

Appendices

Socio-Economic Assessment Report

Joint Agency Draft Strategy for Wild Deer in Scotland

November 2007

Technical Appendix A
Testing Compatibility of Vision 'Outcomes'
Management Strategy for Wild Deer

Socio - Economic Objectives							
Key: Supportive of Socio-Economic objectives: ✓ Potential conflict with Socio-Economic objectives identified: ✗ No identified conflicts with Socio-Economic objectives: 0 Uncertain whether will conflict with Socio-Economic objectives: ?		To contribute to competitive and enterprising rural businesses and the availability of skills, training and employment in rural areas	To contribute to sustaining vibrant rural communities	To contribute to a strong and just society	To improve awareness and understanding of natural resource management	To protect and enhance human health	
		Vision 'Outcomes'	High Quality Environment	valuing populations of wild deer as a part of Scotland's natural heritage	✗	✓	0
	High Quality Environment	minimising any adverse impacts of wild deer on nature and natural systems	✗	✗	0	0	0
	Sustainable Economic Development	careful use of deer as a resource, contributing to successful rural businesses and communities	✓	✓	✓	0	0
	Sustainable Economic Development	developing the skills, knowledge and employment opportunities of those involved in deer management	✓	✓	0	✓	0
	Sustainable Economic Development	minimising any adverse impacts of wild deer on other land uses	✓	0	0	0	0
	Contribute to Social Wellbeing	safeguarding public health and reducing safety risks associated with wild deer	✗	0	0	0	✓
	Contribute to Social Wellbeing	facilitating the observation and understanding of wild deer by the public;	✗	✓	0	✓	✗
	Contribute to Social Wellbeing	promoting the enjoyment of wild venison as a high quality food product	✓	0	0	0	✓
	Vision Objectives Overall Compatibility		x/✓ Supportive and potential conflict in equal measure between vision objectives and contributing to rural businesses and employment	✓/0 Supportive and no potential for conflict in equal measure between vision objectives and contributing to rural businesses and employment with one potential negative impact from minimising any adverse impacts of wild deer on nature and natural systems	0 Primarily no potential for impact of vision objectives on contributing to rural communities with one supportive impact in the careful use of deer as a resource	✓/0 Supportive and no identified impacts between vision objectives and raising awareness of natural resource management	0 Primarily no potential for conflict identified between the vision objectives and human health. Reducing safety risks and promoting wild venison is supportive.

Testing Compatibility of Environmental Objectives
Management Strategy for Wild Deer Socio Economic Assessment

		Socio Economic Objectives					
		To contribute to competitive and enterprising rural businesses and the availability of skills, training and employment in rural areas	To contribute to sustaining vibrant rural communities	To contribute to a strong and just society	To improve awareness and understanding of natural resource management	To protect and enhance human health	
Key: Supportive of Socio Economic objectives: ✓ Potential conflicts with Socio Economic objectives identified: X No identified conflicts with Socio Economic objectives: 0 Uncertain whether will conflict with Socio Economic objectives: ?							
Vision Objectives	High Quality Environment	6.1 a) Safeguard the welfare of all species of wild deer.	X	0	0	0	0
		6.1 b) Minimise further spread of non-native deer species in Scotland.	0	0	0	0	0
		6.1 c) Secure the favourable condition of features in designated sites.	X	X	0	0	0
		6.1 d) Conserve and enhance biodiversity in the wider countryside.	X	X	0	0	0
		6.1 e) Maintain the integrity of natural processes.	X	X	0	0	0
		6.1 f) Help tackle and adapt to the effects of climate change.	X	X	0	0	0
		6.1 g) Conserve and enhance the cultural and historic environment.	X	X	0	0	0
	Environmental Objectives Overall Compatibility		X Environmental objectives potentially conflict with contributing to rural businesses	X Environmental objectives potentially conflict with contributing to rural communities	0 Environmental objectives have no identified conflicts with contributing to a just and strong society	0 Environmental objectives have no identified conflicts with raising awareness of natural resource management	0 Environmental objectives have no identified conflicts with protecting and enhancing human health

Testing Compatibility of Sustainable Economic Development Objectives
Management Strategy for Wild Deer Socio Economic Assessment

		Socio Economic Objectives					
Key: Supportive of Socio Economic objectives: ✓ Potential conflicts with Socio Economic objectives identified: ✗ No identified conflicts with Socio Economic objectives: 0 Uncertain whether will conflict with Socio Economic objectives: ?		To contribute to competitive and enterprising rural businesses and the availability of skills, training and employment in rural areas	To contribute to sustaining vibrant rural communities	To contribute to a strong and just society	To improve awareness and understanding of natural resource management	To protect and enhance human health	
Vision Objectives	Sustainable Economic development	6.2 a) Increase the economic opportunities associated with wild deer.	✓	✓	0	0	0
		6.2 b) Minimise economic costs attributable to wild deer.	✓	✓	0	0	0
		6.2 c) Develop the market and supply chain for venison.	✓	0	0	0	✓
		6.2 d) Contribute to the social and economic development of communities.	✓	✓	0	0	0
		6.2 e) Ensure the skills and knowledge required to manage deer as an integral part of natural resources.	✓	✓	0	✓	0
	Sustainable Economic Development Objectives Overall Compatibility		✓ Sustainable Economic development objectives are supportive of contributing to rural businesses and employment	✓ Sustainable Economic development objectives are supportive of contributing to rural communities	0 Sustainable Economic development objectives are not in conflict with contributing to a strong and just society	0 Sustainable Economic development objectives are not in conflict with raising awareness of natural resource management	0 Sustainable Economic development objectives are not in conflict with protecting and enhancing human health

**Testing Compatibility of Social Well-being Objectives
Management Strategy for Wild Deer Socio Economic Assessment**

		Socio Economic Objectives					
		To contribute to competitive and enterprising rural businesses and the availability of skills, training and employment in rural areas	To contribute to sustaining vibrant rural communities	To contribute to a strong and just society	To improve awareness and understanding of natural resource management	To protect and enhance human health	
Key: Supportive of Socio Economic objectives: ✓ Potential conflicts with Socio Economic objectives identified: ✗ No identified conflicts with Socio Economic objectives: 0 Uncertain whether will conflict with Socio Economic objectives: ?							
Vision Objectives	Social Well-being	6.3 a) Increase participation in management and enjoyment of the wild deer resource.	✗	✓	✓	0	✗
		6.3 b) Contribute to a safe and healthy environment for people.	0	0	✓	0	✓
		6.3 c) Manage the impacts of wild deer in and around communities.	0	✓	0	0	0
		6.3 d) Promote opportunities for outdoor recreation.	✗	✓	0	0	✓
		6.3 e) Promote venison as a healthy food.	✓	0	0	0	✓
		Social Well-being Objectives Overall Compatibility		✗/✓ Some social wellbeing objectives potentially conflict with contributing to rural businesses. Promoting venison is supportive	✓/0 Overall social wellbeing objectives are supportive of contributing to rural communities with no potential for conflict	✓/0 Overall there is no potential for conflict between social wellbeing objectives and contributing to a strong and just society. Increasing participation and contributing to a safer environment are supportive	0 There is no potential for conflict between social wellbeing objectives and raising awareness of natural resource management

Technical Appendix C

Prediction & Evaluation of Effects - Cross Cutting Actions

Note: This method of scoring is intended to be descriptive, not definitive, in terms of effects of options.

Management Strategy for Wild Deer Socio Economics

Key to scoring:

++	Major positive
+	Minor positive
0	Neutral
-	Minor negative
--	Major negative
etc.	Mixed
?	Uncertain
S	Short term effects
M	Medium term effects
L	Long term effects

Socio Economic Objectives

	Cross Cutting Actions													
	7.4.1 a) Promote widespread understanding of sustainable deer management in practice	7.4.1 b) Understand at a local level the costs and benefits delivered by deer management	7.4.1 c) All relevant interests engage in the deer management planning and implementation process to consider social, economic and environmental objectives for management	7.4.1 d) Facilitate greater community engagement in deer issues	7.4.1 e) Learn from other international models for managing wild deer in considering future approaches	7.4.1 f) Build on the collaboration of deer management groups to integrate deer management with other land-uses and interests	7.4.1 g) Where deer management groups do not exist ensure that effective management forums exist in all relevant areas	7.4.2 a) Agree a common understanding of deer welfare	7.4.2 b) Articulate the welfare responsibility associated with managing wild deer	7.4.2c) Demonstrate high standards of competence in safeguarding welfare	7.4.2 d) Consider deer welfare in all management planning and activities affecting wild deer	7.4.2 e) Monitor disease risks and the effects of climate change on deer welfare	7.4.3 a) Establish a series of long term monitoring sites to inform management practice	
To contribute to competitive and enterprising rural businesses and the availability of skills, training and employment in rural areas	?/+ M/L	?/+ M/L	?/+ M/L	?	?/+ M/L	?/+ M/L	?/+ M/L	0	0	?	?	0	0	
To contribute to sustaining vibrant rural communities	?/+ M/L	?/+ M/L	+ M/L	+ M/L	?	?	?	0	0	0	0	0	0	
To contribute to a strong and just society	?	0	+ M/L	?/+ M/L	?	0	0	0	0	0	0	0	0	
To improve awareness and understanding of natural resource management	+ M/L	+ M/L	++ M/L	+ M/L	+ M/L	?/+ M/L	+ M/L	+ M	+ M	?	+ S	+ S/M	+ S/M	
To protect and enhance human health	0	0	0	0	0	0	0	0	0	0	0	0	0	
Cross Cutting action's Overall Potential Effects	Overall positive and uncertain effects	Overall positive and uncertain effects	Overall positive effects	Overall positive effects	Overall positive and uncertain effects	Overall uncertain effects	Overall positive and uncertain effects	Some positive effects but mostly neutral	Some positive effects but mostly neutral	Some uncertain effects but mostly neutral	Some positive and uncertain effects but mostly neutral	Some positive effects but mostly neutral	Some positive effects but mostly neutral	
Mitigation recommendations										Monitor the effects of this on rural businesses	Monitor the effects of this on rural businesses			
Enhancement recommendations						Ensure local business opportunities and needs are identified/recognised as a relevant interest to be considered	Ensure local business opportunities and needs are identified/recognised as a relevant interest to be considered	Ensure this common understanding is disseminated as widely as possible	Ensure this common understanding is disseminated as widely as possible					

7.4.3 b) Collate data from deer managers and processors more effectively and share data among relevant interests to be used in management	7.4.3 c) Empower land managers to use sound science to underpin the deer management planning process	7.4.3 d) Improve knowledge of optimal grazing regimes for site management	7.4.3.e) Refine methods of measuring impacts of wild deer on habitats	7.4.4 a) Develop a greater understanding of public perceptions of wild deer	7.4.4 b) Increase public understanding of the need to manage wild deer and how they are managed	7.4.4 c) Increase awareness of roe deer and the associated management needs in and around urban areas	7.4.4 d) Increase awareness of the interactions of all species of wild deer with access and recreation in urban, woodland and open land settings.	Overall Effect on Socio-Economic Objectives
+ S	?/+ M	?	0	0	0	0	0	0/? Overall neutral and uncertain effects on rural businesses with some potential positive effects from collating and sharing deer from deer managers more effective and promoting greater understanding of and involvement in deer management.
0	0	0	0	0	0	0	0	0/? Overall neutral effects on rural communities with potential positive effects from involving all relevant interests in the deer planning process
0	0	0	0	0	0	0	0	+/ 0 Overall neutral effects on a strong and just society with potential positive effects from involving all relevant interests in the deer planning process
+ S	?	+ S	0	++ S/M/L	++ S/M/L	++ S/M/L	++ S/M/L	+/++ Most actions are likely to have a positive effect on this assessment objective. In particular, actions to explicitly improve awareness and understanding are likely to have a strongly positive effect.
0	0	0	0	0	0	0	0	0 The cross cutting actions are unlikely to affect this assessment objective.
Some positive effects but mostly neutral	Some positive and uncertain effects but mostly neutral	Mostly neutral effects	Mostly neutral effects	Mostly neutral effects with a strongly positive effect on raising awareness	Mostly neutral effects with a strongly positive effect on raising awareness	Mostly neutral effects with a strongly positive effect on raising awareness	Mostly neutral effects with a strongly positive effect on raising awareness	
Monitor and record any benefits from improved data collection and dissemination on rural businesses	Opportunity to integrate learning about relevant science with what happens on the ground - positive effect on skills, training etc			Use this understanding to inform future engagement/awareness raising events to target audiences more meaningfully	Use this understanding to inform future engagement/awareness raising events to target audiences more meaningfully	Use this understanding to inform future engagement/awareness raising events to target audiences more meaningfully		

Prediction & Evaluation of Effects - Social Well-being Actions

Note: This method of scoring is intended to be descriptive, not definitive, in terms of effects of options.

Management Strategy for Wild Deer Socio Economics

Key to scoring:		Social Well-being Actions					Overall effect on Socio-Economic Objectives
++	Major positive	7.3.1 a) Promote locations and opportunities where people are likely to observe wild deer	7.3.1 b) Provide information to local communities and tourism businesses on wild deer and their management	7.3.2 a) Demonstrate high standards of competence in food safety, operator safety and public safety	7.3.2 b) Reduce the risks of road traffic accidents involving wild deer	7.3.2 c) Co-ordinate action to minimise human disease risks	
+	Minor positive						
0	Neutral						
-	Minor negative						
--	Major negative						
++/-, +/- etc.	Mixed						
?	Uncertain						
S	Short term effects						
M	Medium term effects						
L	Long term effects						
Socio Economic Objectives							
To contribute to competitive and enterprising rural businesses and the availability of skills, training and employment in rural areas	?/+ S	+	+	0	?	+	Providing information to communities and businesses and demonstrating high standards of competence are likely to have a positive effect on rural businesses and skills. While promoting locations to see deer is likely to have a positive effect on the economy, there are uncertainties over effects it may have on individual businesses depending on how it is carried out.
To contribute to sustaining vibrant rural communities	?	+	?/+ S/M	0	?	+/?	Providing information to communities is likely to have a positive effect on this assessment objective, although there is some uncertainty over the effects other actions may have which will depend on how they are implemented.
To contribute to a strong and just society	?/+ S/M	?/+ S/M	?	0	0	0/?	Overall uncertainty on the effect of these actions on strong and just society with potential positive indirect effects from promoting opportunities for people to observe wild deer and providing information to local communities and businesses.
To improve awareness and understanding of natural resource management	?	+	0	0	0	+ / 0	Overall neutral effects on raising awareness with a positive effect from providing information to local communities and businesses and uncertainty of the effect on promoting opportunities for deer watching.
To protect and enhance human health	?/+ S	0	+	++ S/M/L	++ S/M/L	++	Actions to reduce the risks of road traffic accidents involving deer and to minimise human disease risks are likely to have a strongly positive effect on this assessment objective.
Social Wellbeing Actions Overall Potential Effects	Overall positive and uncertain effects	Overall positive effects	Overall positive effects	Mostly not applicable with a strongly positive effect on human health	Mostly not applicable and uncertain with a strongly positive effect on human health		
Mitigation recommendations	Need to mitigate against the potential for tourism businesses activities to conflict with stalking activities						
Enhancement recommendations			Monitor and record the benefits to local businesses				

Prediction & Evaluation of Effects - Sustainable Economic Development Actions

Note: This method of scoring is intended to be descriptive, not definitive, in terms of effects of options.

Management Strategy for Wild Deer Socio Economics

Key	Sustainable Economic Development Actions						Overall Effect on Socio-Economic Objectives
	7.2.1 a) Retain existing markets and develop new markets associated with wild deer, both in stalking and other activities and products	7.2.1 b) Identify the most effective means to brand and market venison as a quality, sustainable product	7.2.1 c) Increase the number and value derived from people participating in deer-related activities including stalking and wildlife watching and remove perceived barriers to participation	7.2.1 d) Seek to capture fairly the economic value of wild deer among those involved in deer management	7.2.2 a) Actively manage wild deer to minimise losses to woodland establishment and growth, agriculture and other land uses	7.2.2 b) Maintain and develop capacity to manage deer in woodlands cost effectively	
++ Major positive + Minor positive 0 Neutral - Minor negative -- Major negative +/-, +/- etc. Mixed ? Uncertain S Short term effects M Medium term effects L Long term effects							
Socio Economic Objectives							
To contribute to competitive and enterprising rural businesses and the availability of skills, training and employment in rural areas	++ S/M/L	+ S/M	++ S/M	+ S	++ S	++ S/M/L	++ Overall strongly positive effect on rural businesses
To contribute to sustaining vibrant rural communities	+ M	+ S/M	+ S/M	+ M	+ M	+ M	+ Overall positive effect on rural businesses
To contribute to a strong and just society	0	0	+ M	+ M	0	0	0/+ Positive effect from increasing the number in deer-related activities among those involved in management. Other actions are not considered to affect this objective.
To improve awareness and understanding of natural resource management	0	0	?	0	0	0	0 The actions are not considered to affect this assessment objective, although there is uncertainty over whether increasing participation in deer related activity may affect it.
To protect and enhance human health	0	0	?/+ M	0	0	0	0/? The actions are not considered to affect this assessment objective, although there is uncertainty over whether increasing participation in deer related activity may affect it or whether it may have a positive effect
Socio Economic Objectives Overall Potential Effects	Mostly not applicable with positive effect on rural businesses and communities	Mostly not applicable with positive effect on rural businesses and communities	Overall positive effect	Overall positive effect	Mostly not applicable with positive effect on rural businesses and communities	Mostly positive with some uncertainty about the effect on trying to engage more people in voluntary work	
Mitigation recommendations			Mitigate against potential for conflict with stalking and wildlife watching activities				
Enhancement recommendations			Monitor and record data on the direct and indirect effects of increasing the number of people in stalking			Monitor and record data on direct and indirect effects of increasing capacity	

Prediction & Evaluation of Effects - Environment Actions

Note: This method of scoring is intended to be illustrative and indicative, not definitive, in terms of effects of actions.

Management Strategy for Wild Deer Socio Economic

Key to scoring:

++	Major positive
+	Minor positive
0	Neutral
-	Minor negative
--	Major negative
++/-, +/- etc.	Mixed
?	Uncertain
S	Short term effects
M	Medium term effects
L	Long term effects

Socio-Economic Objectives	Environment Actions										Overall Effect on Socio-Economic Objectives
	7.1.1 a) Actively manage grazing, browsing and trampling impacts of deer and other animals on Sites of Special Scientific Interest and Natura Sites to achieve favourable condition	7.1.1 b) Integrate management action with other land-uses including agriculture in order to achieve favourable condition	7.1.1 c) Seek the most effective management solutions using the appropriate management area and timescale in order to achieve long-term benefits for designated sites	7.1.2 a) Develop effective ways to address deer management within an ecosystem scale approach to landscape and biodiversity	7.1.2 b) Integrate biodiversity and ecosystem objectives and data into deer management planning	7.1.2 c) Contribute to the conservation of species on the UK and Scottish biodiversity action plan lists	7.1.2 d) Seek Orders under the Destructive Imported Animals Act to restrict the movement of sika deer to refugia islands and to restrict the movement of muntjac deer into Scotland.	7.1.3 a) Protect woodlands, bogs and carbon-rich soils in order to maintain and enhance carbon storage	7.1.3 b) Facilitate establishment and maintenance of habitat networks in order to help biodiversity adapt to climate change	7.1.3 c) Research the impacts of climate change on wild deer and their habitats	
To contribute to competitive and enterprising rural businesses and the availability of skills, training and employment in rural areas	_/? S/M	_/? S/M	?	?	_/? S/M	_/? S/M	?	_/? S/M	_/? S/M	0	? Overall uncertain effects with some potential negative effects on rural businesses from managing impacts to achieve favourable condition, for biodiversity and for climate change
To contribute to sustaining vibrant rural communities	?	?	?	?	+/? M/L	?	?	0	0	0	? Overall uncertain effects with a potential positive effect on rural communities from integrating biodiversity objectives into deer management planning
To contribute to a strong and just society	0	0	0	0	0	0	0	0	0	0	0 The actions are not considered to have any effect on this assessment objective.
To improve awareness and understanding of natural resource management	0	0	0	0	+ M	0	0	0	0	+ M/L	0/+ There are potential positive effects resulting from integrating biodiversity objectives into management planning and research in to the effects of climate change. Otherwise, the actions are not considered to affect this assessment objective.
To protect and enhance human health	0	0	0	0	0	0	0	0	0	0	0 The actions are not considered to have any effect on this assessment objective.
Environment Actions Overall Potential Effects	Overall neutral effects and uncertain with some negative effects on rural businesses	Overall neutral effects and uncertain with some negative effects on rural businesses	Overall neutral effects with some uncertainties	Overall neutral effects with some uncertainties	Positive effect on raising awareness and rural communities and some negative effects on rural businesses	Overall neutral effects and uncertain with some negative effects on rural businesses	Overall neutral and uncertain effects	Overall neutral effects and uncertain with some negative effects on rural businesses	Overall neutral effects and uncertain with some negative effects on rural businesses	Overall neutral effects with a positive effect on raising awareness	
Mitigation recommendations	Consider ways to mitigate against detrimental impacts on rural businesses	Consider ways to mitigate against detrimental impacts on rural businesses				Consider ways to mitigate against detrimental impacts on rural businesses		Consider ways to mitigate against detrimental impacts on rural businesses	Consider ways to mitigate against detrimental impacts on rural businesses		
Enhancement recommendations					Raise awareness of issues/opportunities with regard to integrating biodiversity into deer management planning						