

PART 3

**ENVIRONMENTAL OBLIGATIONS
AND INCENTIVES**

15. THE WATER FRAMEWORK DIRECTIVE

On October 23 2000, the “Directive 2000/60/EC of the European Parliament and of the Council establishing a framework for the Community action in the field of water policy” was adopted. The Water Framework Directive (WFD) 2000/60/EC applies to all water in the natural environment – that is all rivers, lochs, estuaries and coastal waters as well as water under the ground. The Directive repeals and replaces a number of older EC water Directives and incorporates the remaining existing water Directives (the Bathing Water, Nitrates and Urban Waste Water Treatment Directives) into its framework through its protected areas provisions. The “Natura” Directives on the protection of Habitats and Birds are also linked to this Directive by virtue of the protected area provisions. It came into force on 22 December 2000 and the Executive transposed the Directive into Scottish law through the Water Environment and Water Services (WEWS) (Scotland) Act 2003 developed in 2003 (SEERAD, 2005a). The Scottish Parliament and the Scottish Executive have taken a lead in Europe in transposing the Directive – Scotland was the first country to translate the provisions of the WFD into a national law. The Scottish Parliament, the Scottish Executive, the environmental non-government organisations and others worked together to build a piece of legislation that does not only meet the basic requirements of the WFD, but goes beyond these requirements in a number of areas, strengthening the legislation. The Scottish legislation commits to the protection of wetlands, introduces sustainable flood management, provides for the principles of public participation and extends the provisions of WFD to three nautical miles into the sea instead of one. The WEWS Act is administered by the Scottish Executive and the Scottish Environment Protection Agency (SEPA). SEPA is the lead organisation in implementing the WFD in Scotland.

AIM

The objectives of the WFD are:

- To prevent deterioration of water body status
- To protect, enhance and restore water bodies with the aim of achieving good status in 2015
- To progressively reduce pollution of water bodies from priority substances and to cease or phase out emissions, discharges and losses of priority hazardous substances.

The purpose of the WEWS act includes (SEERAD, 2005a):

- prevent deterioration in the status of surface water bodies and wetlands that depend on them;
- protect, enhance and restore all bodies of surface water and wetlands that depend on them with the aim of achieving good surface water status by 2015;
- prevent deterioration of the status of groundwater bodies and wetlands directly dependant on groundwater bodies;
- protect, enhance and restore all bodies of groundwater bodies and wetlands directly dependant on groundwater bodies with the aim of achieving good groundwater status by 2015;

- prevent or limit the input of pollutants to groundwater and reverse any significant and sustained upward trend in the concentration of pollutants in groundwater;
- comply with European wide measures against priority and priority hazardous substances; and
- achieve compliance with any relevant standards and objectives for protected areas

IMPLEMENTATION

A timetable for the implementation of the WFD in Scotland has been defined. Starting from the creation of the WEWS Act in 2003, environmental objectives have to be achieved in 2015 and a fourth RBMP is set to be published in 2027, the final step in the timetable. The different steps in the timetable are outlined below (SEERAD, 2005a):

2003	<i>Transpose Directive into domestic law (WEWS (Scotland) Act 2003) Identify river basin districts and the competent authorities who will be empowered to implement the Directive</i>
2004	<i>Produce characterisation of river basin districts/pressures and impacts analysis</i>
2005	<i>Establish a register of protected areas in each river basin district</i>
2006	<i>Establish environmental monitoring Publish a work programme for producing the first River Basin Management Plan</i>
2007	<i>As a precursor to the full plan, publish an interim overview of the significant water management issues in each river basin district for general consultation</i>
2008	<i>Publish draft RBMPs for consultation</i>
2009	<i>Finalise and publish RBMP Establish the programme of measures to meet the objectives</i>
2012	<i>Programmes of measures fully operational Publish timetable and work programme for second RBMP</i>
2013	<i>Repeat characterisation of river basin districts</i>
2014	<i>Publish second draft RBMP</i>
2015	<i>Deadline for achieving environmental objectives Finalise and publish second RBMP with revised Programme of Measures</i>
2021	<i>Third RBMP</i>
2027	<i>Fourth RBMP</i>

The Water Framework Directive (the WEWS Act) has two key components (SEERAD, 2005b):

- it requires management of the water environment on the basis of units that make sense in environmental terms – River Basin Districts that include all interdependent rivers, lochs, estuaries, coastal waters and associated underground waters. A plan will have to be drawn up for each River Basin District setting out where there are environmental problems and what will be done to tackle them;
- it also requires that, for the first time, all impacts – physical, polluting and otherwise – on the water environment are controlled with the aim of achieving ‘good’ ecological status for most rivers etc by specified deadlines – 2015 in most cases. Status is determined on the basis of ecology because the Directive requires that quality is determined not just by the chemical composition of waters but by the fish, plant and other life that inhabit it.

For the purpose of water management, Scotland has been divided into 2 river basin districts – one covering most of Scotland and one covering cross-border areas (Solway and Tweed). For each River Basin District a strategic management plan must be drawn up. This River Basin Management Plan (RBMP) will be the driving force behind environmental improvements and a key to achieving good ecological status. This plan will be based on the results of the ‘characterisation’ process, completed by SEPA in December 2004. The characterisation report identified water bodies in Scotland, which are at risk of failing to achieve good ecological status by 2015. The Plan will establish environmental objectives – a quality target – for each water body (river or loch or part of a river or loch or groundwater). The Directive defines a default objective of ‘good’ status, although variations from that are allowed. It also requires that no deterioration in status may take place. These environmental objectives are based on ecology. This means that the plants and animals (fish as well as insects and other invertebrates) that live in our natural waters will become the principal indicators of success at protecting and improving the water environment. Both chemical, hydro morphological and physical conditions must be right for them to flourish following that what is good for them will also be good for humans.

Having set the environmental objective the plan must set out how that objective will be achieved through a programme of measures. If a particular loch or stretch of coastal water is damaged or polluted, the plan needs to determine what needs to be done to retrieve the situation. Having established the plan and having put the measures in place to achieve the objectives the next stage in the process is comprehensive monitoring to check that the objectives have been met. Thereafter, the process of planning, action and monitoring starts again.

SEPA is responsible for implementing the WEWS Act in Scotland, including monitoring the status of the water environment and for preparing a required monitoring programme and will conduct regulatory functions. The regulatory functions for SEPA have been set in the Water Environment (Controlled Activities) Regulations 2005 (so called ‘CAR’), which set proportionate and risk based approach to controlling impacts on water environment. These impacts include:

- activities liable to cause pollution of the water environment, including point source and diffuse source pollution (diffuse pollution regulations will follow at later stage)
- abstraction of water from the water environment
- the construction, alteration or operation of impounding works in surface waters or wetlands
- carrying out building, engineering, or other works
 - in inland water other than groundwater, or wetlands, or
 - in the vicinity of inland water or wetlands, and likely to have a significant adverse effect on the water environment
- artificial recharge or augmentation of groundwater.

The Controlled Activities Regulations has established a three tier control system consisting of general binding rules, registration and licenses. Activities which represent only a small risk for the water environment do not need to be registered with SEPA and fall within the General Binding Rules. Such activities are:

- A large number of passive weirs constructed before 1st April 2006 that do not affect fish passage
- Abstractions of less than 10m³/day
- Construction/extension of wells/boreholes and subsequent abstraction
- Ditch dredging activities
- Construction and maintenance of temporary/minor bridges
- Laying of pipeline/cable by boring
- Works to control the erosion of a bank of a river, burn or ditch using revetments
- Operation of vehicles, plant/equipment
- Low risk surface water discharges.

The second tier includes activities with predictable environmental impacts but where cumulative impacts are likely and require registration. Registration will encompass such activities as septic tank discharges, small abstractions and minor engineering works.

In the third tier licenses will be issued to control activities posing the greatest risk for the water environment. Licenses will be tailored to the particular nature, extent and location of the activity concerned and it is anticipated that around 15,000 licenses will be issued. Activities requiring a license include for example canalization, permanent diversion of the water body, and flood protection works.

EVALUATION

The WFD covers all water bodies and wetlands directly dependant on a body of surface water or a body of groundwater in Scotland potentially providing a range of environmental benefits and having significant impact on agricultural activities. Agriculture has a role to play in delivering good ecological status and sustainable flood management, but this will not occur without costs. The farming sector will be required to comply with the CAR, in particular water abstraction, engineering regimes and at later stage, also diffuse pollution regime. The Scottish Executive is in the process of releasing for public consultation its proposals for the regulation of diffuse pollution from the land use sector. However, stronger integration with other policy frameworks, in particular CAP, would increase environmental benefits of the WFD and help towards achieving its objectives. For example, stronger integration of WFD objectives in specific prescription

and measures in agri-environment and forestry schemes, together with flood alleviation schemes, could increase environmental benefits through the transformation of agricultural land to wetland, riparian woodlands and floodplains and would also contribute to flood prevention. Agriculture has the potential to deliver a wide range of environmental benefits including environmentally-sensitive flood alleviation on agricultural land. Moreover, promoting agri-environment prescriptions targeting diffuse water pollution from agriculture would contribute to WFD objectives. Axis 2 “improving the environment and countryside through land management” of the new Rural Development Regulation provides a direct link to support EU environmental objectives such as water quality through CAP and rural development. With sufficient funding and integrated in LMCs such a link between WFD and CAP could potentially synthesis environmental benefits.

SOURCES

SEERAD (2005a). Implementation of the Water Environment and Water Services (Scotland) Act 2003 Annual Report to the Scottish Parliament – 2004

<http://www.scotland.gov.uk/Resource/Doc/1057/0011797.pdf>

SEERAD (2005b). The Water Framework directive

<http://www.scotland.gov.uk/Topics/Environment/Water/17316/8084>

SEERAD (2005c). The Water Environment (Controlled Activities) (Scotland) Regulations 2005: Policy Statement and Regulatory Impact Assessment.

<http://www.scotland.gov.uk/Topics/Environment/Water/17316/8084>

16. CROSS COMPLIANCE: STATUTORY MANAGEMENT REQUIREMENTS

The CAP reform agreement, implemented by Council Regulation (EC) No 1782/2003 (OJ L270,21.10.2003), defines standards and requirements, so called Cross Compliance, which farmers have to meet as a condition of receiving their Single Farm Payment. These Cross Compliance requirements and measures concern the promotion of a more environmentally friendly and sustainable approach to farming in Scotland. In principle, Cross Compliance applies to all land within an agricultural business including land which is not used to activate Single Farm Payment entitlements. For permanently held land (either owned or under an agricultural tenancy) Cross Compliance applies for the full 12 calendar months, not just for the minimum consecutive 10 month period. For common land and shared grazings each Single Farm Payment claimant must comply with Cross Compliance (SEERAD, 2004).

There are two elements to Cross Compliance: The first element is the compliance with 18 European regulatory requirements covering the environment, food safety, animal and plant health and animal welfare. These Statutory Management Requirements are in force throughout the EU will have to be complied by land managers with as a condition of receipt of the Single Farm Payment. The second element is the compliance with a requirement to keep land in Good Agricultural and Environmental Condition (GAEC). GAEC measures are explained in a separate briefing note. In this briefing note, we outline the 18 Statutory Management Requirements.

AIM

The Cross Compliance requirements and measures aim to promote a more environmentally friendly and sustainable approach to farming in Scotland.

IMPLEMENTATION

Member States have no discretion about what European Laws have to be applied as Statutory Management Requirements. SEERAD will be responsible for ensuring inspections are carried out in accordance with EU Regulations to make sure farmers meet the Cross Compliance standards and requirements. All the conditions defined in the Statutory Management Requirements are already legally binding on farmers and crofters in Scotland. The only change is that in the future a breach of these legal requirements may lead to a partial or complete withdrawal of Single Farm Payment. However, it is anticipated that CAP reform as a whole will reduce the number of farm inspections carried out by SEERAD. Inspections are carried out in partnership with specialist enforcement bodies such as the Scottish Environment Protection Agency (SEPA) and Scottish Natural Heritage (SNH). SEERAD provide a single point of contact for all Cross Compliance related enquiries as these relate to the Single Farm Payment. Specialist agencies can provide advice on the Statutory Management Requirements that they enforce.

If the Statutory Management Requirements or Good Agricultural and Environmental Conditions are not complied with, the Single Farm Payment payments can be reduced. Any reduction will be applied to the overall amount of direct payments that has been or will be granted to the farmer following the submission of an aid application in the

calendar year that the non-compliance was found. In the case of negligence, payments will be reduced by 3% for any non-compliance. If more than one case of negligent, non-compliance is identified, reductions will be accumulated; however, the overall reduction will not exceed 5%. Where repeated non-compliance with the same standard or requirements is identified, the reduction will be three times the previous reduction up to a maximum of 15%. In cases of intentional non-compliance with Cross Compliance requirements or measures the Single Farm Payment can be reduced by a minimum of 20% and may even result in exclusion from the Single Farm Payment Scheme the following calendar year. Farmers may appeal against a decision SEERAD has taken to apply a refusal, reduction or recovery as a result of a Cross Compliance check. Appeals will be considered under the existing EU Agricultural Subsidy Schemes appeals procedure (SEERAD, 2004).

The 18 Statutory Management Requirements (SMR) are outlined in Table 16.1 (SEERAD, 2004) and target the environment (no. 1 – 5), public and animal health (no. 6 – 15) and animal welfare (no. 16 – 18). The SMR are introduced in three stages starting with the requirements no. 1 – 8 in 2005, followed by no. 9 – 15 in 2006 and, finally, no. 10 – 18 in 2007. Interestingly, the WFD is not included in the list of SMRs. Adding the WFD to the SMRs would provide a close and formal linkage between CAP and WFD.

Table 16.1: Statutory Management Requirements

No	EC directive/regul.	UK/Scottish legislation	Cross Compliance requirement to be met by farmers
1	Environment Directive 79/409/EEC on the conservation of wild birds (OJ L 103, 25.4.1979, p. 1). Articles 3, 4 (1, 2, 4), 5, 7 and 8.	Wildlife and Countryside Act 1981 as amended by the Nature Conservation (Scotland) 2004 Act	<p><u>In relation to Special Protection Area (SPA) under the Birds Directive, you must comply with the 1994 Habitats Regulations including:</u></p> <p>a) Notify Scottish Natural Heritage (SNH) of proposals to carry out any operation likely to damage the protected interest of the SPA. You must also obtain SNH's written consent before commencing these operations, unless they are specifically permitted by the terms of a management agreement. Consent is not required where planning permission has already been obtained or in an emergency. In an emergency situation you must notify SNH as soon as possible after the event.</p> <p>b) Where a Special Nature Conservation Order (or Nature Conservation Order under the Wildlife and Countryside Act 1981 as amended by the Nature Conservation (Scotland) 2004 Act) applies, notify SNH of proposals to carry out any specified operation, and obtain consent before commencing that operation, unless covered by the terms of a management agreement.</p> <p>c) Comply with any other management order or restoration order that is relevant to the purpose of the SPA.</p> <p>d) Comply with the terms of any management agreement entered into with SNH that relates to the purpose of the SPA.</p> <p>e) Comply with the terms of any agri-environment agreement that relates to the purpose of the SPA. You must also comply with the terms of any restoration order.</p> <p><u>You must not:</u></p> <p>Intentionally or recklessly damage any natural feature specified in a SSSI notification, which is relevant to the purpose of the SPA.</p> <p><u>On any land, you must not:</u></p> <p>a) Intentionally or recklessly kill, injure or take any wild bird; take, damage, destroy or otherwise interfere with any nest habitually used by any wild bird included in Schedule A1 of the Nature Conservation (Scotland) Act 2004, obstruct or prevent any wild bird from using its nest, take or prevent any wild bird from using its nest, possessing any live or dead wild birds or anything derived from such a bird, take or keep any egg of a wild bird; or the intentional or reckless disturbance of certain birds (listed in schedule 1 to the Wildlife and Countryside Act 1981) while they are nesting (including disturbance of dependant young).</p> <p>b) Kill or take certain huntable birds during the close season for that bird species. The sale or purchase of game birds after 10 days from the end of the open season for the bird in question is also prohibited.</p> <p>c) Use the prohibited means of killing or taking wild birds as set out in section 5 of the Wildlife and Countryside Act 1981 as amended by the Nature Conservation (Scotland) Act 2004.</p>

No	EC directive/regul.	UK/Scottish legislation	Relevant codes of good practice	Cross Compliance requirement to be met by farmers
2	Directive 80/68/EEC on the protection of groundwater against pollution caused by	Groundwater Regulations 1998.	The Sheep Dipping Code of Practice for Scottish Farmers, Crofters and	Under the Groundwater Regulations 1998 land managers require an Authorisation from SEPA before disposing of List I and List II (as listed in the Directive or as determined by SEPA) substances to land. This means that farmers require authorisation from

	certain dangerous substances (OJ L 20, 26.1.1980, p. 43). Articles 4 and 5.		Contractors.	<p>SEPA for disposal of waste sheep dip and pesticide washings to land. Farmers should also ensure that groundwater is not polluted when dipping and spraying operations are being carried out.</p> <p>Where List I and List II substances are otherwise used, manufactured, stored or handled farmers will be expected to comply with relevant legislation, codes of practice or other relevant good practice. Where it is necessary for the protection of groundwater, SEPA will serve a Notice that requires the activity to comply with certain conditions, or, where the risks cannot be controlled, SEPA may prohibit the activity altogether. The Sheep Dipping Code of Practice may be cited in a Notice served by SEPA.</p>
3	Directive 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture (OJ L 181, 4.7.1986, p. 6) Article 3.	Sludge (Use in Agriculture) Regulations 1989.	Code of Practice for the Agricultural use of sewage sludge.	<p>Scottish Water is the principal sludge producer in Scotland. Farmers using sludge on their land and the sludge producers are both required to comply with the Sludge (Use in Agriculture) Regulations 1989. These include the testing of sludge and soil and withdrawal periods for grazing animals or harvesting of crops. SEPA is the enforcing authority for the 1989 Regulations.</p> <p>Normally, the treatment of agricultural land with sewage sludge will be supported by professional advice as to the nutrients supplied, timing and method of application etc. Guidance is provided in the PEPFAA code of good practice.</p> <p>Farmers in Nitrate Vulnerable Zones (NVZ's) will be expected to record the use of sludge in their Fertiliser and Manure Plan and to observe the relevant closed period, as necessary.</p>
4	Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources (OJ L 375, 31.12.1991, p. 1) Articles 4 and 5.	Nitrate Vulnerable Zones (Scotland) Regulation 2003.	The PEPFAA code The PEPFAA Dos and Don'ts guide.	<p>Farmers with land in NVZs must comply with the measures set out in the Action Programme for Nitrate vulnerable Zones (Scotland) regulations 2003 (SSI/2003/51 as amended by SSI/2003/169). The requirements are set out in the "Guidelines for Farmers in Nitrate Vulnerable Zones" (2003) which has been sent to all farmers in NVZ's.</p> <p>The PEPFAA code with its Dos and Don'ts Guide includes advice designed to prevent the run-off or leaching of nitrates and other nutrients to watercourse or ground water. It identifies which measures of good practice are mandatory or are required under Cross Compliance.</p>

No	EC directive/regul.	UK/Scottish legislation	Cross Compliance requirement to be met by farmers
5	Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna Articles 6, 13, 15 and 22(b)	Wildlife and Countryside Act 1981 as amended by the Nature Conservation (Scotland) 2004 Act	<p><u>K/In relation to Special Area of Conservation (SAC) under the Habitats Directive, you must comply with the 1994 KHabitats Regulations including:</u></p> <p>a) Notify SNH of proposals to carry out any operation likely to damage the protected interest of the SAC. You must also obtain SNH's written consent before commencing these operations, unless they are specifically permitted by the terms of a management agreement. Consent is not required where planning permission has already been obtained or in an emergency. However in an emergency situation you must notify SNH as soon as possible after the event.</p>

			<p>b) Where a Special Nature Conservation Order (or Nature Conservation Order under the Wildlife and Countryside Act 1981 as amended by the Nature Conservation (Scotland) Act 2004) applies, notify SNH of proposals to carry out any specified operation, and obtain consent before commencing that operation, unless it is specifically permitted by the terms of a management agreement. You must also comply with the terms of any restoration order.</p> <p>c) Comply with any other management order or restoration order that is relevant to the purpose of the SAC.</p> <p>d) Comply with the terms of any management agreement entered into with SNH that relates to the purpose of the SAC</p> <p>e) Comply with the terms of any agri-environment agreement that relates to the purpose of the SAC.</p> <p><u>You must not:</u></p> <p>a) Intentionally or recklessly destroy or damage the protected features of an SSSI that are also relevant to the purpose of the SAC, or disturb any protected animals so as to commit an offence under part 1 of the Wildlife and Countryside Act 1981 as amended by the Nature Conservation (Scotland) Act 2004.</p> <p>b) Pick, collect, cut, uproot or destroy a wild plant of a European protected species or keep, transport, sell or exchange, or offer for sale or exchange, any live or dead wild plant of a European protected species (including any part of or anything derived from such a plant).</p> <p>c) Take or kill European Protected Species.</p> <p>d) Release or allow to escape into the wild any non-native wild animal as defined, or plant or cause to grow in the wild any non-native plant.</p>
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No	EC directive/regul.	UK/Scottish legislation	Relevant codes of good practice	Cross Compliance requirement to be met by farmers
6	Council directive 92/102/EEC on identification and registration of animals. Articles 3, 4 and 5. Note: Part of this regulation has been replaced by Council Regulation (EC) No 21/2004 on sheep and goat ID due to come into force from 9 July 2005.	<ul style="list-style-type: none"> • The Sheep and Goats Movement (Interim Measures) (Scotland) Order 2002 (SI 2002/38) as amended • The Sheep and Goats Identification(Scotland) Regulations 2000 (SI 2000/418) as amended • The Cattle Database Regulations 1998 (SI 1998/1796) as amended • The Cattle Identification Regulations 1998 (SI 1998/871) as amended • The Pigs Record , Identification and Movement Order 1995 (SI 1995/11) as amended • The Bovine Animals (Identification, Marking and Breeding Records) (Amendment) Order 1993 (SI 1993/503) 	<p><u>Cattle</u> The British Cattle Movement Service (BCMS) operate the Cattle Tracing System (CTS) on behalf of SEERAD. Requirements on the identification and traceability of cattle are set out in the BCMS guidance leaflets issued to all keepers.</p> <p>You can also find information on the BCMS web page at - www.rpa.gov.uk/rpa/rpaweb.nsf or you can call the BCMS helpline on 0845 050 1234.</p> <p><u>Sheep and Goats</u> Guidance on the requirements you must meet for sheep and goat identification and traceability are contained in the ‘Dear Keeper’ letters of 29 July 2004 and 14 July 2003.</p> <p>The letters are available on the SEERAD website at - www.scotland.gov.uk/library5/agri/sgtagg-00.asp or you can call the Scottish Animal Movement Unit (SAMU) on 0131 244 4202.</p>	Full compliance with domestic legislation. This includes where appropriate, keeper registration, the registration of animals, ear tag identification, record keeping and the recording of animal movements. Details can be obtained from your local SEERAD office or in the case of cattle BCMS who should be contacted if you are in any doubt as to the specific requirements.
7	Commission Regulation (EC) No 2629/97 (repealed by 911/2004) laying down detailed rules for the implementation of Council Regulation 820/97 (repealed by 1760/2000) as regards eartags, holding registers and passports in the framework of the system for the identification and registration of bovine animals. Articles 6 and 8.	<ul style="list-style-type: none"> • The Cattle database Regulations 1998 (SI 1998/1796) as amended • The Cattle Identification Regulations 1998 (SI 1998/871) as amended 	<p><u>Pigs</u> Guidance concerning the identification and traceability of pigs can be found in the 1995 pig keeper guidance and subsequent ‘Dear Keeper’ letters including the letter dated 10 December 2002.</p> <p>You can also contact the Scottish Animal Movement Unit (SAMU) on 0131 244 4202 for further information.</p>	

8	Regulation 1760/2000 of the European Parliament and of the council establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products. Article 4 and 7.	<ul style="list-style-type: none"> • The cattle (Identification of Older Animals) (Scotland) Regulations 2000 (SI 2001/1) as amended • The cattle Database Regulations 1998 (SI 1998/2969) as amended • The cattle Database Regulations 1998 (SI 1998/2969) as amended • The Cattle Identification Regulation 1998 (SI 1998/871) as amended 		
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No	EC directive/regul.	Cross Compliance requirement to be met by farmers
9	Council Directive 91/414/EEC of 15 July 1991 concerning the placing of plant protection products on the market (OJ L 230, 19.8.1991, p. 1) Article 3	<ol style="list-style-type: none"> 1. That the farmer has not retained products that are no longer approved for use. 2. That the farmer is carrying out spray operations on approved crops only, following the Green Code using the pesticide at the correct dosage levels and leaving sufficient 'buffer zones' so that the spray does not enter watercourses. Plant Protection Products (Scotland) Regulations 2003 (SSI 2003/579) refers.
10	Council Directive 96/22/EC of 29 April 1996 concerning the prohibition on the use in stockfarming of certain substances having a hormonal or thyrostatic action and of beta-agonists (OJ L 125, 23.5.1996, p. 3) Articles 3, 4, 5 and 7.	No illegal use of substances having a hormonal, thyrostatic action, or the use of beta agonists. Where confirmed residues of banned substances are found following Meat Hygiene Service (MHS) inspection the State Veterinary Service (SVS) will carry out an on-farm investigation, including taking extra samples.
11	Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety (OJ L 31, 1.2.2002, p. 1) Articles 14,15,17(1),18,19 and 20	<ol style="list-style-type: none"> 1. Ensure that the food and feed safety requirements, specified in Articles 14 and 15 of Regulation 178/2002, are met. 2. Ensure that all stages of production, processing and distribution within the businesses under their control, satisfy the food and feed safety requirements of food law which are relevant to those activities, and verify that such requirements are met (Article 17). 3. Maintain traceability systems (Article 18). 4. Withdraw and/or recall food or feed from the market if this is not in compliance with food or feed safety requirements, and notify competent authorities (Articles 19/20).

No	EC directive/regul.	Cross Compliance requirement to be met by farmers
12	Regulation (EC) 999/2001 of the European Parliament and of the Council of 28 January 2002 laying down rules for the prevention, control and eradication transmissible Spongiform encephalopathies. (OJ L 147, 31.5.2001 p. 1) Articles 7, 11, 12, 13 and 15.	<p>Article 7: The farmer must not feed to ruminants protein derived from mammals or feed any products of animal origin to farmed animals, in accordance with Annex IV. Further, the farmer must not export or store feed intended for farmed animals which contains protein derived from mammals or feed intended for mammals, except for the feeding to dogs and cats.</p> <p>Article 11: The farmer must immediately notify the Divisional Veterinary Manager (DVM) of any animal suspected of being infected by a Transmissible Spongiform Encephalopathie (TSE).</p> <p>Articles 12, 13: Once notification of a TSE suspect is made, the farmer must fully comply with movement restrictions or any other notices served on that animal or animals by an inspector under these articles.</p>

		Article 15: This Article moves away from the individual farmer by largely focusing toward the trade aspects of the industry. However, should the farmer have in his possession a TSE suspect animal(s) which is already covered in Articles 12 and 13, he must remain in full compliance of any movement restrictions.
13	Council Directive 85/511/EEC of 18 November 1985 introducing Community measures for the control of foot-and-mouth disease (OJ L 315, 26.11.1985, p. 11) Article 3.	As implemented in the UK by the Foot-and-Mouth Disease Order 1983 (S.I. 1983/1950), as amended; requires any person who has in his possession or under his charge an affected or suspected animal or carcass to notify the fact to the authorities.
14	Council Directive 92/119/EEC of 17 December 1992 introducing general Community measures for the control of certain animal diseases and specific measures relating to swine vesicular disease (OJ L 62, 15.3.1993, p. 69) Article 3.	The notification provisions of this Directive are implemented in the UK via the Specified Diseases (Notification) Order 1996, as amended, which requires a person who has in his possession or under his charge an animal or carcass which he knows or reasonably suspects is infected to notify the authorities. There is a similar requirement in respect of swine vesicular disease in the Swine Vesicular Disease Order 1972.
15	Council Directive 2000/75/EC of 20 November 2000 laying down specific provisions for the control and eradication of bluetongue (OJ L 327, 22.12.2000, p. 74) Article 3.	As implemented by the Bluetongue (Scotland) Order 2003, requires any person who knows or suspects that an animal or carcass in his possession or under his charge is diseased to notify the authorities.

No	EC directive/regul.	Cross Compliance requirement to be met by farmers
16	Council Directive 91/629/EEC of 19 November 1991 laying down minimum standards for the protection of calves (OJ L 340, 11.12.1991, p. 28). Articles 3 and 4	The Welfare of Farmed Animals (Scotland) Regulations 2000, as amended. The Code of Recommendations for the Welfare of Cattle contains a section on calf rearing. Failure to comply with the Regulations and Code may lead to loss of support.
17	Council Directive 91/630/EEC of 19 November 1991 laying down minimum standards for the protection of pigs (OJ L 340, 11.12.1991, p. 33) Article 3 and 4 (1)	The Welfare of Farmed Animals (Scotland) Regulations 2000, as amended. The Code of Recommendations for the Welfare of Pigs. Failure to comply with the Regulations and Code may lead to loss of support.
18	Regulation (EC) No 178/2002 of the Council Directive 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes (OJ L 221, 8.8.1998, p. 23) Article 4	The Welfare of Farmed Animals (Scotland) Regulations 2000, as amended. Failure to comply with the Regulations and Code may lead to loss of support.

SOURCE

SEERAD (2004). Single Farm Payment Scheme, Information Leaflet 7: Cross Compliance. <http://www.scotland.gov.uk/Publications/2004/10/20108/45384#6>

17. CROSS-COMPLIANCE: GOOD AGRICULTURAL AND ENVIRONMENTAL CONDITION

The latest CAP reform introduced cross compliance, consisting of Statutory Management Requirements and Good Agricultural and Environmental Condition (GAEC), which must be complied by farmers to receive the single farm payment from January 2005 (see BN: Cross Compliance: Statutory Management Requirements). The framework for GAEC has been established in the European Legislations Council Regulation (EC) No 1782/2003 (OJ L270, 21.10.2003) and Commission Regulation (EC) No 796/2003 (OJ L141, 30.04.2004), but member states, and regions such as Scotland, have been given discretion to interpret GAEC in their own way considering different national conditions. The Scottish definition of GAEC was drawn up by SEERAD to recognise *'the wide variability of soils, habitats and farming systems throughout Scotland'* and to be a framework *'which applied flexibly to a wide range of farmed environments'*. GAEC is defined by reference to a number of measures and management practices that need to be adhered to covering soil erosion, soil organic matter, soil structure and minimum level of maintenance (SEERAD, 2004).

AIM

GAEC aims to maintain and safeguard the agricultural and environmental conditions of agricultural land. From 2005, the Single Farm Payment, with cross-compliance, will form Tier 1 of Land Management Contracts (LMCs) in Scotland, providing a minimum level of protection against environmental deterioration, along with animal welfare and food safety.

IMPLEMENTATION

The following two requirements apply to all of the land subject to GAEC measures:

- The land must be available for agricultural use or capable of returning to agricultural use at present or by any time during the next growing season.
- The land must be in a condition that an inspector/auditor could undertake normal control activity (e.g. measure the area and walk the land to identify features that should be excluded).

The following measures and advisory guidelines are defined in Single Farm Payment Scheme Information Leaflet 7 (SEERAD, 2004):

Soil Erosion: Protect soil through appropriate measures -Minimum soil cover-	
<u>Measure</u>	<u>Advisory Guidelines / Good Practice</u>
<p><u>1</u> All cropped land over the following winter must, where soil conditions after harvest allow, have either: crop cover, grass cover, stubble cover, ploughed surface or a roughly cultivated surface. Fine seedbeds must only be created very close to sowing.</p>	<p>Under arable cropping, there are measures available to you to prevent soil erosion over the winter period.</p> <p>A roughly cultivated surface is one created by use of discs or tines.</p>

Soil Erosion: Protect soil through appropriate measures -Minimum land management reflecting site-specific conditions-	
<u>Measure</u>	<u>Advisory Guidelines / Good Practice</u>
<u>2</u> In areas prone to wind erosion you must take steps to reduce the risk of soil loss in spring by maintaining crop cover, using coarse seedbeds, shelter belts or nurse crops, or use other appropriate measures with an equivalent effect.	You should undertake all or some of these measures if there is a risk of soil erosion by the wind. Consideration should be given to using minimum cultivation techniques and mulches.
<u>3</u> On sites where capping is a problem you must form a coarse seedbed or break any cap that forms to avoid erosion.	A capped surface is defined as: those conditions which occur particularly in fine sandy and silty soils where soil particles run together when wet and dry out so as to form a crust. As a result water infiltration is reduced to the point where there is observable run-off, the formation of rills and gullies and/or soil deposition at the sides of fields, on roads or in watercourses and ditches.

Soil Erosion: Protect soil through appropriate measures -Minimum land management reflecting site-specific conditions-	
<u>Measure</u>	<u>Advisory Guidelines / Good Practice</u>
<u>4</u> (i) Prevent erosion of land, particularly, banks of watercourses, watering points and feeding areas from overgrazing, heavy trampling or heavy poaching by livestock. (ii) Where this occurs reduce stock until the land has recovered. All problems should be rectified at any time during the next growing season after the period that the problem has occurred. (iii) This measure does not apply to areas within 10m of a gateway and 3m of farm tracks necessarily used during wet-periods.	Sacrificial feeding areas may be more desirable on improved grassland/arable land providing the risk of soil erosion is very low. Heavy poaching means the cutting up of turf to a significant degree from trampling by livestock. When supplementary feeding outdoors, it will often be preferable to rotate feeding sites and make sure feeding rings are suitably positioned i.e. well away from watercourses and not on ground sloping towards a watercourse. Grazed forage cropped fields that have been poached should be ploughed or sown as ground conditions allow. On peaty soils this action will need to be taken earlier than on other soils due to the fragile nature and increased susceptibility of the soil to erosion. Whilst the measure does not apply to areas within 10m of a gateway and 3m of farm tracks every effort should be made to minimise any effect of soil erosion. For example, in severe weather conditions, consideration should be given to the use of an alternative gateway.
<u>5</u> (i) Maintain functional field drainage systems, including clearing ditches, unless environmental gain is to be achieved by not maintaining field drainage systems. (ii) Where environmental gain is to be achieved, this must be declared on the IACS return.	An example of environmental gain would be the creation of wetland grazing areas. The timing of maintenance should be considered so as to minimise the impact on flora and fauna i.e. during late summer or early autumn. Consideration should be given to only clearing one side of the ditch or leaving vegetation breaks within the ditch to maintain wildlife corridors.

Soil Erosion: Protect soil through appropriate measures -Minimum land management reflecting site-specific conditions-	
<u>Measure</u>	<u>Advisory Guidelines / Good Practice</u>
6 Follow the latest edition of the Muirburn Code.	Compliance with the Muirburn Code including guidance on the statutory controls on Muirburn will help to avoid extensive erosion on steep sites through burning. A copy of The Muirburn Code can be obtained from SEERAD and SNH local offices or from the Scottish Executive website at www.scotland.gov.uk/library3/environment/mbcd-00.asp

Soil Organic Matter: Maintain soil organic matter levels through appropriate practices -Standards for crop rotations where applicable-	
<u>Measure</u>	<u>Advisory Guidelines / Good Practice</u>
7 On arable land: (i) Use suitable break crops in an arable rotation; or (ii) Optimise the use of organic materials by basing rates of application on soil and crop needs. Where break crops are not used, a record should be kept for 5 years of organic materials and quantities applied to arable land.	The Prevention of Environmental Pollution from Agricultural Activity (PEPFAA) code of good practice gives guidance on this measure. Match organic manure spreading rate to the nutrient requirement of the crop and the needs of the planned crop rotation. Where straw is to be incorporated it should be done evenly. Ideally this should be chopped straw.

Soil Organic Matter: Maintain soil organic matter levels through appropriate practices -Arable stubble management-	
<u>Measure</u>	<u>Advisory Guidelines / Good Practice</u>
8 (i) Incorporate livestock manures within 2 weeks after spreading on stubbles. (ii) In areas prone to wind erosion, incorporation of livestock manures can be delayed.	Well timed incorporation of livestock manures can help to maintain Soil Organic Matter and guard against nutrient loss. The PEPFAA code of good practice gives guidance on this measure.

Soil Structure: Maintain soil structure through appropriate measures -Appropriate machinery use-	
<u>Measure</u>	<u>Advisory Guidelines / Good Practice</u>
9 Do not carry out any cultivations if water is standing on the surface or the soil is saturated.	By avoiding field cultivations in wet conditions, erosion, compaction and rutting of the soil will be avoided. Minimise frequent vehicle movements over the same area of land, especially when soil conditions are wet. Consider the use of low ground pressure tyres, dual wheels or tracked vehicles to minimise soil compaction. Cultivation means to prepare for planting and sowing. Saturation is indicated by the appearance of water from the soil when pressure is applied e.g. from the equivalent of a footprint. The PEPFAA code of good practice gives guidance on this measure.

<p>Minimum Level of Maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats -minimum livestock stocking rates or/and appropriate regimes</p>	
<u>Measure</u>	<u>Advisory Guidelines / Good Practice</u>
<p><u>10</u> (i) Avoid undergrazing at a level where the growth of scrub or coarse vegetation is detrimental to the environmental or agricultural interest in the field. (ii) Where undergrazing is identified, a management regime to be observed on that site must be approved by SEERAD.</p>	<p>Undergrazing may be identified as allowing the growth, structure or species composition of grazed vegetation to significantly deteriorate through insufficient management. Biodiversity or other environmental gain may be achieved through the planned and managed encroachment of scrub and coarse vegetation. If your stocking density decreases significantly then the land will be at a greater risk of under grazing. In this circumstance, you should take remedial action or seek professional advice. Often the first sign of undergrazing on a pasture is the build up of dead plant litter. Later stages include the gradual appearance of shrubs and trees.</p>

<p>Minimum Level of Maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats -minimum livestock stocking rates or/and appropriate regimes-</p>	
<u>Measure</u>	<u>Advisory Guidelines / Good Practice</u>
<p><u>11</u> (i) Avoid overgrazing with livestock and other species in such numbers as to adversely affect the growth; structure; or species composition of vegetation on the land. The only exception to this is where vegetation is normally grazed to destruction to a significant degree (i.e. land that is to be cultivated immediately after grazing by livestock which remove the entire crop). (ii) Where overgrazing is as a result of an unexpected and unpredictable incursion of wild deer or geese and it can be shown that appropriate action had been taken to deal with the problem (including for deer, taking advice from the Deer Commission for Scotland where significant), then you will not be held accountable for overgrazing caused as a result of this infringement. (iii) Where overgrazing is attributable to rabbits you will be expected to provide evidence of use of available control methods. (iv) Where overgrazing is identified, a management regime to be observed on that site must be approved by SEERAD.</p>	<p>The common conditions indicating overgrazing are:</p> <ul style="list-style-type: none"> • Clear evidence due to grazing pressure that the growth, quality or species composition of the vegetation is deteriorating to a measurable extent e.g. signs of overgrazing include: vegetation chewed back to the previous year's growth or heavily trampled, absence of flowering, large bare patches of poached soil, a lack of regeneration or visible damage to trees and saplings in woods. • Evidence of poor condition of the vegetation combined with evidence of poor animal condition. • Over-reliance on supplementary feed. <p>Overburning should be avoided by following the Muirburn code.</p>

<p>Minimum Level of Maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats -Protection of permanent pasture-</p>	
<u>Measure</u>	<u>Advisory Guidelines / Good Practice</u>
<p><u>12</u> Any proposal to plough up pasture of high environmental or archaeological value e.g. species-rich grassland, machair habitats, pastoral woodland and heather moorland will require the consent of the</p>	<p>Guidance on who the relevant authority is and the Environmental Impact Assessment regulations can be obtained from your local SEERAD Area Office.</p>

<p>relevant authority (e.g. SNH for land in SSSIs, SEERAD for land in an agri-environment agreement) or approval under the Environmental Impact Assessment (Uncultivated Land and Semi-Natural Areas) (Scotland) Regulations 2002 (SSI 2002/6).</p>	
<p><u>13</u> To ensure the protection of rough grazings and other semi-natural areas you must not undertake new drainage works, ploughing, clearing, levelling, re-seeding or cultivating unless approved under the Environmental Impact Assessment (Uncultivated Land and Semi-Natural Areas) (Scotland) Regulations 2002 (SSI 2002/6).</p>	<p>Rough grazings and other semi-natural areas means land containing semi-natural vegetation including heathland, heather moorland, bog, unimproved and rough grassland which is used or is suitable for grazing.</p> <p>Ploughing, cultivating and re-seeding results in the natural vegetation being destroyed and replaced with sown grasses.</p> <p>New drainage works, and modification of existing drains, cause lowering of the water table which results in the loss of wetland plant communities and their associated fauna.</p> <p>In nearly all areas of deep peat, re-cutting moorland grips beyond what is needed for routine maintenance will also be considered as damaging and should not be carried out.</p>

<p>Minimum Level of Maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats -Protection of permanent pasture-</p>	
<p><u>Measure</u></p>	<p><u>Advisory Guidelines / Good Practice</u></p>
<p><u>14</u> To ensure the protection of rough grazings and other semi-natural areas, pesticides, lime or fertiliser must not be applied except in certain cases specified below or as approved under the Environmental Impact Assessment (Uncultivated Land and Semi-Natural Areas) (Scotland) Regulations 2002 (SSI 2002/6).</p> <p>Exceptions are allowed in the following circumstances:</p> <p>(i) Herbicides may be applied to control injurious weeds as defined in the Weeds Act 1959, and with the prior written approval of SEERAD for the control of other plants e.g. Japanese Knotweed and Giant Hogweed.</p> <p>(ii) For the control of bracken with Asulam or other approved herbicides; or</p> <p>(iii) The application of lime or fertiliser where no conservation damage will result e.g. holding fields adjacent to hill livestock pens.</p>	<p>The Weeds Act 1959 applies to the following injurious weeds: spear thistle, creeping or field thistle, curled dock, broadleaved dock and ragwort. SEPA should be consulted if it is intended to use a pesticide in or near a watercourse.</p> <p>The PEPFAA code of good practice gives guidance on this measure.</p>

<p>Minimum Level of Maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats -Retention of landscape features-</p>	
<p><u>Measure</u></p>	<p><u>Advisory Guidelines / Good Practice</u></p>
<p><u>15</u> (i) Do not damage, nor without the prior written agreement of SEERAD and/or other statutory bodies remove or destroy any of the following boundary features: drystone or flagstone dykes, turf and stone-faced banks, walls, hedges and hedgerow trees, boundary trees and watercourses.</p> <p>(ii) No hedge trimming is permitted between 1 March and 31 July except for roadside hedge</p>	<p>Examples of potentially damaging activities are :</p> <ul style="list-style-type: none"> • The use of machinery, including cultivations, the application of fertilisers or pesticides, or the storage of materials including livestock manures or straw or silage bales, on or within 2 metres of field

<p>trimming, required in the interest of road safety. (iii) Written approval is not required where it is proposed to widen field entrances to enable access for livestock or farm machinery.</p>	<p>margins or the base of hedges or dykes or the banks of watercourses.</p> <ul style="list-style-type: none"> • The canalisation or culverting of watercourses. This type of activity will be regulated by SEPA under the Water Environment and Water Services (Controlled Activities) (Scotland) Regulations, currently due to come into force in April 2006. • The cutting of bankside vegetation between 1 March and 31 July except to control injurious weeds (as defined in the Weeds Act 1959) as well as Bracken, Japanese Knotweed and Giant Hogweed. • The use of trees as straining posts. <p>Guidance on who the relevant authority is can be obtained from your local SEERAD Area Office.</p>
<p><u>16.</u> Avoid the deterioration of non-productive landscape features which are part of the agricultural unit, such as shelter belts, copses and ponds.</p> <p>Deterioration is defined as:</p> <p>(i) Not maintaining functional stockproof fences around shelter belts and copses. (ii) Severe poaching where feeding and/or other husbandry practices of livestock occur in copses and shelterbelts. (iii) Failure to maintain ponds on the holding e.g. eutrophication, drainage.</p>	<p>These features should be protected from damaging activities such as drainage or felling (except where this is the subject of specific consent by SEERAD or the appropriate regulatory authority, in particular the Forestry Commission for felling licences), and land managers should take reasonable positive action to prevent these features from deteriorating. Severe poaching means the cutting up of turf by the trampling of livestock to the destruction of the underlying vegetation leading to a predominantly muddy surface.</p>

<p>Minimum Level of Maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats -Retention of landscape features-</p>	
<p><u>Measure</u></p>	<p><u>Advisory Guidelines / Good Practice</u></p>
<p><u>17</u> (i) Avoid altering, damaging or destroying protected elements of the historic environment. These elements are scheduled monuments, listed buildings and sites included in the Inventory of Historic Gardens and Designed Landscapes. (ii) Monument of national importance are scheduled under the Ancient Monuments and Archaeological Areas Act 1979. No works affecting such monuments may be carried out or permitted without the prior written consent of the Scottish Ministers (known as Scheduled Monument Consent (SMC)). (iii) Buildings of special architectural or historic interest are listed under the Planning (listed Buildings and Conservation Areas) (Scotland) Act 1997. The alteration or demolition of such buildings requires Listed Building Consent (LBC) from the local planning authority.</p>	<p>Information on these protected elements of the historic environment is available from several sources:</p> <ul style="list-style-type: none"> • Local Authorities; • Historic Scotland; • SNH; and • on line at www.pastmap.org.uk <p>Pastmap provides online data on the location of scheduled monuments, listed buildings and Inventory sites.</p> <p>For guidance on scheduled monuments owners should contact Historic Scotland at:</p> <p>Ancient Monuments Historic Scotland Longmore House</p>

	<p>Salisbury Place Edinburgh EH9 1SH Tel: 0131 668 8777 e-mail: hs.farming@scotland.gsi.gov.uk www.historic-scotland.gov.uk</p> <p>For detailed information about specific monuments, buildings and sites owners should contact their local authority in the first instance. Your local authority will be able to put you in touch with their conservation and archaeology services. Sites included in the Inventory of Historic Gardens and Designed Landscapes are also protected. Developments affecting such sites may require special consideration in the planning process. Copies of the Inventory can be consulted at main public libraries, local SNH offices or SEERAD offices.</p>
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Minimum Level of Maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats -Retention of landscape features-	
Measure	Advisory Guidelines / Good Practice
<p>18 (i) Avoid the encroachment of unwanted vegetation which degrades the agricultural and environmental value of the land to the extent that the land is not capable of returning to agricultural production at any time during the next growing season.</p> <p>(ii) Taking the above into account, the encroachment of native species is allowed in the following instances:</p> <ul style="list-style-type: none"> • Recolonisation of trees across the boundary line from native woodland. • Recolonisation of scrub species such as gorse, birch and juniper as part of a mosaic of habitats. • Reversion of land to wet grassland or wetland. 	<p>Through appropriate grazing, topping or other permissible methods of control land managers should prevent the severe encroachment of unwanted vegetation which is both agriculturally and environmentally degrading including rhododendron, bracken, weeds covered by the Weeds Act 1959, Japanese Knotweed, Giant Hogweed and Himalayan Balsam.</p> <p>These patterns of ecological succession will be regarded as consistent with Good Agricultural and Environmental Condition provided that:</p> <ul style="list-style-type: none"> • They are consistent with maintaining the ecological status of protected areas (e.g. Sites of Special Scientific Interest). • The growth of scrub is easily reversible through regular cutting, use of approved herbicides or grazing.

EVALUATION

The GAEC measures as defined in Scotland focus to a large extent on soil-related measures. The importance of GAEC can be seen in balancing potential changes in land management and landscape as a consequence of decoupling and modulation. It is widely anticipated that decoupling of direct payments and modulation may lead to further land management extensification and to changes in farm structures resulting in fewer, bigger farms. Without GAEC, extensification, on the one hand, and farm amalgamation, on the other hand, could potentially lead to significant changes in vegetation and field structures (for example, fewer hedges, walls and dykes), with implications for environment, wildlife and the characteristics of the cultural landscape in rural Scotland. A more detailed

evaluation of the environmental impact of GAEC is only possible in some years once comprehensive information have been obtained through the monitoring of GAEC. At this time, there is still uncertainty about the extent of land management changes required by GAEC and how and how effective GAEC inspection and monitoring will be.

SOURCES

SEERAD (2004). Single Farm Payment Scheme, Information Leaflet 7: Cross Compliance. <http://www.scotland.gov.uk/Publications/2004/10/20108/45384#6>.

18. THE SCOTTISH BEEF CALF SCHEME

The Scottish Executive decided, while implementing the fully decoupled single farm payment (SFP), to make use of the option under Council Regulation (EC) 1782/2003 (article 69) to implement a beef national envelope this year (2005) recognising the specific importance of beef cattle.

AIM

The main objectives of the Scottish Beef Calf Scheme (SBCS) are to sustain quality beef production and protect environments dependent on cattle grazing.

IMPLEMENTATION

The SBCS is targeted at Scottish beef producers who breed and keep eligible calves on their Scottish land continuously from birth for at least 30 days. Eligible animals are male and female calves which are at least 75% beef bred. However, calves should have not been older than 30 days on 1 January 2005, hence, only calves born on or after 2 December 2004 are eligible for payments. The calves need to be registered on the Cattle Tracing System and have a valid cattle passport. The scheme is open for claims since beginning of the year and there is no limit on the number of claims which can be submitted in each calendar year. There will be no forward retention periods or stocking density limits.

Actual payment rates for eligible calves will depend on the total number of eligible claims in each year. A higher rate will be paid for the first 10 beef bred calves followed by a lower flat rate for further eligible animals. However, in earlier information provided by SEERAD (2004b), the Executive anticipated payment rates of around £70 for the first ten beef bred calves in each business and £35 for all other beef bred calves. The scheme will be funded through the beef national envelope created by retaining 10 percent of single farm payments from the cattle sector. The SBCS, as a supplementary direct payment in addition to the single farm payment, is subject to modulation at the rate defined for certain years. Farmers receiving the SBCS will be required to comply with Statutory Management Requirements and to maintain their land in Good Agricultural and Environmental Condition (GAEC).

UPTAKE

At this stage there is no information available about the number of claims so far.

EVALUATION

According to its objectives the scheme is expected to encourage the suckler cow sector, in particular in remoter areas, providing not only economic benefits, e.g. by promoting the production of weaned calves and store animals for fattening by others, but also environmental benefits through cattle grazing. But as the SBCS is a very young scheme open for its first year, a meaningful impact assessment of the scheme can not be carried out, yet.

SOURCES

SEERAD (2004a). The Scottish Beef Calf Scheme (SBCS).
<http://www.scotland.gov.uk/library5/rural/sbcs.pdf>

SEERAD (2004b). Beef national envelope. Press release 29/07/2004.
<http://www.scotland.gov.uk/News/Releases/2004/07/29121117>

19. LMC MENU SCHEME

The Land Management Contract Menu Scheme (LMCMS) was launched in 2005 as a prototype Tier 2 of the LMCs following the LMC concept introduced by SEERAD (2005a). Tier 2 provides further payments for delivering different combinations of economic, environmental or social benefits, additional to Tier 1 – the Single Farm Payment and cross-compliance.

AIM

The aim of the LMC Menu Scheme (Tier 2 of LMCs) is to a) deliver public benefits which would not otherwise be provided in a free market and b) improve the efficiency and competitiveness of Scottish agriculture to allow it to respond to challenges of decoupling and operating in a free market.

IMPLEMENTATION

The LMC Menu Scheme is available to all farmers on a non-competitive basis. Farmers can choose from a menu of 17 separate measures, which apply at all-Scotland level, including, for example, training and access measures and a number of animal welfare, woodland and environment-related measures. Farmers have a free choice which combination of measures from the menu they want to take up (SEERAD 2005c), although some of the measures only apply if the habitat is present on the farm. The following is the full list of measures for the LMCMS 2005:

Table 19.1: Measures and payment rates of the Tier 2 LMC (SEERAD 2005a)

	Measure	Payment rates
1	Animal health and welfare programme	Up to £1135
2	Membership of quality assurance scheme	Up to £150 per scheme
3	Training	Up to £500
4	Farm and woodland visits	£100 per visit
5	Off-farm talks	£50 per talk
6	Buffer areas	£200 per hectare
7	Management of linear features	£0.10 per metre of hedgerow £1 per metre of ditch £0.10 per metre of dyke
8	Management of moorland grazing	£1 per hectare
9	Management of rush pasture	£125 per hectare
10	Biodiversity cropping in-bye	£40 per hectare £150 per hectare with stooking
11	Retention of winter stubbles	£40 per hectare
12	Wild bird seed mixture	£329 per hectare
13	Summer grazing of cattle	£1 per hectare
14	Nutrient management	£2 per hectare
15	Improving access	£2.75 per metre of path Up to £150 for capital items
16	Woodland plan	£10 per hectare of woodland
17	Farm woodland management	£30 per hectare of woodland

A maximum amount that will be payable to a farm has been implemented depending on the size of the farm. For 2005 the maximum amount will be:

- first 10 ha at £75 per hectare
- next 90 ha at £30 per hectare
- next 900 h at £1 per hectare
- any hectares over 1000 at £0.10 per hectare.

UPTAKE

The LMC Menu Scheme was introduced for the first time in 2005 and provisional information released by SEERAD (2005b) indicates that about 10,200 farmers have applied under the various options available in the menu representing just under half of all farmers applying under the Single Farm Payment Scheme (Tier 1). This will direct £17 million to farm households financed through modulation of the Single Farm Payment Scheme. The biggest interest and highest uptake has been for a quality assurance scheme, participation in an animal health and welfare programme, improving access and protection of linear landscape features such as dykes and hedges. Conversely, low uptakes have been received for measures such as biodiversity cropping on in-bye, off-farm talks and management of moorland grazing. Table 19.2 summarises the different measures, number of applicants and the projected amount to be spent.

Table 19.2: Uptake of measures under the LMC Menu Scheme (2005)

	Measure	No of applicants	Projected spend (in £k)	Area managed (in ha)
1	Animal health and welfare programme	3949	2500	-
2	Membership of quality assurance scheme	7548	850	-
3	Training	1807	780	-
4	Farm and woodland visits	406	150	-
5	Off-farm talks	275	50	-
6	Buffer areas	880	25	1230
7	Management of linear features	4511	2936	8216 km
8	Management of moorland grazing	233	196	196,000
9	Management of rush pasture	1751	2060	16,500
10	Biodiversity cropping in-bye	58	7	124
11	Retention of winter stubbles	1050	675	16,900
12	Wild bird seed mixture	371	160	490
13	Summer grazing of cattle	419	173	173,000
14	Nutrient management	663	186	93,000
15	Improving access	4145	6885	2400 km
16	Woodland plan	185	31	3000
17	Farm woodland management	162	30	1000

EVALUATION

A key element of the LMC Menu Scheme is that there is a free choice as to which measures farmers can apply for. Although consideration was given by SEERAD (in a public consultation) to having some restriction on the choice this has been rejected. The advantage is that such a “free choice menu” approach could potentially allow farmers to incorporate aspects that account for the specific characteristics and structure of their farms. On the other hand, there is a risk that a spatially inconsistent distributed menu of different measures reduces the potential benefit of the scheme. LMCMS applicants, if the application concerns land of an agricultural business, have to adhere to Cross Compliance requirements, as Cross Compliance does apply on all land in agricultural business. Moreover, recipients must adhere to Good Farming Practice. No data of the

regional breakdown are available at this stage, but information on the spatial distribution is expected to be available later this year.

Given that the LMC Menu Scheme has just been introduced at the beginning of 2005, it is not possible to assess environmental benefits contributed by this scheme at this time. The ability to evaluate the impact and success of the LMC Menu Scheme will strongly depend on future monitoring systems of the scheme and the implementation of land management plans.

SOURCES

SEERAD (2005a): Land Management Contracts: The LMC Menu Scheme 2005.
<http://www.scotland.gov.uk/library5/agri/lmcsl.pdf>

SEERAD (2005b): Land Management Contract Menu Scheme. News Release.
<http://www.scotland.gov.uk/News/Release/2005/08/25151946>

20. THE LESS FAVOURED AREAS SUPPORT SCHEME

The principal objective for LFA policy is to maintain farm management in less-favoured areas based on environmental principles and provision of other functions beyond food production such as public good provision. The aim is sustainable resource management which includes particularly preservation of soil, water and air quality, maintenance of the cultural landscape, a high degree of biodiversity and protection from natural hazards (ESPON, 2004). In Scotland, specific LFA support has been provided from 1975 until 2000 through the Hill Livestock Compensatory Allowances (HLCA), a headage payment for breeding beef cattle and ewes. However, the Rural Development Regulation (RDR), emerged from the Agenda 2000 reform as the second CAP pillar, required that LFA support payments must be made on an area basis. Accordingly, the Scottish Executive introduced the Less Favoured Area Support Scheme (LFASS) as the successor of the HLCA in 2001.

AIM

The LFASS aims to ensure that agricultural activities continue in naturally disadvantaged areas, more remote and peripheral regions, where agriculture has a key role to play in sustaining fragile rural economies, and maintaining valuable biodiversity and landscapes - yet where agriculture would not prove feasible in the absence of such support. The LFASS compensates disadvantaged farmers and crofters for the low productivity and additional costs they face in such areas.

IMPLEMENTATION

The new LFA Support Scheme (LFASS) has introduced a number of new or strengthened elements, in particular after revisions in 2003 and 2004. The calculation of the area based entitlements depends on eligible forage hectares, livestock units and grazing categories, fragility categories of areas, and an environmental element such as the livestock mix maintained. The Scottish Executive (2004) has outlined a four-step procedure to calculate the entitlements:

1. The amount of eligible forage hectares needs to take into account any ineligible dairy activities and minimum and maximum stocking density obligations.

In his step the amount of forage hectares will be reduced by the ineligible dairy land, the area used for dairy activities, applying the following equation:

$$\text{Total liters of milk quota} / 5730 * 0.80 = \text{Ineligible dairy land}$$

To avoid over-compensation of LFA farmers minimum and maximum stocking densities apply. If the stocking density is less than the defined minimum of 0.12 lu/ha the entitlement will be based on the number of hectares that would have been required to support the livestock actually maintained, at 0.12 lu/ha (the minimum stocking density). Maximum stocking density is defined as 1.4 lu/ha, using the ratio of maximum stocking density and actual stocking density to adjust the amount of eligible hectares, if the maximum stocking density is exceeded.

- The number of eligible hectares needs to be multiplied by the hectare values of the different grazing categories defined by stocking density to calculate the adjusted amount of eligible hectares.

The Table 20.1 summarises the different grazing categories, stocking densities and the hectare values allocated to the grazing categories:

Table 20.1. Hectare values of the different grazing categories

Grazing category	Stocking density (in lu/ha)	Hectare value
A	Up to 0.19	0.167
B	0.2 – 0.39	0.333
C	0.4 – 0.59	0.667
D	0.6 and more	0.800

- If at least 10 percent of the livestock units are cattle, the adjusted eligible hectares needs to be multiplied by an enterprise mix multiplier rewarding environmental and socio-economic benefits of keeping cattle in LFAs.

The enterprise mix or hectare multiplier is equal 1.35, if between 10 percent and 50 percent of livestock units are cattle. If 50 percent or more of livestock units are cattle, a higher multiplier of 1.7 applies.

- Finally, the adjusted eligible hectares need to be multiplied by the appropriate payment rates depending on fragility markers (standard, fragile, very fragile), defined by lower and higher transport costs and island locations.

Grazing categories (A, B, C and D) are put in two groups differentiating between more and less disadvantaged land. These two groups have different payment rates as outlined in the Table 20.2:

Table 20.2: Payment rates in £ per adjusted hectare

Land category	Areas with lower transport costs	Mainland areas of disadvantage and higher transport costs	Islands
	“Standard”	“Fragile”	“very fragile”
More disadvantaged land (A + B)	39.00	45.00	47.00
Less disadvantaged land (C + D)	33.50	39.50	41.50

The scheme contains also a minimum payment of £350 per farm. However, a farm must have at least 3 hectares of eligible forage land and submitted a AAA base form to qualify for the LFASS. Examples for the exact calculation of entitlements are outlined in SEERAD (2004). Based on EC Regulations 1750/1999 and 1257/1999 farmers must comply with SEERAD’s Good Farming Practice Guidelines, including a newly introduced requirement to adhere to minimum standards of animal welfare, to qualify for the LFASS farmers. Moreover, in 2004 SEERAD introduced 5 more environmental controls farmers must comply with. These environmental controls aim at maintaining

landscape, biodiversity and habitats of conservation value and at avoiding negative implications of overgrazing and unsuitable farming.

UPTAKE

The total amount spent on LFASS remains rather constant at about £60 million from 2001 to 2006. The Scottish Executive (2005a) predicted a yearly coverage of about 2 million ha and about 11,500 beneficiaries per year within the scheme. However, Table 20.3 shows that the uptake of LFASS in 2004 was about 12 percent more than anticipated by SEERAD, which could mean that the area covered by the scheme was slightly higher, too.

Table 20.3: Total LFASS recipients and payments by Scottish sub-regions (NUTS 3) for scheme year 2004

	Recipients	Payments (£'000)	Average payment (£/recipients)
Aberdeen City, Aberdeenshire & North East Moray	1,234	5,069	4,108
Angus & Dundee City	135	1,075	7,963
Clackmannanshire & Fife	125	592	4,736
East & Midlothian	90	827	9,189
Borders	636	6,220	9,780
City of Edinburgh	-	-	-
Falkirk	78	212	2,718
Perth & Kinross and Sterling	613	4,796	7,824
West Lothian	68	348	5,117
East and West Dunbartonshire & Helensburgh & Lomond	100	714	7,140
Dumfries & Galloway	1,255	9,634	7,676
East & North Ayrshire and Mainland	397	1,811	4,562
Glasgow City	-	-	-
Inverclyde, East Renfrewshire & Renfrewshire	139	644	4,633
North Lanarkshire	93	309	3,322
South Ayrshire	211	1,524	7,223
South Lanarkshire	461	2,448	5,310
Caithness & Sunderland, Ross and Cromarty	1,578	5,321	3,372
Inverness & Nairn, Moray, Badenoch & Strathspey	518	3,429	6,620
Lochaber, Skye & Lochalsh and Argyll & the Islands	1,706	8,421	4,936
Western Isles	1,760	1,514	860
Orkney Islands	711	3,129	4,400
Shetland Islands	1,014	2,038	2,010
Scotland Total	12,931	60,212	4,656

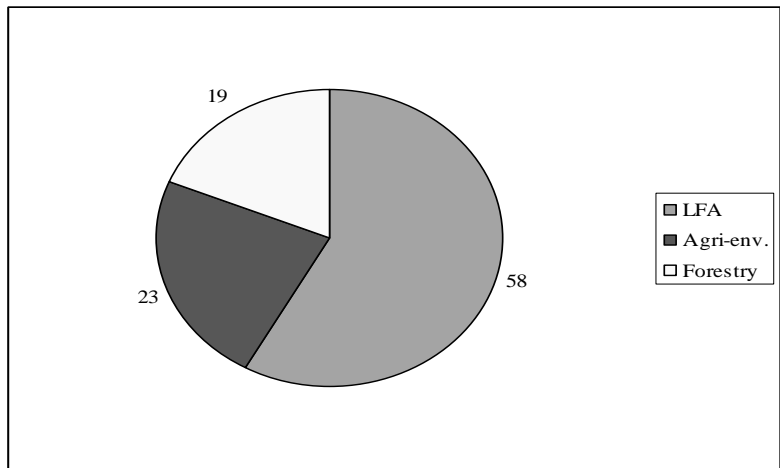
Source: SEERAD (2005b)

IMPACT

Expenditure in the Scottish Rural Development Plan is dominated by LFA support (Figure 20.1). 58 % of its spending is allocated to LFA support following figures published by SEERAD (2005a) in the latest amendments of the SRDP. It is primarily targeted at the objective to assist the viability and sustainability of Scottish farming, with particular reference in to remote and peripheral regions. The LFASS has been reviewed several times and has grown in complexity over the years, especially recently, as

SEERAD has tried to reconcile farm income stabilisation with general environmental concerns enforced by CAP reform.

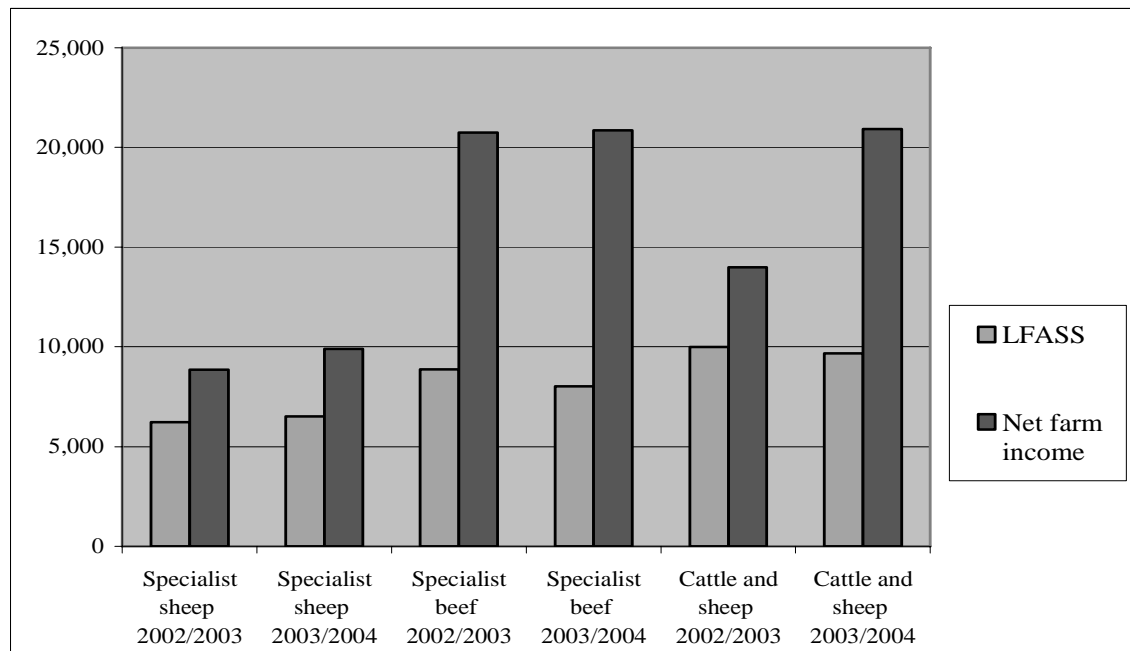
Figure 20.1: Public expenditure allocation in the Scottish Rural Development Plan 2000-2006 (in percent) (computed from SEERAD, 2005a) *



* Figure 20.1 includes funding from national modulation but excludes funding from EU modulation which will be used to finance the LMC Menu Scheme.

Farm Account Survey data for LFA farm types show that LFASS contributed significantly to the income of LFA farms. Figure 20.2 compares net farm income and LFASS receipts of LFA farm types (specialist sheep, specialist cattle and cattle and sheep)

Figure 20.2: Net farm income and LFASS receipts of LFA farm types (in £) in 2002/2003 and 2003/2004 (computed from SEERAD, 2005c)



In 2002/2003 and 2003/2004 LFASS receipts of specialist sheep farms are around 70 percent and 65 percent of the net farm income, while for specialist cattle farms the share of LFASS at the net farm income is significant lower, although it still contributes 43 percent and 38 percent of the net farm income, in these two years. Because of low output

in 2002/2003 compared to the following year net farm income of cattle and sheep farms is significantly lower in this year. However, in both years LFASS receipts provide an important contribution to income of cattle and sheep farms.

While the positive income effect for LFA farms is widely recognized, the scheme has been criticized, in particular in the early years, for focusing on the importance of LFA payments to farming incomes, and not on environmental or wider-economy issues (DTZ Piedad, 2003). It is often seen as a “hidden” subsidy for sheep farmers lacking demanding changes to the scheme to deliver more environmental benefits. Moreover, the relevant target for the LFASS as set by the Scottish Executive to sustain agricultural activities in Scotland’s remote hills has been subject to criticism as many farm businesses receiving LFASS are not in remote hill areas (see Table 20.3 for number of recipients). A number of changes have been implemented in the scheme responding to the criticism and changing EU frameworks. Minimum and maximum stocking densities have been implemented to avoid overcompensation and reduce the risk of overgrazing, in particular since the introduction of the lower maximum stocking density of 1.4 in 2004. In the same year new environmental controls have been added and Good Farming Practice guidelines with respect to overgrazing have been expanded (SEERAD, 2005a). However, the need has been expressed during an evaluation of the SRDP to strengthen and clarify the guidelines, creating a unified Code of Practice for the agricultural industry with the Good Farming Practice being a part of that (Ward and Thompson, 2002). Moreover, adjustments to the scheme towards supporting cattle grazing have been made to account for anticipated implications of the recent CAP reform such as reduction of cattle numbers in marginal areas.

There has been no integration with nature quality schemes or designations such as Sites of Special Scientific Interest (SSSIs) identified by environmental agencies or Environmentally Sensitive Areas (ESAs) implemented under Regulation 2078/1992 (Thomson, 2004). However, while environmental aspects are included in the aim of the scheme, it remains mainly a socio-economic support instrument for farming in disadvantaged areas. During the negotiations on the new RDR, to be implemented in 2007, discussions have taken place on how to revise the European LFA designation, which would potentially lead to changes in the design of LFASS or any other future specific LFA payment, but a decision on such revisions has been postponed until 2010 (Agra Europe, 2005). However, SEERAD will be including proposals for an interim LFASS scheme for 2007-2010 in its upcoming consultation on the Scottish Rural Development Plan.

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21. ENVIRONMENTALLY SENSITIVE AREA SCHEME AND COUNTRYSIDE PREMIUM SCHEME

This section summarises the Countryside Premium Scheme (CPS) and the Environmentally Area (ESA) Scheme. Agri-environment schemes have operated in Scotland since 1987. The Environmentally Sensitive Areas Schemes (ESAs) were first introduced in 1987 followed by the introduction of the Organic Aid Scheme in 1994 and the Countryside Premium Scheme (CPS) 1997. By the end of the year 2000, all ESAs and the CPS closed to new applications and the Rural Stewardship Scheme has been introduced in 2001 as their successor.

The ESA Scheme is assessed in more detail than the CPS because of comprehensive monitoring information available. The CPS extended the ESA Scheme to the rest of Scotland but with some refinements to the aims and implementation, effectively acting as a pilot for the Rural Stewardship Scheme. As the CPS monitoring data have not been available, yet, comments are therefore confined to a brief review of the effects of uptake. Following a separate description and assessment of the aims, implementation and uptake of the ESA Scheme and CPS, a brief evaluation is provided focusing on the ESA Scheme.

Some of the information presented in this section is based on the results of the monitoring of the ESAs carried out by the Macaulay Institute and the Centre for Ecology and Hydrology.

COUNTRYSIDE PREMIUM SCHEME

AIMS

The main objective of the CPS was to protect and enhance Scotland's landscape (including archaeological and historical features) and the wildlife, habitats and natural resources of the countryside. The scheme also helped contribute to the Government's national and international conservation objectives for example on biodiversity and the protection of rare and endangered species.

IMPLEMENTATION

The scheme applied to all of Scotland outside the ESAs but, unlike the ESA scheme, was constrained by a national budget and was therefore competitive. Consequently only the best applications were accepted and, if necessary, applications were ranked on:

1. Proposals to manage sites designated under European environmental legislation
2. The proportion of priority habitats (see below) occurring on the holding and proposed for management;
3. The number of non-priority habitats/features proposed for management
4. Proposals to manage habitats/features jointly with neighbours
5. Any continuation of management from previous agri-environment scheme;
6. Any proposals for the enhancement of designed landscapes.

Farmers entering the scheme had to conform with some General Environmental Conditions (equivalent to ESA Tier 1 but no payment was made for this under CPS).

They could then select habitats/features to be managed from a general list that included some options not present in the ESA scheme (e.g. beetle banks, restoration of vernacular buildings). For each of the 8 regions overseen by SEERAD's area offices, some habitats/features were identified as local conservation priorities following discussions with SNH and local farming, crofting and conservation interests. The priority habitats in the list could change from year to year. The larger the number of priority items included in a farmer's application, the greater the chance that the application would be funded, especially if the scheme was over-subscribed.

UPTAKE

In the absence of detailed monitoring information, it is possible only to pick up one or two general points regarding the uptake of the CPS. In 2004, £4.3m was paid to 1,117 CPS participants Scotland-wide covering an area of 669,000 hectare. There were differences in the number of participants in SEERAD sub-regions, ranging from 5 in West Lothian to 173 in the region comprising Aberdeen City, Aberdeenshire and NE Moray. However there are no readily available data on the proportions of those areas entered into the scheme. The equivalent 2004 data for ESAs (which were starting to decrease as agreements reached their 10-year lifespan) and RSS are shown in Table 21.1.

Table 21.1: Number of participants and cost of CPS, ESA and RSS in 2004

	Number of participants	Range in no. across SEERAD sub-regions	Cost (£m)	Area (in 1000 ha)*
CPS	1,117	5-173	4.3	669
ESA	2,452	28-372	9.7	815
RSS	2,713	6-664	11.5	714

Source: SEERAD (2005a); * area data from SEERAD (2005b)

ENVIRONMENTALLY SENSITIVE AREA SCHEME

AIMS

The main objective of the ESA Scheme was to help conserve specifically designated areas of the countryside where farming and crofting practices have helped create distinctive landscapes and have maintained wildlife habitats and historic features. The purpose of the ESA Scheme is to support the continuation of those farming practices and to encourage measures that will enhance the environment.

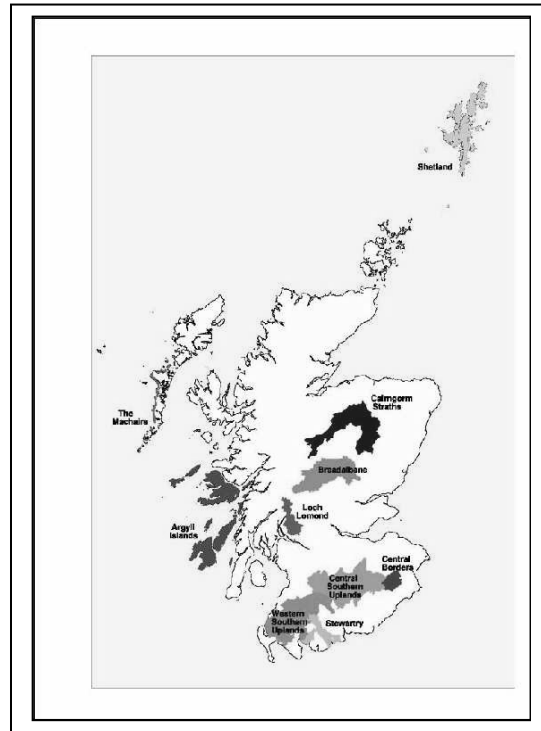
IMPLEMENTATION

Five ESAs were launched in 1987: Breadalbane, Loch Lomond, the Stewartry, Whitlaw/Eildon in the Borders (to become the Central Borders), and the Machairs of the Uists, Benbecula, Barra and Vatersay, a narrow strip of western seaboard in the Western Isles. The precise delineation of the ESAs was determined by a working party of representatives from the Scottish Office Agriculture and Fisheries Department, The Countryside Commission for Scotland, and the Nature Conservancy Council. As part of the 1992 CAP reform, 5 new ESAs were created in 1993 and at the same time three of the existing ESAs had their boundaries extended. The 10 ESAs cover almost 1.5 million hectares, equivalent to approximately 19% of Scotland's land, with nearly 4100 potential participants. The scheme closed to new applicants in December 1999.

Table 21.2: Areas of the Scottish ESAs

ESA	Area (km ²)
Argyll Islands	2641
Breadalbane	1812
Cairngorms Straths	2361
Central Borders	351
Loch Lomond	497
Machairs of Uists etc.	181
Shetland Islands	1465
Stewartry	603
Central Southern Uplands	2733
Western Southern Uplands	2205

Figure 21.1: Location of the Scottish ESAs



To achieve the above aims, landholders voluntarily entered the scheme and committed their land to an agreed management plan for 10 years, although there was a break clause after five years. Common grazings committees could also enter common land into the scheme, separate from crofters' individual applications. The scheme had two tiers of payment:

- Tier 1 agreement, a basic level of payment was made for fulfilling certain requirements over the total area of eligible land on each farm or croft. These 'maintenance' requirements aimed to prevent any decline in the current state of the land.
- Tier 2 payments, which were considerably higher than Tier 1, were designed to 'conserve, enhance or extend' prescribed habitats or features of conservation value, including archaeological sites. Payments were usually made on an area basis (including the rebuilding of dry-stone walls) but 'headage' payments were made for removal of stock from the holding and, for example, tree planting.
- *Capital payments* were also available e.g. for fencing required to achieve the Tier 2 aims.

However, there are a number of regional variations in this scheme. Firstly, the size of the cap on the total payable to any particular holding under Tier 1 and Tier 2 and the balance

between Tier 1 and Tier 2 payments varied between ESAs, reflecting the size of landholdings and the number and type of Tier 2-eligible habitats in each ESA. For example, the initial caps on Tier 1 and Tier 2 annual payments in the Stewartry were, respectively, £1500 and £5000, in Breadalbane and Loch Lomond, £2000 and £4000 but in the crofting areas of the Machairs they were £1000 and £2000. The caps and payments were revised as the scheme progressed.

Secondly, while the Tier 1 management prescriptions were standard across all ESAs, there were differences under Tier 2 with each ESA having its own list of eligible habitats or features. These were broadly defined so that one definition would cover the wide range of vegetation types that constituted, say, 'wetlands' in the different ESAs. Most habitats/features were common to several ESA lists but there were regional variations, not only in the list as a whole but also for certain priority habitats/features that were considered to be particularly important in an ESA. For the latter, it was mandatory to enter a significant proportion of what was present on the holding into Tier 2. Other Tier 2 measures were optional but in both cases the areas to be managed were selected by the landholder, subject to SEERAD's subsequent approval. An example of a regionalised Tier 2 measure is the set of highly specific options for the narrow strip of coastal land that formed the Machairs ESA of the Outer Islands. These options encouraged traditional forms of management on the machair plain and the conservation of the dunes that protect the plain. Other examples include an option to protect the catchments of basin mires in the Central Borders ESA and options for hedgerow management applied only in some southern ESAs where hedgerows are common.

A booklet specific to each ESA listed the eligible features/habitats and provided guidelines and prescriptions for their management, although these were usually identical for all ESAs. Regional differences for particular prescriptions were confined to stocking rates on moorlands (decided on a site by site basis) and in permitted dates for cutting and cultivation. Applicants marked the areas of each feature and its intended management in a Farm Conservation Plan along with the aims of that management, although these were often vague e.g. 'improve the conservation value of...'.

UPTAKE

A major factor in determining whether or not a farmer entered the scheme was how well the scheme and its prescriptions fitted in with the current farm activities and management (Crabtree *et al*, 1999). When the scheme closed to new applicants in December 1999, two-thirds of the potential 4069 eligible holdings had entered the scheme (Table 21.3) and payments in that year totaled £10.4 million. Nearly 40% of participants applied in the final two years of the scheme but this figure was 61% in Shetland where informal discussions with landholders indicated that many people applied for the ESA scheme because they considered they would have a low chance of success in the competition for RSS funding.

Table 21.3: ESA agreements in force in Scotland by 2000, numerically and as a proportion (%) of the number of eligible participants in each ESA. (Written answer to Parliamentary question SIW-21884, 29/01/02)

ESA	No. of agreements	% of eligible participants
Breadalbane	166	86
Loch Lomond	51	51
Stewartry	203	53
Central Borders	143	84
Machairs of the Uists etc	407	85
Central Southern Uplands	297	77
Western Southern Uplands	183	46
Cairngorms Straths	158	84
Argyll Islands	367	82
Shetland Islands	724	54
Total	2703	66

Results of the monitoring carried out by the Macaulay Institute and the Centre for Ecology and Hydrology suggest that the land cover of farms that were entered into the scheme differed from non-entrants, perhaps reflecting differences in farm types. This is indicated by the different proportions of features in an ESA that were covered by at least the Tier 1 whole-farm prescriptions. For example, as shown in Table 21.4 below, in-scheme farms in the Argyll Islands contained 52% of the area of eligible herb-rich grasslands in the ESA but less than one-third the area of eligible wetlands, while in the Cairngorms Straths the situation was reversed with the percentage of wetlands being nearly three times that of herb-rich grasslands. The Breadalbane and Loch Lomond ESAs had the same measures and prescriptions but very different percentages of the woodland regeneration resource present on in-scheme farms.

The reasons for these differences are not clear. The assessment of the monitoring data did not identify a particular reason for these regional differences. It could be argued that in an ESA where a particular feature was scarce that there is stronger case for ensuring that higher percentage of that feature was entered into the scheme, but this pattern is generally not evident from the data in Table 21.4.

Table 21.4: Regional variations in the percentage of the area of different key vegetation types that were covered by at least Tier 1 of the ESA scheme in 1997

ESA	Herb-rich grassland	Heather	Wetland	Woodland regeneration present
Argyll Is.	52	35	28	24
Breadalbane	34	33	39	67
Central Borders	51	0	50	None found
Cairngorm Straths	13	10	33	32
Loch Lomond	65	38	48	32
Machairs	Most*	no data	Most*	None found
Shetland Is.	6	5	39	None found
Southern Uplands	**	46	**	28
Stewartry	18	29	28	25

* exact proportions not calculable due to difficulty in identifying in/out land in complicated crofting areas

** included in broad moorland categories

EVALUATION

The ESA concept enabled the targeting of areas where certain habitats and features were considered to be particularly at risk but, as stated in DEFRA (2002b), area targeting of ESAs was perceived as too narrow in the Scottish context and a scheme which procured environmental gain throughout the farmland of Scotland was seen as highly desirable. The special area concept underlying ESAs was never as credible in Scotland, where valued (or at risk) habitats and landscapes are not concentrated in specific localities, compared with England. However the ESA scheme provided a focus for the conservation of some nationally and internationally important sites which are more regionally concentrated (e.g. native pinewoods in Cairngorms Straths, machairs) and mandatory Tier 2 measures focused funding on what were perceived to be the habitats and features most at risk in each ESA. Tier 2 prescriptions did improve some habitats in some places, although this was not consistent throughout the ESAs.

The data provided by monitoring of the ESA scheme suggest that monitoring blanket prescriptions for Tier 2 sites were not appropriate to all of the wide range of vegetation types that constituted each key vegetation type in the different ESAs e.g. zero summer grazing was almost always prescribed for grasslands and wetlands but could be detrimental where species-richness was due to a history of continuous grazing. There was also a lack of flexibility and ‘tuning’ of Tier 2 prescriptions to local conditions e.g. dates for cutting/cultivation could have been more flexible to cater for annual and regional variations in weather which affect not only plant growth but also the timing of breeding of farmland wading birds. However experience suggests that such fine tuning would require relatively frequent site assessment, by individuals with the necessary expertise so that prescriptions could be adjusted as necessary. Few ESA sites were assessed by SEERAD staff more than once before the 5-year breakpoint in the agreements. Moreover, lack of ecological expertise local SEERAD staff to assess the value of Tier 2 sites and to sanction variations to prescribed management procedures are a commonly stated problem for site assessment and monitoring of site management.

In terms of socio-economic impacts, local employment should have increased, particularly for fencing and dyking contractors (although information is not readily available on how local the contractors were and whether the money remained within the ESA boundaries). Farmers regularly commented that the best part of the scheme was that they got their fencing paid for. The restoration of dykes also had benefits for controlling stock but had additional benefits for the landscape because dykes are characteristic of some ESAs. The scheme increased farm income and in several cases farmers/crofters stated that they could not have continued farming without that extra income.

On the other hand, the definitions of habitats were often stretched to their limits so that the maximum amount of land was entered into the scheme until the financial ceiling on an agreement was reached, and sites were commonly selected for the convenience or lack of value to the farmer, rather than for conservation reasons. Moreover, sites were often selected that had little or no potential for improvement, either because (a) they were extremely poor e.g. some heather regeneration areas with little heather that they could probably never be regenerated, (b) because they were already as good as they could be (e.g. some herb-rich grasslands). Adhering to Tier 1 prescriptions, worth up to £2000, required little or no change to management practices (Crabtree et al., 1999). Farmers were also adept at selecting from the prescription menu those activities that minimised changes to their farming practices (DEFRA, 2002a) which meant that the most appropriate sites for conservation were not always selected. Moreover, monitoring data suggest that larger estates tended not to enter the scheme: it seems likely that the income from Tier 1 payments did not adequately compensate for the obligations that would be applied across the whole estate.

Finally, sense of ownership is an important criterion for farmers to fully participate in voluntary schemes. Discussion with farmers during monitoring indicated that they could have received better information about the aims for individual sites entered into Tier 2. Similarly, farmers commonly said that they were unaware about possible variations to the prescriptions. As a result they often felt that they had no control over some land and this reduced their sense of ownership of the scheme.

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22. RURAL STEWARDSHIP SCHEME

The Rural Stewardship Scheme (RSS), introduced in 2001, is currently the main agri-environment scheme in Scotland and its design draws extensively on experience gained from previous schemes such as the ESAs and CPS. Participants in the ESA have a guaranteed entry into the RSS when their existing ESA agreements come to an end. The RSS applies across the whole of Scotland and was planned to deliver clearly defined environmental gain in a cost-effective way.

AIMS

The RSS aims to encourage farmers, crofters and common grazing committees to adopt environmentally friendly practices and to maintain and enhance particular habitats and landscape features. The main thrust of the scheme is to 'maintain and enhance existing habitats and biodiversity' (see list below) and, for some habitats, to create new areas. The RSS is also expected to contribute to the achievement of a wide range of rural policy objectives e.g. contributing to farm income, providing employment opportunities for contractors, and supporting the retention or development of rural skills.

IMPLEMENTATION

The scheme is open to all occupiers of agricultural land, on a competitive basis, based on a point scoring application system. Applicants produce an environmental audit for the holding which provides a basis for the agreed prescriptions. The 5-year contract has up to four elements as indicated in Table 22.1. The scheme uses a Good Farming Practice requirement to ensure a degree of environmental protection across the holding at no direct exchequer cost. However this will be replaced to a considerable extent from 2005 by the requirement to maintain land in Good Agricultural and Environmental Condition as cross-compliance for the Single Farm Payment, which reduces the environmental minimum requirements compared to Good Farming Practice.

Table 22.1: Basic elements of RSS

Element	Type	Payment
Basic environmental standards (Good Farming Practice)	Mandatory – applies over the whole farm.	None
Selected management prescriptions.	Voluntary	Fixed annual payment per ha of prescription.
Selected capital works to benefit habitats and features.	Voluntary	Single fixed payment per unit of capital works.
Selected capital works associated with management options.	Voluntary – only available in the context of the relevant management option.	Single fixed payment per unit of capital works.

The RSS has a well-selected range of environmental enhancement measures that clearly indicate the environmental objectives pursued. These are implemented through over 30 management options each with its management prescriptions, which broadly distinguish the following categories:

- Prescriptions predominantly for bird life
- Prescriptions for species rich areas
- Prescriptions for moorland

- Prescriptions for wetland features
- Prescriptions for field margins and boundaries
Prescriptions for arable areas
- Prescriptions for woodland and scrub
- Prescriptions for historic and archaeological sites
- Small unit prescriptions
- Capital works

Payments are at fixed rates with no upper limit on the total payment under a plan. However, payments are reduced to 80% of the full rate where the total area of habitats proposed for management exceeds 100 ha of inbye land or 1000 hectares of rough grazings (2000 hectares for Common Grazings). While total payments for dyking in any single application cannot exceed 35% of the total cost of an RSS proposal (excluding stock disposal and the interest element of the annualised payment), expenditure on capital items not linked to management (i.e. stand-alone capital items) cannot exceed 25% of the total management payments due. Overall, a ceiling of £30,000 per application is implemented in the RSS.

Participants are chosen through discretionary selection using a scoring system to rank applications, the highest scores being accepted into the scheme. The scoring takes into account the number of activities proposed and the contribution to national and local BAPs: greater priority is given to BAP-relevant proposals. The scoring system was intended to select high value for money applications, hence raising efficiency in procuring environmental gain. Landholders who previously had successful ESA or CPS agreements are guaranteed entry into RSS thus ensuring that benefits gained under previous schemes are not jeopardised by the RSS points scoring system.

UPTAKE

Uptake of the RSS has increased from only 49 agreements in 2001 to 2713 participants in 2004 at a cost of £11.5 million (see Table in CPS briefing note). There are regional differences in the numbers of areas entered under different options (Table 22.2) - for brevity, these have been aggregated into broader topics in the table.

Table 22.2 shows the total numbers of areas (regardless of size) under different management options for vegetation registered with each SEERAD regional office by February 2005. Results are given in percentages of all entries handled by that office (for example, 18% of all the land parcels entered into the scheme at the Ayr office were associated with bird-related measures). Measures accounting for less than 1% are denoted with by 't'. Note that the baseline counts were of every individual area entered into the scheme so there can be more than one per farm.

Some of regional differences clearly relate to the occurrence of particular features in an office's region (e.g. high uptake of machair measures in the Benbecula office), but others probably reflect, at least in part, farmers' preferences e.g. the low percentage of bird-related measures in Dumfries and the small number of moorland management areas for Lerwick.

Table 22.2: RSS entries to February 2005- the number of areas of land of different features as a percentage of all areas of land entered into scheme at individual SEERAD area offices. (*Percentages less than 1 shown as 't'*).

Aggregated measures	% of land parcels entered into RSS at each office														
	Ayr	Benbecula	Dumfries	Galashiels	Grampian	Hamilton	Inverness	Kirkwall	Lairg	Lerwick	Oban	Perth	Portree	Stornoway	Thurso
Ancient wood pasture	t	-	-	-	t	-	-	-	-	-	t	-	-	-	-
Arable/cropping (excl. machairs)	-	19	-	-	2	-	6	-	-	6	3	-	-	-	-
Bird-related	18	20	6	14	17	2	22	40	25	26	28	13	44	34	39
Bracken control	t	-	t	t	t	t	t	-	2	-	t	-	2	-	t
Coastal heath	t	-	t	t	t	-	t	7	t	-	t	t	1	4	1
Conservation headlands	2	-	3	3	6	3	3	4	8	-	1	2	-	-	13
Dry lowland grass	-	-	-	t	t	-	t	2	-	-	t	t	-	-	t
Dunes	-	2	-	-	-	-	-	-	-	-	2	-	-	-	-
Extended hedge	7	-	5	2	7	4	2	t	1	-	t	6	-	-	1
Extensive cropping	1	-	t	t	2	1	4	3	5	t	1	1	1	6	5
Flood plains	1	-	t	t	t	1	t	t	t	t	1	1	4	t	t
Grass margin / beetlebank	2	-	1	15	15	4	5	5	6	t	t	10	t	-	5
Hedgerows	12	-	4	13	7	8	3	t	t	t	t	7	1	-	2
Machair-related	-	23	-	-	-	-	-	t	t	-	-	-	-	2	-
Heathland	4	t	3	3	t	5	4	1	4	t	2	2	8	14	t
Species-rich grassland	9	10	12	8	7	13	10	8	12	21	15	12	11	13	10
Stock control/ disposal	6	-	5	3	t	8	1	t	2	20	1	t	5	4	t
Water margins	18	-	24	20	26	19	18	11	21	t	7	20	9	15	14
Wetland (incl. wet grassland)	12	24	18	9	9	11	12	16	10	21	23	12	9	8	7
Woodland (WGS, grazing control)	2	t	13	6	1	2	6	-	-	4	7	9	-	-	-
Native/semi-natural woodland/scrub	3	t	4	2	2	1	3	t	3	t	4	5	3	t	t
Total no. of parcels	6589	2329	5670	9913	17072	2232	5576	3457	566	5817	5249	11052	545	512	3012

Source: Data provided by SEERAD

As ESA agreements come to an end and former ESA participants enter the RSS, some of the regional differences shown above will probably be affected by (a) the regional distribution of the ESAs themselves and (b) differences between ESAs in the list of priority features for Tier 2 ESA measures, which would be carried over into RSS agreements.

EVALUATION

At present in the scoring system high weighting is given to the diversity of habitats included in the plan, without taking any direct account of environmental quality. Consequently some large farms and estates will be highly competitive because of the diversity of habitats present. This concentration of expenditure may represent high value for money by targeting payments to high-environmental gain sites. However, this needs to be evaluated. It may be that such concentration is less than ideal from a rural development perspective. For example, it is possible that a wider spread of expenditure would be associated with greater employment benefits.

The scoring system favours large ecologically diverse holdings and makes it difficult for land with a limited range of habitats to enter even if these are of exceptional quality. Pressure from crofters who found it difficult to enter the CPS has resulted in special prescriptions for small units (<10 ha inbye) in the RSS and this increases their chance of successful application. Lack of transparency is another major criticism of the scoring system. Some farmers may not know how many points are required to secure entry into

the scheme. IACS businesses already involved in other agri-environment, conservation or woodland schemes are given additional points.

The lack of monitoring information makes it difficult to determine the influence of management prescriptions on environmental outcomes as there is no direct evidence available, yet. As outlined above the choice of the measures depends at least to some extent on farmers' preferences. Cases such as the highest uptake of the conservation headlands option administered by the Lairg and Thurso offices suggests that the RSS may be promoting maintenance or enhancement of features and habitats that are not a major component of the landscape in that region. Whether this is environmentally positive or negative that will depend on whether these rarer features are seen as important for the environment in that specific region. Furthermore, bracken measures, although a widespread problem particular in warmer and wetter regions, have not been popular and the uptake has generally been rather low, except in Galashiels and Inverness area with 22 land parcels entered.

For most RSS optional management measures, there is an underlying presumption for changes in management practices. But changes might not always be appropriate, e.g. for sites of high biodiversity. Such necessary assessments of potential changes in management emphasizes the need for highly skilled advisors, if the correct option is to be selected for a site, particularly grazing options e.g. for wetlands. That skill is also necessary for assessing progress and more flexibility is required to change options if the wrong one has been selected.

A current review of the RSS is undertaken by SEERAD in collaboration with stakeholders assessing which options can and should be included in Tier 3 of the LMCs and what changes and revisions are required and desirable.

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23. ORGANIC AID SCHEME

HISTORICAL DEVELOPMENT and UPTAKE

Organic farming has been practiced in Scotland at least since the 1950s. The sector experienced considerable growth only after the introduction of the Organic Aid Scheme (OAS) in 1994. There was a steady increase in both the numbers of agreements under the scheme, and the hectares under agreement until the year 2003 (see Tables 23.1 and 23.2). The minimum standards for organic farming are defined by EC Regulations 2092/91 and 1804/99; farmers are required to be registered with an approved certification body, of which the three main schemes operating in Scotland are the Bio-dynamic Agricultural Association, the Scottish Organic Producers' Association and the Soil Association. (Scottish Executive, 2003)

Table 23.1: Number of participants in the OAS and annual expenditure 1995 - 2005

Number of agreements in force at 31 March each year										
1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
13	24	35	54	139	383	509	627	662	608	453
Expenditure as at 31 March each year (£k)										
1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
0	53	88	146	194	1226	3485	4943	5513	4766	3100

Source: Scottish Executive (2005a)

Table 23.2: Ha under agreement as at 31 March each year 1995 – 2004

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Rough grazing	11727	12240	14215	18718	84074	185785	227962	296231	291103	225194
Improved grassland	310	571	1135	2010	7479	17937	23846	30062	30175	25914
Arable	328	463	571	866	1633	8210	11776	15849	17700	17481
Total	12365	13274	15921	21593	93187	211932	263584	342142	338979	268588

Source: Scottish Executive (2005a)

Tables 23.1 and 23.2 refer to land and agreements under the OAS. The total number of producers and processors, as well as the area of organic and in-conversion land are higher (based on certifying bodies' membership and inspections): As at 1st January 2005 there were 632 producers and 166 processors and/or importers in Scotland. The land in conversion was 15,199 ha, the fully organic land 344,416 ha; the total of this equals 7.3% of the total agricultural area of Scotland. There were 416 organic and in-conversion livestock producers in Scotland at this date; numbers of livestock are not available.

There was a particularly high increase of agreements between 1999 and 2001; a large number of hill farmers joined the scheme in these years. The drop in numbers in 2004 and 2005 reflects the end of their five-year agreements, when many farmers decided to renounce their organic status.

Although in 2005 the total of organic and in-conversion land has decreased by 3% on the previous year (2004), towards the end of the year 2004, prior to and after the decoupling of statutory support from production and the introduction of the Single Farm Payment (SFP) on 1 January 2005, farmers began to express more interest in converting. These farmers were mostly mixed arable / livestock farms.

A further incentive for new organic farmers may have been the changes made to the OAS in 2004 to make the scheme more flexible, with new payments for land in fruit and vegetable production and new capital activities, as well as providing more long term support for organic producers by introducing maintenance grants. Payment rates for arable land were raised, those for rough grazing, however, lowered, as they had been deemed disproportionately high. It is hoped to attract more lowland farmers into the scheme through the revised support rates. (Scottish Executive, 2005a)

An extensive organic advisory programme is run by the Scottish Agricultural College (SAC) and funded by SEERAD. The programme includes visits to SAC's network of demonstration farms.

The total land under organic management in Scotland (fully organic and in conversion) equals 7.3% of the total agricultural area. A large proportion of this is rough grazing (in 2004, about 84%). The introduction of more attractive payments under the OAS in 2004 as well as advantages brought through the decoupling of statutory support have, after a drop in numbers of agreements in recent years, increased the interest in joining the scheme.

ENVIRONMENTAL BENEFITS

According to the Soil Association, there is a large body of evidence that in lowland areas, organic farming supports much greater levels of both wildlife abundance and diversity than conventional farming systems. This includes those plants and animal groups that are known to have significantly declined on farmland in recent years. Organic farming also reintroduces the benefit of mixed farming to predominantly arable or grassland areas, addressing a fundamental problem in the current agricultural situation that cannot easily be addressed. This and the extensive nature of organic farming indicate important benefits for the uplands, too (Soil Association, 2000). A recent study by the CEH also shows that 85% more plant species populate organic units, alongside more birds and beneficial insects, in England; there is a lack of comparable studies specifically for Scotland (CEH, 2005).

A DEFRA study from 2000 showed that organic farming produces further environmental benefits in that less energy is used per unit output in organic production of individual arable crops. In stockless systems, however, this advantage is reduced due to fertility building crops and winter cover crops with no direct outputs. For livestock production, equivalent organic systems show a better energy ratio in all cases. Energy input levels for extensive conventional and organic grazing enterprises are more similar than arable or intensive livestock systems (DEFRA, 2000).

Although there is evidence that organic farming generally is beneficial to biodiversity as well as being more efficient in the use of energy, specific data for Scotland are lacking.

THE ORGANIC ACTION PLAN AND THE FUTURE

In 2002, the Scottish Executive invited an Organic Stakeholder Group (OSG) to advise on the putting together of a Development Plan for the organic sector in Scotland. (Scottish Executive, 2002) The work of the OSG resulted in the publication of the Organic Action Plan (OAP) in 2003.

The Scottish Executive's vision as described in the OAP is of a prosperous organic farming and food sector which ensures that, as far as possible, demand for organic products is met by Scottish producers, and which makes a strong contribution to the sustainable environmental management of Scotland's agricultural land and water resources. Scottish organic products should meet at least 70% by value of overall Scottish consumer demand for products which can be sourced in Scotland.

The high percentage of upland conversion has not delivered the wider range of environmental benefits across Scotland that would be delivered by additional organic conversion of land on mixed and arable farms. The Scottish Executive's aim is to support accelerated growth of organic farming where this can make the best contribution to environmental sustainability. A doubling of the area of arable land and improved grassland in organic conversion or production is aimed at, with a view to these areas comprising 30% of Scotland's organic area by 2007, against a current 15%. (Scottish Executive, 2003)

A problem that has been pointed out by the Soil Association affects certain long-standing organic farmers, who converted their farms before the start of the OAS in 1994, as well as many newly converted dairy farmers, who stand to lose out under the new Single Payment Scheme, which is based on former payments. The Soil Association estimates that organic farmers typically received 40% less CAP money than non-organic farmers. Hardship payments are available from SEERAD only for those who were in an agri-environment scheme during 1997 and 2002, if they can prove that they lost out on subsidies due to the obligations of their scheme (SSN, 2005).

A study into the organic farming system research needs for Scotland (Scottish Executive, 2005c), advised that SEERAD should re-focus its organic farming research programme to emphasise:

- resolving producer and market constraints, and
- gaining better information on environmental impact of organic production to aid policy direction.

The study highlights a number of constraints on the organic market in Scotland as well as technical issues that should be addressed. On questions of environmental standards and biodiversity, the following areas of research are recommended:

- research actual practices on organic farms (stocking rates, species, manure use)
- determine which explicit environmental benefits are desired by consumers and policy makers
- determine whether, and how best, these benefits can be derived from organic farming practices.

The Scottish Executive is committed to advancing organic farming in Scotland and aims at increasing the self-sufficiency rate for products that can be sourced in Scotland to 70% by value. It is being advised by an Organic Stakeholder Group as well as the newly created Organic Stakeholders Marketing Group. There is still a need for better information on environmental impacts of organic farming in Scotland to aid policy direction.

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Links to other BNs

24. NATURAL CARE

Natural Care was launched in October 2001 as a strategy to manage Sites of Special Scientific Interests (SSSIs) and Natura sites better and to support their owners and managers.

AIMS

Natural Care has four principal aims:

- to improve and maintain the condition of SSSIs and Natura sites.
- to draw on land managers' knowledge and skills when developing schemes for their SSSIs and Natura sites.
- to help more sites for the benefit of their wildlife.
- to encourage people to see how SSSIs and Natura sites help the local economy.

Both agricultural and sporting managers may be able to obtain financial assistance to manage SSSIs and Natura sites through Natural Care. Management Schemes provide standard management requirements and offer standard payments.

Currently there are nine voluntary Management Schemes operated under Natural Care. Most schemes are paid by SNH using grants from the Scottish Executive. However, some schemes are paid jointly by other government agencies and departments such as Forestry Commission, while other schemes may use money from EU programmes for the environment (SNH, 2002).

MULL EAGLE SCHEME

The Mull Eagle Scheme offers support to hill farmers on Mull who have sea eagles and/or golden eagles on their land. It has the following objectives:

- Helping to safeguard the sea eagle and golden eagle populations on Mull, through increased wardening and monitoring of eagles, in conjunction with RSPB and Police Wildlife Liaison officer led initiatives.
- Fostering the pride and commitment of land managers towards the eagle populations on Mull and the recognition that eagles are an asset to the island.
- Supporting land managers in measures aimed at reducing vulnerability of sheep flocks to sea eagle predation.
- Trialling a number of habitat improvements aimed at increasing levels of wild prey taken by eagles.

The scheme offers incentive payments towards:

- Extra shepherding and sheep health measures, aimed at reducing risk of predation by sea eagles.
- Extra support for lamb protection, in special cases where sea eagles nest close to lambing parks.
- Carrying out reporting/wardening tasks related to both golden and sea eagles.

- Habitat management trials, aimed at increasing the levels of eagle prey, at a few selected locations.

The Natural Care Scheme supercedes the Pilot Mull Sea Eagle Management Scheme which was introduced in 1998 and ended in December 2004.

EAST SCOTLAND GRASSLAND MANAGEMENT SCHEME

The scheme offers help with the management and care of 83 lowland grassland and fen Sites of Special Scientific Interest (SSSI). These contain just under half of the semi-natural lowland grasslands in Scotland. The aim of the Scheme is to support and reward land managers for managing SSSIs in a way which will maintain or restore the special grassland and fen habitats.

These habitats need ongoing management in the form of either grazing or cutting, and annual payments are available to support this. Additional financial support is also available for fencing and water troughs, and for work to prevent any loss of habitat, for example, scrub control. Management agreements last 5 years.

LENDALFOOT GRASSLANDS SCHEME

The scheme is located in South Ayrshire, within the hills around Lendalfoot and Colmonell, and is available within the following Sites of Special Scientific Interest:

- Aldons Hill SSSI
- Bennane Head Grasslands SSSI
- Knockdaw Hill SSSI
- Littleton & Balhamie Hills SSSI
- Pinbain Burn to Cairn Hill SSSI

The Lendalfoot Hills Complex cSAC also lies within these sites.

The main conservation interest is botanical. The sites are notable for the extent of unimproved species-rich grassland present, while a range of heath, mire and wetland vegetation adds to the botanical diversity. The scheme has been set up to support land managers in maintaining and enhancing these plant communities through appropriate grazing management, along with bracken control where necessary. The scheme uses an outcome-led approach, and entrants are asked to achieve certain vegetation condition targets, rather than simply following a prescribed grazing regime. It aims to draw on the skills and experience of land managers, working in partnership with SNH, so that conservation needs can be addressed while taking account of the practicalities of livestock production.

The scheme was launched in December 2003, and is open for applications until April 2007, with individual scheme agreements running for five years.

PEATLANDS MANAGEMENT SCHEMES

The aim of this scheme is to secure adequate protection for the internationally important peatland habitats, to build public support for that objective, and to provide a financial incentive for the continued management of peatland in a traditional and sustainable way in sympathy with natural heritage interests. The natural heritage interests that are targeted are blanket bog, wet heath and peatland breeding birds. Eligible areas are:

- Peatland SSSIs in Caithness and Sutherland
- Lewis Peatlands Special Protection Area, Western Isles
- Peatland SSSIs on Skye

Annual payments are made for undertaking a range of management measures.

SOLWAY MERSE MANAGEMENT SCHEME

The aim is to maintain and promote improvements to saltmarsh habitats, which are of interest in their own right, and which support important populations of wintering wildfowl and other wildlife. The natural heritage interests targeted are saltmarsh habitats, natterjack toads, wintering wildfowl and waders. The eligible areas of saltmarsh on the Scottish Solway are eligible.

Applicants sign up to a 5-year management agreement and must follow a grazing management plan agreed with SNH in return for annual payment. Grazing levels are controlled to give variations in sward height and diversity and late summer grazing makes the area more attractive for overwintering birds. A breeding wader supplement is available, to provide light grazing during nesting time.

CORNCRAKE MANAGEMENT SCHEMES

The scheme provides financial incentives to help safeguard populations of breeding corncrakes within corncrake Special Protection Areas in Western Isles, Tiree, Coll and Islay by encouraging and supporting the sympathetic management of agricultural land.

Applicants sign up to a one-year management agreement which covers:

- The establishment and management of late mown grass crops, and
- The creation of adjacent early/late cover, thereby ensuring that suitable tall vegetation is available for corncrakes throughout the breeding season from April to October.

Both annual payments and capital payments for fencing and gates are available.

LOCAL GOOSE MANAGEMENT SCHEMES

There are seven local Goose Management Schemes in Scotland, covering populations of wintering Greenland white-fronted geese and wintering barnacle geese (South Walls, Orkney; Lock of Strathbeg; Uists; Coll and Tiree; Islay; Kintyre; Solway). They aim to help integrate productive farming with the conservation of wild geese and their grazing

on farm and crofting land. Most of the Schemes provide payments towards the maintenance of disturbance free feeding areas where geese are resident whilst encouraging the scaring of geese from other parts of the farm.

In most cases applicants sign up to a 5-year management agreement which covers the establishment and management of:

- Feeding zones: Refuge areas where geese can graze undisturbed. No audible scaring within 100m of boundaries of feeding zone fields. Grassland maintained according to good agricultural practice.
- Buffer zones: Non-audible goose scaring permitted, whilst minimising disturbance to adjacent feeding zones.
- Scaring zones: The farmer or his agent actively scares geese. Audible scaring is encouraged through loan of scaring equipment or grant towards equipment purchase.
- Different rates are offered by the local Goose Management Schemes for each of these prescriptions. This reflects differences in farming/crofting practices and profit margins between different localities.

MOORLAND MANAGEMENT SCHEMES

The sites covered by these schemes are of interest for the variety of moorland habitats present and also for the range of breeding birds they support, including hen harriers. The aim of the schemes is to maintain and enhance these natural heritage interests and to provide a financial incentive for their sustainable management.

Eligible areas are:

- Forth and Borders (12 moorland sites)
- Forest Of Clunie
- Arran Moors
- Muirkirk & North Lowther Uplands
- Glen App & Galloway Moors
- Orkney Mainland Moors scheme

Applicants sign up to a 5-year management agreement. Prescriptions are arranged in four levels and all applicants must participate in levels one and two and must also supply an annual record of moorland management undertaken.

LOWLAND BOGS IN GRAMPIAN

The scheme aims to support management that will allow lowland raised bogs to maintain or restore their water table, by promoting and funding simple management techniques such as blocking ditches and removing scrub to restart peat growth. Management is described in a management plan agreed with the applicant.

Owners and occupiers who join the scheme are expected to monitor and treat any re-growth of scrub, and carry out any minor repairs of dams. They receive £20 per hectare

for the first 100 hectares entered into the Scheme and £12 per hectare thereafter, up to a maximum of 250 hectares. An additional payment of £5 per hectare is available for the management of public access and interpretation facilities.

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25. Nitrate Vulnerable Zones (NVZ)

BACKGROUND

In 1991, the **European Nitrates Directive 91/676/EEC** was introduced with the aim to reduce water pollution from agricultural sources: it sought to prevent inappropriate use of inorganic fertilizers and organic manure which results in nitrate pollution of surface and ground waters. The Directive requires legally binding rules to be put in place for NVZs to reduce nitrate loss from agricultural land when nitrate levels exceed, or are likely to exceed, the levels set in the Directive. These rules are known as Action Programmes. The deadline for implementation of the Directive was 1993.

Member States are required to submit a report to the Commission every four years following its notification, including information pertaining to codes of good farming practice, designated NVZs, results of water monitoring and a summary of relevant aspects of action programmes for vulnerable zones (OECD, 2003). By the end of 2001, the UK was the only member state that had not submitted a sufficient report to the Commission (EC, 2002).

In 2002, there were two NVZs in Scotland, the Balmalcolm NVZ in Fife designated in 1996 and the Ythan NVZ designated in May 2000. Following a European Court of Justice ruling in December 2000 the Scottish Environment Protection Agency (SEPA) extended its surface water-monitoring networks and – with supporting research from the Macaulay Land Use Research Institute and the British Geological Survey – identified elevated levels of nitrate in waters in Angus and the Borders (SEPA, 2002).

Concentrations of nitrate below 0.3mg N/l are considered to be natural or background levels; over one-third of the sites in Scotland tested by SEPA met this classification in 2004. Between 1993 and 2004 the percentage of sites with average nitrate concentrations of 2.5mg N/l rose to a peak of 25.5% in 1997, before falling to 17.6% in 2004 (Scottish Executive, 2005).

From January 2005, NVZ Action Programme rules have become Statutory Management Requirements for farmers under the Cross Compliance rules of the SFP Scheme in at present four designated NVZs in Scotland (equalling about 14% of the total area) (Scottish Executive, 2004):

- Aberdeenshire, Banff and Buchan and Moray
- Lothian and Borders
- Lower Nithsdale
- Strathmore and Fife

About 14% of Scotland are designated NVZs. In these areas legally binding rules, called Action Programmes, are in place to reduce nitrate loss from agricultural land.

ACTION PROGRAMME RULES

In January 2003 the Minister for Environment and Rural Development introduced the Action Programme measures to be followed in NVZs in Scotland. In short, these are:

- record keeping: details of cropping, livestock numbers, use of inorganic fertiliser and organic manure;
- N application limits: N applications from all sources must not exceed the crop / grassland N requirement; organic manure use must not exceed the farm-based limits of 250kg organic N/ha on grassland and 170kg organic N/ha on non-grassland;
- closed periods when no applications should be made: no inorganic N fertiliser to be applied 15/9–20/2 on grassland; closed periods for other land to begin 1/9; no slurry, poultry manure and liquid sewage sludge to be applied 1/10–1/11 on grassland or autumn sown crop, 1/8–1/11 on other land on sandy/shallow soil;
- storage of slurry/poultry manure: the capacity of storage facilities must be sufficient to hold all of the manure that cannot be applied due to closed periods.

The legal obligation to comply with the Action Programme rules rests with the occupier of each farm with land in an NVZ. Farms with NVZs are monitored to ensure compliance with the Action Programme rules with SEERAD Area office staff being responsible for enforcement of the legislation (Scottish Executive, 2003). SEPA's role in implementing the Nitrates Directive relates primarily to regular monitoring of the quality of both ground and surface waters using a monitoring network. The monitoring data is reported to the Scottish Executive in order to fulfill the requirements of the Directive (SEPA, 2002).

Until October 2005, the NVZ Grant Scheme provided help to farmers in designated NVZs who needed to install or improve livestock slurry or manure storage systems or silage effluent tanks in order to comply with the Action Programme rules (Scottish Executive, 2003b).

Action Programme measures include rules on record keeping, N application limits, periods closed for N application, and storage of manure.

THE FUTURE

The gradual orientation of the CAP to take greater account of environmental issues contributes to the purposes of the Nitrates Directive. However, the failure of a proper application of the directive in some member states cannot be rectified only through CAP measures. Controlling nitrate emission is still primarily the task of transposition and implementation of the nitrates directive. Some member states have only since the year 2000 shown a real willingness to improve implementation. They realise that costs induced by drinking water treatment for nitrates excess, or by eutrophication damages in dams or coastal waters will still increase (EC, 2002). It has also to be taken into consideration that there is a considerable time lag between improvements at farm and soil level and a response in waterbody quality (OECD, 2003).

An effect of the application of Action Programme rules cannot be shown as yet, as there is a natural time lag between improvements on the farm and in the waterbody.

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26. ENVIRONMENTAL ASSESSMENT

HISTORY

Environmental Assessment (EA) covers both Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA). Public consultation and participation are fundamental to the preparation phases of both EIA and SEA but the procedures operate at different levels, with EIA relating to individual projects whilst SEA is carried out on plans and programmes at a strategic level. Both are concerned with ensuring that environmental implications are systematically considered before an activity happens.

The EU EIA Directive was implemented in 1988 with the current Scottish legislation being the **Environmental Impact Assessment (Scotland) Regulations 1999**. The EIA Directive's main aim was to ensure that the authority giving primary consent (the 'competent authority') for a particular project makes its decision in the knowledge of any likely significant effects on the environment. (Planning Circular 15/1999). Although EIA has been required for certain developments since 1988, it was recognized that it only applied at the project level. The environmental impacts of wider policy or planning decision were not subject to the same scrutiny.

The EU Directive on the Assessment of Certain Plans and Programmes on the Environment (a.k.a. the SEA Directive), was adopted in June 2001 and transposed in Scottish legislation as **The Environmental Assessment of Plans and Programmes (Scotland) Regulations 2004**. The SEA Directive aims to ensure that the cumulative and interactive environmental consequences of certain plans and programmes, and alternatives to them, are identified and critically assessed before adoption (Reid, 2005). A key observation is that in the past economic and/or social considerations have tended to dominate the policy making process, but SEA establishes a formal process for including environmental considerations.

No Environmental Reports had been completed in Scotland under the 2004 Regulations although 12 are underway (Reid, 2005). Table 26.1 highlights the key differences between SEA and EIA.

Table 26.1: Key differences between SEA and EIA

	Strategic Environmental Assessment	Environmental Impact Assessment
Applies only to individual projects	No	Yes
Site specific	No	Yes
Can consider cumulative effects	Yes	No
Can consider interacting effects	Yes	No
Constrained to specific project	No	Yes

Source: adapted from Reid (2004)

Under the current Partnership Agreement (2003), the Executive will “*introduce SEA to ensure that the full environmental impacts of all new strategies, programmes and plans developed by the public sector are properly considered*”. All the provisions of the 2004 Regulations are incorporated within the Environmental Assessment (Scotland) Bill as introduced to the Scottish Parliament on 2 March 2005. But critically...

... the Environmental Assessment Bill provides that certain authorities and bodies (e.g. local authorities, Scottish Executive) will be required to undertake an SEA for all their plans and programmes unless they have minimal or no likely significant environmental effects. This will include agriculture and forestry strategies.

SCOPE OF ENVIRONMENTAL ASSESSMENT

The basic test of the need for an EIA is the likelihood of significant effects on the environment. It falls to the planning authorities to consider whether an EIA is required. The Regulations have listed those projects that require an EIA (Schedule 1) and those where it may be required after a screening process (Schedule 2). The latter relate to 3 main types of case:

- Major developments that are more than local importance
- Developments proposed in particularly sensitive or vulnerable locations
- Developments with unusually complex and potentially hazardous environmental effects.

Up to June 2003 there had been 481 EIAs for planning projects of which 31 were mandatory (related to schedule 1 projects) and 450 were for schedule 2 projects where the need for an EIA is based on a screening process (Reid, 2004). There is a lack of research on the effectiveness of the EIA process, however, SNH currently have a research project let (FO3AA503 “*An assessment of the environmental impacts of developments that were subject to Environmental Impact Assessment*”).

In general agricultural operations fall outside of the scope of the EIA regulations, unless they involve large developments, water abstraction or forestry-related work. The scope of the new Environmental Assessment (Scotland) Bill will mean that SEA will be a requirement of all future strategies, plans or programmes that relate to Scottish farming (e.g. Scottish Rural Development Plan).

EA IN RELATION TO FARMLAND

Agricultural operations generally fall outside the scope of the Town and Country Planning System and where relevant are regulated under other consent procedures.

In terms of the **Town and Country Planning (Scotland) Act 1977**, development (e.g. greenhouses, farm buildings) on previously uncultivated land is unlikely to require EIA unless it covers >5ha. EIA is more likely to be required if the development would result in permanent changes to the character of >5ha. In assessing the significance of any likely effects particular attention should be paid to wider impacts on hydrology, and surrounding ecosystems, of irrigation and land drainage works, which are also covered under the **Land Drainage (Scotland) Act 1958**. The impacts associated with intensive

livestock installations depend upon the level of odours, increased traffic and waste handling arrangements. EIA is more likely to be required for intensive livestock installations if they are developed to house more than 750 sows, 2000 fattening pigs, 60000 broilers or 50000 layers, turkeys or other poultry. These are only indicative thresholds (Scottish Executive Circular 15/1999).

SPECIAL CASES: WATER ABSTRACTION AND FORESTRY

Under the **Environmental Impact Assessment (Water Management) Scotland Regulations 2003**, any farmer who is proposing to irrigate land must apply to their local Planning Authority for a screening opinion. Where the Planning Authority finds that the proposal may cause a significant environmental impact (typically for proposals to irrigate >50ha) then permitted development rights are removed and the farmer will require planning approval. A statutory EIA must be prepared. These are temporary arrangements to be replaced when the Water Environment and Water Services (Scotland) Act 2003 abstraction control regime takes effect (SEPA).

Forestry is also a special case. Under the **Environmental Impact Assessment (Forestry) (Scotland) Regulations 1999**, Forestry Commission Scotland (FCS) is responsible for ensuring that the environmental impact of proposals that fall within any of the four “forestry projects”: afforestation, deforestation, forest roads and forest quarries is assessed. Applicants must register via the EIA register and if it is considered that a project will have a significant effect on the environment then work cannot proceed without consent from FCS. An application for consent must be accompanied by an Environmental Statement.

Agricultural operations currently fall outside the scope of the EIA regulations, unless they involve large developments, water abstraction or forestry-related work. The scope of the new Environmental Assessment (Scotland) Bill will mean that SEA will be a requirement of all future strategies, plans or programmes related to Scottish farming (e.g. Scottish Rural Development Plan).

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27. THE SCOTTISH FORESTRY GRANTS SCHEME

Following a review of the forestry schemes in 2001/2002, the Woodland Grant Scheme has been substituted by the Scottish Forestry Grants Scheme (SFGS). The SFGS has been revised to stronger reflect specific circumstances in Scotland and has been available for applications since June 2003. The scheme is covered by the EC Council regulation 1257/1999 and the Scottish Rural Development Plan and is administered by the Forestry Commission Scotland (SEERAD, 2005). The SFGS is currently undergoing a major review.

AIM

The of the SFGS is to help to deliver the Scottish Forestry Strategy by encouraging the creation and management of forests and woods to provide economic, social and environmental benefits, now and in the future. The delivery of wider benefits for the public in form of environmental and landscape improvements, diverse habitat creation and increased recreation and access is seen as a key component of the scheme (SEERAD, 2005).

IMPLEMENTATION

The SFGS is open to landowners, tenants, crofters and grazings committees on common land. It provides financial support for woodland **expansion** and **restocking** (including natural regeneration) on agricultural and non-agricultural land and supports **stewardship** activities in existing woodlands. Woodland **expansion** and **restocking** includes principal operations such as ground preparation, protection, planting (including weeding and fertilizing), management of natural regeneration, and open space management. Grants for such operations are made as a contribution towards the cost of afforestation of land (SEERAD, 2005).

Payments for operations under woodland planting and natural regeneration are available for the following objectives (Forestry Commission, 2005a):

- 1) Producing well designed productive forest
- 2) Restoring native woodland
- 3) Improving riparian habitat
- 4) Improving the quality and setting of urban or post-industrial areas
- 5) Improving the diversity of farmed or crofting landscape

However, payments do not cover the full amount of planting and management costs and are restricted to 60 percent or 90 percent of defined Standard Costs of certain operations determined in agreements. The Standard Costs are outlined in the Scottish Rural Development Plan (SEERAD, 2005) and the SFGS Applicant's Booklet (Forestry Commission, 2005a). In more detail, the 60 percent cost contribution applies under objectives 1 and 5 of the above list, while 90 percent of the operational costs will be provided under the objectives 2, 3 and 4. Costs for operations for restocking purposes are generally defined at 75% of the cost for planting on new areas.

Grants are paid after the completion of work, but in different stages depending on the different operations. While for ground preparation payments land managers receive payments after the completion of the work, standard grants for planting are paid in two stages with 70% after planting and the remaining 30% after years, if the trees are in satisfactory conditions and minimum stocking levels are fulfilled (see table 27.1). Similarly, payments for regeneration are also available in two stages, first 60% or 90% of the costs of work as agreed necessary to encourage natural regeneration after the completion of the work, and second, a further fixed payment for achieved successful regeneration usually after 5 – 7 years (SEERAD, 2005; Forestry Commission, 2005a).

In addition to the standard grant, a number of specific grants such as Targeted Grants, Challenge Funds, Locational Premia, and Negotiated Grants are available in the SFGS supplementing the standard grant. Targeted Grants aim to raise the level of afforestation in specific areas and Challenge Funds provide a competitive mechanism to increase public benefits. Locational Premia offer an additional non-competitive flat rate per hectare in specific geographic areas and Negotiated Grants for applications in excess of 300 hectares. Furthermore, payments are available for poplars and willows planted on suitable sites to be worked on short rotations (short rotation coppice).

With respect to **stewardship**, the SFGS provides for the costs of work significantly improving economic, ecological and social values of woodland. Grants are available for applications which meet at least one of the following objectives (SEERAD, 2005; Forestry Commission, 2005a):

- 1) Improving timber quality
- 2) Reducing deer numbers
- 3) Native woodlands
- 4) Improving woodland biodiversity
- 5) Landscape improvement
- 6) Developing alternative systems to clear-felling
- 7) Woodland recreation
- 8) Developing community involvement

Although generally stewardship grants are only available for existing woodlands, in specific situations and applications such as creating recreation facilities or encouraging community involvement these grants are also available for new woodlands. Payments rates for the Stewardship Grants vary between 60% for grants which will result in some public benefits (e.g. applications under objective 1) and 90% for grants which will provide enhanced public benefits such as access and biodiversity (e.g. applications under objectives 3 and 7). Moreover, three pilot schemes were introduced in 2005, prior to implementing the grants in the following year. These schemes aim at enhancing biodiversity in woodlands through controlled grazing, improving economic value of farm woodlands by developing woodland products, and improving economic value of farm woodlands through local wood production and the use of wood energies (SEERAD, 2005). For example, a Controlled Livestock Grazing in Woodland Stewardship Grant has been introduced to maintain and enhance biodiversity in woodlands. The scheme will last between 5 and 10 years and participants receive, in addition to the 60%/90% of cost contribution, £100 per hectare per year (Forestry Commission, 2005a).

Land in woodland set-aside is not eligible for the Single Farm Payment Scheme and will be paid under the forestry scheme. However, to qualify for grants, applicants must

adhere to the UK Forestry Standard and associated Forestry Commission Guidance. Moreover, detailed eligible criteria for the different objectives listed above are outlined in the SFGS Applicant's Handbook (Forestry Commission, 2005a).

UPTAKE

The following table summarises areas of new planting and restocking of woodland. The figures are divided into the total of Forestry Commission (FC) and non-Forestry Commission (non-FC) new planting and restocking. The non-FC figures are the areas for which grants were paid together with an estimate of planting without the aid of grants.

Table 27.1: Woodland areas of new planting and restocking from 2001 to 2005 in thousand hectares

Years (to 31 March)	New planting			Restocking		
	FC	Non-FC	Total	FC	Non-FC	Total
2001	0.1	11.6	11.7	4.4	3.6	8.0
2002	0.1	7.9	8.0	4.9	2.9	7.8
2003	0.1	6.6	6.7	5.0	3.5	8.5
2004	0.1	6.7	6.8	5.3	3.6	8.9
2005	0.0	5.6	5.6	5.3	4.2	9.5

Source: Forestry Commission (2004 and 2005b)

Table 27.1 shows that nearly the entire new planting took place on non-FC land but the uptake of new planting decreased over the period from 11,600 ha to 5,600 ha. On the other hand, the majority of restocking occurred on FC owned land, but the uptake of restocking on non-FC increased slightly from 3,600 ha in 2001 to 4,200 ha in 2005. Statistics published by the Forestry Commission (2004) also show that on new planting areas, mainly broadleaf trees have been planted, e.g. in 2004 over 60%, while restocking has mainly been done with conifer trees.

In terms of the uptake of stewardship grants and measures, data are available for an annual management grant which was introduced in 1991 under the WGS to help owners of existing woodland to provide access for recreation. As explained above, the SFGS, as the successor of the WGS, continues to provide funding for stewardship grants for woodland recreation. Table 27.2 shows the amount woodland approved for annual management grant.

Table 27.2: Woodland approved for annual management grant¹ in thousand hectares

Years (to 31 March)	Broadleaves	Conifers	Total
2001	2.6	6.3	8.9
2002	2.2	3.1	5.3
2003	3.2	2.8	6.0
2004	1.3	3.0	4.3
2005	0.2	0.8	1.0

¹ Standard, special and annual management grants are included. Woodland improvement grants are not included.

Source: Forestry Commission (2005b)

A total of 4,300 ha has been approved for annual management grants in 2004, mainly conifers, which is a decrease of around 28 percent compared to the previous year. **Overall, the amount of woodland approved for annual management grant in 2001 was more than twice as large as in 2004. Even more drastic is the decline in**

woodland approved for grants in 2005. The latest figures show a further decline to only 1,000 ha of woodland approved for stewardship grants, the successor of management grants which were phased out in 2003/2004.

Participation under the SFGS obliges land managers to fulfill the UK Forestry Standards and promotes the engagement of land managers with the Forestry Commission who can provide advice on diversifying farmland and increasing biodiversity. However, it emerges from the uptake figures of planting and management/stewardship grants that a relatively large amount of woodland is not included in the SFGS and hence does not require that land managers meet the UK Forestry Standard for these woodlands.

EVALUATION

The expansion of native and mixed woodlands and the restoration of riparian and tree line woodlands creates important habitats for wildlife. Floodplain and riparian woodland can also play an important role in stabilizing river banks. Planting broadleaf trees within the riparian zone and clearing of conifer plantations near watercourses is expected to improve the fresh water environment. The SFGS provides support for the development of new riparian woodland and for the management of existing riparian woodlands. Moreover, the SFGS includes now provisions for assistance with deer management and for preparation of Deer Management Plans to reduce the negative impacts of deer on woodlands.

The new pilot scheme Controlled Livestock Grazing provides additional benefits to the SFGS. While in the past, grazing activities in grant-approved woodland was not possible, the new pilot scheme aims to enhance biodiversity through sustainable grazing activities in woodlands and provides a direct link between agricultural activities and woodland management.

With respect to forestry measures for recreation purposes, by 2003 about 368 Community Woodland Schemes have been approved covering around 3,100 ha and about 925 Walkers Welcome schemes have been signed, increasing public access to woodlands (SNH, 2004). On the other hand, Ward and Thompson (2002) identify in their evaluation of the SRDP the imbalance between funding for afforestation of agricultural and non-agricultural land, with a focus on the former, as a major concern for a number of forestry interests. Only 6 percent of the forestry budget in the SRDP is programmed for afforestation of non-farmland. The concern is that the funding distribution, driven by the desire to retain as much of the rural development spending within the farming sector as possible, will not allow a healthy forestry industry to be sustained in the future.

Overall, due to limited funding, conflicts with other land uses, e.g. agriculture, and farmers' perception of tree planting, the uptake of forestry measures and establishment of new forest areas has been restricted and needs to be increased, in particular, if the key aspiration of the Scottish Forestry Strategy (SFS) of 25% woodland cover by 2050 has to be fulfilled. However, the SFS strategy is currently under review and a new strategy is expected to be launched in summer 2006. One of the main aspects and questions of the review is the definition of a new forestry target and it seems doubtful that the 25% land cover target will remain in the new strategy.

Moreover, options are currently being explored to include forestry grants in LMCs (Tier 3) by 2007 providing a closer link between forestry and agricultural grants and promoting a more integrated approach to land use.

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28. THE SFGS: FARMLAND PREMIUM

Following a review of the forestry schemes in 2001/2002, the Farm Woodland Premium Scheme has been substituted by the SFGS: Farmland Premium (SFGS.FP). Existing approvals and commitments made under the old scheme(s) Farm Woodland Premium Scheme 1992 and 1997 continue to operate for the duration of their annual payments (10 – 15 years). The payments made under the SFGS: Farmland Premium are in addition to the SFGS establishment grants. The scheme is covered by the EC Council regulation 1257/1999 and the Scottish Rural Development Plan and is administered by the Scottish Executive Environment and Rural Affairs Department (SEERAD, 2005a).

AIM

The objectives of the scheme are to encourage the creation and management of woods on farm and croft land for their economic, environmental and social benefits for now and the future. Thoughtful management of woodlands will provide different habitats for wildlife and well designed woodlands will enhance the landscape. In addition there are income opportunities from timber production, shelter for crops and livestock and recreation opportunities, (SEERAD 2005a).

IMPLEMENTATION

The SFGS: Farmland Premium provides annual payments for 10 or 15 years for the conversion of agricultural land to woodland and payments are determined by type of trees and not the overall number of trees (SEERAD, 2005a). Farmers will receive payments for 15 years, if at least 60% of the area of the woodland is broadleaves and the woodlands contain more than 50% of broadleaves throughout the period. Payments will be made only for 10 years, if less than 60% of the woodland area is planted with broadleaves. The scheme does not allow trees to be felled within 30 years (for the 15 year payment period) and 20 years (for the 10 year payment period) after the first annual payment (Forestry Commission, 2005). However, payment rates differ depending on the land category. Table 28.1 summarises payment rates for different land categories.

Table 28.1 Payment rates of the SFGS: Farmland Premium

Land category	£/hectare/year
Non-LFA (arable and improved land)	300
LFA (arable and improved land)	
- disadvantaged areas of LFAs	230
- severely disadvantaged areas of LFAs	160
Unimproved land	60

Source: SEERAD (2005a); Forestry Commission (2005)

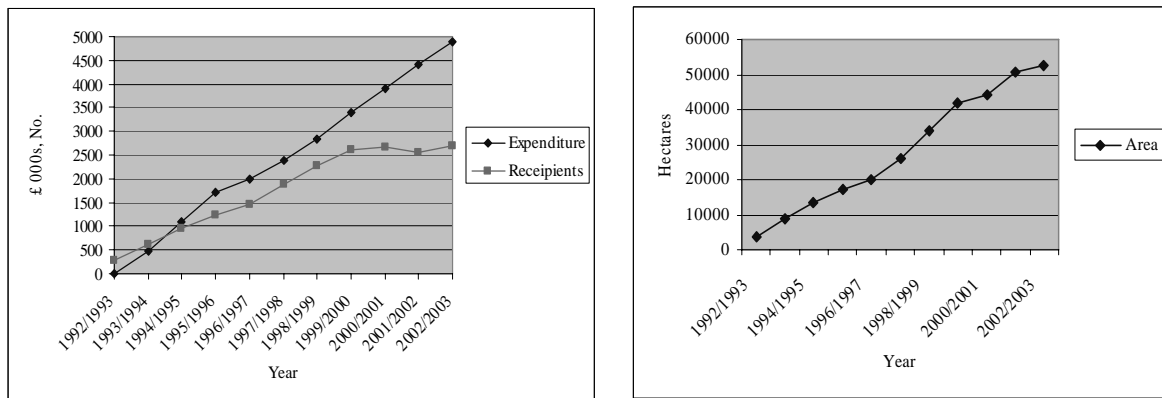
Agricultural land is defined as land used for horticulture and fruit growing, arable cropping, seed growing, dairy farming, livestock breeding and keeping, as well as grazing land, meadowland, osier land and market gardens and nursery grounds. Planting woodland on common grazings in crafting areas is also eligible. On the other hand, land mainly used for horses and woodland to be used for Christmas trees is not eligible. The SFGS: Farmland Premium is restricted to a maximum of 200 hectare per farm with a minimum of 1 hectare per application. Applications for unimproved land are limited to 80 hectares maximum (Forestry, Commission 2005).

All applications are evaluated to ensure that they meet the environmental standards set out in the UK Forestry Standard and the associated guidelines on nature conservation, landscape design, archaeology, soil and water. Moreover, payments will only be provided, if woodlands are planted with the approval of the Forestry Commission under the rules of the SFGS. This is to ensure that satisfactory environmental and silvicultural standards are maintained (SEERAD, 2005a).

UPTAKE

The number of agreements under the predecessor, the Farm Woodland Premium Scheme, rose steadily during the duration of the scheme from 1992 to 2003 to 2689 agreements and an area cover of 52,521 hectare in 2003. Expenditure rose from £14,000 in the first year to £4.9 million at the end of the financial year 2002/2003 (SNH, 2004).

Figure 28.1: Uptake of the Farm Woodland Premium scheme



Source: SNH (2004)

For 2004 the annual report of the administration of CAP schemes in Scotland (SEERAD, 2005b) provides regional uptake data for recipients and payments made under the old commitments of the Farm Woodland Premium Scheme. Table 28.2 summarises the regional uptake data for the year 2004. Table 28.2 shows a high uptake with relatively large payments in particular in the North-East of Scotland (Aberdeen City, Aberdeenshire & North East Moray) but also in some Western and Northern regions (Caithness & Sunderland, Ross and Cromarty and Lochaber, Skye & Lochalsh and Argyll & the Islands) and Perth & Kinross and Stirling. Relatively low uptakes can be found, for example, on the Western Isles, East & North Ayrshire and Mainland and East & Midlothian. Overall, £5.15 million have been paid to farmers for afforestation of farmland through the FWPS in 2004.

Table 28.2: Total recipients and payments by Scottish sub-regions (NUTS 3) for scheme year 2004

	Recipients	Payments (£'000)
Aberdeen City, Aberdeenshire & North East Moray	311	1338
Angus & Dundee City	65	134
Clackmannanshire & Fife	78	232
East & Midlothian	49	53
Borders	225	282
City of Edinburgh	8	29
Falkirk	18	81
Perth & Kinross and Stirling	218	477
West Lothian	25	102
East and West Dunbartonshire & Helensburgh & Lomond	*	*
Dumfries & Galloway	151	333
East & North Ayrshire and Mainland	33	82
Glasgow City	0	0
Inverclyde, East Renfrewshire & Renfrewshire	*	*
North Lanarkshire	30	154
South Ayrshire	35	185
South Lanarkshire	45	296
Caithness & Sunderland, Ross and Cromarty	222	641
Inverness & Nairn, Moray, Badenoch & Strathspey	73	178
Lochaber, Skye & Lochalsh and Argyll & the Islands	184	424
Western Isles	36	77
Orkney Islands	*	*
Shetland Islands	*	*
Scotland Total	1824	5152

Source: SEERAD (2005b)

In addition to the existing commitments in the FWPS, nearly one hundred claims under the new SFGS: Farmland Premium have been made in the scheme year 2004 with an average value of £2,232 per claim, in total £0.2 million (SEERAD, 2005b).

EVALUATION

The Scottish Executive (2005a) concludes that about 60 percent of the area planted can be directly attributed to the FWPS and that without the FWPS planting would have significant reduced, in particular on arable and cropping land. The scheme SFGS: Farmland Premium is expected to have a similar impact, estimated at an afforestation area of 8000 hectares in 2005 and 2006 (SEERAD, 2005a). However, it is important to note that payments under the FWPS and SFGS: Farmland Premium are based on income foregone instead of the costs of woodland establishment or the value of benefits delivered.

With respect to environmental impacts, the review of the FWPS carried out in 2002 (Forestry Commission, 2002) concluded that despite having landscape, habitat and biodiversity objectives, the FWPS is untargeted in terms of environmental objectives it is aiming to achieve. The review suggests moving more closely towards the functioning of the Rural Stewardship Scheme by linking objectives and targeting priorities to biodiversity aims as expressed through LBAPs and other local strategies (Forestry Commission, 2002).

Similar to the SFGS, it is important that sufficient efforts and resources are allocated to the management of farm woodland to maintain environmental benefits in the longer term. Recognizing the need for improved woodland management, farm woodland planning and

farm woodland management measures have been included in the new LMC Menu Scheme, but preliminary figures on the uptake of the forestry measures in the LMC Menu Scheme indicate that the uptake of these two measures has been rather low. Low uptake of forestry measures by farmers is a common problem, restricting the amount of woodland planted on agricultural land. Hence, farmers' attitude towards tree planting is a crucial aspect to consider in future forestry planning, if the key aspiration of the Scottish Forestry Strategy (SFS) of 25% woodland cover by 2050 has to be fulfilled.

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29. NATIONAL PARKS

HISTORY

As early as 1931 the Cairngorms area was proposed for National Park status but the proposal was rejected. After the Second World War, Government Committees reviewed National Parks for Scotland and five prospective Park areas: Loch Lomond & the Trossachs, the Cairngorms, Glen Coe-Ben Nevis-Black Mount, Wester Ross and Glen Strathfarrar-Glen Affric-Glen Cannich. In 1953 the Cairngorms National Nature Reserve was declared, followed by the Loch Lomond National Nature Reserve in 1958.

In response to the report from the former Countryside Commission for Scotland, Government established working parties in 1991 for Loch Lomond & the Trossachs and the Cairngorms to undertake a detailed review of the needs of the two areas. In 1997, the new Government declared its intention to legislate for National Parks in Scotland and that Loch Lomond & the Trossachs and the Cairngorms should be Scotland's first Parks. The general National Parks proposals, developed by Scottish Natural Heritage (SNH) after wide-ranging consultation, were accepted by the Government in 1999 as the basis for legislation by the new Scottish Parliament and the matter became part of the new Parliament's first legislative programme. Following debate in Parliament, the National Parks (Scotland) Act 2000 passed into law in August 2000. This Act provides for two phases of public consultation on a formal Ministerial proposal, with the final decision to establish a National Park taken by the Scottish Parliament. (SNH, 2005)

More than 70 years after National Parks were first proposed for Scotland, Loch Lomond and The Trossachs National Park was established in 2002, and the Cairngorms National Park in 2003.

AIMS OF NATIONAL PARKS IN SCOTLAND

In Scotland, National Parks have been established to deliver better management of some of Scotland's most special areas of outstanding natural and cultural heritage. Their aims are:

- to conserve and enhance the natural and cultural heritage;
- to promote the sustainable use of the natural resources of the area;
- to promote understanding and enjoyment (including enjoyment in the form of recreation) of the special qualities of the area by the public;
- to promote sustainable social and economic development of the communities of the area.

Social and economic development is addressed alongside the proper protection of the natural heritage. In cases where there appears to be irreconcilable conflict between these aims, priority will be given to the protection of the area's natural and cultural heritage (SNH, 2005).

A National Park Plan sets out how the National Park will be managed to deliver the four statutory aims. The National Park Authority is a national body, funded by Government and reporting directly to Scottish Ministers. Its main purpose is to prepare and facilitate

the implementation of the National Park Plan. The Cairngorm National Park Authority produced its first draft National Park Plan and issued it for public consultation on 16 May 2005. A final version will be produced in 2006 and submitted to Scottish Ministers for approval.

The National Park Plan, which is expected to be finalised in 2006, sets out how the National Parks will be managed to achieve the statutory aims. Foremost of these is the conservation of natural and cultural heritage. Sustainable use and development is pursued as well as the enjoyment of the Parks by the public.

LOCH LOMOND AND TROSSACHS NATIONAL PARK

The Park is 1,865sq km and has a boundary length of 350km. It is a mountaineous area with 20 Munros (mountains above 3,000ft) and 20 Corbetts (mountains between 2,500ft and 3,000ft). There are 22 larger lochs, with numerous smaller lochs and lochans, as well as about 50 rivers and large burns.

Farming is the major land use in the park, with registered agricultural land accounting for around 55% of the area, compared with 28% for forestry and woodland. Almost all (98%) of the Park's agricultural land is classified as LFA, with 97.4% classed as Severely Disadvantaged. About 87% of the agricultural land is rough grazing. The level of tenanted agricultural land in the National Park stood at 47% in 2003, and is much higher than the Scottish average of 30%.

The key issue facing the Park Authority will be how to ensure that the inevitable changes in agricultural practices occurring in response to changes in agricultural support policies and market conditions contribute to achieving the environmental, social and economic objectives of the National Park. Decoupling of agricultural support from production may lead to significant reductions in stock numbers on certain farms or in certain areas. There is an increasing possibility of the abandonment of grazing in significant areas of the Park.

While farmers are concerned that productive farming could become marginalized within the Park with an increasing emphasis on tourism much of this change is inevitable. It is important to ensure that as far as possible changes in policies support the aims of the park – including all 4 aims. Already, there is an increasing reliance on non-agricultural income sources.

While land managers have concerns over potential conflicts between land management and recreation interests e.g. potential disturbance of farming activities, especially at sensitive times such as lambing, there is an opportunity to promote public awareness of the role of farming in contributing to the objectives of the National Park, e.g. landscape, environment and social and economic aims. (Loch Lomond and the Trossachs National Park Authority, 2005)

More than half of the area of Loch Lomond and Trossachs National Park is used agriculturally, most of which is classified as Severely Disadvantaged. Changes in agricultural policy bear the danger of abandonment of grazing in some parts of the Park, leading to changes in habitat and landscape.

CAIRNGORMS NATIONAL PARK

The Cairngorms National Park is Britain's largest and newest national park. The Park is 3800 km² in area, roughly twice the size of Loch Lomond and the Trossachs. It contains within it a unique range of landscapes, wildlife, habitats, and people.

Four of Scotland's five highest mountains are within the Park; there are 52 summits over 900 metres. 10% of the land area is over 800 metres and 68% is over 400 metres above sea level. The land above 600 metres - known as the 'montane zone' - is the largest area of arctic mountain landscape in the British Isles. The Spey, Dee and Don valleys are major features of the lower ground.

39% of the park area is designated as important for natural heritage; 25% is of European importance. The central mountain area provides a harsh habitat for a unique assemblage of vegetation, insects and animals - the national Park is home to 25% of the UK's threatened bird, animal and plant species. The forests of the Cairngorms contain remnants of the original Caledonian pine forest and include a rare kind of pinewood found only in Scotland and Norway. Heather moorland covers about 40% of the Park. The rivers, lochs and marshes are among the cleanest in Scotland.

Agriculture is an important land use in the Cairngorms. Most of the farms in the Cairngorms National Park are livestock farms, some with small areas of crops for feeding to livestock, as well as some barley grown for whisky distilleries (Cairngorms National Park Authority, 2005).

However, against the recommendation of SNH, at this stage the Cairngorms National Park still excludes Angus & Perthshire Glens, and the debate about their inclusion is still on-going.

Two thirds of the Cairngorms National Park is above 400m; this includes the largest area of arctic mountain landscape in Great Britain. The Park is particularly rich in threatened species and habitats. Most of the agricultural land within the Park is used for grazing livestock.

SOURCES

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Possible links to other Briefing Notes

30. VOLUNTARY INITIATIVE

BACKGROUND

A programme of measures aimed at minimising the environmental impacts of pesticides in the UK was established in 2001. The Voluntary Initiative (VI), as this programme has been named, originally comprised 27 projects that were proposed by the crop protection industry as an alternative to pesticides tax; in March 2005, there were a total of 43 projects UK wide, of which fifteen had been completed and a further 28 were still in progress and on schedule.

The different strands of the VI address research, training, awareness raising and technology transfer, all with the broad aim of helping farmers, advisers and operators to protect water quality and enhance biodiversity. The projects include

- awareness raising of biodiversity issues with the crop protection industry;
- provision of Environmental Information Sheets for each pesticide product;
- development and promotion of Crop Protection Management Plans throughout the UK;
- establishment of an independent generic sprayer testing scheme.

By the end of March 2005 all major targets for the year were achieved. The national VI target is to maintain and increase the downward trend of detection levels above 0.1 ppb of those nine pesticides most commonly found in untreated water with the objective of achieving a 30% reduction by 2006. A new longer term national target of a 50% reduction in exceedences has been proposed.

The main VI Farmer Participation Activities and their uptake in the UK are:

- Crop Protection management Plans (CPMP); a CPMP will set clear management objectives and identify specific issues that need to be addressed as well as the actions needed including alternatives to using pesticides; in the year to March 2005, 1.365 million ha of cropped land in the UK were covered by CPMPs.
- National Sprayer Testing Scheme: in the year to March 2005 50% of sprayed area in the UK was treated using sprayers tested under the scheme. The target for the final year is 80%.
- National Register of Sprayer Operators: a central register of certificated sprayer operators using continuing professional development as a means of ensuring ongoing training; UK membership in March 2005 was 20,000.

The Voluntary Initiative is a UK wide programme, introduced in 2001 and initially running until 2006, which was proposed by the crop protection industry as an alternative to a pesticide tax. The measures under this programme are aimed at minimising the environmental impacts of pesticides.

THE VOLUNTARY INITIATIVE IN SCOTLAND

A separate implementation group, chaired by the National Farmers' Union Scotland (NFUS) with support from the Scottish Environment Protection Agency (SEPA) and others, was established. SEPA is also represented on the VI project of implementing a national retrieval scheme for expired or unwanted pesticide products.

There had not been the same drive to establish surface water pesticides monitoring in Scotland, mainly because drinking water supplies are taken from upland areas that tend not to be widely impacted by pesticide use. Nevertheless, the risk of pesticide pollution exists in certain areas. For example, the River Ugie catchment in Grampian was chosen for inclusion in one of the VI projects. A local catchment management group, comprising Scottish Water, NFUS and the Crop Protection Association (CPA), is co-ordinating this work.

Over 2,000 individuals in Scotland have registered with the National Register of Sprayer Operators (NRoSO) (NFUS, 2005). CPMPs accounted for 121,300 ha in Scotland. The VI was promoted on a number of stands at the Royal Highland Show, at Scotgrass and at open days run by the Scottish Agricultural College.

Training and education in environmental best practice are key activities of the programme. 70 sprayer operator roadshows in Scotland have concentrated on the problems of where and how to fill sprayers and the use of biobeds (SEPA, 2002).

Information events have helped to keep field staff up to date on development from VI projects. Two BETA courses (Biodiversity and Environmental Training for Advisers) have been held in Scotland, which has resulted in about 40 agronomists gaining the BETA certificate (VI, 2005).

In Scotland, 121,300 ha land were under a CPMP in 2005, and over 2,000 individuals had registered with the NRoSO. It is in some cases difficult to separate a regional figure for key indicators from the national statistics; however, the Scottish implementation group reports a good general awareness of the aims and purpose of the VI and willingness to work towards them.

THE FUTURE OF THE VOLUNTARY INITIATIVE

Some recent findings of a House of Commons EFRA Committee are (VI, 2005):

- The Government should provide financial support for the national rollout of the water catchment projects and help to facilitate ongoing professional training using rural development funds.
- The VI should be renewed after its current programme ends in March 2006 and its remit be re-focused on catchment-sensitive farming and other water issues.
- Some of the VI targets were insufficiently challenging and there was currently little irrefutable evidence of the environmental benefits that had resulted.
- VI schemes for sprayer testing and operator registration should be made mandatory.

The VI, which is currently scheduled to end in March 2006, is recommended to be extended after that date, with a special focus on water catchment areas. A further recommendation is to make some of its measures mandatory.

SOURCES

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http://www.voluntaryinitiative.org.uk/_Attachments/Second%20Farm%20Application%20Practice%20Survey%20June%202005.pdf

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SEPA (2002): The Voluntary Initiative – minimising the environmental impacts of pesticides in the UK. SEAP View: Farming Special;
<http://www.sepa.org.uk/publications/sepaview/html/farming/voluntary.htm>

The Voluntary Initiative website: <http://www.voluntaryinitiative.org.uk>

VI (2005): Fourth Annual Report of the Voluntary Initiative Steering Group;
<http://www.voluntaryinitiative.org.uk/Content/Reports.asp>

Possible links to other BNs

31. Quality Assurance Schemes (Quality Meat Scotland and Scottish Quality Cereals)

Driven by the demands of consumers, particularly in EU markets, for assurances over the way their food is produced, farm and quality assurance schemes have been developed in EU member states, but also in countries outside the EU such as Australia and New Zealand. In Scotland, a number of different quality assurance schemes are operating, most importantly different schemes in the meat sector under Quality Meat Scotland and for cereals under Scottish Quality Cereals which set the standards for the different schemes (NFUS, 2005). The assurance schemes are monitored, and farms inspected, by the Scottish Food Quality Certification Ltd., an independent organization responsible for the certification (Scottish Quality Cereals, 2005a).

AIM

The objective of these schemes is to ensure that the consumers and the trade have confidence that the meat and crops are produced with a high standard of management, especially of farm operations which might affect the wholesomeness or safety of the food produced or the health of the environment and countryside. The schemes aim to assist farmers to meet their obligations under the Food Safety Act 1990 (Scottish Quality Cereals, 2005a).

IMPLEMENTATION

Quality Assurance Schemes are voluntary schemes implemented through a range of different standards to be fulfilled by farmers and processors. Standards are reviewed once a year by a group called a Standard Setting Body which advises Quality Meat Scotland and Scottish Quality Cereals. However, standards remain often unchanged and are only revised and modified if legislation changes, the industry best practice changes, consumer needs change or specific benefits for the industry can be identified (Quality Meat Scotland, 2005a and Scottish Quality Cereals, 2005a).

Quality Meat Scotland administers assurance schemes for Cattle and Sheep, Pigs, Processors, Feeds, Haulage, and Auction Markets setting standards for farm assured products and specific labeling. In the case of the cattle and sheep scheme, quality assurance standards are defined with respect to traceability, stockman competency (including e.g. farm husbandry and calving/lambing management), animal health and welfare (including e.g. livestock health and disease control plan and health and welfare of farm dogs), farm environment (including e.g. livestock housing and waste management), feed, and transport. Transport standards deal with loading and unloading of animals and, if farmers conduct animal hauling on their own, also e.g. animal welfare during transport and maintenance and hygiene of vehicles (Quality Meat Scotland, 2005a).

Recent changes to the label requirements for Scotch Beef and Scotch Lamb demand that cattle or sheep have to be born, raised and slaughtered in Scotland and have to be assured from birth. Store producers need to be assured, not just finishers, if their animals are to be eligible to be called Scotch Beef or Scotch Lamb. Cattle and Sheep which were born in other UK regions and finished in Scotland can still be sold to an abattoir as farm assured

but can not be labeled Scotch Beef or Scotch Lamb. However, while the bulk of levy collected by QMS is used to support the Scotch brand, QMS also provides support for companies to develop their other brands as long as they promote a quality message and benefit the Scottish industry as a whole (Quality Meat Scotland, 2005a).

Scottish Quality Cereals provides farm assurance scheme standards for cereals, oilseeds and pulses. Scottish Quality Cereals ensures that participating farms operate production systems encompassing high standards of crop management, and particularly that fertiliser, pesticide, growing, storage and overall farm standards have all been subject to an independent assessment procedure. Standards are defined for the use of fertilizers and, for crop protection practice, for the production and harvesting of cereals, for the storage of cereals (including temporary and longer term storage), and for the production and storage of oilseeds and pulses. Participation is open to all cereal producers in Scotland who demonstrate, by independent annual assessment that they operate to those standards. (Scottish Quality Cereals, 2005a). Membership payments in 2004/2005 vary depending on the cereal hectareage of the previous year between £85 (below 30 ha) and £245 (above 300 ha) (Scottish Quality Cereals, 2005b).

Participants of quality assurance schemes must comply with environmental legislations and regulations such as NVZ regulations and Codes of Good Practice. Participating farms, feed companies, haulage firms and auction marts are inspected on an annual basis. Processors are inspected 3 times a year (Scottish Quality Cereals, 2005).

UPTAKE

Quality Meat Scotland has published in their annual report 2004/2005 (Quality Meat Scotland, 2005b) figures regarding membership and coverage of their assurance schemes. Table 31.1 summarises the membership in the different QMS schemes.

Table 31.1: Quality Assurance Scheme Membership 2004/2004

Scheme	Membership numbers
QMS Cattle and Sheep	10,811 including 167 crofting groups
QMS Pigs	289
QMS Haulage	153
QMS Feeds	106
QMS Auction Markets	34
QMS Processors	32

Source: Quality Meat Scotland (2005b)

Due to the wide coverage of the schemes over 93% of Scotch Beef, 90% of Scotch Lamb and 96% of Scottish pork is fully assured throughout the supply chain (Quality Meat Scotland 2005b).

According to a press release from Quality Meat Scotland from March 2005, at that time 616,500 cows in Scotland are assured within the QMS Assurance scheme. This represents 89% of total cow numbers. 94% of beef cows are assured (464,000 out of 490,000) and 76% of Scottish dairy cows are also in the QMS scheme (152,000 out of 199,000). The main concentration of non-QMS assured dairy cows are in Grampian, Strathclyde and Central. 85% of Scottish dairy farms are members of the National Dairy Farm Assurance Scheme (NDFAS). The processing company pays for this and involvement is a prerequisite for supply (hence the high level of membership). However, NDFAS assures milk, not meat so the United Kingdom Accreditation Service and Assured Food

Standards do not consider cull cows to be assured for meat production. Dairy farms therefore need to join a meat assurance scheme if they are to sell assured cull cows. In the Scottish pig sector, nearly all pigs produced by the Scottish red meat industry are covered by the QMS Assurance Scheme, with the majority of pigs located in the North East (Quality Meat Scotland, 2005c; NFUS, 2005).

In 2004/2005 the Scottish Quality Cereals assurance scheme has 3400 members and 85% of the crops is marketed through Scottish Quality Cereals (Scottish Quality Cereals, 2005b; NFUS, 2005).

EVALUATION

Quality Assurance Schemes focus on improving market(ing) opportunities for agricultural products and producers and increasing consumer confidence through specific standards and labelling rather than on producing directly environmental benefits such as through agri-environment schemes. However, minimum requirements such as Codes of Good Practice and NVZ regulations need to be fulfilled by Quality Assurance Scheme members/participants.

Membership in a Quality Assurance Scheme is one of the options farmers can choose from the menu provided in the LMC Menu Scheme. It entitles farmers to a repayment of 50% of the annual membership fee, up to a maximum of £150. Given the uptake figures for the LMC Menu Scheme, the Quality Assurance Scheme option has been popular with land managers and achieved a relatively high uptake compared to other options from the menu. Although the promotion of quality standards and, hence, products the consumer wants, can potentially help the farming sector to better utilise market opportunities, a high uptake of this menu option reduces the available funds for other agri-environment options and schemes potentially constraining benefits of directly targeted agri-environment tools.

SOURCES

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