several years if any trends are to be identified necessitating adjustment to the programme.
- If culling is necessary, then, prior to the start of the season the deer manager with the help of the stalkers, should prepare a cull plan containing information supporting the proposed cull target, a shooting plan and details of any constraints or special requirements.
- A detailed cull record should be maintained by each stalker. Information on age, sex, and carcass weight should be recorded. Any suspected symptoms of Bovine TB must be reported to the Divisional Veterinary Manager at the local Animal Health Office of MAFF in England and Wales or DANI in Northern Ireland.
- At the end of the season a cull report should be prepared, normally by the stalker, for the deer manager. This, in conjunction with the cull plan for that period, will assist in formulating a programme of management for the season(s) ahead.

Liaison

The mobility of herd deer means that in most cases their management will encompass a wide geographical area. In order for such management to be effective, a considerable degree of co-operation is required from all landowners in the area. The most satisfactory form that this co-operation takes is the creation of a Deer Management Group. These will be further promoted under the auspices of English and Welsh Deer Initiatives from whom advice and literature on the subject can be obtained. The Trust is a founder member of the English Deer Initiative.

In England, Wales and Northern Ireland, we will actively promote the establishment of a management group where herd deer are present and no such organisation currently exists.

Deer and the Law

Apart from the normal responsibilities that the Trust has as an employer and as an owner of land to which the public has access, there are a number of legal requirements relating specifically to the management of deer. The most relevant legislation is listed in the bibliography on page 17. A more comprehensive account is provided in "Deer: Law and Liabilities" 2000.

Detailed guidelines on 'The Use of Firearms on National Trust Property' were prepared in 1991 and have been circulated. The Firearms guideline or any future amendment is the definitive statement of the Trust's management of firearm use on its lands. A copy must be held with the deer guidelines.

Dispatching a Wounded Animal

Stalkers are often called upon to deal with injured animals. The humane dispatch of deer and other animals injured in road accidents is fraught with legal difficulty. If a police officer is present at the scene of an accident it is important to work under his or her direction. Official guidance on "Road Traffic Accidents and the Humane Dispatch of Deer" is being prepared.

Trained tracker dogs may be used to search for a wounded animal in open country should a shot not kill cleanly.

Poaching

The poaching of deer can be a major problem. In instances where poachers are apprehended on Trust property with sufficient evidence available for a successful prosecution, it is important that the Trust support the prosecution.

Deer stalkers or managers who suspect that deer are being taken illegally should make a note of the time and location of any incident, take the details of any vehicle and a description of any people seen acting suspiciously. They should immediately contact the police. **Trust staff or stalkers should not attempt to apprehend a suspected poacher.**

Deer and the Public

There is public concern about the killing of deer. It is vital that the Trust is open in presenting its case for essential management.

These Guidelines are available on the Trust's national Conservation and Environment Website

Every opportunity should be taken, with due sensitivity, to demonstrate the importance of deer management (of which culling is only one aspect). Deer management enables the effective conservation of the features and natural processes that are valued in the countryside, helps to protect agricultural crops and contributes to a reduction in road traffic accidents caused by deer.

The possibility that people may be at risk from contracting Lyme disease on certain properties has been reviewed. Advice to the public and warning notices will be used, initially, only in areas where ticks are known to occur. (See also Section 4: *Health and Safety and Hygiene Requirements in the Culling of Deer and the Capture of Live Deer*).

Guidelines on the Management of Park Deer

Introduction:

These guidelines have been prepared with the purpose of:

- *establishing the need* for management of deer in Trust deer parks;
- *defining the Trust's policy* and identifying appropriate management objectives;
- *promoting high standards* in all aspects of management at all staff levels.

Deer in Parks:

Between 1991 and 1996 the number of deer in Trust owned parks in the spring, ie post cull but before fawn/calf drop, varied between 4135 and 4406. In 1996, there were totals of 3096 fallow, 1065 red and 56 sika deer. The figures were similar for the other years and there were no obvious changes in the ratios of the different species.

Densities (in spring, post - cull and before calf/fawn drop) varied widely from an average of 0.9/ha at Belton to 6.9/ha at Calke Abbey. The mean density in 1996, which is typical of densities over the previous five years, was 2.9/ha (all species) and 2.6 /ha (fallow). In a sample of 97 deer parks selected to give the full range of densities, for fallow deer the range was from 0.1/ha to 29.7/ha with a mean of 3.6/ha (Goldspink 1989). This sample included some National Trust deer parks and does not, therefore, represent an independent comparison. Nevertheless it is clear that densities on Trust properties are close to, but lower than, the national average.

Red Deer (*Cervus elaphus*) in: Calke, Charlecote, Lyme, Studley Royal, Tatton

Sika (*Cervus nippon*) in: Studley Royal.

Fallow Deer (*Dama dama*), in: Attingham, Belton, Calke, Charlecote, Crom, Dinefwr, Dunham Massey, Dyrham, Lyme, Petworth, Studley Royal, Tatton

The Need for Management:

Deer parks are often ancient pasture-woodlands and designed landscapes of great ecological and historical importance. They are also an important resource for public recreation.

The primary concern in deer parks is to maintain the herd in a healthy condition as an integral feature of an historic landscape. The deer will contribute to the grazing necessary to sustain the plants and animals associated with ancient pasture-woodland. Deer numbers in parks should be determined by ecological and historical criteria, and not by revenue considerations.

Parks are enclosed areas. Without management involving both culling and winter feeding, numbers would rapidly exceed the carrying capacity of the park.

Objectives of Management:

The Trust's objectives in managing park deer are:

- **To maintain populations of deer in a healthy condition;** The relatively high stocking levels make it imperative to monitor and maintain healthy stock.
- **to maintain desired wild plant communities;** the protection of such communities depends on specific levels of grazing.
- **to maintain the historic landscape;** deer have been managed in parks, in some cases, for several hundred years.

In achieving these objectives the Trust will aim:

- to conduct all operations in a safe and humane manner; any culling is to be carried out with full regard at all times for the safety of visitors and staff; the welfare of livestock and other animals and the swift and clean despatch of culled deer;

The Trust does not:

- maintain populations of deer in order to maximise their revenue potential in any way;
- permit trophy stalking on its land;
- permit the hunting of deer with dogs on its land.

Management Principles:

Management and monitoring

Park deer are maintained at stocking levels far higher than could be sustained in the wild. Culling is therefore essential both to the well-being of the park and the herd.

Improvement of pasture within parks by fertiliser or herbicide application is not compatible with the conservation of the flora and fauna. It may be incompatible with providing a sward appropriate to the historic designed landscape. There is no justification for 'improving' the sward in order to sustain higher deer numbers. A reduction in stocking levels would be preferable if summer grazing is inadequate.

Supplementary feeding in winter is essential to maintain the health of the deer. Micronutrients essential to health and lacking in the vegetation should be provided as part of this regime.

Shelter and protection from human disturbance, especially when the young are dropped, is highly desirable.

There is rarely any justification for the introduction of new blood. Fallow deer, in particular, have such a low level of genetic diversity in the UK that a significant improvement of the herd in this way is improbable.

Live sales

Deer in Trust parks are not managed commercially. However, income from the sale of cull animals is welcome. Selling live animals is possible and at first sight seems humane and financially attractive. This involves nets, handling pens or drugs. Their use is not without hazard to deer, deer managers and, under some circumstance, the public. Live capture using muscle relaxing drugs is especially hazardous. This is dealt with in Section 4, *Health and Safety and Hygiene Requirements in the Culling of Deer and the Capture of Live Deer* (see page 13). Any capture and transport of live deer requires a licence from English Nature, Countryside Council for Wales, or the DOE (NI). It is essential to evaluate the apparent benefit of live sales most carefully.

Culling

Responsibility for the implementation of any cull programme will rest with those persons (or 'rifles') appointed by the deer manager. The agreed annual culling programme must be implemented even if the live-sale or venison markets are poor.

Minimum standards of competence must be demonstrated, (see Section 3, *Minimum Standards for Stalkers and Conditions of Employment*). 'Rifles' must be party to the Trust's Standard Licence to Use Section 1 Firearms on National Trust Land and Permit to Shoot on National Trust Land.

Responsibility for the hygienic handling of carcasses and an awareness of factors which render carcasses unsuitable for human consumption also lies with the 'rifle.' These matters are dealt with in "The Culling and Processing of Wild Deer" and "Wild Game - Guidance on recommended Standards for Wild Game".

The manager of the park should control the culling operations and ensure that correct procedures are followed by all 'rifles' at all times.

Records must be kept on all major aspects of the cull programme:

- Prior to the start of the culling season, the deer manager should prepare a cull plan which must include the estimated deer population, the cull target, a shooting plan and details of any constraints or special requirements.
- A detailed cull record should be maintained. Information on sex, age, carcass weight, carcass details, should be recorded. Any suspected symptoms of Bovine TB must be reported to the Divisional Veterinary Manager at the local Animal Health Office of MAFF in England and Wales or DANI in Northern Ireland.

- At the end of the season a cull report should be prepared for the deer manager. This, in conjunction with an estimate of the breeding success of the herd will assist in formulating a programme of management for the season(s) ahead.

Deer and the law

Apart from the normal responsibilities that the Trust has as an employer and as an owner of land to which the public has access, there are a number of legal requirements relating specifically to the management of deer. The most relevant legislation is listed in the bibliography on page 17. A more comprehensive account is provided in "Deer: Law and Liabilities" 2000.

Detailed guidelines on 'The Use of Firearms on National Trust Property' were prepared in 1991 and have been circulated. The firearms guidelines (including future amendments) are the definitive statement of the Trust's management of firearm use on its lands. A copy must be held with the deer guidelines.

Poaching

The poaching of deer can be a major problem. In instances where poachers are apprehended on Trust property with sufficient evidence available for a successful prosecution, it is important that the Trust support the prosecution.

Deer stalkers or managers who suspect that deer are being taken illegally should make a note of the time and location of any incident, take the details of any vehicle and a description of any people seen acting suspiciously. They should immediately contact the police. **No Trust employee or any stalker working for the Trust should attempt to apprehend a suspected poacher on their own.**

Deer and the Public

There is public concern about the killing of deer. It is important that the Trust is open in presenting its case for management of which culling is only one aspect. Every opportunity should be taken to demonstrate the importance of deer management in the conservation of the features and special attributes of parks.

These guidelines are available on the Trust's national Conservation and Environment website.

Another important medium for informing visitors is the leaflet or guide book. Although there is no need, and rarely space, for any detailed presentation of the case, a reference to the fact that deer are managed, with an indication of the numbers culled each year can give visitors an insight into management practice and pre-empt criticism. Guided walks and the inclusion of references to deer management in educational material also have the potential for increasing knowledge and understanding.

Lyme disease is not currently a problem in any National Trust deer park. Carcasses in all parks are free from ticks which can carry the disease. If this situation changes warning signs will be used and advice made available to the public.

Minimum Standards for Stalkers and Conditions of Employment

The Trust demands the highest standards of all its stalkers. All stalkers must be able to demonstrate a minimum standard of achievement before being permitted to stalk on Trust property. In addition to the skills of deer knowledge and marksmanship, current and proposed legislation concerning carcass handling and inspection require that stalkers are also proficient in these areas.

Licence:

All stalkers (not members of staff carrying out their normal work) must be subject to the standard National Trust Deer Licence. All stalkers including staff must be subject to the Trust's Licence to Use Firearms on National Trust Land and the Permit to Shoot on National Trust Land.

Insurance:

All stalkers on Trust land (not members of staff carrying out their normal work), must be in possession of a public liability insurance indemnity currently to a minimum value of £5 million that will be reviewed annually. Permanent, part-time and seasonal staff and volunteers are covered by the Trust's own policy.

Qualifications:

There are currently many competent and responsible stalkers both on the Trust staff and outside, who have no recognised qualification. So long as there is no reason to doubt their competence, they will be permitted to continue while being encouraged to gain an appropriate qualification or attend relevant training events. The Trust's manager must be satisfied that the stalker is competent to operate alone.

The Trust will ensure that all unqualified stalkers and 'rifles' receive training in carcass handling and meat inspection.

No new stalker should be recruited without a formal qualification. New stalkers will be expected to hold at least one of the following:

- Deer management Qualifications (DMQ) Stalking Certificate at Level 1
- the British Deer Society's National Stalker's Competence Certificate;
- the British Deer Society Woodland Stalkers Certificate;
- the St Hubert's Club Stalker Certificate;
- equivalent training certificates from the Forestry Commission, Sparsholt College or the Game Conservancy.

The Trust will increasingly expect its stalkers to have obtained the Deer Management Qualifications (DMQ) Stalking Certificate at level 2 or the *Cull Deer* module of the Gamekeeping Vocational Qualification.

References:

References are essential when recruiting stalkers. Ideally a reference should be obtained from another stalker currently known to the manager and in whom he has complete confidence. Alternatively they may be obtained from a landowner on whose property the applicant has stalked or continues to stalk.

Training New Stalkers:

In many circumstances qualified and experienced stalkers should be encouraged to train novice or apprentice stalkers. This will be with the express written permission of the Regional Director and could prove very useful in developing future stalkers with an intimate knowledge of the property and the particular deer management objectives of the Trust. Such apprenticeships should be of two years, or more, duration.

- The Manager should also carefully assess the risk to the target species, especially fallow deer which typically experience a severe reaction to the drug often leading to death.
- Only persons with an official **authorisation** by the Home Office may administer the drug by hypodermic dart. A region may wish to maintain a list of such persons for future use. A strict protocol must be followed in compliance with the drug manufacturer's instructions and contemporary veterinary practice. All discharged darts must be recovered. A full report must be submitted to the Director of Estates.
- No carcass of a previously drugged animal may be sold for human (or any) consumption within four weeks of the use of such drugs.

Food Hygiene and Environmental Protection:

Carcasses of cull animals will normally be sold for human consumption. Venison comes under the provisions of the Food Safety Act (1990), Food Safety (General Food Hygiene) Regulations 1995 and Wild Game Meat (Hygiene and Inspection) Regulations 1995. Under the terms of these Acts it is an offence to render food injurious to health or to sell or offer for sale food that is unfit for human consumption.

The regulations specify that all wild game is accompanied to the processing facility by the thoracic viscera (or 'pluck'), the liver and the spleen for inspection. This will be the responsibility of all stalkers and deer managers. As a means of meeting statutory requirements the Trust endorses and will comply with the recommendations contained in *The Culling and Processing of Wild Deer*, by John Adams and Norman Dannat (Arun District Council 1989). A copy, together with any subsequent amendment, should be retained with this guidance. Training in support of the procedures is provided by the Trust for all its stalkers.

Compliance with above will ensure that the Trust meets the standards of the Food Safety Act (1990) and that its stalkers are competent to comply with the Tuberculosis (Deer) Order (1989). This stipulates that the Divisional Veterinary Officer (MAFF) is immediately notified if the presence of TB is suspected in a carcass. It is also good practice to notify the local Environmental Health Department.

Collection centres (or larders) for the initial processing of carcasses are now provided at each deer park where venison is produced. Elsewhere it may be possible to share facilities with other managers, such as the Forestry Commission.

The Code of Good Agricultural Practice for the Protection of Water (1991) published by MAFF contains recommendations for the disposal of waste material (carcasses, gralloch etc) by burying. The Trust will comply fully with this. Alternatively arrangements may be made with the local Waste Disposal Service for use of infill sites.

Safety of Staff Engaged in Culling and Processing:

The COSHH regulations apply to micro-organisms hazardous to health. Formal assessments are complete for the most important hazards associated with deer: Bovine TB and Lyme

Disease. Information on the health hazards of Lyme Disease is set out in the Trust's Health and Safety Memorandum 5/92.

It is the manager's responsibility to evaluate the risks to staff in the operations associated with culling and processing to ensure that these are minimised and to demonstrate due diligence in this process. In particular the following points should be addressed:

- In the larder lifting equipment is necessary to avoid the physical stresses on individuals of handling carcasses.
- In the larder it is highly desirable to have someone in attendance who is trained to provide first aid following a knife wound.
- In the larder the person using a knife should have chain mail protection for the hand not holding the knife; also protection for the forearm (usually in the form of a plastic guard).
- Where processing carcasses involves operations akin to 'de-boning' - where the knife is drawn through all or part of the carcass, with the point of the knife pulled towards the body of the operator - a metal apron must be worn.

Useful Information

Close Season:

Statutory Close Seasons in England, Wales and Northern Ireland	
Sika Deer	
Stags	1 May to 31 July
Hinds	1 March to 31 October
Sika Deer	
Stags	1 May to 31 July
Hinds	1 March to 31 October
Fallow Deer	
Bucks	1 May to 31 July
Does	1 March to 31 October
Roe Deer	
Bucks	1 November to 31 March
Does	1 March to 31 October

Recommended Close Season in England and Wales	
Muntjac	
Males	1 May to 31 July
Females	None
Chinese Water Deer	
Males and Females	1 March to 31 October

Permitted Firearms:

Firearms permitted for killing deer in England, Wales and Northern Ireland		
	England and Wales	Northern Ireland
Rifles	Calibre not less than .240 in or muzzle energy not less than 1700ft/lb	Calibre not less than .236 in or muzzle energy not less than 1700ft/lb
Rifle ammunition	Bullet must be soft nosed or hollow nosed	Bullet of not less than 6.48 g (100 grains) Expanding bullets designed to deform in a predictable manner
Shotgun	Not less than 12-bore (may only be used by occupier to prevent provable serious damage)	As England and Wales
Shotgun ammunition	Rifle slug of not less than 22.68 g (350 grains) or AAA shot	As England and Wales
Prohibitions	Any air gun, air rifle or air pistol	Any air gun, air rifle or air pistol or gas propelled weapon; any pistol,

		revolver or handgun other than slaughtering instrument
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Selected Bibliography

J C Adams & N Dannatt; *The Culling and Processing of Wild Deer*, Arun District Council /Forestry Commission, 1989

BASC/BDS, *Deer Stalking-A Code of Practice*, BASC/BDS, 2000

P Bateson: *The Behavioural and Physiological Effects of Culling Red Deer*, A report to the National Trust, 1997

A Cadman; *Dawn Dusk and Deer*, Country Life, 1966.

A J de Nahlik; *Wild Deer*, Faber, 1959. Deer Management, David & Charles, 1974.

C Greenwood; *Firearms Control*, Routledge & Kegan Paul, 1972.

C Parkes and J Thornley: *Deer: Law and Liabilities*, Swanhill Press, 2000

R Prior; *Trees and Deer*, Batsford, 1983.

R Prior; *Living with Deer*, White Lion, 1976.

R Prior; *Deer Management in Small Woodlands*, The Game Conservancy (in association with the BDS), 1987.

R J Putman; *Natural History of Deer*, Helm, 1989.

G K Whitehead; *Practical Deer-Stalking*, Constable, 1986

National Trust Guidelines: "The Use of Firearms on National Trust Property" 1991.

Local authorities coordinating body on food and trading standards; "Wild Game, Guidance on recommended standards for wild game". 1997.

B D S Management, Conservation and Interpretation of Park Deer. Ed. M.B Brown and C.R. Goldspink. A symposium held at Manchester Polytechnic April 1988. BDS/Manchester Polytechnic.

The Management, Welfare and Conservation of Park Deer - Symposium held at Leicester Polytechnic. Ed. D.J. Bullock and C.R. Goldspink, Published by UFAW (University Federation of Animal Welfare) ISBN No. 900767790 (1992)

The Biology of Deer - Proceedings of the International Symposium on the Biology of Deer - Mississippi June 1990. Ed. R.D. Brown. Published by Springer Verlag.

National Trust Report: 'The Conservation and Management of Red Deer in the West Country' March 1993.

Forestry Commission Leaflet 74. High Seats for Deer Management. 1979, HMSO.

Forestry Commission Leaflet 82 Assessment of Wildlife Damage in Forests. R C Melville, L A Tee, K Rennolls 1983, HMSO.

Forestry Commission Record 124 The Fallow Deer. N G and D I Chapman, 1982, HMSO.

Forestry Commission Bulletin 71 The Management of Red Deer in Upland Forests. Phil Ratcliffe, 1987, HMSO.

Forestry Commission Bulletin 102 Forest Fencing. Harry Pepper, 1992, HMSO.

Forestry Commission Bulletin 105 Roe Deer Biology Management, HMSO.

Forestry Commission Handbook 7 Tree Shelters. Mark Potter, 1991, HMSO.

Forestry Commission Research Information Note 206.HMSO.

Electric Fencing Against Deer H W Pepper, A H Chadwick, R Butt, 1992, HMSO.

Statutory Instruments:

Deer, Game, Wildlife and Animal Health:

1. Game Act 1831
2. Game Licences Act 1860
3. Game Preservation Act (NI) 1928 (as amended)
4. Agriculture Act 1947
5. Miscellaneous transferred Excise Duties Act (NI) 1972
6. Wildlife and Countryside Act 1981
7. Wildlife (NI) Order 1985
8. **Deer Act 1991. Replaces Deer Act 1963, Roe Deer (close seasons) Act 1977, Deer Act 1980, Deer Act 1987.**
9. The Tuberculosis (Deer) Order 1989

Firearms:

1. Firearms Act 1968
2. Firearms (Amendment) Act 1988
3. Firearms (NI) Order 1981

Food Safety:

1. Food Safety Act 1990
2. Food Safety (General Food Hygiene) Regulations 1995
3. Wild Game Meat (Hygiene and Inspection) Regulations 1995

Health and Safety at Work:

1. Health & Safety at Work Act 1974
2. Management of Health & Safety at Work Regulations 1992
3. Control of Substances Hazardous to Health Regulations 1988

All staff involved with deer management should have access to copies of the items in bold text.