



**Organic Producer Standards
For Farming and Food Production in Scotland**

Scottish Organic Producers Association – Production Standards

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Introduction

The history of organic farming

It is important to realize and appreciate where organic farming first originated from and the progress it has made and where it is today.

British botanist **Sir Albert Howard** is generally considered to be the father of organic farming. He was an agricultural advisor in India from 1905 to 1924 specialising in composting and agricultural health. In his 1943 book, *An Agricultural Testament*, Sir Howard describes the main characteristics of what he called *Nature's Farming* and the concept he called “the Law of Return” which has come to define organic farming today.

Another key character contributing to the founding of organic farming was **Rudolf Steiner**, who in 1924 delivered a series of lectures to a group of farmers in Austria. These lectures went on to define biodynamic agriculture and the Demeter symbol was created in 1927.

During the 1940's **Hans and Maria Muller** from Switzerland worked closely with **Hans-Peter Rusch** from Germany to pioneer a natural and sustainable approach to farming, in Switzerland and the German speaking countries. Hans Peter Rusch also developed a test to determine the level of soil fertility.

Lady Eve Balfour (the founder of the Soil Association) was indeed Scottish; she was born into the Balfour family of Whittingehame of East Lothian (near Haddington) in Scotland. She later trained at Reading University College during the First World War and after briefly managing a hill farm in Wales, Eve and her sister Mary bought a farm in Suffolk. She was inspired by Sir Albert Howard and by **Sir Robert McCarrison** (both working in India at the time) and this led her to start the Haughley Experiment on her farm in Suffolk in 1939; this was the first study of its kind. Lady Balfour published *The Living Soil*, in 1943 leading to the formation of the Soil Association, an organic advocacy group. The Haughley Experiment was written up by Lady Eve Balfour and published in 1975.

In Japan, microbiologist **Massanobu Fukuoka** doubted modern agricultural practices and began to devote his life to growing crops to a natural farming method that does not require pesticides, fertilisers, weeding or tilling, this is known as Fukuoka Farming.

Jerome Rodale an American businessman saw a lack of communication between the organic farming community and conventional farmers so in 1942 he began publishing *Organic Farming and Gardening* magazine introducing organic farming to a wide audience.

Prominent naturalist **Rachel Carson** published her book, *Silent Spring*, in 1962. This best seller is often credited with introducing the international environmental movement as well as leading to the 1972 banning of the pesticide, DDT, responsible for the near-extinction of a number of bird species.

With the new concerns about pollution and the environment, the differences between organic and conventional chemical farming came into focus, increasing awareness and exchange of organic principles and practice. By the 1980s, consumer groups began to pressure government to regulate organic production leading to certification standards being introduced.

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The Origins of Organic Standards

Up until the 1960's there were no formal definitions or recognition of organic farming, apart from those defined through Biodynamic agriculture, Demeter. The first 'standards for organically grown food' were published by the Soil Association in their Magazine Mother Earth, but this was only 4 pages of guidelines at this point.

In 1972 Lady Eve Balfour, Jerome Rodale and a number of others formed the International Federation of Organic Agricultural Movements (**IFOAM**), this took into account the international nature of organic farming. The aim for IFOAM was to share information on organic farming across language, cultural and geographic boundaries. In 1980 IFOAM produced its first set of organic standards but these were for information rather than for certification. Then in 1987 the UK Ministry of Agriculture formulated **UKROFS** (UK Register of Organic Food Standards), brought about by a desire to protect the consumer from possible fraud.

The **EU Regulations 834/2007 and 889/2008** are the legal basis for all organic farming and processing in Europe. These were last updated on 01 January 2008. The EU Regulations define a method of agriculture production and define appropriate practices for processing agricultural products and production of animal feedstuffs. They also define how products must be labelled and set out rules for trade and importation of organic goods.

The Department for Environment, Food and Rural Affairs (**DEFRA**) takes direct responsibility for the implementation of the EU Regulations in the UK. This involves holding a register of all organic producers, processors and importers. This also includes approving and regulating the private Control Bodies. DEFRA entrusts this task to the United Kingdom Accreditation Service (**UKAS**).

UK Organic Standards

In June 2016 the United Kingdom voted via referendum to leave the European Union. As a result of leaving the EU the responsibility for the ensuring the legal basis for organic farming falls back within the remit Defra. The Devolved Administrations have confirmed that, whilst agriculture in general remains the responsibility of each Devolved Administration organic farming will be overseen by Defra. In taking responsibility for organic regulations Defra has opted to retain the current organic regulations Regulation 834/2007, Regulation 889/2008 and Regulation 1235/2008 as UK law for the foreseeable future.

Scottish Organic Producers Association (SOPA)

The Scottish Organic Producers Association Ltd was incorporated as a member co-operative society in June 1988 under the Industrial and Provident Societies Act, number SP02278R. It is governed under the Rules of the Association, which are registered with the Financial Conduct Authority.

SOPA exists to promote the sustainable growth of its members' farming businesses through the development of its services as Scotland's largest organic membership organisation. SOPA was established to provide a focus for organic food producers across Scotland, and is committed to the long-term growth of a viable organic industry infrastructure linking producers, processors and retailers in the interests of bringing certified organic produce to the consumer.

In early 2012 SOPA passed over its Certification Body status to SFQC in order to remain compliant with EN45011, the accreditation standard required at the time. In 2015 SOPA took the decision to move its certification services from SFQC to Organic Farmers & Growers (operating as OF&G (Scotland)). OF&G have been operating in the UK organic sector since its inception in 1973 with OF&G being the first Control Body approved by the government to certify organic food production in the UK. OF&G (Scotland) administer the SOPA Organic Standards to SOPA

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members with a pragmatic understanding of the climate, geography and specific challenges faced by Scottish agriculture. The SOPA Organic Standards are owned by the SOPA Board and OF&G (Scotland) Ltd are approved by DEFRA and independent auditors UKAS to implement the SOPA Organic Standards.

SOPA have a dedicated Member Services team utilising their extensive knowledge of the food and farming industry within Scotland to support and guide SOPA members with day to day questions and advice.

Definitions:

The SOPA Organic Standards are owned by the SOPA Board of Directors on behalf of the SOPA Membership

OF&G (Scotland) Ltd ensure the SOPA Organic Standards are correctly adhered to and administered according to EU, DEFRA and UKAS legal requirements.

SOPA Organic Scheme refers to the delivery of organic certification by OF&G (Scotland) Ltd according to the SOPA Organic Standards.

SOPA always adopts a pragmatic approach:

- **protect and uphold the organic integrity of all products produced by our members and certified by OF&G (Scotland) to the SOPA organic standards**
- **support our members in building financially and environmentally sustainable businesses**
- **work in a trusting and fair way with all our industry partners**

Other roles SOPA provide

- Encourage the acceptance of quality standards for Scottish organic produce and establish appropriate codes of practice.
- Encourage the development of appropriate marketing structures within the organic sector.
- Collect and disseminate Scottish organic production statistics as appropriate.
- Provide a forum and lobby to enable Government, advisory and research establishments, DEFRA, the agricultural bodies and other organisations to be properly advised on matters concerning organic production in Scotland.
- Work towards financially stable businesses for Scottish organic businesses.
- Maintain high quality standards of organic farming and processing and the dissemination of good practice among all SOPA members.
- Raise public awareness of SOPA's role in meeting the demand for certified organic produce through the use of the Organic Logo.
- Collaborate with others in strengthening the infrastructure for the production and marketing of organic food grown in Scotland.
- Advocate the best use of financial support mechanisms for SOPA members within current Government policies for developing Scotland's organic industry.
- Mentoring and advisory support to SOPA members.

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Section 1 Standards of management

1.1 Organic principles and methods

1.1.1 Organic farming:

Organic farming is the system of land management that produces food of high nutritional quality and purity, based on the sustainable management of natural resources. Organic food production aims to optimise the operation of the whole farm through managing the natural system of soil, climate, crops, animals and people on the farm. The organic farmer manages this natural, biological system to ensure the long-term quality and health of the animals, crops, soil and farm environment, as well as producing high quality food. Organic farms must use only methods and inputs that avoid and minimise damage to the environment and wildlife. Organic farming therefore excludes the use of agrochemical pesticides and synthetic fertilisers and all genetically modified organisms and their derivatives and reduce the reliance on veterinary inputs for animals.

1.1.2 Organic principles:

The SOPA Standards for certified organic production are based on a set of internationally recognised agricultural principles. These principles are:

Agricultural Principles:

- the production of high quality food in sufficient quantity
- respect for, and operating in accordance with, natural systems and cycles throughout all levels from the soil to plants and animals
- the maintenance and long-term increase in the fertility and biological activity of the soil
- the ethical treatment of livestock, respecting the expression and needs of their innate behaviour
- respect for regional, environmental, climatic and geographic differences and appropriate practices that have evolved in response to them

Environmental Principles

- the encouragement of biodiversity and the protection of sensitive habitats and landscape features
- maximum utilisation of renewable resources and recycling
- Minimisation of pollution and damage to the environment and the reduction and safe handling of waste.

Social Principles

- consider the wider social impact of the agricultural system of each farm
- the provision of a fair and adequate quality of life, work satisfaction and working environment for those involved
- the development of ecologically responsible production, processing and distribution chains, based on local economies.

1.1.3 Food Processing Principles

- minimum processing, consistent with the nature of the food in question
- maximum information on processing methods and ingredients provided to the consumer

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1.1.4 Organic methods:

When the organic principles are applied to managing a farm, the system of organic management that is used should be based on the following general organic farming methods:

- careful planning and management of production to create a farming unit that provides a mixed balance of livestock, crops and soil fertility building, based where possible on a closed system with minimal need for outside inputs to sustain the farm long-term
- mixed farming systems incorporating both animal and arable production, including animal feeds grown on farm
- sound crop rotations moving crops between fields each year, to build and use fertility, create good soil structure, avoid disease and pest build up and transfer between crops
- the use of legumes and grass crops, and other green manures to build up and retain soil fertility and organic matter as the main source of nutrients and to avoid nutrient loss and leaching
- use of farm manures and crop wastes to provide additional fertility and nutrient cycling, including the collection, composting and safe storage of manures and wastes prior to their extensive and rational use to build soil health
- use of cultivation techniques that avoid damage to soil structure, carried out at the appropriate time to avoid leaching of nutrients
- avoiding the use of synthetic fertilisers in the form of soluble mineral salts and, where any supplement to soils are needed, using natural and slow release forms such as rock phosphate and lime
- strict prohibition of agro-chemical pesticides
- strict prohibition of all genetically modified (GM) organisms, including showing that the farm is free of genetically modified crops, using GM-free feed and other inputs, and ensuring the farm is not potentially contaminated by genetic pollution
- use of animal husbandry techniques based on the Five Freedoms which meet the animals' physiological, behavioural and health needs, such as choosing appropriate breeds, small group sizes, outdoor pasture and minimum slaughter ages
- avoidance of the routine use of veterinary medicines through preventative management.
- high levels of animal health and welfare through careful planning to avoid disease and encouraging disease resistance through a natural immune responses, reinforced by prompt veterinary treatment for any sick or injured animals
- the rearing of animals that are bred and live their full life on an organic farm, and are fed on organically produced feed that is grown mostly on the same farm.

1.1.5 Derogation from the organic principles:

By derogation from the principles detailed in 1.1.2 of these Standards, permission to undertake certain practices or use certain materials during a transitional period or under strictly defined circumstances may be available. Where producers take advantage of such a derogation they must ensure that the particular requirements and permissions to deviate from the organic principles, as detailed elsewhere in these Standards, are observed in full. SOPA recognises that derogations may assist in the evolution of the individual organic unit and organic farming systems in Scotland. However, producers are cautioned that the continuing or long-term use of derogations will inhibit or delay the development of their organic unit.

1.1.6 Interpreting the Organic Standards:

SOPA requires all farms to comply with the principles outlined in section 1.1.2, and to observe the requirements of 1.1.4. When deciding if a farm is being managed in compliance with these Standards, and in interpreting Council Regulation (EC) 834/2007 and Commission Regulation (EC) 889/2008, these principles and methods shall be applied.

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Producers should therefore ensure that all their activities comply fully with the principles and the general methods, as well as the detailed requirement of each relevant section of these Standards.

1.1.7 **Alternative methods:**

The SOPA Standards encourage new methods and is willing to allow novel solutions, so long as they are compatible with organic principles and have been agreed by OF&G (Scotland) in advance. If a producer wishes to use alternative methods, including any methods not listed in these Standards or to trial the use of new or novel management; they must seek OF&G (Scotland) approval in advance. The use of management practices that have not received prior approval from OF&G (Scotland) may lead to production land or crops not being licensed as organic.

1.1.8 SOPA certification is subject to the SOPA Payment Terms.

1.1.9 In addition, it is the Member's responsibility to ensure that they remain compliant to all other relevant legislation and regulation such as that relating to animal welfare, labelling, use of permitted supplementary field inputs and pest/disease control products. SOPA does not guarantee compliance to the SOPA Organic Standard is equivalent to similar industry assurance schemes (such as Red Tractor, QMS, SQC, Freedom Foods et).

1.2 **Eligible organic units**

1.2.1 **Separate organic production units:**

Organic production must take place on clearly defined units of land so that the production and storage areas are clearly separate from those of any other unit not producing in accordance with these Standards. An organic production unit must comply with the following:

- the unit is an operationally separate business, with its own records and management accounts
- the unit is geographically separate and does not share common facilities such as buildings, milking parlours, yards etc
- there is a secure physical barrier between the livestock units, including double-fencing to reduce potential disease transmission risk
- the unit is clearly identified on the farm plan and is clearly signed on-site.

It is not generally acceptable to have converted fields scattered over a larger conventional holding unless these are part of a planned phased conversion which will result in the organic fields being grouped together as a discrete block of land.

Where an operator runs several production units in the same area, the unit(s) producing product not covered by these Standards must all be subject to regular inspection by OF&G (Scotland). The operator must comply with the following requirements:

- lodge with OF&G (Scotland) a document setting out a full description of the non-organic unit(s) showing the land areas, the production and storage premises and, where applicable, the premises where packaging and/or processing operations take place
- each year when requested by OF&G (Scotland), provide a schedule of production of non-organic crop products giving a break-down by land area and/or, as appropriate, details of livestock production
- keep written records and financial accounts which enable the OF&G (Scotland) inspection to trace: the origin, nature and quantities of all materials brought-in and the use of such materials; the nature, quantities and consignees of all agricultural products sold from the organic and non-organic enterprises, in compliance with all relevant requirements of these Standards.
- On part-converted holdings undergoing a staged conversion, the separation between organic and non-organic land must be identified and maintained by means of a physical boundary such as a wall, ditch, hedge or fence. The use of boundary stones, plough furrow or track is not sufficient

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1.2.2 Clearly identify all elements of the organic unit:

Clear signing must identify, both on farm plans and on-site, the organically managed land areas, animals, storage areas and farm records. Any confusion or accidental mixing of organic and non-organic activity will lead to organic certification being withheld.

During an approved phased conversion, fields, animals, buildings and stores must have their use and status clearly identified on the Farm Plan and be clearly labelled on-site to avoid confusion or misidentification.

Only materials approved by these standards for use on the unit may be stored on the unit. Storage on the unit of input products other than those compatible with these standards is not permitted see standard 4.4.2.

1.2.3 No to 'Parallel production':

Where a producer runs a unit or units in the same area that has/have a mixture of land designated as non-organic and in-conversion or organic, and the same crop is to be grown on fields which are not at the same designation (known as 'parallel production'), a different and easily distinguished variety must be grown on each differently designated area of land. This does not apply to land in use for agricultural research and land being used for organic seed and vegetative transplant production. In these cases the experiment or seed production plan must be approved by OF&G (Scotland) in advance of the land being used. Adequate storage and labelling must be in place, and verified and approved by OF&G (Scotland).

Grassland used for grazing is not defined as parallel production.

Conserved forage from grass or crops harvested for forage from land of different designations must be harvested and stored in a way that preserves its identity and readily allows for its identification. Such methods must be outlined in the conversion plan and/or the Crop Management Plan and be approved by OF&G (Scotland) in advance. Failure to comply with this requirement will result in all forage being classified at the status of the crop harvested at the earliest stage of the conversion process e.g. silage harvested from organic and first year in-conversion fields that is stored in the same clamp will be classified as non organic.

In the case of perennial crops a temporary period during which 'parallel production' takes place may be allowed, if a conversion plan is produced which undertakes to convert the whole area concerned within five years. The conversion plan and the separation measures must be approved by OF&G (Scotland), and be verified by OF&G (Scotland) to be taking place.

At harvest of perennial crops and in the case of seed and vegetative production material, OF&G (Scotland) must be notified of the harvest of each product at least 24 hours in advance. Once the products are harvested, the producer must inform OF&G (Scotland) of the exact quantities of each harvest and any distinguishing features (e.g. quality, colour, size) and confirm that the appropriate measures to separate the products have been taken. OF&G (Scotland) will accept written records, to be verified at the inspection, as notification of such activities and measures.

Animals belonging to the organic unit must be converted in accordance with the requirements of Section 3 of these Standards. Once converted, all livestock on the unit must be managed organically. A registered producer must not produce or manage (or have an interest in any other farming business that produces or manages) the same breed or cross of animal on both an organic and non-organic unit in the same locality (see 3.1.6 of these Standards for further information).

1.2.4 Processing on the organic unit:

Processing or packing operations (e.g. organic box schemes) may take place on the holding as part of the licensed production process where the activities are limited to processing or packing the operator's own agricultural products. Where processing or packing operations include more than 10% brought-in products the operation may need to be separately registered with the OF&G (Scotland) Processing Certification scheme. Producers should check with section 5 to 13 for the SOPA Standards for the Processing and Importing of Organic Food and Animal Feeds to see whether the processing activity can be considered part of the farm production or requires a separate certification.

Where produce is sold directly to the final consumer the quantities sold must be accounted for on a daily basis.

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1.3 Conversion to organic production

1.3.1 Conversion period:

To achieve status as an organic producer all units must undergo a period of conversion during which an organic farming system is established. Conversion provides a period of time to establish organic management, build soil fertility and develop a viable and sustainable agro-ecosystem. Conversion from conventional to organic production must be carried out using only the permitted materials and practices set out in these Standards and must be agreed and certified by OF&G (Scotland).

Land and crop production are eligible to carry the Organic Scheme certification code (and therefore products are able to be sold with an organic description) after a conversion period of at least 2 years. The minimum periods of conversion are:

- for arable and horticultural crops: 24 months from the last use of any prohibited materials before sowing or planting the organic crop
- for grassland and crops conserved for as forage: 24 months from the last use of any prohibited materials until the grass or crop is used for organic grazing or cut for the production of organic hay or silage
- for perennial crops (excluding grassland) 36 months from the last use of any prohibited materials until the harvest of the first organic crop

Conversion periods for livestock are given in Section 3 of these Standards.

Producers wishing to register land as in conversion to organic production must notify their intention to OF&G (Scotland). The start of the conversion period will be determined by OF&G (Scotland) and shall be no earlier than the date of receipt of the notification from the producer.

1.3.2 Extended and reduced conversion periods:

After considering the previous use of registered land, Defra may require the conversion period to be extended for longer than the 24 month minimum. For example, this may be required where there has been:

- prolonged nutrient extractive cropping prior to conversion
- land contaminated by environmental pollution such as factories, heavy traffic or sewage sludge
- the presence of residual pesticides or other long-acting contaminants.

A soil analysis may be required to determine the extended conversion period and the OF&G (Scotland) Technical Advisory Committee (TAC) may specify the levels of contamination to be reached to allow the land to gain organic status.

OF&G (Scotland) may reduce the 24 month conversion period by a maximum of four months provided that:

- the field input records available to the inspector confirm that the land has been managed in accordance with these Standards during the period derogated
- the visible physical evidence also confirms this

In exceptional cases, OF&G (Scotland) may make a special application to DEFRA for a longer reduction in the conversion period. Only land meeting one of the following criteria will be considered by OF&G (Scotland) for referral to DEFRA:

- natural (non-agricultural areas) or agricultural areas where OF&G (Scotland) is satisfied that no input not permitted by these Standards has been applied for a period of at least three years.

By derogation from the principles stated in 1.3.1, the conversion period may be reduced to one year for pasturage, open air runs and exercise areas used by non-herbivore species (e.g. pig and poultry) where:

- there is evidence that the land has received no prohibited materials for at least 12 months before the start of the reduced conversion period

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- evidence is provided to OF&G (Scotland) to verify that any animals using the land have not been fed GM feedstuffs during that time.

This derogation must be approved in advance by OF&G (Scotland).

All applications for reduced conversion must be notified to the OF&G (Scotland) office at the time that the land is entered into conversion.

1.3.3 Whole farm conversion:

In accordance with organic principles the whole farm including all crop production and all animal husbandry should be converted to organic management over a period of time.

Good Practice: Conversion of the whole farm, including:

- conversion of the whole land area of the unit at the same time to produce a sustainable organic unit
- simultaneous conversion of both land and animals at the same time (this is generally appropriate only for beef and sheep production units)
- conversion of physically separate and identifiable units of land large enough to permit organic production to be developed and sustained
- a financially separate organic enterprise with its own management accounts and record keeping system complying with the SOPA record keeping requirements

Permitted practice: Phased conversion over an agreed period. The rate of phased conversion of a farm is determined by:

- balancing the level of intensity of the farm and the mix of enterprises
- skills, knowledge, experience of the producer and quality of supporting advice available to them
- ecological suitability of the farm
- financial and other resources available to the farmer

Phased conversion must be agreed in advance with OF&G (Scotland) through the Conversion Plan that sets out the whole farm unit that will be converted by the end of the plan period, and identifies within that unit the date at which each area and enterprise will commence and complete conversion.

Prohibited practice: Partial Conversion:

- partial conversion of a holding such that the registered organic unit has insufficient resources to enable a sustainable organic farm system to be established.
- conversion to organic management of only the land on the unit, without also the conversion of the livestock enterprises on the unit or associated with the unit.

1.3.4 Conversion Planning:

Conversion must take place according to a clear and progressive plan that covers all aspects relevant to these Standards. The draft plan must be submitted in full to OF&G (Scotland) at the time of application to join SOPA.

Registration as a SOPA member can commence from the date a completed application form is submitted and an application fee received by SOPA. A start date can be agreed once a full conversion plan has been submitted and approved. The approved conversion plan and start date will then be acknowledged in writing by OF&G (Scotland) as forming the basis of a viable and sustainable proposition, satisfactory for the purpose of acceptance into the Organic Certification Scheme. Failure to submit a plan that complies with the requirements of these Standards may lead to a delay in acceptance into the Certification Scheme.

Following the first on-farm inspection by OF&G (Scotland), any changes and additions required to the Conversion Plan must be made and a revised plan re-submitted to OF&G (Scotland) within one calendar month. The Conversion Plan will be fully approved by OF&G (Scotland) only when a

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comprehensive plan has been produced that is fully compliant with these Standards. The Plan must reach OF&G (Scotland) approved status within six months from the conversion start date. Failure to reach approval of the Conversion Plan within six months will lead to the conversion period being extended for the additional time taken to produce an approved plan. Failure to produce an approved plan by one year after entering the scheme will result in a return to the start of the conversion process.

The Conversion Plan is made up of two parts: a Farm Plan covering all elements described in Section 1.4.3, and a Conversion Programme bringing together all these elements and describing the timetable of actions that will take the farm from its entry into the OF&G (Scotland) Organic Certification scheme to full organic status for all land and enterprises. The Conversion Plan must cover the elements specified in Section 1.3.3 and Table 1.3.4.

Table 1.3.4 Conversion Plan content

Conversion Plan section	Additional information for conversion	Date by which approval is required
Part 1- Conversion Programme		
Conversion timetable	A timetable for the conversion of the whole farm which identifies, for each field the date land enters and completes conversion, and the dates each enterprise enters and completes conversion.	Pre-requisite for acceptance into scheme
Field histories	Field records including a plan of the holding showing the Ordnance Survey numbers of the fields accompanied by a history of the inputs and crops for each field for the previous five years	Pre-requisite for acceptance into scheme
Soil analysis	Full soil sampling plan on which future management will be based. Sampling from each field or block of fields (not applicable to rough grazing that will receive no inputs).	Within three months of entering scheme
Part 2 - Farm Plan		
Farm audit	Description of the farm and its resources.	Pre-requisite for acceptance into scheme
Enterprise Plan	The set of enterprises to be managed and how these enterprises interact to create a balanced farm system.	Pre-requisite for acceptance into scheme
Soil and Nutrient Management Plan	System used to manage major nutrients on farm and control their use, output, loss, cycling and measurement.	Pre-requisite for acceptance into the scheme
Environment and Biodiversity Plan	An audit of the existing environmental and historical resources, habitats and features on the unit. A description of the measures to protect and manage these areas, and plans for enhancing the quality and management of natural and cultural interest on the farm.	Pre-requisite for acceptance into the scheme (documentation produced for other agri-environment schemes may be acceptable)
Crop Management Plan	A description of each main crop (plant) enterprise planning its husbandry, growing and post harvest management.	Pre-requisite for acceptance into the scheme
Animal Health Plan	A description of each livestock (animal) enterprise planning its husbandry, health and welfare.	Pre-requisite for acceptance into the scheme (not for a standard conversion)
Processing and Marketing Plan	A description of the products produced; the markets they are sold to and the links to other businesses that process and market the farm produce.	Pre-requisite for acceptance into scheme
Staff and Advice Plan	A programme for gaining the staff skills required for organic management, sourcing expert advice, and keeping track of changes in these Standards.	Pre-requisite for acceptance into scheme

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In the second year of conversion, and each following year, the Farm Plan must be reviewed and, where necessary, updated. An updated Farm Plan must be submitted in advance to OF&G (Scotland) where there is a change in farm enterprise, site conditions or other major changes. Such changes must be notified to OF&G (Scotland). Failure to submit an updated Farm Plan when requested by OF&G (Scotland) will lead to the inspection being delayed and the certification of produce will also be delayed.

If OF&G (Scotland) requires a new Farm Plan before the annual review is due a date for submission of the updated Farm Plan will be set.

1.3.5 Conversion approval:

Crop products may only be sold or classified as in-conversion after:

- the conversion plan has been assessed and approved by OF&G (Scotland)
- the land and production has been assessed and registered as in-conversion by OF&G (Scotland)
- at least 12 months has elapsed from the start of conversion until the first harvest of each crop.

1.3.6 Standard and Simultaneous conversion:

All livestock on the unit must also be converted to organic management. This can be done either immediately following the conversion of the land (standard conversion), or it can be done at the same time as the conversion of the land (simultaneous conversion). Where a holding is phasing in conversion over several years, conversion of the livestock enterprise cannot begin until sufficient grazing land has begun conversion to feed and graze the stock. Section 3 of these Standards contains detailed requirements for the conversion of different livestock enterprises.

1.3.7 Reverting to non-organic management:

Organic conversion is normally a one-way process and should not be reversed. Converted areas must not be switched back and forth between organic and non-organic management. If land has reverted to non-organic management, it will not normally be re-admitted for conversion a second time.

In exceptional circumstances, OF&G (Scotland) will consider applications to remove land from organic production with the intention of returning it to organic conversion status at a later date. Such an action will usually incur a penalty of an extra year as in-conversion in addition to the normal minimum conversion period, requiring a three year re-conversion period. Applications will be considered on a case-by-case basis at the discretion of OF&G (Scotland).

1.4 Farm planning

1.4.1 Farm plans for organic management:

Successful organic farming is based on careful stewardship of the available resources on the farm and their management to produce crops, whilst maintaining and enhancing the quality of those long-term resources. Farm planning is the process that identifies the resources available on the farm, decides how the resources will be used, measures their condition and feeds back to revising the process in future years. The plan is designed to be a working and evolving document to help producers plan ahead and monitor their progress. It is also key to organic certification, showing where the farm is aiming to develop in future years. A comprehensive farm plan is required for all Scheme producers.

Each section of the Farm Plan must be compiled by producers or their advisers, and reviewed each year. The Plan must be written down and contain all the information listed in Table 1.4.3.

Farm Plans must be easily and readily accessible to farm staff and OF&G (Scotland) inspectors. The farm plan should be read by all staff on the unit and be easily accessible on farm.

New producers are required to gain approval for their initial farm plan (the Conversion Plan) in order to be accepted in the SOPA Organic scheme.

1.4.2 Updating Farm Plans as the organic farming system develops:

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All plans may change and SOPA producers are expected to show continuous development in their organic management. Once an approved Farm Plan (or Conversion Plan) is in place, the plan must be reviewed, and where appropriate updated, each following year, to reflect the previous year's activity, lessons learned, new information and advice and new activities proposed.

Continued membership of the SOPA Organic Scheme is dependent on the annual updating of the farm plan.

An annual review date will be agreed between each producer and OF&G (Scotland), when the plan will be updated and revised. The plan must be revised by the review date and be available for inspection at the next visit. Organic certification and production certificates will be delayed until the plan is revised and the updated plan approved by a OF&G (Scotland).

1.4.3 Farm plan contents, reviews and updates:

The farm plan is composed of eight elements that interact to describe how the farm and its resources will be managed. The minimum level of content for all farm plans is set out in Table 1.4.3.

Table 1.4.3 Farm Plan content and update frequency

Plan	Content	Review & Update
Farm audit	<p>A description of the farm, its environment and resources:</p> <ul style="list-style-type: none"> a plan of the holding of sufficient scale to identify the field reference numbers and areas indicating the fields in-conversion, organic or non-organic a large-scale plan of the farm buildings, yards and stores etc. identifying their use and whether designated for organic or non-organic purposes a large-scale plan of the crop storage areas identifying the bins and floor storage areas whether designated for in-conversion, organic or non-organic purposes a large-scale plan of the buildings used for housing livestock, their dimensions, numbers of animals housed and whether designated for organic or non-organic purposes an inventory of equipment and facilities on the farm a description of all staff and their skills, experience and qualifications, plus a list of contractors used a list of all suppliers to the unit, identifying their organic certification body and certificate number a list of all sales outlets, identifying their organic certification body and certificate number a description of the facilities and measures to maintain separation of organic, in-conversion and non-organic inputs and produce a description of measures to avoid infestation, control storage pests and avoid contamination <p>Farm and field identifiers must be used on all records. If field separation and identity is unclear, a re-mapping by Scottish Government may be required.</p>	Every year
Enterprise Plan	<p>The set of enterprises to be managed and how these enterprises interact to create a balanced farm system. Includes the planned:</p> <ul style="list-style-type: none"> farm enterprises and their interaction farm proposed organic rotation of crops pattern of rotation during conversion to reach the organic rotation crop storage both on and off farm processing route for crops, identifying those on farm and linked organic certified processors to be used 	Every year

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	<ul style="list-style-type: none"> marketable products, main market outlets and organic certified traders to be used <p>The scope of the Enterprise plan must cover the full period of a complete rotation.</p>	
Soil and Nutrient Management Plan	<p>The system used to manage major nutrients on-farm and control their use, output, loss, cycling and measurement. Including:</p> <ul style="list-style-type: none"> a programme for soil testing and results of a recent soil analysis and any recommendations made a programme and techniques for fertility building and any inputs to be brought on-farm a description of manure storage, management and application tillage timing, techniques and selection nutrient leaching prevention measures a 'farm gate' nutrient budget <p>The nutrient budget must show the balance between the annual amounts of nutrients brought onto the farm and leaving the farm at each stage of the rotation (if any), and a calculation of major nutrients levels, losses and inputs.</p>	Every 2-3 years
Environment and Biodiversity Plan	<p>An audit of the existing environmental and historical resources, habitats and features on the unit. A description of the measures to protect and manage these areas, and plans for enhancing the quality and management of natural and cultural interest on the farm including:</p> <ul style="list-style-type: none"> a map of the farm showing the major habitat types and any archaeological features i.e. woodlands, hedgerows, dykes, watercourses, open water, wetlands, species rich grasslands, heath, parkland, old field patterns, ancient monuments. notes to accompany the descriptive habitat map listing any notable conservation features known and including any designated sites on the farm for habitats, species or historical artifacts a list of the main objectives for farm conservation to enhance the natural and cultural interests - include the aims of any current agri-environment schemes or conservation plan agreements 	Every 5 years (documentation prepared for other agri-environment schemes may be used where appropriate)
Crop Management Plan	<p>A description of each main crop (plant) enterprise planning its husbandry, health and post harvest management. A section for each crop type, including:</p> <ul style="list-style-type: none"> species and variety selection timing and scale of cropping husbandry techniques including control of weeds, pest and diseases and nutrient management harvest crop management, drying, marking and storage. <p>Grazing practice and grassland management are an integral part of crop enterprise management and must be fully described.</p>	<p>Every year after harvest.</p> <p>New section for any new crop.</p>
Animal Health Plan	<p>A description of each livestock (animal) enterprise planning its husbandry, health and welfare. A section for each animal enterprise, including:</p> <ul style="list-style-type: none"> conversion of stock and new stock general management and welfare housing, free range and handling feed and feeding regimes positive health management tactical veterinary treatments strategic veterinary treatments vaccination and bio-security programme recording of management and animals 	<p>Every year.</p> <p>New section for any new animal enterprise.</p>

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	The Animal Health Plan must include appropriate disease control programmes, bio-security and all measures to develop positive animal welfare and preferably be drawn up in consultation with a veterinary surgeon.	
Processing and Marketing Plan	<p>A description of the products produced the markets they are sold to and the links to other businesses that process and market the farm produce. Including:</p> <ul style="list-style-type: none"> • a list of farm products planned to be sold • a description of potential <i>end consumer</i> markets to be supplied and the links in the chain to reach them • the timing and quantities of produce and quality grades of crops to be sold from farm • a description of on-farm processing activity • a list of potential buyers for each product and sources of information on market and prices • a description of information to accompany each sold batch of produce from the farm, including any packaging and recording • membership of any quality assurance schemes, along with details of their requirements • membership of any marketing groups and their requirements • details of all farm sales made, including non-agricultural produce activity and sales <p>If a marketing or diversification plan for the farm has been prepared, this should be noted and made accessible.</p>	Every year
Complaints system	<p>All producers must have in place a written complaints procedure for their holding, including their organic unit. The complaints system must record all complaints made and received, and the actions taken to rectify complaints. Complaints may arise from feedback from customers, consumers, public agencies and other businesses, when the products, land management, staff or other aspects of the unit fail to meet their requirements or cause nuisance. The complaints procedure uses this feedback to bring about action to improve farm performance and answer complaints.</p>	Every year

SOPA Member Services can assist with the drafting of farm and conversion plans, and offer ongoing advice under its Mentoring Programme

1.5 Key documents

1.5.1 Access to documents:

All registered Producers are required to keep copies of key documents and Codes of Practice available on site and accessible to all staff.

1.5.2 Required and recommended documents:

All producers must keep copies of applicable documents listed in Table 1.5.2 accessible on farm.

Table 1.5.2 - Key document for Organic scheme producers

Document	
Required	<ul style="list-style-type: none"> • The SOPA Organic Standards • SOPA/OF&G (Scotland) Certification Updates • approved Farm Plan • all required Farm Records

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	<ul style="list-style-type: none"> • Prevention of Environmental Pollution from Agricultural Activity Code of Practice ('the PEPFAA Code') Do's and Don'ts GUIDE SEERAD 2009 (Scotland) • SGRPID Code of for using plant protection products in Scotland (2007) • Welfare of Animals During Transport Order (Jan 2007) • Codes of Welfare of Livestock, for each species of animal kept on-farm (23 April 2012) • EC Egg Marketing Standards Regulation – Scotland (July 2009) • Four Point Plan (16 April 2012) • LERAPS Guide (Oct 2008) • Nitrate Vulnerable Zones (NVZ's) Guidelines for Farmers in Scotland (Dec 2010) • Code of Practice for the Safe Handling and Storage of Animal Feeds • Guidance on the Transport of Casualty Farm Animals, MAFF 1993, PB1381 • GAEC, Cross Compliance • Relevant SEPA Regulatory Requirements (Water, Soil, Pollution) e.g. CAR
Recommended	<ul style="list-style-type: none"> • SOPA Newsletter • SOPA Technical Notes and briefings • The Organic Research Centre: Organic Farm Management Handbook

1.6 Record keeping

1.6.1 Record sheets:

Routine accurate record keeping is a key part of good organic farming and is essential for the purpose of obtaining organic certification. OF&G (Scotland) produce Record Sheets in digital and paper formats to simplify the process of keeping the required records. These are available on the SOPA website. The use of these Record Sheets is recommended. However, other equivalent formats are acceptable as long as they cover as a minimum all the information in table 1.4.3.

1.6.2 Back-up records:

Back-up records must be kept, whether on computer or as paper records. Computer records must be regularly backed-up and printouts on paper must be made available upon request at the time of the farm inspection.

All records must be kept for a period of five years, and be accessible to OF&G (Scotland) on request.

1.6.3 Record frequency:

Information must be entered in the farm records so as to ensure that all changes and events are documented at or about the time that they occur. The minimum frequency for reviewing each area of the farm records must comply with the requirements of these Standards. Where information remains unchanged, this must be affirmed and noted prior to the annual inspection. The content and frequency of recording is given in Table 1.6.3.

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Table 1.6.3 - Scheme required records and frequency

Record	Content	Frequency
Farm veterinary supplies and use record	<p>The keeping of records of purchase and use of all veterinary products is a statutory requirement as well as being required by these Standards. These records must be kept on the holding, be kept up to date and include all treatments administered including those administered by a veterinary surgeon or under the direction of a vet, (see SOPA Record Sheet 8 & 9)</p> <p>A register of veterinary medicines stored on the holding must include:</p> <ul style="list-style-type: none"> • date of purchase of veterinary medicine • name of veterinary medicine and quantity purchased • supplier of veterinary medicine <p>A record of the use of any veterinary medicine must include:</p> <ul style="list-style-type: none"> • identity of animals treated including method of identification of the individual, batch or group. • reason for treatment including the method of diagnosis • number of animals treated • date treatment started • date treatment finished • veterinary product used • dosage total quantity of veterinary medicine used • length of withdrawal period in number of days - both the statutory withdrawal period and the organic withdrawal period. • earliest date for sale of animal or produce • name of person who administered veterinary medicine. 	Every time a product is purchased or a treatment is administered
Genetically Modified Organisms records	<p>Verifiable evidence must be obtained from all relevant suppliers in order to confirm that the products (including all ingredients) of all inputs that are supplied to the operator are not produced from GMO's or their derivatives.</p> <p>The operator on a farm production unit, on-farm processing unit, or small scale processing unit, shall require that the suppliers of all conventional raw materials supply a declaration, statement, letter or a printed product label which confirms that the material is not produced from GMOs or their derivatives, (see SOPA Record Sheet 17)</p>	Review weekly and update where appropriate (with supplies and use record)
Manures & Soil Conditioners records	<p>For all manures, slurry and soil conditioners (including compost and digestate) usage, producers must keep the following records (including for manures brought in from other holdings, whether organic or non-organic, including bartered inputs):</p> <ul style="list-style-type: none"> • a written derogation to import non-organic manure from a conventional source (see SOPA Derogation Form for the application of non-organic manure) • declaration from the supplier of manures from non-organic sources that the manure is a product of non-GM fed animals (see SOPA Record Sheet 17) • on a field by field basis - the date, field, type of manure or slurry and approximate quantity applied (see SOPA Record Sheet 5) <p>For all approved fertiliser usage and mineral supplementation, producers must record the following:</p> <ul style="list-style-type: none"> • permitted fertilisers brought in (delivery notes, invoices etc) • a derogation to bring in a restricted material (see SOPA Approval Form for supplementary nutrients) • a declaration from the supplier that a non-mineral fertiliser is non-GM. (see SOPA Record Sheet 17) 	Review monthly and update where appropriate

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Record	Content	Frequency
	<ul style="list-style-type: none"> calibration records of all machinery used for approved fertilisers and mineral applications (See SOPA Record sheet 10) on a field by field basis: the date, field, type of fertiliser and approximate quantity (see SOPA Record Sheet 5) name and FACTS qualification number for any adviser, consultant or trade representative giving advice about fertiliser usage. Such advice must be confirmed in writing; heavy metal analysis where required by the SOPA Standards derogation consent. 	
Production records	<p>Producers must keep the following records of crop, forage, livestock and all other yields:</p> <ul style="list-style-type: none"> approximate quantities and type of forage made from each field (see SOPA Record Sheet 6) approximate yield and type of crops from each field or cropping area. (see SOPA Record Sheet 6) number of animals, weight and finished condition and approximate area of free range on which they were produced (including field-by-field grazing records). Records of sales and whether the sale was to an organic or non-organic supply chain 	Review monthly and update where appropriate
Seeds, Transplants & Propagating Material records	<p>For all seeds, transplants and vegetative reproductive materials used or brought onto the holding, producers must keep the following records:</p> <ul style="list-style-type: none"> supplier source and organic status, including certificate number; varieties and quantities of seeds, transplants and vegetative propagative material brought onto the holding; varieties and quantities of seeds, transplants and vegetative propagative material raised on the holding; for buying non-organic seeds, a completed derogation consent from OF&G (Scotland), dated in advance of the purchase (see SOPA Derogation Form for non-organic seed); details of any seed dressings used, Section 2.5 of these standards; varieties and quantities of seeds sown and transplants planted by field or cropping area; a declaration from the supplier that the seed or transplant is non-GM (organic seed label to confirm non-GM status). 	Review monthly and update where appropriate
Permitted pesticide use records	<p>For all applications of approved pesticides, records must show:</p> <ul style="list-style-type: none"> reason and justification for use, with SOPA Standards approval consent where required, dated in advance of application (see Approval Form for the control of pests and diseases); name of pesticide application operator, pesticide user and copy of certificates of competence issued by the National Proficiency Test Council (NPTC); records of each spray application including: date, field, crop, stage of growth, product, permitted dose rates, pesticide and water application rates, start and finish times, wind speed and direction, harvest interval & operator (see SOPA Record Sheet 5); National Sprayer Testing Scheme (NSTS) certificate; record of calibrations and maintenance of equipment (see SOPA Record Sheet 10); date of purchases of permitted pesticides; name and BASIS qualification number of any advisers, consultants or trade representatives giving advice on pesticide usage. All such advice must be confirmed in writing and kept on file; 	Every time a permitted pesticide is applied

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Record	Content	Frequency
	<ul style="list-style-type: none"> • use of Scottish Government permitted rodent baits and a plan of the bait points in yards, buildings and stores; • future management measures to be taken to reduce need for repeat use of pesticide. 	
Cleaning and Maintenance records	<p>For greenhouses, propagating & spraying equipment, harvesting machinery and crop stores, producers must keep the following records:</p> <ul style="list-style-type: none"> • date of maintenance, calibration and cleaning action as appropriate (See SOPA Record Sheet 10 & 11)) • person carrying out the operation or check • copy of checklist or sign-off sheet • any cleaning chemicals or pest control chemicals used • any action taken or further maintenance or cleaning needed • date for next inspection 	Review weekly and update where appropriate
Animal Feed records	<p>Records of all feedstuffs for livestock must be kept, including estimated quantities of grazing and farm-conserved forage (see SOPA Record Sheet 3 & 6). Records must include:</p> <ul style="list-style-type: none"> • constituent ingredients of the feed and organic/conversion/non-organic status • the feeding group of animals consuming the feed and their age, weight and daily dry matter intake • proportion of the constituents to the total feed (on a dry matter basis); • source of the constituent parts of a mixed diet and the quantities from on-farm and purchased off-farm • for compound feedstuffs from a feed mill registered or approved by an Organic Certification Body, a product label should be kept • declaration from the supplier for pig and poultry feed confirming that the products are from non-genetically modified sources (not required for feeds from a mill registered or approved by an Organic Certification Body) 	Review daily and update where appropriate
Organic Sector Livestock Transfer records	<p>All stock sold or purchased must be accompanied by a Livestock Transfer Document to identify the animals and their status, (see SOPA Record Sheet 15). For live animals entering or leaving the farm the following must be recorded:</p> <ul style="list-style-type: none"> • date, species, numbers, ages and identification of births and stock purchased • whether born on the holding or brought in from a supplier • organic/non-organic status • veterinary history to date including the withdrawal period for any veterinary treatments that are current at the time of sale • a declaration from the supplier and/or herd mark owner to the effect that the holding is BSE-free • quarantine measures undertaken • conversion time by animal or group prior to full organic status 	Every time stock is sold or bought.
Fallen stock record	<p>A record of the disposal of all fallen or destroyed stock must also be made, including:</p> <ul style="list-style-type: none"> • animal identification • date of death • cause of death or result of <i>post mortem</i> • method of disposal, including name and registration number of disposal facility 	Every time stock is buried, destroyed or disposed of.

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Record	Content	Frequency
	<ul style="list-style-type: none"> location of the burial pit, if buried on the farm (where allowed by Scottish Government). <p>If a statutory notice has been given to destroy the animal this must be noted and copy attached.</p>	
Complaints records	A record must be kept for recording complaints. All complaints recorded should be made known during the inspection visit, (See SOPA Record Sheet 19) Keep copies of all complaints on file and show to the inspector. Where no complaints have been received a record of this must be kept.	Every time a complaint is made or received.

1.7 Farm Inspections

1.7.1 The Farm Inspection visit:

All SOPA Organic Scheme Members must have an on-site inspection at least once every calendar year, and farms will be certified as organic only following a farm inspection visit and an approved report. The farm inspection verifies to OF&G (Scotland) that the unit is being managed in compliance with the SOPA Organic Standards. The SOPA Member, and if appropriate their farm manager or agent, is required to be present for the full duration of the inspection. Staff responsible for day-to-day field operations or care of animals must also be available if requested by OF&G (Scotland).

The Scheme Member must give OF&G (Scotland) access to all parts of the unit and all premises, for inspection purposes

The records and documents outlined in section 1.6 must be available on the day of the inspection. Additionally, complete and up-to-date financial and stock records must also be kept at the production unit and these must be available for inspection by OF&G (Scotland) on request. These records must be sufficient to ensure that the registered producer and OF&G (Scotland) can identify the suppliers, buyers and where appropriate the consignees for the purchase and sale of all inputs and outputs from the registered production unit. Financial accounts must be documented and supported by receipts and invoices. The accounts and other farm records must demonstrate the balance between the inputs and outputs. Furthermore, all Scheme Members must supply upon request any other information required by OF&G (Scotland) for the purpose of proper inspection.

Date of Inspection:

The annual inspection date will be determined by OF&G (Scotland). The inspector will contact the SOPA Scheme Member in advance to arrange a convenient date and time for the inspection. The inspection date may only be moved by prior agreement of the OF&G (Scotland) office. Where an operator cancels an inspection with less than five working days notice so that the inspector has incurred a cost or is unable to reschedule another inspection for the day, an additional inspection fee may be charged to the member. The cancellation costs are detailed in the SOPA Payment Terms, available on the SOPA website and on request.

Preparing for Inspection:

Prior to the inspection, OF&G (Scotland) will issue the member with a confirmation of the inspection date. OF&G (Scotland) will ask producers to notify and confirm all production details (by field or parcel for crops). A checklist/questionnaire of information to be collected by the member and made available to the inspector during their visit will also be supplied. This will specify:

- the date of the inspection visit (the Inspector will telephone to arrange date and time)
- registered areas of land and its organic status
- production enterprises and their organic status
- list of the individual fields registered with space for the crops and inputs during the previous year to be recorded
- in the case of simple processors, the registered processing enterprises and activities

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- a checklist of information and records the Inspector will wish to see
- a set of questions to be answered in advance and to be discussed with the Inspector during their visit
- notice of any outstanding issues to be addressed from previous inspection or other issues raised with OF&G (Scotland) (copies of earlier correspondence with action points highlighted may be provided).

1.7.2 Additional Inspections:

Interim inspections may be required where a major change or deviation has been made from the approved Farm Plan. Any major changes in activity or measures taken to rectify problems on farm may require OF&G (Scotland) to carry out additional inspections of the farm before the next annual inspection due. The procedure for interim inspection is the same as for the annual inspection. An additional inspection fee may be due for an interim inspection

Spot-check inspections:

OF&G (Scotland) is required to carry out Spot-Check inspections where an inspector visits a farm announced or unannounced and carries out an on-the-spot inspection. Spot-Check inspections are a routine part of verifying continuing quality in the Organic Certification system. The member is required to give co-operation to a Spot-Check inspection.

Audit and shadowed inspections:

In order to maintain status and accreditation as a DEFRA Approved Organic Control Body OF&G (Scotland) is required from time to time to allow representatives of DEFRA, Scottish Government and UKAS to audit OF&G (Scotland) certification procedures. Producers are required to give their full cooperation to any official audit or inspection.

Residue Testing:

OF&G (Scotland) routinely takes samples of materials on certified organic farms. The purpose of residue testing is to additionally verify the authenticity of the product and its compliance with the SOPA Organic Standards. This may include products such as grain in bulk stores for pesticide residue analysis and freedom from GM, milk for medicines residues analysis, or samples of inputs used to verify organic status, composition and GM status etc.

The inspector must take samples where fraud or contamination of materials is suspected. The inspector may take samples or, where appropriate, the producer may sample material in the presence of the inspector. The sample will be split into three and one part given to the producer. The second will be kept for record purposes and the third will be sent under an anonymous code number to a designated laboratory.

Where producers undertake their own residue testing or are provided with such information from purchasers or packers of their products this information must be made available to OF&G (Scotland) on request. Any positive result that exceeds the Limit of Detection (LOD) must be notified to OF&G (Scotland) immediately. In the case of a positive result, OF&G (Scotland) will initiate an investigation through the supplier and any other control bodies involved.

1.7.3 Assessment Feedback:

During the inspection visit, the inspector will identify in writing any non-compliance with these Standards and record them on the Inspection Summary Form (ISR). The producer must sign an undertaking to carry out corrective action and indicate the date of completion for each action. Following the inspection, OF&G (Scotland) will write to the Member confirming the areas of non-compliance and the time by which corrective action must be taken.

The confirmation of non-compliance will be notified to members by means of a Compliance Notice. The Certification Officer will detail all non-compliance's and respective corrective actions identified by the inspector within the compliance notice. Where appropriate the Certification Officer may identify further non-compliance from the report subsequent to the inspection. The Certification Officer will review the report and corrective action and propose a decision on certification.

Defra have agreed five categories of certified performance, outlined in Table 1.7.3:

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Table 1.7.3 - Scheme Inspection Action Categories

Category	Description	Action required	Time to implement	Action if not completed in time
Category 1: Organic Good Practice (Compliant)	Management of the unit is compliant with the SOPA Organic Standards. <i>(e.g. The approved Animal Health Plan is being followed)</i>	Continue management. Look for ways to improve or extend the system.	Continue	
Category 2: (Comment)	<i>The means of notifying general information regarding the standards.</i> <i>(e.g. Practices that could be improved e.g. to best practice Interpretation to the standards</i> <i>Forthcoming changes to the standards)</i>	Take steps to acknowledge comments so as to remain compliant in the future.	Changes or plans must be in place and operational by time of next OF&G (Scotland) inspection, or implementation of new standards	Failure to act may lead to category 3 feedback at next inspection visit.
Category 3: Action required (Non-compliance)	Elements of the unit's management do not meet the SOPA Standards and require action to be taken to reach Category 1. (e.g. Failure to obtain a GMO declaration; or housing conditions are leading to increase in therapeutic medicine use)	Renewal of certification is conditional on: Corrective action to be agreed in writing by OF&G (Scotland) and member. To commit to undertake corrective action within an agreed timescale Evidence of compliance to be supplied by member and verified by. Only where evidence of compliance cannot be supplied a statement of intent may be accepted (e.g. where a long term capital investment is required)	Usually within 30 days OF&G (Scotland) will set date by which action must be taken.	Failure to confirm to OF&G (Scotland) office that appropriate changes have been made or plans are in place by deadline date may lead to immediate Category 4 An additional inspection maybe required, at the discretion of OF&G (Scotland)

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Category	Description	Action required	Time to implement	Action if not completed in time
Category 4: Product suspended until action taken (Irregularity)	<p>A serious breach of the standards is taking place. The organic integrity of a batch or product has been compromised: the certificate for the batch of product affected is suspended until the problem has been resolved and a new system is in place that has OF&G (Scotland) approval.</p> <p>e.g. By accidental use/substitution/contamination of prohibited materials</p> <p>Illegal or incorrect labelling</p> <p>Excessive number of non-compliances</p> <p>Contamination with GMO's above detectable level</p> <p>Contamination with pesticide above MRL</p>	<p>Immediate product, Field or batch suspension.</p> <p>Surrender any current OF&G (Scotland) Organic certificate.</p> <p>Change current management to alleviate the problem and comply with SOPA Standards.</p> <p>Specialist advice maybe required.</p> <p>Inform OF&G (Scotland) office once action has been taken.</p> <p>Notify DEFRA and other CB's depending on severity and if product recall is needed.</p>	<p>Action usually within one month.</p> <p>OF&G (Scotland) will set date by which action must be taken and additional Inspection visit may be made (with additional fee to Member)</p>	<p>Product certificate suspended until action taken.</p> <p>Failure to act to prevent future reoccurrence by deadline date, will result in immediate Category 5 and whole farm/business suspended.</p>
Category 5: Whole farm/business suspended until new management approved (Manifest Infringement)	<p>A serious and potentially irreversible breach of the standards has taken place. The integrity of the organic production unit has been compromised. Whole unit is suspended and no produce/product may be sold as organic. New Plans must be prepared and approved by OF&G (Scotland), and implementation must show that the new plan is reaching Category 1 before a certificate will be issued.</p>	<p>Surrender any current OF&G (Scotland) SOPA Organic Scheme certificate. Stop the activity.</p> <p>Take external advice to prepare new Plan for OF&G (Scotland) approval. Implement new plan.</p> <p>Additional inspection visit required once new plan in action (with extra fee).</p>	<p>Immediate suspension of all organic sales.</p> <p>OF&G (Scotland) will set date for new plan.</p>	<p>Failure to act, attempt to sell produce as organic or failure to prepare new Plans by deadline date will lead to expulsion of Member from Organic Certification Scheme.</p>

1.7.4 Action to reach organic good practice:

The aim of the inspection process is to recognise and encourage good practice and to identify the steps that each Member must take to improve the management of their unit to reach organic good practice. The aim is not to 'catch out' producers, rather to assist every Member to take action so they can reach a full set of 'Category 1' feedback at their next inspection.

The action required and usual time given to undertake corrective action is given in Table 1.7.3. Failure to act and comply by the deadline date given will lead to the next category of sanction being immediately applied. OF&G (Scotland) is able to confirm if proposed actions are likely to comply with the Standards. However, OF&G (Scotland) is not able to offer advice on the detailed steps needed to enable the unit to reach Category 1 approval. External, specialist advice is recommended for all changes and is required for Category 4 and Category 5 feedback.

1.8 Horses on organic land

These standards do not permit organic certification of horses. However, horses must be managed in the following way to comply with the SOPA organic standards;

- you should feed organic feed to horses on your organic land

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- if you purchase non-organic concentrates it MUST be non-GM, and you must be able to verify this at your inspection
- Any purchased non-organic feed such as forage or concentrates must be stored separately
- All non-organic feed fed to horses must be accountable in feed records.
- Prevent worming horses with an avermectin, if you do, a worming policy should be available. Housing for 48 hours after treatment is also recommended.
- Treat the manure from these horses as non-organic

1.9 Labelling products

The following is a summary of the labelling requirements. For more detail, refer to Section 6 of the Processing Standards – ‘Labelling of Organic products’

1.9.1 Labelling of ‘organic’ products:

The information provided is only concerned with organic labelling and additionally applies to advertising material, sales catalogues, mail order forms and websites and any other method of marketing your products. It is incumbent on you to ensure that your label complies fully with all relevant UK labelling legislation. Further advice on labelling is available from your local Environmental Health or Trading Standards Office.

The labelling and advertising of unprocessed organic products under SOPA Standards refers to an organic product that:

- Contains certified or organic ingredients including permitted additives, processing aids and approved non-organic agricultural products or all other ingredients for which you are in possession of a current DEFRA derogation;
- Contains 95 – 99.9% agricultural ingredients which have been certified as organic. The balance of 5% must be made up from permitted additives, processing aids and approved non-organic agricultural products or all other ingredients for which you are in possession of a current DEFRA derogation.

1.9.2 Mandatory Requirements

The product label for products that comply with the above two points must state that the goods are organic and include your Certification Code and the place of origin of raw materials.

a) The Certification Code

The Certification Code may be used in the labeling, presentation and advertising of products which satisfy the requirements set out under these Standards. The Organic Certification Mark shall only be used on products that have been produced by Approved Operators to SOPA Standard. For all products, the labelling must refer to the relevant DEFRA code number ‘GB-ORG-17’.

b) The Place of Origin

An indication of the place where the raw materials of which the product is composed, shall appear on the label, immediately below the control body code and shall take on the following forms;

- (a) ‘UK Agriculture’, where the agricultural raw material has been farmed in the UK;
- (b) ‘Non-UK Agriculture’, where the agricultural raw material has been farmed in third countries;
- (c) ‘UK/non-UK Agriculture’, where part of the agricultural raw materials has been farmed in the UK and a part of it has been farmed in a third country.
- (d) ‘Scottish UK Agriculture’ where all the agricultural raw materials are farmed in Scotland

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GB-ORG-17

Scottish UK Agriculture

1.9.3 Trading Name:

An operator who has the word 'Organic' in their trading name must ensure that this does not appear on any of the labelling, packaging, or sales literature or any accompanying documentation relating to non-organic products. An operator who produces both organic and non-organic products must ensure that the labelling, packaging, sales literature and any accompanying documentation are sufficiently differentiated to avoid any confusion on the part of a customer or final consumer. Where organic and non-organic products of the same type are on retail display, the products must be adequately separated and labelled to prevent any mixing or confusion by the customers and staff.

1.9.4 Labelling of 'In-Conversion' products:

The labelling and advertising of a crop product may refer to conversion to organic production methods providing that:

- the product contains only one ingredient of agricultural origin
- the product was produced in accordance with SOPA Organic Standards
- an approved Conversion Plan has been in operation and a conversion period of at least 12 months before harvest has been completed

The labelling of any animal product as 'in-conversion' is prohibited.

Wording of 'In-Conversion' products:

Care must be taken not to mislead consumers about in-conversion products, particularly about their difference from products which are fully organic. The most common example is the sale of 2nd Year conversion spring barley; this will appear on your organic certificate as

2nd Year conversion

Spring Barley

This will always appear under your organic products. You are not permitted to sell any in-conversion products unless it is present on your certificate.

1.9.5 The SOPA logo

The SOPA logo is not registered as a Trademark but is owned by the SOPA Board and may only be used by members holding a valid Organic Scheme Certificate. The SOPA Board will deal with misuse of the logo by any party in the most appropriate manner, which may include legal action.

The SOPA logo may only be used under license and in association with the business name shown on the Approved Operator's Certificate or the brand mark of the business, and in such a way that consumers can distinguish between the producer and SOPA. On retailers 'own-brand' labels, the producer's identity can be replaced by identification marks on the product packaging, from which the retailer is able to easily identify the producer's names and address and that this can be ascertained by the consumer, on request.



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- 1.9.6 Misuse of the Certificate will be considered to be a serious non-compliance with these Standards and will be dealt with accordingly. The Certificate remains the property of OF&G (Scotland) at all times and must be surrendered to any authorised representative of OF&G (Scotland) on request.

1.10 Packaging and transport of products to other production or preparation units

1.10.1 Labelling of products in transit to non-organic units

The integrity of organic produce must be maintained during transportation to any premises not subject to organic inspection: When produce is transferred to units such as a retailer which is not subject to an inspection by a DEFRA Approved Organic Control Body. Only packaging, containers or vehicles closed in such a manner that substitution of the contents cannot be achieved without manipulation or damage to the seal must be used.

Such products must also be accompanied by a label that states:

- the name and address of the operator and, where different the owner or seller of the product
- the name of the product and a reference to the organic production method as described in 1.9.2 above.
- the name and code number of the inspection body as described in 1.9.2 above
- an identification mark that permits the lot to be identified in the financial records and accounts referred to in 1.6.1 above.

This information may be presented on an accompanying document if this can be definitively linked with the packaging, container or vehicle carrying the product. This document must also state the name of the supplier and transporter as appropriate.

1.10.2 Labelling of products in transit to organic units

The integrity of organic produce must be maintained during transportation to other premises subject to organic inspection: When produce is transported to other premises that are subject to inspection by a DEFRA Approved Organic Control Body the closing of packaging or containers is not required where:

- transport is direct between the two premises
- the products are accompanied by a document containing the information specified in 1.9.1 above.

The inspection bodies of both operators are notified of such transport and agree that it may take place.

The notification of such transport operations to OF&G (Scotland) should be through keeping copies of the documents referred to above and making such activities known at any inspection visit or upon request at any other time by OF&G (Scotland).

1.11 Farm staff and skills

1.11.1 Clear organisational structure:

A full list of farm staff, their name, qualifications and duties, must be kept up to date and shown upon request to the Inspector. On larger units (and where the organic unit forms part of a larger holding) an organisational chart, showing the management structure, who reports to whom and who holds responsibility for key duties and enterprises including organic inspection, financial and enterprise accounts and health and safety (where appropriate), must be maintained and made available upon request to OF&G (Scotland). The organisational chart should contain sufficient contact details to allow farm emergencies to be dealt with swiftly and it must be readily accessible to all farm staff.

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1.11.2 Providing staff benefits and safety:

The farm manager is responsible for induction of new staff to ensure that they are aware of the requirements of organic production and the areas, livestock enterprises and crops on the farm that are under organic and non-organic management.

All farms must conform to all relevant current standards and industry good practice for providing a safe working environment and caring for the well-being of farm staff. Relevant legislation and guidance on pay and conditions, premises, equipment, staff facilities, general hygiene and health and safety must be observed on the farm.

Breach of any statutory guidance or action by authorities for their enforcement must be notified to OF&G (Scotland). OF&G (Scotland) may review the continuing Organic registration of the farm, if statutory requirements have been broken.

1.11.3 Training and developing new skills:

The training needs of the personnel engaged in organic production should be identified and training should be given to individuals as necessary to ensure that they are competent to carry out their assigned tasks and understand the importance of maintaining, throughout the production cycle, the organic integrity of the starting materials and the finished products.

Developing skills of farm staff is key to improving the performance of the organic farm. Each member of staff should undertake training each year: this may include attending training courses, distance learning, attending organised farm walks, monitor farm meetings and events, attending key agricultural shows or conferences and other appropriate ways to gain new skills and explore new ideas.

A record of training undertaken must be kept.

1.11.4 Take advice:

Farm managers are recommended to take regular advice from appropriately experienced advisers with expertise in organic farming, particularly where management is being changed or new enterprises considered.

OF&G (Scotland) staff may give advice on the requirements of these Standards only in so far as whether planned actions are likely to comply with these Standards - they are not permitted to provide detailed advice on methods of organic farming or to recommend specific actions or products.

SOPA Member Services are the advisory arm of the organisation and offer information and guidance on good practice in organic farming.

1.12 Products suspected not to meet the requirements of these Standards

1.12.1 Producers must ensure that products not produced in accordance with these Standards are not marketed as organic: Where an Organic Certification Scheme producer considers or suspects that a product which they have produced, prepared, imported or had delivered from another operator, is not in compliance with this Standard, they must initiate procedures either to withdraw from this product any reference to the organic production method or to separate and identify the product. They may only put it into processing or packaging or on the market after elimination of any doubt, unless it is placed on the market without indication referring to the organic production method. In case of such doubt, the operator must immediately inform OF&G (Scotland). OF&G (Scotland) may require that the product cannot be placed on the market with indications referring to the organic production method until it is satisfied, by the information received from the operator or from other sources, that the doubt has been eliminated.

1.12.2 OF&G (Scotland) must ensure that products not produced in accordance with these Standards are not marketed as organic: Where OF&G (Scotland) has a substantiated suspicion that an operator intends to place on the market a product not in compliance with these Standards but bearing a reference to the organic production method, then OF&G (Scotland) can require that the operator may provisionally not market the product with this reference. This decision shall be supplemented by the obligation to withdraw from this product any reference to the organic production method if OF&G (Scotland) is sure that the product does not fulfil the requirements of these Standards. However, if the suspicion is not confirmed, the above decision shall be cancelled after a time

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period to be determined by OF&G (Scotland). The operator shall co-operate fully with OF&G (Scotland) in resolving any suspicion.

1.13 Complaints procedures and confidentiality

1.13.1 Producers' complaints system:

All producers must have in place a complaints procedure for their holding, including their organic unit. The complaints system must record in writing all complaints made and received, and any actions taken to rectify these, (see SOPA Record Sheet 19)

Complaints may arise from feedback from customers, consumers, public agencies and other businesses, when the products, land management, staff or other aspects of the unit fail to meet their requirements or cause nuisance. The complaints procedure uses this feedback to bring about action to improve farm performance and answer complaints and to prevent any reoccurrence.

All complaints records should be made known during the inspection visit. Copies of all complaint forms on file must be shown to the inspector upon request.

1.13.2 OF&G (Scotland) Scheme complaints system:

Any complaint received by OF&G (Scotland) or SOPA against a Scheme Member will be investigated. Where the investigation is not conclusive, an Assessor will carry out an interim inspection. Where the complaint is considered to be serious, a senior member of OF&G (Scotland) staff or a member of the Technical Advisory Committee may accompany the Assessor. The results of the investigations will be made known to the Technical Advisory Committee, which will decide the appropriate action.

Written complaints about the OF&G (Scotland) Organic Certification Scheme must be made in accordance with OF&G (Scotland) quality management system (available from OF&G (Scotland)).

1.13.3 Confidentiality:

All information held by OF&G (Scotland) on its Scheme Members and their production activities shall be held in confidence. All Members may see their file and information held on them by OF&G (Scotland). When discussing technical information on a Member's activity (for instance with the OF&G (Scotland) Technical Advisory Committee) the Member and farm will be identified only by the Scheme Membership number.

Section 2 - Production Standard – Crop Production

2.1 Organic crops

2.1.1 Only organic crops may be grown:

All crops grown on the organic unit must be grown entirely in accordance with these Standards. Non-organic crops may not be grown on the organic unit. This includes crops grown during conversion to full organic status, when all crops must be also be grown according to these Standards.

2.1.2 Only food and feed crops can be certified:

Only crops grown in full accordance with these Standards and for food and feed use will be certified by OF&G (Scotland) and may carry the Certification mark. These include:

- grains and pulses grown for human food use and for animal feeding
- horticultural crops grown at a field scale or in market gardens
- grassland, forage and conserved forage grown for use either on the unit or for sale to another unit.

Other non-food crops may be grown on the organic holding, such as industrial oil and fuel crops and these crops must also be produced according to the SOPA Organic Standards. However, only food crops can be certified by OF&G (Scotland) and carry the Certification mark.

2.2 Management for organic cropping

2.2.1 Crops must form part of a balanced rotation:

The development and establishment of a well-designed crop rotation is an essential component of an organic production system. A satisfactory rotation will aid in the control of weeds, pests and diseases. For field scale crops the key to a sustainable organic rotation is the inclusion of legumes, forage crops for grazing and the production of manures that will allow the organic unit to be self sufficient in nitrogen. Care must also be taken to maximize the effective recycling of other plant nutrients and organic matter that may be lost to the environment or removed in plant materials. The time that soil is left uncovered should be minimized through the use of green manures, where appropriate. The need for rotations does not apply to permanent and perennial crops such as rough grazing, permanent pasture, cane fruit and top fruit.

2.2.2 Requirements of an organic rotation:

Generally, arable and horticultural crops may only be grown for no more than half of the full rotation period: for instance a maximum of three years in seven. Other rotations will be considered only if they are supported by a nutrient budget. Where crops are consumed by livestock on the organic unit the recycling of nutrients in the resulting manure will be taken into consideration by OF&G (Scotland) when approving the rotation. In addition to this, the following specific rotational guidelines must be adhered to:

- a balance must be achieved between fertility building and exploitative crops
- crops with different rooting systems must be included
- leguminous crops must be included to provide nitrogen for other crops within the rotation
- crops with similar disease susceptibility must be separated by an appropriate time interval and must not be grown in close proximity
- cereals may be grown in one location for a maximum of two successive years. A third consecutive cereal crop is permitted only if it is used as a nurse crop for the establishment of a grass/clover ley.
- several types of horticultural crop require a lengthy break to avoid pest or disease build-up. Potatoes, brassicas and alliums require a minimum period of four years between cultivation in the same location

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- diversity is a key element of organic cropping. A different type of crop or plant variety should be grown in each year of the rotation, except when under successive years of grass/clover leys
- all crop (or 'stockless') field scale systems have yet to be proven to provide an appropriate balanced organic system in Scottish farming conditions. Therefore, careful monitoring is essential in order to maintain a well balanced rotation.
- smaller horticultural units (under 10ha in crop area and with each variety grown at less than field scale) need to ensure inputs can be sourced, to maintain nutrient balance, from approved sources agreed with OF&G (Scotland).

Failure of the crop rotation: The continuing certification of cropping land and produce depends on its integration into the rest of the farm through sound rotations, appropriate soil and fertility management and due care for the cropped and surrounding environment. Where OF&G (Scotland) is concerned that the rotation, management or performance of cropping on the unit is leading to reduced soil quality, fertility or other associated problems, OF&G (Scotland) will withdraw certification for crop production until the problem has passed or a new and approved crop and rotation plan is approved by OF&G (Scotland) and implemented by the producer.

2.3 Conversion to organic cropping

2.3.1 'In conversion' crop status:

Crop products may only be sold or classified as 'in-conversion' meaning 2nd Year Conversion when:

- the conversion plan has been fully approved by OF&G (Scotland)
- at least 12 months has elapsed from the start of conversion period until the harvest of the crop, and the crop has been sown, cultivated and harvested in accordance with these Standards
- all of the land and production has been inspected and registered as in-conversion (this includes abandoned land, land with no records of inputs or land from which the certificate of registration has previously been withdrawn).
- The 2nd year conversion cereal product is listed on your certificate

2.3.2 'Organic' crop status:

Land and crop production are eligible for full organic certification (and therefore products are able to be sold with an organic description) after a conversion period of:

- for arable and horticultural crops 24 months from the last use of any prohibited materials before sowing or planting the organic crop
- for grassland 24 months from the last use of any prohibited materials until the grass is used for organic grazing or the production of organic hay or silage
- for perennial crops (excluding grassland) 36 months from the last use of any prohibited materials until the harvest of the first organic crop.

Minimum two years of fertility building: Where the land was under exploitative cropping prior to entering organic conversion– including crops that are nutrient depleting, such as cereals harvested for sale off the farm - the conversion of these fields must normally begin with a fertility-building phase and may not enter organic crop growing use for at least two years.

Where the whole unit is entered into organic conversion, extractive cropping may continue only in accordance with the rotation specified in the OF&G (Scotland) approved Conversion Plan.

2.4 Grassland and forage

2.4.1 Grassland Management

Organic crop standards apply to all grass, grassland and other crops grown for forage or conservation: Grass and all plants grown for forage production are classified crops and the same Standards for organic management apply to grazing areas, the growing and harvesting of conserved forage crops, and all grassland and forage growing areas.

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Clover and herb-rich leys are of central importance to most organic farms, providing a fertility-building phase in the rotation, high quality grazing and forage for livestock and allowing a chance to break weed, pest and disease cycles. Permanent pastures contribute to the health and diversity of the farm in similar ways, building up fertility, protecting vulnerable soils, and acting as a carbon sink and providing high quality grazing and forage for livestock.

Species-rich meadows and unimproved pastures are an important habitat for many plants and insects; they enhance the landscape and can make a useful contribution to organic livestock nutrition due to the diversity of plant species and high mineral and trace element content.

In addition to all other crop standards, the following Standards apply specifically to grassland, grass and forage production:

Recommended methods for grassland management:	
<ul style="list-style-type: none">• Rotational stock grazing systems and mixed species stocking for pasture management and animal parasite control.• Alternating (rotating) grazing with forage conservation for pasture management and to facilitate the strategic use of clean and/or evasive grazing techniques for intestinal worm control.• Organic, in-conversion and non-organic forage must be stored separately for correct identification and use.• Regular soil analyses for hay and silage fields to monitor fertility.• Management of unimproved grassland and species-rich meadows in order to maintain their conservation value.	
Permitted methods of grassland management:	
<ul style="list-style-type: none">• Set stocking in situations where intestinal worm burdens can be monitored and strategically avoided through contamination mapping and in accordance with the approved Animal Health Plan.• Management agreements with statutory conservation bodies, provided that any input materials comply with the requirements of these Standards.	
Prohibited methods of grassland management:	
<ul style="list-style-type: none">• The sale of forage as a cash crop from any field more than one year in four. Permission is likely to be given only if the soil fertility can be maintained and this is monitored and can be demonstrated by regular soil analyses. Exceptions will be allowed in the case of species-rich meadows that require low fertility to maintain their particular environmentally important habitat.• Switching from hay to silage on unimproved and species-rich meadows.• The use of non-organic seeds except for quantities permitted by derogation as set by EU or UK legal authority.• Pollution of water courses by silage effluent.• Grazing organic livestock on non-organic land	

- 2.4.2 The production of high quality conserved forages can be difficult and may be adversely affected by climatic conditions in Scotland.

When weather conditions do not allow for adequate fermentation, OF&G (Scotland) will authorise the use of lactic, formic, propionic and acetic acids in the production and preservation of silage (including conserved grass and wholecrop). These substances may also be used in the crimping and ensiling of grain, (see 2.9.8) please contact OF&G (Scotland) to confirm compliant products prior to use.

Additionally the following processing aids are permitted for use in silage production:

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Sea salt, coarse rock salt, whey, sugar, sugar beet pulp, cereal flour, molasses, enzymes (GM derived prohibited), yeasts, Lactic, acetic, formic, and propionic bacteria.

Silage clamps and silage effluent pose one of the potentially most damaging risks to the environment on organic farms. All clamps must be constructed and maintained to prevent pollution of water courses and groundwater and have effluent collection tanks with sufficient storage for unusually wet silage and be protected from water entering the system and causing an overflow.

All bagged silage must be stored on sites where any drainage can be controlled to prevent pollution. All bagged silage should be protected from bird and vermin damage. All bagged silage should be inspected regularly for leakage and leaking bags removed immediately.

2.4.3 Control of surplus grazing by using visiting non-organic animals

SOPA recognizes that Scottish organic farms may not always have access to sufficient organic animals to control and manage grazing at certain periods of the year.

For grazing management purposes only, OF&G (Scotland) may authorise a derogation for non-organic animals to use organic land for no more than 120 days in each calendar year provided that:

- There are no suitable organic animals available
- such animals come from extensive husbandry, or a system where a maximum stocking rate is equivalent to 170kg of Nitrogen per year per ha (as defined in paragraphs 4.3.3 of these Standards).
- organic animals are not present on this pasturage at the same time.

The 120 days is to be calculated on a whole organic unit (individual SOPA Scheme membership number) basis, that is, not for individual fields or parcels of land, but may take place in distinct blocks of time rather than continuously.

It will generally not be acceptable for non-organic animals to graze pasturage if organic animals of the same species are on the same holding. However, this may be authorised by OF&G (Scotland) in cases where organic livestock is unavailable, if adequate separation can be demonstrated and appropriate management for biosecurity, and in particular parasite control, is identified within the approved Animal Health Plan.

During conversion the 120 day rule also applies, except for existing livestock on the organic unit that are subject to a conversion plan, or otherwise by prior agreement with OF&G (Scotland). During conversion it is acceptable to house non-organic animals on an organic arable farm for 120 days and feed them non-organic and in-conversion conserved pasturage from that organic unit, but this practice will not normally be authorised once sufficient land to supply all of the forage for the housed livestock has reached organic status.

These derogations are not designed to allow an ongoing non-organic livestock enterprise to be supported by the organic land.

These derogations must be authorised in advance by OF&G (Scotland) (see SOPA Derogation Form for grazing non-organic livestock).

2.5 Seeds and propagation

2.5.1 Use and origin of organic seed:

All crops sown or planted on land registered in the SOPA Organic Scheme must be produced from certified organic seed or vegetative propagating material, where it is currently available. Only untreated and uncoated seed may be used.

In order to produce organic seeds, the mother plant must have been produced in accordance with these Standards for at least one generation or, in the case of perennial plants, two growing seasons. All seeds must have reached full organic certification status (not in-conversion status) and be approved and labelled by a DEFRA Approved Organic Control Body.

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Certified farms using bought-in seed must retain copies of all seed labels and descriptions for OF&G (Scotland) inspections. Farms using home-saved seeds must keep records of seed testing results and seed storage on farm. All seed, transplants and propagating material used (both bought-in and home-saved) must be recorded when sown or used.

2.5.2 Use of non-organic seed:

The use of non-organic seeds, vegetative propagating material (such as potato tubers, onion sets, strawberry runners and fruit tree root stock) is only permitted where:

- the species and variety is included in the DEFRA authorised database of organic seed availability www.organicxseeds.co.uk as not being available for the year of use
- the producer has completed an SOPA seed derogation form (see SOPA Derogation Form for non-organic seed) and that written authorisation has been granted by OF&G (Scotland) prior to purchase.

Details of how to search the DEFRA seed availability database can be obtained from OF&G (Scotland).

2.5.3 Grass and Forage seed mixes

At least 70% (by weight) of grass & forage seed mixes must be organic. Producers using a mix containing 70% or more of organic seed will need to apply for approval prior to sowing. This % is reviewed periodically by Defra and the Organic Grass Seed Working Group. Please contact OF&G (Scotland) for the most up to date organic inclusion requirements.

Forage mixes include mixes in any combination of cereals, grasses, legumes, crucifers (fodder kale, fodder radish, swede), oil and fibre plants such as fodder rape, and soya beans for use as forage in livestock diets. Forage may be grazed or conserved, for example it may be cut for silage.

A “mix” containing a single species with a single variety must contain 100% organic seed. A mix containing a single species with different varieties of the same species can be 70% organic. A mix containing different species can be 70% organic. The same variety of seed may not be used in both organic and non-organic form within a mix.

Forage mixes cannot be combine harvested in order to harvest the grain as organic under any circumstances unless the seed planted is 100% organic seed or a derogation has been obtained prior to planting to use non organic untreated seed.

2.5.4 Non-organic seed for organic seed production

The use of conventional seed for the production of organic seed (including potato tubers etc) is also permitted where: the seed is of a very high health status or a new species or variety that is not otherwise available organically and is to be used to produce a crop for seed production only.

A derogation must be submitted to OF&G (Scotland) and approval given prior to purchase. Additional information maybe required to ensure the future production of this variety without the need for derogations, i.e. a future cropping plan which details amounts of home saved seed for future use. A certificate for sale of any part of such a crop for use as ware or feed will not generally be issued. Where a crop fails to meet Scottish Government requirements for seed marketing OF&G (Scotland) will consider issuing a certificate for the crop to be sold for consumption or animal feed on a case-by-case basis. Such requests must be made in writing and will be considered at the discretion of OF&G (Scotland). Producers are further reminded that Standards relating to parallel production must also be observed (1.2.3)

2.5.5 Use of organic transplants:

All transplants (including blocks, modules, sets, root stock and bud materials) must be propagated on a registered organic unit. Bare root transplants raised on the licensee’s own organic unit are the preferred method of establishing crops, where direct-sowing of seed is not used. Bought-in transplants may be used from other registered organic units holding a current license to produce organic transplants. Records must be kept of all transplants planted, including both those raised on the registered unit and those bought-in.

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Organic seed must be used for growing transplants, where available. For transplants grown and used on the SOPA Members own farm, non-organic seed may only be used under the conditions set out in 2.5.2. For bought-in transplants only certified organic transplants may be used.

All transplants must be grown in a medium that contains:

- At least 75% of the substrate content must originate from organic sources, using only composted materials approved in these Standards
- No soil, including soil from organically licensed fields, which may not be used in substrate
- No peat, which may not be used in substrate
- At least 51% of the nutrient content of the transplant substrate (expressed as nitrogen) must be derived from the organic content of the substrate, and less than this from added minerals
- Any material added to the substrate must come only from approved ingredients and sources, listed in these Standards

The same Standards apply also to the production of organic pot herbs, pot-reared transplants and other pot grown plants.

2.6 Weed control

2.6.1 Avoiding weed problems:

Weed control is best achieved by careful design and management of the whole farming system, including rotation of crops, grazing animal and manure management, appropriate and timely soil cultivations and good farm hygiene. Weed problems should be minimized by prevention and controlled by appropriate cultivation. Under no circumstances may herbicide chemicals be used or stored on any part of an organic farm.

2.6.2 Methods of weed control;

Recommended methods of weed control include:	
•	Balanced rotations: including weed-suppressing and weed-susceptible crops, and utilisation of green manures
•	Pre-sowing cultivations: inversion ploughing to bury weeds and stale seed bed techniques with harrowing to germinate and kill young weeds
•	Competition: using high seed rates cross drilling and under-sowing to suppress weeds
•	Use of compost: including composting all manures and plant wastes, and aeration of slurry, to prevent weed seeds surviving
•	Selection of crop varieties: for vigour and weed suppression, and use of re-cleaned home saved seed
•	Hygiene: cleaning of machinery, removal of perennial weeds and clearing of weeds before setting seed
Permitted methods of weed control include:	
•	Mulches
•	Pre-emergence and post-emergence mechanical operations (e.g. hoeing, harrowing, topping, hand weeding).
•	Plastic mulches.
•	Thermal Processes (e.g. pre-emergence and post-emergence flame weeding)
Prohibited methods of weed control include:	
•	The use of agrochemical and hormone herbicides is prohibited anywhere on the organic unit. This includes weeds and land within the crop, at the edge of fields, within or below hedgerows,

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headlands and pathways or on any other part of the organic holding.
<ul style="list-style-type: none"> Steam pasteurization or sterilization for weed control in open fields (may be permitted as a once only treatment in enclosed protected cropping areas)

2.6.3 Weed control perimeter buffer zone:

A minimum buffer zone of 10m must be maintained around the perimeter of the organic areas of the farm, unless an established windbreak capable of preventing drift is in place. The inspector will perform a risk analysis to maintain whether the existing windbreak is satisfactory where necessary. This buffer distance may be extended by OF&G (Scotland) if there is thought to be risk of contamination over a larger distance, for instance drift from nearby orchards.

The spray treatment of weeds with herbicides and pesticides within the buffer zone and adjacent to organic land is not permitted. A minimum 10m buffer zone with no spray application must be maintained in the absence of an established windbreak.

The buffer 10m includes both non-organic land in the same ownership (including yards and farm roads) and adjacent land under other ownership. The buffer strip of land may extend either outside the organic field area (so long as records are maintained of the management of these areas showing no spray chemical application within the buffer zone) or within the field area (so long as no certified organic crops are grown in the buffer zone).

Where following an inspection OF&G (Scotland) is satisfied that an effective windbreak is in place or the nature of the chemicals used precludes the risk of contamination (e.g. placement of granules) the buffer zone may be reduced upon request on a case-by-case basis.

Producers are reminded that substances prohibited by these Standards must not be used, kept or stored on any part of the organic unit including in or around the associated roads yards and buildings.

2.7 Pest and disease control

2.7.1 Minimising pest and disease problems:

Organic pest and disease control relies primarily on fostering natural growth and creating a balanced farm system in which pests and disease problems are minimised by natural controls. The farm plan sets out the methods to be used to achieve soil and crop health and vitality, along with a diversity of crops and natural habitats to provide natural competition and control. A low level of pest and disease presence and minor crop loss may be expected and acceptable in many crops. Crop problems should be minimised by prevention and controlled using natural methods.

2.7.2 Methods of pest and disease control:

Recommended methods of pest and disease control include:
<ul style="list-style-type: none"> A balanced fertilisation programme creating fertile soils of high biological activity and providing a balanced supply of plant nutrients.
<ul style="list-style-type: none"> The creation of a diverse ecosystem within and around the crop to encourage natural predators by: <ul style="list-style-type: none"> Companion planting, under-sowing and mixed cropping. Leaving uncultivated field margins, hedges, windbreaks and wildlife corridors. Balanced rotations including green manures and companion planting to break the pest and disease cycles and provide crop diversity
<ul style="list-style-type: none"> The choice of crops and varieties which are well adapted to the environment, including the use of resistant varieties.
<ul style="list-style-type: none"> The use of strategic planting dates to avoid risk periods e.g. carrot root fly control.
<ul style="list-style-type: none"> Good husbandry and hygiene practices within the holding to minimise the spread of pests and disease.
<ul style="list-style-type: none"> Steam sterilisation of buildings and equipment (not soil).
<ul style="list-style-type: none"> Mechanical traps, barriers and sound.

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Permitted methods of pest and disease control include:		
Note: They may be used only in so far as approval is given for their use under the relevant Scottish and UK legislation. * indicates the active ingredients that are currently approved pesticide products for use in agriculture, horticulture or the home garden in the UK.		
Name	Use limited to:	Permission needed
Allium sativum (Garlic extract)		None
Azadirachtin extracted from Azadirachta indica (Neem tree)		Prior written approval from OF&G (Scotland) Only in traps and dispensers
Basic substances based on food (including: Lecethins, sucrose, fructose, vinegar, whey, chitosan hydrochloride (from sustainable fisheries or organic aquaculture) and Equisetum arvense etc.)	Only those basic substances within the meaning of Article 23(1) of Regulation (EC) No 1107/2009 of the European Parliament and of the Council (1) that are covered by the definition of 'foodstuff' in Article 2 of Regulation (EC) No 178/2002 of the European Parliament and of the Council (2) and have plant or animal origin. Substances not to be used as herbicides, but only for the control of pests and diseases.	Prior written approval from OF&G (Scotland)
Beeswax*	Pruning agent/wound agent	None
COS-OGA		None
Hydrolised proteins excluding gelatine		None
Laminarin	Kelp shall be either grown organically or harvested in a sustainable way	None
Maltodextrin		
Pheromones	Only in traps and dispensers	Prior written approval from OF&G (Scotland)
Plant oils* (e.g. mint oil, pine oil, caraway oil, citronella oil etc)	All uses authorised, except as herbicides	None
Pyrethrins* extracted from Chrysanthemum cinerariaefolium	Insecticide, only from plant origin	Prior written approval from OF&G (Scotland)
Quassia* extracted from Quassia amara	Insecticide, repellent	None
Repellents by smell of animal or plant origin/sheep fat	Only on non-edible parts of the crop and where crop material is not ingested by sheep or goats.	Prior written approval from OF&G (Scotland)
Salix spp. Cortex (a.k.a willow bark)		None
Terpenes (eugenol, geraniol and thymol)		None
Microorganisms (bacteria, viruses and fungi) e.g. Bacillus thuringiensis, Granulosis virus, etc	Not from GMO origin.	None
Spinosad		Prior written approval from OF&G (Scotland)
Cerevisane		Prior written approval from OF&G (Scotland)
Aluminium silicate (Kaolin)		None
Calcium hydroxide	When used as a fungicide, only in fruit trees including nurseries, to control Nectria galligena	Prior written approval from OF&G (Scotland)
Carbon dioxide		None
Copper* in the form of copper hydroxide, copper		Prior written approval from OF&G (Scotland) or approval via your crop management plan. If your

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oxychloride, (tribasic) copper sulphate, copper oxide and Bordeaux mixture		plan is approved an annual return must be completed detailing the quantities you have used and the areas applied.
Diammonium phosphate	Only as attractant in traps	None
Ethylene*	Only use as a plant growth regulator. In organic production for degreening bananas, kiwis and kakis; Degreening of citrus fruit only as part of a strategy for the prevention of fruit fly damage in citrus; Flower induction of pineapple; sprouting inhibition in potatoes and onions	Prior written approval from OF&G (Scotland)

Name	Use limited to:	Permission needed
Fatty acids	All uses authorised, except herbicides	None
Ferric phosphate (iron (III) orthophosphate)	Preparations to be surface-spread between cultivated plants	None
Hydrogen peroxide		None
Kieselgur (diatomaceous earth)		None
Lime sulphur* (Calcium polysulphide)		None
Paraffin oil*		None
Potassium and sodium hydrogen carbonate (a.k.a potassium/sodium bicarbonate)		None
Pyrethroids (only deltamethrin or lambda-cyhalothrin)	Only in traps with specific attractants; only against <i>Bactrocera oleae</i> and <i>Ceratitis capitata</i> Wied.	Prior written approval from OF&G (Scotland)
Quartz sand*		None
Sulphur*		None
Sodium chloride	All uses authorised, except herbicides	None
Rodenticides	For pest and disease control in livestock buildings and installations	None

Prohibited methods of pest and disease control include:				
<ul style="list-style-type: none"> The use of agrochemical pesticides is prohibited anywhere on the organic unit. This includes land within the crop, at the edge of fields, within or below hedgerows, headlands and pathways or on any other part of the organic holding. 				
<ul style="list-style-type: none"> Specifically, the following controls are not permitted: <ul style="list-style-type: none"> Nicotine. Formaldehyde and phenols for soil sterilisation. Methyl bromide and other chemical soil sterilants. Seed dressings based on mercurial and organo-chlorine compounds (including Gamma HCH, Lindane and BHC). Slug and snail killers based on metaldehyde or aluminium. Strychnine for killing moles. The use of rodenticides in cropping areas is prohibited. For persistent or widespread problems, contact the certification body to discuss how they might be resolved. Use of rodenticides around buildings, for example, is permitted as per section 2.9.2 All other synthetic pesticides. 				
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- Steam pasteurisation or sterilisation for weed control in open fields may be used in protected cropping as a 'once only' means of pest control. Prior written consent of OF&G (Scotland) required.

2.7.3 Pest and disease control perimeter buffer zone:

The prohibition of agrochemical insecticides, fungicides, growth regulators and other chemical applications also extends to all land immediately adjacent to organically managed land which is owned or managed by the producer, in order to prevent any possible contamination. No agrochemical may be applied on land immediately adjacent to the area of the organic holding.

See 2.6.3 above.

2.7.4 Reducing the use of permitted materials for pest and disease control:

In anticipation of the withdrawal of use of currently permitted inputs, producers should seek and trial on their farm, alternative pest and disease control methods.

In the meantime, the use of permitted plant protection materials shall only be approved where the farm has demonstrated that it is using all possible natural control methods and that it has identified the specific problem in the crop through crop inspection, analysis, insect traps and so on. Where no prior consent is required, this information must be recorded in the crop Management plan and made available to the Inspector. Where prior written consent is required from OF&G (Scotland) before use, this information must be supplied in advance to the OF&G (Scotland) office and written consent received before application is made. OF&G (Scotland) may decline to consent to the use of any permitted material if an insufficient case is given or alternative methods are available.

2.7.5 Using permitted disease and pest controls:

The application of all permitted materials must comply with current pesticide and health and safety regulations and relevant codes of practice. Producers are expected to comply with all the specified instructions and withdrawal periods when storing and using natural pesticides approved under the Control of Pesticides (Amendment) Regulations 1997 (as amended).

Every product used must be approved by DEFRA for the situation for which it is to be applied.

Purchased equipment that has previously been used to spray prohibited materials must be thoroughly cleaned so as to be free from non-approved substances and must be dedicated thereafter for organic use. Where contractors are used to carry out applications, it is the farmer's responsibility to ensure that the contractor applies only approved materials and observes buffer zones, and that approved cleaning procedures have been carried out or that organic-only equipment will be used.

It is the producer's responsibility to follow the correct procedures for disposing of spray washings, crop protection product containers and unwanted crop protection product

2.7.6 Storage of permitted disease and pest controls:

Storage of approved disease and pest control products must be clearly labelled, in sound condition and kept in a secure locked store displaying an appropriate warning sign. The store must be bunded to contain the crop protection products in the event of spillage, fire or other accidental occurrences. If the quantities stored at any one time are small, the store may consist of a lockable, bunded metal container or multiples thereof. An up-to-date crop protection products stock record must be available, a copy of which should be kept in the farm office.

2.8 Chemical residue testing

See 1.7.2 of these Standards.

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2.9 Harvest and storage

2.9.1 Harvest and storage procedure:

Maintaining the integrity of organic produce is vital at all times: both through clear identification and through protection from contamination during harvesting, storage and transportation. Full traceability is required so that the integrity organic crops can be clearly demonstrated, along with the steps taken at each stage of crop handling. In the same way that the farm plan and field records show every step of growing the crop to SOPA Standards, an equivalent plan and records are required in the form of the Crop Management Plan to show how crops are labelled and separated after harvest to ensure that they continue being genuinely organic.

A written harvest and storage procedure must be included in the Crop Management Plan held on farm and used for all crops on the farm. The harvest and storage procedure sets out the steps to be used to identify, label, separate and store both organic and non-organic crops. The plan must include steps to be taken for:

- cleaning of harvest machinery (See SOPA Record Sheet 11)
- equipment and containers
- labelling crops at harvest
- transporting harvested crops
- storing harvested crops (See SOPA Record Sheet 13)
- post harvest treatments (See SOPA Record Sheet 13)
- routine inspections and testing
- risk assessment completed for mycotoxins in wheat (using the HGCA risk assessment)

The Crop Management Plan must be specific to the farm and be submitted to OF&G (Scotland) for approval, and approved in advance of any organic certificates being issued for the sale of crops as organic or in-conversion.

All the procedures mentioned in the Crop Management Plan must comply with the requirements of these Standards. Actions taken and information collected to comply with other organisations' requirements (such as product testing and batch identification) should also be integrated into the procedure.

2.9.2 Harvest and storage batch record:

Each batch of produce must be given a unique identifying number or code. Each separate batch must be accompanied by a written record showing how the harvest and storage procedure has been implemented for that batch. The record must show that from harvest through to dispatch that the batch of organically grown produce is clearly and legibly identified, labelled, separated and stored, (see SOPA Record Sheet 13)

Each time a crop is handled, moved, treated or inspected a separate entry must be made in the harvest and storage record. The record must also be cross-referenced to the field records of inputs, cultivations and outputs.

2.9.3 Cleaning of harvest machinery, equipment and containers:

The Crop Management Plan must include a routine for inspecting the cleanliness of machinery used in drilling, spraying or combining. The nature of the routine should be proportional to the level of risk and therefore mixed operations (holdings composed of both organic and non-organic units) will need a more comprehensive system.

Harvest machinery, vehicles and containers used for transporting organic products should be subjected to a regular cleaning programme to ensure they are maintained in a generally clean state with no build up of non-organic materials or residues, these cleaning procedures must be recorded (See SOPA Record Sheet 11 & 12). Cleaning routines must ensure that all harvesting equipment, transport vehicles and containers, drying equipment, conveyors, storage areas and

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other ancillary equipment are clean and free from non-organic crop residues and any other materials which may contaminate the organic produce before they are used. Before loading, vehicles, and all handling equipment must be inspected to ensure they are clean and free from visible residues and any materials that may contaminate or impair the integrity of the organic products to be transported.

2.9.4 **Labelling crops at harvest:**

The harvest and storage procedure must include a routine for labelling the crop at time of harvest. Where the produce is bagged or packed on farm this will involve full consumer labelling (see section 1.9). Where the produce is going into storage either on farm or in rented storage (but is still the property of the farm), the labelling must include at least:

- the name and address of the farm and their SOPA Scheme Member number
- the name of the product including a reference to the organic production method
- a batch identification number for each separately stored group of produce, and for which a separate harvest and storage record is held.

2.9.5 **Transporting harvested crops:**

Organically produced products may be transported to other units, including wholesalers and retailers in appropriate packaging or containers designated only for use with organic produce. The packaging or containers must be closed and sealed so that the produce cannot be substituted for non-organic produce or contaminated by contact with non-organic materials.

Each sealed package or container must bear a clear label containing all the information required in sections 1.9 of these Standards.

Open containers (including unsealed vehicles and trailers) may only be used for transportation between a producer and another operator if both subject to organic inspection and OF&G (Scotland) have approved the transfer in advance.

2.9.6 **Pre Harvest procedures:**

Prior to harvest all crop stores, reception pits, dryers, cleaners and conveyors must be treated as follows;

- clean all areas of the store, elevator pit, conveyor tunnels and ventilation ducts
- remove all sweepings and cleanings
- use a disinfectant (food grade) if necessary
- Use bait bags/traps to check for infestation and remove before storage

Permitted cleaning procedures;

- Vacuum cleaning
- Steam Cleaning
- High pressure water cleaning
- Hypochlorite in solution followed by rinsing with potable water
- For pests and disease control only those substances specified in 2.7.2 of the standards

This information must be recorded (see SOPA Record Sheet 12)

2.9.7 **Storing harvested crops:**

The storage areas and containers used for organic produce must be:

- dedicated to organic or in-conversion crops only
- clearly labelled to prevent misidentification of organic, in-conversion and non-organic crops
- separated from storage areas used for other purposes by a physical barrier in the form of an effective partition
- constructed from materials suitable for food use
- maintained in a clean and hygienic state
- covered to prevent contamination by the presence of birds and bird droppings
- Records must be kept on a weekly basis to check for the presence of birds

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- protected from access and contamination by domestic animals and vermin.
- All buildings used for storage must have all glass fittings, e.g. windows, skylights, light bulbs, protected to prevent broken glass contaminating the stored product. Polycarbonate or plastic covers replacing glass are permitted. A regular inspection of all glass fittings must be recorded, see Record Sheet 13.
- Temporary storage must have a waterproof roof and the floor must be of a solid construction.
- Long term storage must be waterproof, walls and floors must be of a solid construction, and doors must fit properly.
- For long term storage temperature must be taken and recorded weekly of each batch, and any fluctuations must be investigated. If hot spots are developing, appropriate action must be taken, i.e. use low volume aeration, turn the grain or re-dry. See SOPA Record sheet 13.
- Oil seed rape must not be stored on a tarmac floor or make contact with any bitumen based products.

Long term storage is defined as storage that is over 4 weeks; any storage within the 4 weeks is termed as temporary storage for these standards.

Storage areas must be left empty for an appropriate period of time prior to use to act as a disease and insect break.

Sacks used for storage or delivery of produce to customers must be of food grade quality, clean and free from contamination. Containers used for storage or transport should be of food grade quality, in a state of good repair, clean and free from visible residues or any materials that may contaminate or impair the organic integrity of the products they contain.

Any post harvest contamination must be reported to the certification body immediately.

2.9.8 Post harvest treatments and storage:

Permitted methods of post harvest treatment:	
•	If required, crops may be dried by indirect heated air or by other suitable means, including direct fired propane, diesel and paraffin fuelled dryers, but they must not be contaminated by the combustion products of the fuel used. A regular maintenance programme must be established to ensure full combustion when in use.
•	Moist ensiled grains and pulses may be crimped and ensiled with the aid of additives containing any combination of propionic, lactic, acetic and formic acids. Note some additives may reduce the Vitamin E content in grains and pulses.
Prohibited methods of post harvest treatment:	
•	The use of ionising radiation and synthetic chemicals as an aid to preservation
•	The use of prohibited materials in stores and on premises where organic or in-conversion crops are stored, including sprout inhibitors, fungicidal sprays, dips or powders and chemical fumigants or pesticides
•	Stores containing wood previously treated with organo-chlorine (gamma HCH & lindane) wood preservatives.
•	Contamination by the combustion products of the fuels used for crop drying

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Section 3 - Production Standards – Livestock Production

3.1 Organic Livestock – Organic Principles

3.1.1 Only commercial domesticated livestock can be certified:

These Standards apply to commercial livestock and livestock products from the following species only: Cattle (all bovines, including bubalus and bison species), pigs including 'wild boar' (porcine), sheep (ovine), goats (caprine), farmed deer, horses (equidae), poultry (including broilers, layers, pullets, ducks, geese, turkeys and guinea fowl).

Where non-commercial animals of any species or commercial animals belonging to any species other than those listed above are kept or husbanded on organic land this must be notified to OF&G (Scotland) in the Farm Plan. These activities must be subject to the annual inspection process and the management plans and records must be approved by OF&G (Scotland) to allow for organic certification of land and any other livestock enterprises on the organic unit.

3.1.2 Livestock production is an essential part of a balanced organic farm:

Livestock production should form an integral part of any organic farming enterprise in Scotland through its contribution to the nutrient requirements of crops and improvement of the soil's organic matter. By strategic and rational use of renewable natural resources (livestock manure, legumes and fodder crops), mixed farming and pasturage systems allow soil fertility to be maintained and improved in the long term and contribute to the development of sustainable organic agriculture.

These Standards for organic livestock production must be considered in the context of a whole farm, farming system or linked farm(s) which is/are being managed organically. Farmers applying for certification for a livestock enterprise must also comply with all other relevant parts of these Standards.

Organic livestock production must be managed according to a Farm Plan, which includes an enterprise management plan, and an Animal Health Plan as outlined in section 1.3.4 of these Standards and these must be approved by OF&G (Scotland) as part of the annual certification process and kept up-to-date at all times.

All livestock must be handled, housed and transported under conditions which reflect proper care and concern for their welfare at all times and which comply at least with the requirements of all relevant legislation and Scottish Government/DEFRA Codes of Recommendations for the Welfare of Livestock.

3.1.3 Management of all livestock on organic units must be based on the 'five freedoms':

- Freedom from malnutrition
- Freedom from thermal and physical discomfort
- Freedom from injury and disease
- Freedom from fear and distress
- Freedom from unnecessary restrictions of behaviour

3.1.4 Maintaining the integrity of organic livestock production - Avoiding parallel production:

In organic livestock farming, all livestock on the organic production unit must be reared in accordance with the rules laid down in these Standards. If a producer is converting under a Standard Conversion, it is not necessary to manage the animals in accordance with these Standards unless required as part of a simultaneous conversion (see 3.2.11). During this time livestock must not be fed genetically modified (GM) feedstuffs and their management should be progressively developed towards compliance with these Standards. Once the organic unit has completed its conversion, all animals must be organically managed and undergo the conversion periods specified in these Standards to be eligible for organic certification.

As part of an agreed conversion plan, non-organically reared beef stores, fattening pigs, store lambs and poultry can continue their production cycle, regardless of the organic status of the land, until sold as non-organic or reaching an appropriate time to convert e.g. restocking of birds

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after the land has become organic. These animals must be identified and managed separately from organic animals and all such activities must be agreed and approved in advance by OF&G (Scotland).

3.1.5 Maintaining the integrity of organic livestock production – assuring the production system:

OF&G (Scotland) can only offer certification to organic livestock systems where the authenticity and integrity of the production system can be assured by the annual inspection supported by suitable precautionary measures as specified in these Standards. To avoid the possible misidentification and/or substitution of organic and non-organic livestock these Standards contain specific provisions on the separation of organic and non-organic production that must be observed by all producers. Compliance with these requirements is of particular importance where:

- The organic unit is established through a planned phased conversion and individual livestock enterprises are converted as sufficient land becomes available e.g. purchased organic store lambs are finished on organic forage rape or the beef herd is initially converted along with rotational grassland and cropping ground while the dairy cattle continue to utilise non-organic or first year in-conversion land.
- The organic unit is a part of a larger farm or farming business e.g. a large farm (a holding) is subdivided such that the rough grazing and a limited area of inbye ground constitute an organic unit carrying hill sheep, but non-organic low ground continues to support a flock of field sheep.
- The producer owns or has a business interest in or has management input into any other livestock farm or enterprise in the locality.

All such situations must be disclosed to OF&G (Scotland). These provisions are of particular importance in maintaining the credibility of organic certification. Producers should note that failure to observe the provisions of these Standards with respect to separateness of organic and non-organic livestock production will normally give rise to an inspection category 4 or 5 (see table 1.7.3) which will result in loss of organic status for livestock and livestock products and possibly for the whole organic unit.

Notwithstanding the above principles livestock not reared in accordance with these standards (non-organic livestock) may be permitted on the same agricultural holding as organic animals provided they are totally separate from the organic animals (including buildings and land parcels), and a different species is involved. Failure to observe these requirements will not permit the integrity of organic production to be verified by OF&G (Scotland).

3.1.6 Separation measures between organic and Non-organic farms

Producers involved in farming the same species organically and non-organically must take special precautions: By derogation from these Standards, OF&G (Scotland) may authorise a producer to be involved in the production of the same species of livestock organically and non-organically where this takes place on entirely separate units or holdings. In this case, additional measures must be in place to ensure the integrity of the organic livestock production unit. In particular, the organic livestock production unit(s) must be physically, financially and operationally separate from other non- organic units, agricultural holdings or farming enterprises. These terms are defined below:

- **‘Physically separate’** means geographically distinct blocks of land; – a mosaic of organic and non-organic fields is not acceptable, but the two units or holdings can be adjoining each other, provided they are separated by a physical barrier (for example stock-proof hedge or fence)
- **‘Financially separate’** means that separate enterprise management books need to be kept and invoices will need to be clearly identifiable for each unit
- **‘Operationally separate’** means that the management of the units or holdings must be distinct, and precise financial and operational procedures/records will be required for inspection. Shared cultivation equipment would be acceptable, as long as cleaning records are kept, but adequate separation must be demonstrated for feed, milling and mixing machinery, as well as parlour and housing facilities. Separate units may share the same agricultural holding number(s) but the herds and flocks on the two units would usually need different herd or flock numbers.

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Beef cattle and sheep must be of a different and preferably visibly different breed or cross. This derogation must be approved in advance by OF&G (Scotland).

3.1.7 **No to Genetic Modification:**

Any animals using the organic or in-conversion unit (including both land and associated buildings) must not be fed feeds or feed materials containing genetically modified organisms (GMO's) or their derivatives at any time or at any stage in the conversion process. Failure to observe this requirement will be regarded as a serious non-compliance with these Standards and may lead to loss of organic status for land and associated organic livestock enterprises.

3.1.8 **Organic/converting animals can use common grazing:**

No conversion period for the common grazing is necessary provided it can be shown that no prohibited inputs have been applied for at least three years, which must be verified by a grazier's association agreement or similar document. The land must be registered with the National Register of Common Land or be Croft Common Grazing recognised by the Crofters Commission. The alternative would be for the land to be registered for organic conversion and undergo a normal 24 month monitored conversion.

Common land is not registered as organic but has its own status and category for the purposes of Organic Certification.

A producer who wants to graze organic/simultaneously converting animals on common land must demonstrate the following in their conversion plan or prior to grazing, in order for OF&G (Scotland) to agree to register the unit or approve the grazing:

- that stock are clearly hefted and clearly identified (for example, using ear tags)
- that livestock intended for organic certification do not freely mix with non-organic livestock of the same species
- the non-organic animals that may graze the land must come from extensive systems
- the land does not receive any prohibited inputs, which must be verified by a graziers association agreement
- any supplementary feeding that organic livestock have access to must comply with the requirements of these Standards

3.1.9 **Special provisions apply to farms undertaking research activities:**

Organic and non-organic livestock of the same species may, by derogation, be reared and managed on the same holding in the course of agricultural research that has been approved in advance by OF&G (Scotland) in agreement with DEFRA where the following conditions are met:

- appropriate measures, agreed in advance with OF&G (Scotland), have been taken in order to guarantee the permanent separation between livestock, livestock products, manure and feeding stuffs of each unit
- the operator informs OF&G (Scotland) in advance of any delivery or selling of the livestock/livestock products
- the operator informs OF&G (Scotland) of the exact quantities produced in the units together with all characteristics permitting the identification of the products and confirms that the measures taken to separate the products have been applied.

3.2 **Origin of livestock and Conversion of organic livestock enterprises.**

3.2.1. **Organic livestock production must take place on land of appropriate organic status:**

Where a production unit is converted to organic production, the whole area of the unit used for animal feed must comply with these Standards, using the conversion periods established in these Standards relating to plants and plant products. (See section 1.3 of these Standards). Animals managed in accordance with the rules of these Standards must only graze land

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registered as organic. They must not graze on any land other than that derogated in these Standards (e.g. land in its first or second year of conversion or Common land registered with an organic certification body for the purpose).

Where a holding or unit is undergoing a staged (phased) conversion, the livestock enterprise cannot begin to be converted until sufficient grazing land has begun conversion to feed and graze the associated livestock. Producers should note that a farm that is still all in-conversion cannot sell livestock or livestock products as organic. Dairy farms can sell milk as organic on the first day the land achieves organic status, provided that dairy cows are fed to full organic Standards and the health and welfare requirements of these standards are adhered to for the least six months prior to this date. The feed rules in these Standards must be complied with as detailed in section 3.5 and a 12 month (calendar year) feed plan would need to form part of the conversion plan. More information can be obtained from OF&G (Scotland) and SOPA.

Where new land is being converted for an existing organic holding, the young breeding stock may graze the land in its first year of conversion. The animals must be managed in accordance with these Standards, with the exception of the grazing, which is considered to be in-conversion. These animals must return to organic pasture:

- six months prior to calving in the case of dairy heifers;
- twelve weeks prior to calving in the case of beef suckler heifers;
- from service in the case of ewe lambs, goats and gilts.

By derogation from this principle, the conversion period may be reduced to one year for pasturages, open air runs and exercise areas used by non-herbivore species (e.g. poultry and pigs), where there is evidence that the areas concerned have not received any materials not listed in Sections 2.7.2 and 4.4.1 of these Standards for at least 12 months before the start of the reduced conversion period.

3.2.2 **Organic animals should be born and raised on an organic unit or holding:**

Organic livestock farming should be based on and sustained by integrated regional production systems. In accordance with this principle, organic production should be based on the maintenance of traditional local or rare breeds of livestock to retain genetic diversity. Where appropriate, organic production should also seek to establish closed herds and flocks for animal welfare (no need for transport, no social stress) and health (no stress, no introduction of disease). SOPA does however recognise that Scottish upland farming systems are traditionally dependent on stratification, that is the linking together of farm types to reflect their natural production capabilities. SOPA recommended practices include the production of organic store and breeding stock in hill and upland areas for use on linked organic lowland farms. In such cases adequate measures should be in place to ensure effective disease and parasite control, minimise stress, and provide continuity between collaborating farms.

The policy for replacements should therefore be:

- first choice; closed herds/flocks.
- second choice; replacements from organic herds/flocks.
- third choice; converted organic replacements.
- fourth choice; replacements from non-organic herds/flocks (a derogation must be submitted to OF&G (Scotland) prior to purchase, see SOPA derogation form for non-organic livestock).

Producers should note that where livestock is obtained from units not complying with these Standards, special attention must be paid to animal health measures. OF&G (Scotland) may apply, depending on local circumstances, special measures such as screening tests and quarantine periods prior to approving the use of non-organic animals.

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3.2.3 Existing livestock can be converted to organic production:

Livestock must come from production units that comply with these Standards. Throughout their life, this system of production must be applied. In accordance with this principle, livestock used for breeding and replacements should be derived from organic farms wherever possible. However, where organic animals are not available in sufficient numbers, OF&G (Scotland) may authorise a number of derogations to allow the introduction of non-organic livestock on a controlled basis, as detailed below.

Producers should note that animals which have undergone conversion to produce organic offspring, but which will never be organic in their own right in terms of sale for meat, will be awarded status as 'converted organic breeding stock' for the purpose of trading.

3.2.4 Conversion periods for non-organic animals

All non-organic animals that are brought onto the organic unit under a derogation from OF&G (Scotland) must be managed organically immediately on arrival, except during a Standard conversion.

Where land has obtained organic status and non-organic animals are to be brought under full organic management the following conversion periods must be observed:

- cattle whose progeny is intended for meat production must be under organic management for at least 12 weeks before calving
- cattle intended for milk production must be under organic management at least six months before the end of the conversion period
- ewes, goats and sows whose progeny is intended for meat production must be under organic management from mating
- sheep and goats intended for milk production must be under organic management for at least six months before the end of the conversion period
- poultry products can be sold as organic, provided the poultry are under organic management for at least:
 - ten weeks for meat production, and only where chicks are brought onto the organic unit before the birds are three days old
 - six weeks for egg production, and only where pullets are brought onto the organic unit before the birds are 18 weeks old and have been managed in accordance with the organic feed and veterinary standards, permitted under derogation until 31 December 2021.
- existing layers on a converting farm may start to produce organic eggs after a conversion period of six weeks, following the completion of the conversion of the land. Table ducks from non-organic ducklings cannot be sold as organic until they are at least 10 weeks old.

Where animals are brought-in from non-organic sources as permitted by these Standards:

- the animals must have been transported in accordance with the provisions of section 3.7 of these Standards
- approval via a derogation must be sought prior to their arrival onto the organic holding
- on arrival, animals must be adequately checked for disease and appropriate action taken where an animal appears to be ill or injured
- the animals must undergo a conversion period, as indicated below, before the animals or their products are certified and marketed as organic.
- Quarantine livestock for at least 21 days to observe and help control disease.

3.2.5 When organic livestock is not available or renewal of a herd or flock

Where organic animals are not available non-organic replacements can be sourced to maintain and grow established flocks and herds or the renewal of a herd or flock: SOPA acknowledges that

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the continuing development of organic farming in Britain may occasionally need to be supported by the use of replacement livestock produced on non-organic production units.

Approval must be sought in the form of a derogation being submitted to OF&G (Scotland) prior to non-organic stock arriving on the organic holding. By derogation from these Standards, the following provisions allow non-organic animals to be brought onto established organic farms in closely defined circumstances:

- males for breeding may be brought in from non-organic farms provided that the animals are subsequently reared and always fed according to these Standards
- when organically reared animals are not available a maximum of 10% per year of adult livestock for cattle and 20% in the case of sheep, pig and goats, may be brought in, as female nulliparous animals, from non-organic farms, for supplementing natural growth and for the renewal of the herd or flock ('Nulliparous' means animals that have not yet given birth to any young). Producers are cautioned that in practice, cattle must be more than 12 weeks from calving for calves to be eligible for organic meat production.
- Other than for cattle, pregnant animals must not be purchased.

Non-organic livestock will be permitted onto your holding provided that;

- no suitable organic stock are available
- no suitable converted organic breeding stock are available
- the stock are nulliparous
- only 10% (for cattle) and 20% (for sheep, pigs and goats) of the exiting herd or flock size is requested

Producers are advised that replacements must not have been bred on an organic unit, moved onto a conventional unit and brought back as replacements. In such a case, the producer would have had access to organic replacements. This practice is only permitted by these Standards on a case by case basis and for a limited period of time only, as part of the livestock conversion plan with appropriate justification as to why the replacements are to be reared in this way. Written permission must be obtained in advance from OF&G (Scotland).

Producers should note that the percentages laid down in the above derogation do not apply to production units with less than ten animals (five for sheep). For these units, any renewal as mentioned above shall be limited to a maximum of one animal per year.

40% Approval

The percentages for replacement stock may be increased from 10% up to 40% following agreement in advance by Defra, in the following special cases only:

- when a major extension to the farm is undertaken;
- when a breed is changed;
- when establishing a new livestock enterprise
- When it is a rare breed (these breeds do not necessarily need to be nulliparous)

You may, upon derogation approval from Defra, purchase non-organic rare breed and pedigree animals from specialist and pedigree sales held at livestock market premises. You may only do this if they are not available from direct sources and with prior approval.

Derogation applications should be made to OF&G (Scotland) who will liaise with Defra on your behalf and inform you of their decision.

3.2.6 Establishing a new livestock enterprise

Where organic animals are not available, non-organic animals can be sourced to established new flocks and herds for the first time: SOPA acknowledges that occasionally all animals required for a new enterprise may not be available from organic production units. By derogation from these Standards, the following provisions allow non-organic animals to be brought onto organic units in closely defined circumstances.

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When a herd/flock is constituted for the first time and organically reared animals are not available in sufficient numbers, non-organically reared chicks for broiler production or pullets for egg production and non-organically reared animals not intended for meat production may be brought into the organic unit subject to the following conditions:

- For pullet production – must be managed to full organic standards from less than three days old
- chicks for broiler production must be less than three days old at the time they leave the production unit where they were produced
- buffalos must be less than six months old
- calves must be reared according to the rules of these Standards as soon as they are weaned and in any case must be less than six months old
- ewes and goats must be reared according to the rules of these Standards as soon as they are weaned and in any case, they must be less than 60 days old.
- piglets intended as breeding stock must be reared according to the rules in these Standards as soon as they are weaned and in any case, they must weigh less than 35kg (This must be approved as part of the livestock conversion plan).

Producers should note that livestock used to establish a new flock or herd for the first time should preferably be organic (including converted breeding stock) where available. However, these Standards above allow 40% of the new stock as non-organic nulliparous animals. Therefore, only 60% of the new flock/herd needs to be constituted from weaned stock. Producers are strongly advised to seek guidance on the application of these Standards from SOPA at an early stage when they wish to establish a new flock, herd or livestock enterprise.

This derogation must be approved in advance in writing by OF&G (Scotland).

Derogation applications should be made to OF&G (Scotland) who will liaise with Defra on your behalf and inform you of their decision.

3.2.7 Establishing a new livestock enterprise in special circumstances

Where organic animals are not available, non-organic replacements can be sourced to renew or reconstitute flocks and herds on established organic units: SOPA acknowledges that in certain circumstances and for certain breeds the sourcing of replacement livestock from organic production units may not always be possible. By derogation from these Standards, the following provisions allow non-organic animals to be brought onto organic units in closely defined circumstances.

The renewal or reconstitution of a herd or flock may be authorised by OF&G (Scotland) when organically reared animals are not available, and in the following cases only:

- high mortality of animals caused by health or catastrophic circumstances (producers should note that 'Renewal or reconstitution' here means a herd or flock that is being brought back up to full strength following 'catastrophic circumstances'. No age limits are imposed in these situations, but the normal conversion periods must be adhered to for the replacement stock. Permission must be obtained in advance from Defra for this)
- pullets for egg production - less than 3 days old
- pullets for pullet production – less than 3 days old
- poultry for meat production less than three days old ('renewal or reconstitution' means introducing the next batch following a cull of the flock). This must be authorised in advance by Defra.

This derogation must be approved in advance in writing by Defra.

Notwithstanding the provisions laid down in points 3.2.5 and 3.2.6, non-organically reared pullets for egg production of not more than 18 weeks may be brought into an organic livestock unit when organically reared pullets are not available, subject to the following conditions:

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- prior authorisation of Defra;
- the provisions laid down in sections 3.5 (Feed) and 3.6 (Disease prevention and veterinary treatment) shall apply to non-organically reared pullets intended to be brought into organic livestock units.

The pullets must have been fed according to the organic feed standards and treated according to the veterinary and welfare standards from the age of three days. This would permit a normal vaccination programme.

Derogation applications should be made to OF&G (Scotland) who will liaise with Defra on your behalf and inform you of their decision.

3.2.8 **Converted Organic breeding stock**

Converted organic breeding stock or non-organic animals brought-in for breeding or milking purposes must not be sold for organic meat production: Producers are reminded that other than where specifically allowed above, all animals for meat production must be born and subsequently reared on an organic unit for the whole of their life. Producers are cautioned that where OF&G (Scotland) is not able to verify that satisfactory precautionary measures are in place to verify the status of all animals, certification will not be awarded for the livestock enterprise and may eventually lead to loss of status for the organic unit.

3.2.9 **Quarantine procedures for all bought in livestock**

All new/replacement/returning livestock whether or not purchased from disease free flock/herds should be quarantined on arrival. Whilst in quarantine it is important to monitor and undergo tests e.g. internal and external parasites, and inspect regularly for any signs of disease. Any treatments given should be detailed in your livestock management plan.

A quarantine period of 28 days suffices for most diseases, but where specific diseases are targeted this may need to be extended on veterinary advice.

The quarantine area can be a dedicated shed or field but must prevent direct or indirect contact with other livestock.

Single animals should not be quarantined on their own but with at least one other animal.

3.2.10 **No to GM:**

Livestock that have been produced by transgenic or other genetic engineering techniques must not be brought onto the organic unit at any time.

3.2.11 **Land and livestock can convert together under 'simultaneous conversion':**

Livestock can be converted simultaneously with the land that supplies the majority of their feed (as defined below in these Standards) to achieve earlier organic status for livestock and livestock products: Livestock may be converted to achieve 'converted organic breeding stock' status either following the conversion of the land (as a Standard Conversion) or simultaneously with an identified area of land (a simultaneous conversion unit). Once conversion of the livestock has begun, these Standards must be complied with in regard to replacements or expansion of the herd or flock.

Where there is simultaneous conversion of an identified organic livestock production unit, including pasturage and/or any land used for feeding the simultaneously converting animals, the total combined conversion period for livestock, pasturage and/or any land used for animal feed is 24 months subject to the following conditions:

- this applies only to existing breeding animals
- except in the case of beef, only offspring conceived after the start of the combined (simultaneous) conversion period may be used for organic meat production

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- beef calves must be born (at least) three months after the start of the conversion date
- animals complying with the requirements for simultaneous conversion (including fully organic animals) may be brought on to or sold off the simultaneous conversion unit but such livestock and any products from them may not be sold as organic until after the completion of the latest 24 month conversion period to which they have been subject.

Simultaneous conversion may be applied to all classes of stock and must be applied to all stock on the simultaneously converting unit ('Unit' means a distinct block of land and the animals on that land) from the start of the conversion period, unless as part of the conversion plan residual non-organic livestock will remain on the unit for an agreed period of time.

The production unit designated for simultaneous conversion should provide 60% of the feed (on a dry matter basis) of the herd/flock and any subsequent progeny produced, and this must be documented in the approved conversion plan.

All home produced feed is considered organic when used on the simultaneous conversion organic unit (not when sold off the unit) during a simultaneous conversion.

Fully organic producers may purchase livestock from simultaneously converting units (termed as 'livestock reared under simultaneous conversion') and vice versa. However, in both cases they may only sell them or their products as organic after all land on which the livestock has grazed completes its 24 month conversion period.

Livestock moving onto or off simultaneously converting farms should only be traded once between organic units, before the final sale as finished livestock. OF&G (Scotland) may authorise a derogation from these Standards on a case-by-case basis for a second trading in exceptional circumstances. This derogation must be approved in advance in writing by OF&G (Scotland).

Trade may only take place when the simultaneously converting livestock have been added to the organic certificate.

Traded stock must be accompanied by a Livestock Transfer Document which must include certification details of the vendor's business, a copy of the appropriate organic certificate, identity of the livestock, and date when the livestock is due to complete its conversion (that is, the latest conversion date of the land it has grazed). A *pro forma* for this is available from OF&G (Scotland). It is important that both producers (vendor and purchaser) keep detailed records of, for example, livestock movements, conversion date and feeding details to verify the requirements of these Standards have been met throughout the lifetime of the animal(s).

3.3 General Management of organic livestock enterprises

3.3.1 The management of organic livestock must be designed and undertaken to maximise animal welfare:

SOPA requires organic production to meet the highest standards and best traditions of Scottish livestock production. Organic livestock systems must allow animals to conduct their basic behavioural needs and production levels and speed of growth should be compatible with good health and welfare of the animals. This will require attention to the choice of breeds in order to produce animals suited to organic systems, Scottish conditions and to avoid problems at birth.

Organic livestock systems must be land-based and all classes of livestock must have access to pasturage whenever the weather conditions and state of the ground permit, unless there are European Community or national requirements relating to specific health problems that prevent this.

3.3.2 The outdoor stocking density of livestock kept on pasturage, heathland, wetland, heather and other natural or semi-natural habitats must be low enough to prevent poaching of the soil and over grazing of vegetation at all times of year.

The total stocking density shall be such as not to exceed the limit of 170kg of Nitrogen per year per hectare of agriculture area. See table below as a guideline

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Maximum number of animals per hectare

Class or species	Max No. of animals/ha =170kg N/ha/yr	Class or species	Max No. of animals/ha =170kg N/ha/yr
Horses over 6 months	2	Breeding ewes/goats	13.3
Calves for fattening or other cattle less than 1 year	5	Breeding sows	6.5
Cattle (male & female) from 1 to less than 2 years	3.3	Piglets	74
Bulls over 2 years or older	2	Pigs for fattening & other pigs	14
Breeding/fattening heifers	2.5	Table Birds	580
Dairy/cull cows	2	Laying hens	230
Other cows	2.5		

In Scottish conditions, suitable housing should be provided to give shelter from winter weather and to protect land from poaching and to ensure that animals have access to sufficient feed. A high standard of housing cleanliness should also be maintained. Out wintering is appropriate where conditions allow and where breeds are suitably hardy and/or there is adequate shelter (including natural features) to prevent environmental damage and any welfare problems.

A detailed management plan must be developed and agreed by OF&G (Scotland) which addresses how these Standards will be met in each of the following areas:

- paddock and grazing management (this should normally be integrated with the cropping plan and address parasite control, sward management, provisions for rotational or paddock grazing, prevention of overstocking and overmanuring and describe reseeding plans where appropriate. Where relevant these measures should also be referred to in the Animal Health Plan)
- housing
- handling and welfare
- diet
- transport
- slaughter

Producers are reminded that animal production must be based on the 'five freedoms' (see 3.1.3 above in these Standards) and in particular that:

- the plans for livestock systems must allow for the animals, especially breeding cows and sows, to be kept in reasonably stable groups
- livestock must have access to water at all times. For animals on piped water supplies, the drinking water should be checked regularly (where access cannot be 'at all times', such as in collecting pens, during transport, etc there must be no more than an eight hour period without access to water)
- when animals are transported, they must be handled with proper care and concern for their welfare and in accordance with these Standards.

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3.3.3 Livestock and livestock products must clearly be identified:

At all stages of the production cycle including, preparation, transport and marketing, livestock must be identified - individually in the case of large mammals and by batch in the case of poultry and small mammals.

3.3.4 Permitted and prohibited practices

Organic animals must be managed in line with good agricultural practices, but some operations are not permitted by these Standards:

SOPA Permitted Practices include:

- artificial insemination for breeding. (If sexed semen is to be used this must be described in the Animal Health Plan and approved by OF&G (Scotland), hormones for synchronisation of oestrus must not be used).
- tagging, ear notching, tattooing and freeze branding animals for identification.
- castration and de-horning where it is judged to be necessary, in accordance with relevant legislation and Codes of Recommendation for Animal Welfare and approved by OF&G(Scotland) (castration of pigs is not allowed).

SOPA Prohibited Practices include:

- animals subjected to any surgical or chemical interference which is not designed to improve the animals' own health or well-being or that of the group, other than those practices specifically permitted in these Standards
- Prohibited practices include tail docking of piglets, tooth cutting, grinding and nose ringing in pigs and beak trimming in poultry.
- systems of livestock management that involve routine use of prophylactic medication except in accordance with these Standards or as part of the approved Animal Health Plan.
- zero grazing systems (buffer feeding is permitted to extend the grazing season and up to 20% of the forage dry matter intake during the grazing season).
- breeding practices that make the livestock systems over-reliant on inappropriate technology (for example embryo transfer techniques and routine caesarean sections).
- breeding practices based on genetic engineering.
- the keeping of livestock in conditions, or on a diet, which may encourage anaemia.

3.3.5 The organic management of pig and poultry enterprises requires special consideration:

Organic pig and poultry production must be an integral part of the farming system on the registered organic unit. Where this is not possible, organic units may work with other organic farms in the area, in terms of manure and rotational management and, where possible, feed.

In organic production, roughage, fresh or dried fodder, or silage must be added to the daily ration for pigs and poultry (also see 3.5.2).

In organic pig production:

- Management should aim to ensure suitable welfare conditions for pigs, prevent undue nitrogen leaching and soil erosion, maintain soil structure and provide adequate control of endoparasites (worms). In general rotational systems for pigs should ensure that they do not return to the same land more than once in four years and the duration of pigs on the land should not be more than six months. However, OF&G (Scotland) will evaluate individual systems for compliance with SOPA Standards on a case-by-case basis.
- Pigs must be checked twice each day by a suitably trained stockperson.

In organic poultry production:

- Poultry must have continuous and easy daytime access to pasture and/or range, except in adverse weather conditions.

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- Outside access is required for at least the following proportion of their life:

Ducks: 2/3 life Layers: All laying life

Geese: 2/3 life Broilers: 2/3 life

Guinea fowl: 2/3 life Turkeys: 2/3 life

Poultry may be kept indoors where restrictions, including veterinary restrictions, which are taken on the basis of Community law for the purpose of protecting public or animal health, prevent or restrict access of poultry to open air runs.

Where poultry are kept indoors, they shall permanently have access to sufficient quantities of roughage and suitable material in order to meet the poultry's ethological needs.

If it becomes necessary to urgently require poultry to be kept indoors, poultry and eggs affected will retain their organic status as long as all other provisions of these standards are complied with. Poultry products will retain their free-range status for up to 12 weeks.

The land to which poultry have access must be well covered with suitable and properly managed vegetation. Pasture must be rested from poultry to allow vegetation to grow back, for health reasons and to enable built-up fertility to be used for:

- in the case of layers at least nine months after each batch (the nine month gap should therefore be between each batch).
- in the case of table birds at least two months per year and in addition for one year in every three years (i.e. two years on followed by one year off).
- In the case of pullets (for pullet production) 2 consecutive months must be left between batches.

These requirements shall not apply to small numbers of poultry, which are not kept in runs and are free to roam throughout the day. 'Small numbers' means up to about 50 birds, however the exact number will depend on the system, and this will be considered on a case-by-case basis by OF&G (Scotland).

Poultry must have access to feed and water at all times in daylight hours, except just prior to transport and/or slaughter when feed may be withheld for a limited period.

Poultry must have access to shelter at all times and be provided with protection from predators. Adequate cover, either natural (for example trees, shrubs and cover crops) and/or artificial (for example screens and trailers) must be provided in the free range areas to give the birds conditions akin to their native habitat, protection from overhead predators and shelter from extreme weather conditions. This cover should be provided in a way that encourages ranging behaviour and ensures maximum use of the pasture.

Waterfowl must have access to a stream, pond or lake, whenever the weather conditions permit.

Such water must be well maintained and managed to prevent the build-up of stagnant water and decaying vegetation, pollution and disease risk.

Maximum outdoor stocking rates:

Ducks: 2,000 birds/ha Layers: 1,000 birds/ha

Geese: 600 birds/ha Broilers: 2,500 birds/ha

Guinea fowl: 2,500 birds/ha Turkeys: 800 birds/ha

All poultry must have access to insoluble grit.

Poultry diets must contain a minimum of 65% cereals or cereal by-products (see section 3.5 for general feed standards).

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Poultry must be checked at least three times daily by a suitably trained/experienced stockperson, who should pass within three metres of each bird at least once within every 24 hour period.

Slaughter ages of poultry

The minimum slaughter age, except where traditional or slow growing strains are used, must be:

Chickens: 81 days	Capons: 150 days
Geese: 140 days	Guinea fowl: 94 days
Turkeys: (female) 100 days	Turkeys: (male) 140 days
Muscovy: (female) 70 days;	Muscovy: (male) 140 days
Mallard: 92 days	Ducks: Peking 49 days;

For this purpose poultry are regarded as slow growing if under organic management and the live weight gain per day does not exceed 45g or in the case of turkeys 55g. Where slow growing strains are used, the slaughter age is unrestricted (but note the conversion period of 10 weeks for non-organic 'day old' chicks).

3.4 Livestock Housing

3.4.1 Animal housing must maximise the welfare of livestock and protect their health:

The type of housing, bedding materials, ventilation and stocking density all have a direct impact on the welfare of the stock and their health status. Housing conditions for livestock must meet the livestock's biological and ethological needs (for example, behavioural needs as regards appropriate freedom of movement and comfort). The livestock must have easy access to feeding and watering. Insulation, heating and ventilation of the building must ensure that air circulation, dust level, temperature, relative air humidity and gas concentration are kept within limits that are not harmful to the animals.

Free range, open-air exercise areas or open-air runs, where required by these Standards, must provide sufficient protection against rain, wind, sun and extreme temperatures, depending on local weather conditions and the breed concerned.

Housing for livestock is not mandatory in areas with appropriate climatic conditions to enable suitable (preferably native) breeds of animals to live outdoors.

The stocking density in buildings must provide for the comfort and well being of the animals, depending on the species, breed and age. It should also take account of the behavioural needs of the animals, which depend in particular on the size of the group and the animals' sex. The optimum density will seek to ensure the animals' welfare by providing them with sufficient space to rise without restriction, stand naturally, lie down easily, turn round, groom, assume all natural postures and make all natural movements such as stretching and wing flapping.

The minimum surface areas for indoor housing and outdoor exercise areas and other characteristics of housing are detailed below:

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Stocking Rates for housing

Animal	Indoors area (net area available to animals)		Outdoors area (exercise area, excluding pasturage)
	Live weight minimum (kg)	m ² /head	m ² /head
Breeding and fattening cattle and horses	up to 100 up to 200 up to 350 over 350	1.5 2.5 4.0 5 with a minimum of 1 m ² /100 kg	1.1 1.9 3 3.7 with a minimum of 0.75 m ² /100 kg
Dairy cows		6	4.5
Bulls for breeding		10	30
Sheep and goats		1.5 sheep/goat 0.35 lamb/kid	2.5 2.5 with 0.5 per lamb/kid
Farrowing sows with piglets up to 40 days		7.5 sow	2.5
Fattening pigs	up to 50 up to 85 up to 110	0.8 1.1 1.3	0.6 0.8 1
Piglets	over 40 days and up to 30 kg	0.6	0.4
Breeding pigs		2.5 female 6.0 male	1.9 8.0

(See 3.4.3. for housing requirements for poultry and other farmyard birds)

Where animals can be housed for a final fattening phase (see 3.4.3 below) or where open fronted sheds are used for winter housing, an outdoor area may not be required. In such a case, the indoor and outdoor requirements must be added together to provide the total indoor area. Such arrangements must be approved in advance in writing by OF&G (Scotland).

3.4.2 **Animal housing must provide a clean, safe environment and be kept free from pests:**

Housing, pens, equipment and utensils must be in a condition that is not likely to cause injury to livestock and must be properly cleaned and disinfected to prevent cross-infection and the build up of disease carrying organisms. Only the products listed below in these Standards can be used for such cleaning and disinfection of livestock buildings and installations. Faeces, urine and uneaten or spilt food must be removed as often as necessary to minimise smell and to avoid attracting insects or rodents.

Only the products listed in these Standards can be used for the elimination of insects and other pests in buildings and other installations where livestock is kept.

Livestock housing must have a smooth but not slippery floor and must be provided with a comfortable, clean and dry lying/resting area, consisting of a solid construction (not slatted).

Ample dry bedding strewn with litter material must be provided in the lying/resting area. The litter must comprise straw (preferably from the organic unit) or other suitable natural material.

Permitted materials

- non-organic straw
- natural materials bean haulm or bracken
- sawdust and wood shavings (from untreated wood only)
- paper (not magazine) but not permitted for poultry
- sand

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The litter may be improved and enriched with any mineral product authorised for use as a fertiliser in organic farming in accordance with section 4.4 of these Standards.

Housing must have adequate natural ventilation and lighting.

Building materials treated with paints or preservatives that are toxic to animals must not be in reach of livestock.

3.4.3 Conditions for animal housing:

Housing must take account of the needs of each species, including their breed, sex, age and production status:

As far as possible organic production systems must be based on the use of pasture and range. For each of the main farmed species the following principles and rules must be observed when animals are housed:

Cattle

In accordance with organic principles cattle must be at grass when conditions permit but may be housed over the winter to protect the environment and animal welfare. In addition to winter housing the final finishing phase for beef animals may be indoors provided that this does not exceed one fifth of their lifetime with an absolute maximum period of three months.

When animals are housed in groups care must be taken to protect individual animals from bullying and aggressive behaviour. Horned cattle must be given extra space for lying and feeding to avoid damage or injury.

Breeding bulls should be kept with other stock whenever possible, for example with dry cows. When over one year of age they may be housed but must have access to pasturage or an open-air exercise area or an open-air run with a minimum area of 30m². If housed they must be in sight of other animals.

Cattle should be housed in well-bedded yards, however SOPA recognises that bedding materials are often not readily available in certain areas of Scotland and the use of stalls and cubicles is permitted by these Standards.

Cubicles must be of optimum size for the cattle on the holding with regard to their welfare. Dimensions of cubicles and average weight of cattle must be documented within the approved Animal Health Plan.

Cubicles must be kept clean, dry and comfortably bedded (preferably over mats or other soft coverings if the base is concrete) at all times.

The number of cubicles must exceed the number of animals in the housed group by at least five per cent.

The housing of calves for rearing requires special care to protect their health and welfare. In accordance with organic principles every calf should be reared by its own mother. Where this is not practicable, they may be reared in individual pens for no more than seven days. The construction of the pen must allow the calf to see and hear other calves, to rise, to lie down and to turn around without difficulty.

Beyond the age of seven days, calves must be reared in groups of two or more.

Sheep and goats

Sheep and goats may be housed for lambing/kidding or in-wintering (generally limited to hoggs or ewe lambs). The facilities must ensure that there is:

- a minimum of 50cm of trough space per heavily pregnant ewe/goat for concentrate feeding
- a maximum of 40 ewes/goats per pen if in-wintered (that is, housed for the winter)
- a maximum of 100 ewes/goats per pen if yarded at lambing/kidding
- good ventilation without pockets of stale air or excess draughts.

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Pigs

Organic pig enterprises must be based on a free-range system with suitable soil type and climate. However, pigs may be housed in extreme weather conditions and for up to one fifth of their lives in the final fattening stage.

Housing at any other time must be approved in advance by OF&G (Scotland).

When permitted, the housing facilities must provide:

- ample dry bedding (preferably organic straw) with plentiful natural ventilation and light
- access to an outside run which must permit dunging and rooting – different substrates for rooting can be used
- a maximum of ten pigs per nipple drinker, 15 pigs per bowl or ten pigs per linear foot of trough. Drinkers must have flow rates of sufficient levels to meet the needs of each class of pig
- if not fed ad-lib then there must be enough trough space for all pigs to feed at once
- individual housing for sows with piglets
- stable, evenly sized groups of fattening pigs, gilts or sows. The management plan must provide details of provisions for managing/protecting thin or bullied pigs.

Sows should be introduced to their farrowing accommodation well before piglets are due to be born. Their arcs should be approximately 2.44m by 1.9m. The arc must be bedded with straw and additional heat can be provided in the creep area.

Poultry

Organic poultry enterprises should be based in mobile houses, as these allow for greater flexibility of management and the ability to integrate poultry production into the organic farming system in accordance.

For fixed housing producers must submit a maintenance plan for the poultry range and surrounding area. This should include the following;

- re-seeding timescales of the range
- varieties of grassland/forage mixes/trees
- description of and how many permanent shelters provided

Houses should be bedded with straw (preferably organic) or wood shavings (not treated) as litter material to maintain

- birds to be kept in dry, friable conditions
- hygienic conditions
- allow birds to dust bathe
- sufficient depth for dilution of faeces

Pop-holes must be located on different sides of the house so as to be able to avoid adverse weather conditions affecting the environment inside.

Where housing units accommodate more than the normal social group size of the species (generally greater than 100 adult birds), then the number and distribution of feeders, drinkers and other facilities and/or provision of partitions, for example, must be adequate to allow the development of social groups within the unit.

Between batches of poultry, houses must be emptied, cleaned and disinfected to prevent a build up of parasites and pathogens, preferably with steam, blowtorch, or lime having regard to the construction of the house. The house must be left empty for sufficient time to break pest cycles.

Permitted disinfecting materials are detailed in section 3.4.4 of these Standards.

The following shall apply to indoor housing and facilities:

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Housing requirements for poultry

	Layers	Table Birds	Turkeys	Ducks	Geese	Guinea fowl
Maximum stocking rates in mobile housing	6birds/m ²	16birds/m ² † (30kg/m ²)	3birds/m ²	16birds/m ²	3birds/m ²	16birds/m ²
Maximum stocking rates in fixed housing	6birds/m ²	10birds/m ² (21kg/m ²)	2birds/m ²	10birds/m ² (21kg/m ²)	2birds/m ²	10birds/m ² (21kg/m ²)
Minimum perch space (cm per bird)	18cm/bird		40cm/bird	40cm/bird (Muscovy only)		20cm/bird
Individual nest boxes (max no. birds/nest box)	6birds/nest					
OR communal nests (min cm ² /bird)	120cm ² /bird					
Maximum slatted floor area (%)	50	50	50	50	50	50
Minimum exit/entry pop-holes (m length per 100m ² floor area)	4m per 100m ²	4m per 100m ²	4m per 100m ²	4m per 100m ²	4m per 100m ²	4m per 100m ²
Maximum area of poultry houses per unit (m ²)		1,600m ²	1,600m ²	1,600m ²	1,600m ²	1,600m ²

Where the house design incorporates a solid floor in one identified area then the ratio of solid floor to slats may be reduced to one third solid floor: two thirds slatted area.

†Only in mobile houses not exceeding 150m² floor area.

The maximum number of birds in a housing unit shall be:

- Ducks: 500 Layers: 3000
- Geese: 250 Table Birds: 500
- Guinea fowl: 500 Turkeys: 250

By derogation from these Standards, housing units containing more birds than those specified immediately above may be permitted by OF&G (Scotland), only where the following conditions are fully complied with:

the maximum number of birds allowed in each housing unit will be assessed by a calculation of the area of pasture available to the birds within the designated ranging distance for the species, taking into account the following:

the designated ranging distance from the house:

- Ducks: 50m Layers: 100m
- Geese: 100m Table Birds: 50m
- Guinea fowl: 100m

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- Turkeys: 50m
- the maximum outside stocking density as in paragraph 3.3.5 of these Standards
- the exclusion of additional areas that are required for rotation/resting of the pasture
- the exclusion of the area taken up by the house, access roads or concrete aprons.
- a demonstrably high level of bird health and welfare.
- good environmental conditions, both inside the house and externally on the range.

In any event, the housing unit size shall not exceed:

Ducks: 1,000 birds	Layers: 3,000 birds
Table Birds: 1,000 birds	Geese: 1,000 birds
Guinea fowl: 1,000 birds	Turkeys: 1000 birds

Artificial lighting may only be used to prolong the day length up to a total of 16 hours and the day must end at dusk.

3.4.4 Only permitted cleaning agents and disinfectants can be used:

The following products are authorised for cleaning and disinfection of livestock buildings and installations:

- potassium and sodium soap
- water and steam
- milk of lime, lime, quicklime
- sodium hypochlorite (for example as a liquid bleach)
- caustic soda, caustic potash
- Hydrogen peroxide
- natural essences of plants
- citric, peracetic, formic, lactic, oxalic and acetic acid
- alcohol
- nitric acid, phosphoric acid (dairy equipment)
- formaldehyde
- cleaning and disinfection products approved by DEFRA/Scottish Government for teats and milking facilities
- sodium carbonate.

3.4.5 Permitted Rodenticides may be used to control pests in livestock buildings and installations:

Static bait traps using licensed poisons are permitted so long as there is no risk to other animals or wildlife. Substances used for rodent control must be properly labelled and must be kept in a locked store. The use of all rodenticides must be recorded in accordance with the requirements detailed in table 1.6.3 of these Standards.

3.4.6 Some housing practices are not permitted:

Producers are cautioned that the following practices are not permitted by these Standards:

- prolonged confining or tethering of animals for example in shippens, steadings and byres ('prolonged' means a routine practice that is continuous over several days at a time. Occasional tethering, e.g. for training of show animals or in exceptional circumstances, for example illness may be acceptable)

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- housing or lying areas without bedding are not permitted
- have more than 50% slats on the whole loafing and lying areas (existing 100% slatted buildings may be bedded over to enable compliance with these Standards).

3.5 Livestock Feed

3.5.1 **The natural health and vitality of farm livestock is based on sound nutrition from before conception and throughout life. In principle, livestock should be fed only on organic feed:**

Wherever practical the organic production unit and linked organic units should supply all the nutritional requirements of the livestock enterprises. In accordance with this principle organically grown feedstuffs fed in the form of a balanced ration are requirements of these Standards. Livestock should be fed 100% organically grown feed of good quality. All feed should come from the organic farm unit itself or be produced within the region. The diet shall be offered to the animals in a form allowing them to exhibit their natural feeding behaviour and digestive needs e.g. rooting in pigs and rumination in cattle, suckling in young mammals.

In accordance with the principles outlined in these Standards feed is intended to ensure high quality production rather than maximising production, while meeting the nutritional requirements of the livestock at various stages of their development. Organic producers are cautioned that sheep and cattle systems which involve intensive housing of animals and high levels of concentrate feeding are not readily compatible with the principles and rules contained in these Standards.

Particular attention should be paid to the physiological adaptation of livestock to different types of feedstuffs, both in the initial choice of rations and when any changes of diet are contemplated. Sudden changes of diet should be avoided.

Wherever possible, feed brought in from exploitative or polluted situations should be avoided. Sources should therefore be checked and preference should be given to feeds available locally.

3.5.2 **Feeding/weaning of youngstock:**

These principles apply to the feeding of youngstock and accordingly these Standards require that the feeding of young mammals must be based on suckled maternal milk in preference to natural milk. 'Natural milk' is interpreted as meaning organic milk in either liquid or powder form, Natural milk can include dried milk and milk, fresh or dried to which any feed additives or feed ingredients permitted under 834/2007 and 889/2008 for ruminants has been added. All mammals must be fed on maternal/natural milk for a minimum period, depending on the species concerned, which must be at least three months for cattle (i.e. bovines - including bubalus and bison species) and horses, 45 days for sheep and goats and 40 days for pigs. Organic milk replacer may be used after 21 days in the specific cases of organic dairy sheep and goat production.

SOPA recognises that in certain circumstances, maternal milk may not be immediately available and that natural milk is not generally available in Scotland for lambs at this time. Individuals fed on non-organic milk powder must be individually identified and must not be used for organic meat production. However, in an emergency you may feed non-organic milk replacer to newly born stock for a period of up to 72 hours, if fed after this time period the individual must be identified and must not be sold for organic meat production. Records of all non-organic milk powder (over 72 hours) used must be available for inspection by OF&G (Scotland).

3.5.3 **Organic livestock should be fed feed from the organic farm unit:**

For ruminants, a minimum of 60% of the feed, calculated over a calendar year, must be obtained from the unit, or from linked units ('linked units' means that there should be some form of ongoing relationship between the units, that is, not just a one-off purchase). If this is not feasible, the feed must be produced in co-operation with other organic farms in the area. In exceptional circumstances, for example where weather conditions have affected forage production, OF&G

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(Scotland) may approve a derogation from the 60% requirement. Written permission must be obtained from OF&G (Scotland) for this derogation, and a satisfactory case must be made to demonstrate that the circumstances are exceptional.

In the case of pigs and poultry, at least 20% of the feed shall come from the farm unit itself or in case this is not feasible, be produced in the same region in co-operation with other organic farms or feed operators.

At least 60% of the dry matter in the diet on an annual basis (calculated per calendar year - January to January) must come from feedstuffs produced to full organic Standard ('full organic Standard' means fully organic, not in-conversion). However there may be flexibility where second year in-conversion feed from the organic unit is being used – see below.

For herbivores, post-weaning rearing systems should be based on maximum use of pasturage according to availability at different times of the year. At least 60% of the daily dry matter must consist of fresh or dried fodder, roughage or silage (the 60% forage rule applies only after weaning, and therefore, does not apply to milk based diets for calves and lambs prior to weaning. See below for details of the feeds that constitute fodder and roughage).

In organic production, roughage, fresh or dried fodder, or silage must be added to the daily ration for pigs and poultry (also see section 3.3.5).

Accurate and comprehensive records must be kept of all feedstuffs, including the constituent ingredients of the feed, the proportion of the constituents to the total feed on a dry matter basis and the source of the constituent parts.

3.5.4 In conversion feeds from your own holding:

This scenario may arise for example when an organic producer converts more fields, purchases more land or takes on management of a new farm. It is preferred that organic livestock are fed 100% organic feed, but in these circumstances 20% of the total average amount of feed stuffs (calculated as 20% of the Dry Matter- DM content) fed to livestock may originate from the grazing or harvesting of permanent pastures, perennial forage parcels and protein crops in their first year of conversion.

During the second year of conversion 100% of the feed

Conversion feed from your own holding should be either

100% Organic feed	
20% FIRST year Conversion	80% Organic feed
100% SECOND year conversion	

3.5.5 Bought in any In conversion feed:

ONLY second year conversion feeding stuffs may be purchased from another organic holding; no first year conversion feedstuffs may be purchased or used unless from your own holding see details above.

Second year conversion feeds are those that come from land that is harvested after 12 months from the start of the conversion date.

All in-conversion feed, grazing and forage are to be calculated as a percentage of dry matter intake of feeding stuffs of agricultural origin (i.e. do not include major minerals or trace elements or seaweed meal) over a calendar year (January – December).

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In conversion feeds from a non-linked organic holding;

30%	70% Organic feed
2nd year Conversion	

When both 'bought in' and first year conversion feeds (from your own holding) are being used, the total combined percentage shall not exceed 30%.

Crops and forage harvested before 12 months from the start of the conversion period are considered as first year conversion feeds for the purposes of these Standards.

3.5.6. **Pig and Poultry feeds:**

SOPA acknowledges that at this time it may not always be possible for pig and poultry producers to satisfy the nutritional needs of their organic livestock from farms producing in accordance with the requirements of these Standards.

For a transitional period, the use of a limited proportion of conventional protein feedingstuffs is authorised by OF&G (Scotland) where farmers can show that they are unable to obtain feed exclusively from organic production.

The maximum percentage of conventional protein feedingstuffs authorised over of 12 months is 5 %, up until 31 December 2022

This figure shall be calculated annually as a percentage of the dry matter of feedingstuffs from agricultural origin.

Derogations for Pig and Poultry producers

It is necessary for livestock producers to obtain a derogation from the OF&G (Scotland) to use non-organic feedstuffs using the 'Derogation Form for Non-Organic Feed'. The justification can comprise of the following;

- Details of the source(s) of the organic feedstuff in question who have been contacted and were unable to supply it as organically produced;

and additionally, in certain circumstances the following may also be accepted as justification:

- Evidence is supplied that the available equivalent organic feed is not suitable – based on nutritional or qualitative information from a nutritionist/laboratory; OR
- It is demonstrated that the equivalent organic feed is not available within the locality in sufficiently small quantities e.g. isolated regions or islands.

For livestock producers buying in certified/approved products from a certified feed mill or supplier, which contains non-organic ingredient/ingredients, the product label will act as the written justification for the unavailability of the ingredient as organically produced.

The written approval supplied by the certification body or the feed labels supplied with a compound feed must be retained with the feed records for the certification body's inspector or Defra to inspect at any time

The inspector must check feed labels and derogations issued at the inspection and record the types of feed and quantities used.

3.5.7 **In exceptional circumstances a higher percentage of non-organic feeds may be used to protect animal welfare:**

When forage production is lost, in particular as a result of exceptional weather conditions, infectious disease outbreaks, contamination with toxic substances or as a consequence of fires, DEFRA may authorise, for a limited period and in relation to a specific area, a higher percentage of conventional feedstuffs where such a derogation is warranted. Following such an approval by

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DEFRA, individual Organic farmers may apply in writing to OF&G (Scotland) for permission to use this derogation.

In accordance with the principles of these Standards a written plan giving preference to the use of any available organic feed to those animals to be used for organic production or producing organic livestock products must be drawn up and approved in advance by OF&G (Scotland).

3.5.8 **Certain feeds must not be fed to organic livestock:**

The following feeds must not be fed at any time to organic or simultaneously converting livestock:

- materials that have been subject to solvent extraction (for example extracted oils and seed residues)
- animal by-products or manures (including meat, offal, blood, tallow, feather meals, poultry manure)
- sawdust and other non-food ingredients and fillers
- ingredients that are genetically modified organisms, or derived from such organisms
- milk from dairy cows treated with antibiotics must not be fed to any organic stock during the manufacturer's stated withdrawal periods
- straw or cereals treated with ammonia or caustic soda
- fats, oils and fatty acids used to produce diets of high nutrient density designed to achieve very early maturity or high levels of production
- urea
- commercially produced compounded/blended feeds from feed compounders that are not certified for use in organic production by a DEFRA Approved Organic Control Body.

Producers are cautioned that forced feeding or restricted feeding practices are not permitted by these Standards.

3.5.9 **Organic livestock feed may be supplemented by certain major minerals, trace elements and vitamins:**

On well-established organic farms, sound agricultural practices should render major mineral, trace element and vitamin supplementation unnecessary. However, where the Member has identified a risk that major minerals necessary for health, growth and production may not be supplied in feed, producers may supply these to all categories and classes of livestock in the following forms:

Permitted supplements:

- sodium: unrefined sea salt, coarse rock salt, sodium sulphate, sodium carbonate, sodium bicarbonate, sodium chloride
- potassium: potassium Chloride
- calcium: lithotamniom and maerl, calcareous marine shells, calcium carbonate, calcium gluconate
- phosphorus: defluorinated phosphate, monosodium phosphate, calcium-magnesium phosphate, calcium-sodium phosphate
- magnesium: magnesium oxide (anhydrous magnesia), magnesium sulphate, magnesium chloride, magnesium carbonate, magnesium phosphate
- sulphur: calcium sodium sulphate

Vitamins and Provitamins:

In order to satisfy the nutritional requirements of livestock, the following vitamins and other chemically well defined substances having a similar effect may be fed to organic livestock:

- Vitamins authorised under directive 70/524/EEC:

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preferably derived from agricultural products, or

- synthetic vitamins identical to natural vitamins – only for monogastric animals (e.g. pigs and poultry).
- synthetic vitamins A, D and E identical to natural vitamins for ruminants. This derogation must be authorized in advance by OF&G (Scotland) and Defra.
- Betain anhydrous – only for monogastric animals (e.g. pigs and poultry. Only from natural origin and when available from organic origin.

Micro-organisms:

- Enzymes and micro-organisms in the category of “zootechnical additives” (ID numbers or functional groups 4a, 4b, 4c and 4d) (not from or by genetic modification)

Trace Elements

The use of the following trace elements is permitted in order to satisfy the nutritional requirements of livestock,

- Iron: iron (II) carbonate (siderite), iron (II) sulphate monohydrate and iron (II) sulphate heptahydrate..
- Iodine: potassium iodide, calcium iodate (anhydrous), coated granulated calcium iodate anhydrous.
- Cobalt: cobalt (II) acetate tetrahydrate, cobalt (II) carbonate, cobalt (II) carbonate hydroxide (2.3) monohydrate, coated granulated cobalt (II) carbonate hydroxide (2.3) monohydrate and cobalt sulphate heptahydrate.
- Copper: copper (II) carbonate dihydroxy monohydrate, copper (II) oxide, copper (II) sulphate pentahydrate and dicopper chloride trihydroxide (TBCC).
- Manganese: manganese (II) oxide and manganese sulphate monohydrate.
- Zinc: zinc oxide, zinc sulphate heptahydrate, zinc sulphate monohydrate, zinc chloride hydroxide monohydrate (TBZC).
- Sodium: sodium molybdate dehydrate and sodium selenite.
- Selenised yeast (inactivated)
- chelated trace elements, but only when you can justify that the unchelated form is not suitable

The use of the above trace elements must be justified over time in the approved Animal Health Plan (see 3.6 below). Suitable justification can take the form of forage, blood or soil analysis or a letter from the responsible veterinary surgeon detailing evidence of previous problems with specific mineral deficiencies. Where possible producers should work with their veterinary surgeon to produce evidence that the trace element status of all classes of livestock is satisfactory throughout the production cycle so as to avoid deficiencies or needless supplementation that may compromise animal health and welfare.

SOPA Scheme producers may use products that have been approved by a DEFRA Approved Organic Control body for general use without reference to SOPA. Where products are approved for ‘restricted’ use producers must seek guidance from OF&G (Scotland) prior to use.

Producers should note that mineral licks with flavour enhancers, non-mineral additives, preservatives and urea are not permitted by these Standards.

Concentrated vitamins and minerals which produce diets of very high nutrient density designed to achieve very early maturity or high levels of production are not permitted by these Standards.

Producers may also use the following products as feed supplements to all categories and classes of livestock:

- Yeast
- Brewers Yeast

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- Refined cod liver oil (including possibly a preservative).
- Wheat germ (for vitamin E).
- Seaweed meal

3.5.10 Organic livestock must not graze non-organic land:

The grazing of organic stock on non-organic land at any time is not permitted by these Standards. Whenever organic animals are away from the organic unit e.g. for shows and exhibitions, sufficient organic feed must be provided for their needs. Feed records to demonstrate this shall be available at inspection.

3.6 Animal health and veterinary treatments

3.6.1 Positive Welfare

Animals must be maintained in good health by the adoption of effective management practices, including high standards for animal welfare, appropriate diets and good stockmanship:

The prevention of disease is central to the approach of organic livestock husbandry. Health in farm animals is not simply the absence of disease, but also the ability to resist infection, parasitic attack and metabolic disorders, as well as the ability to overcome injury by rapid healing.

In accordance with this principle the development and management of organic livestock systems requires special care in nurturing positive health and vitality, ensuring the proper control of disease and the encouragement of positive animal welfare. 'Positive welfare' is used in these Standards in the sense used by the Farm Animal Welfare Council (FAWC) to mean the satisfaction of the animals' needs, including behavioural needs and not merely the avoidance of cruelty.

3.6.2 Disease prevention must be central to the organic livestock system:

Disease prevention in organic livestock production should be based on the following, which should limit animal health problems so that they can be controlled mainly by prevention:

- the selection of appropriate breeds or strains of animals. In the choice of breeds or strains, account must be taken of the capacity of animals to adapt to local conditions; their vitality, and their resistance to disease. In addition, breeds or strains of animals must be selected to avoid specific diseases or health problems associated with some breeds or strains used in intensive production (e.g. porcine stress syndrome, PSE Syndrome, sudden death, spontaneous abortion, difficult births requiring caesarean operations, etc.) Preference is to be given to Scottish or other British breeds and strains.
- the application of animal husbandry practices appropriate to the requirements of each species, encouraging strong resistance to disease and the prevention of infections.
- the use of high quality feed, together with regular exercise and access to pasturage, having the effect of encouraging the natural immunological defence of the animal.
- ensuring an appropriate density of livestock, thus avoiding overstocking and any resulting animal health problems. Isolation or hospitalisation facilities for quarantined or sick animals conforming to the DEFRA/Scottish Government Codes of Recommendation for the Welfare of Livestock.

3.6.3 Animal Health Plan

The management of all aspects of animal health and welfare must be described and monitored through the development of an Animal Health Plan for each livestock enterprise:

An Animal Health Plan addressing all of the areas in section 3.6.2 must be drawn up by the farmer, who should consult with a veterinary surgeon. Veterinary advice is strongly recommended both to ensure appropriate technical expertise is brought to bear on the plan and so that the nominated veterinary surgeon can familiarise him/herself with the farm and with organic requirements before any emergency occurs. Producers are cautioned that it is unlikely that an Animal Health Plan that is prepared without the assistance of a vet will satisfy the

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requirements of these Standards. Further guidelines and information on producing an animal health and welfare plan are available from OF&G (Scotland) and SOPA.

The initial plan should, where possible, be agreed between the producer and the veterinary surgeon during and after conversion, to develop and operate an organic livestock system that conforms to these Standards.

The plan must ensure the development of a pattern of health building and disease control measures appropriate to the particular circumstances of the individual farm and allow for the evolution of a farming system progressively less dependent on allopathic veterinary medicinal products.

The Animal Health Plan must be submitted to and approved by OF&G (Scotland) as part of the conversion plan and be subject to regular updating as detailed in section 1.4.3 of these Standards or upon request by OF&G (Scotland)

The Animal Health Plan should detail the strategies for the management of animal health both during and after conversion, including diagnosis and control measures and the strategies for reducing any health problems on the unit.

The frequency of inspection of animals must also be noted in the plan.

In order to allow certain veterinary procedures to take place on organic farms Defra require individual operators to apply for approval to OF&G (Scotland). To continue the tail docking of lambs, disbudding of calves, dehorning of cattle, castration of all types of livestock or the use of vegetative propagating material. You must ensure the Animal Health Plan details the reason for undertaking these procedures together with a justification.

3.6.4 Sick animals must be treated without delay:

If, despite all of the above preventative measures, an animal becomes sick or injured, it must be treated immediately, if necessary in isolation, and in suitable housing. Failure to treat a sick animal is a serious breach of these Standards and may result in withdrawal of Organic Certification of the operator (i.e. the whole of the registered unit). Producers are cautioned that treatment must be administered even if the result would mean an animal or group losing its organic status.

In these Standards veterinary medicinal products shall be defined as follows:

Medicinal product family	Medicinal product category
Allopathic veterinary medicinal products'	<ul style="list-style-type: none">• Antibiotics• Chemically synthesised allopathic veterinary medicinal products• Vitamin preparations• Mineral and glucose solutions• Herbal extracts• Phytotherapeutic remedies
Chemically synthesised allopathic veterinary medicinal products	<ul style="list-style-type: none">• Anti-parasitic drugs• Hormones• Mediators• Anti-inflammatory and analgesic drugs• Drugs which affect the nervous system e.g. sedatives and anaesthetics• Drugs with a specific effect on target organs e.g. bronchodilators & spasmolytics
Immunological preparations	<ul style="list-style-type: none">• Vaccines & antisera

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The selection and use of veterinary medicinal products in organic farming must comply with the following:

- first choice: complementary therapies listed in these Standards and trace elements and products listed in section 3.5.9 shall be used in preference to chemically synthesised allopathic veterinary medicinal products or antibiotics, provided that they are known to produce a therapeutic effect for the species of animal, and the condition for which the treatment is intended
- second choice: If the use of the above products should not prove, or is unlikely to be, effective in combating illness or injury, and treatment is essential to avoid suffering or distress to the animal, chemically synthesised allopathic veterinary medicinal products or antibiotics may be used under the responsibility of a veterinarian
- third choice: The use of chemically synthesised allopathic veterinary medicinal products or antibiotics for preventive treatments is prohibited. Where due to an identified disease risk the welfare of animals cannot be maintained by management practices alone, OF&G (Scotland) may permit the strategic use of a chemically synthesised allopathic veterinary medicine, other than an antibiotic, in the context of the approved Animal Health Plan.

3.6.5 **The use of all medicinal products must be recorded:**

Whenever veterinary medicinal products are to be used the type of product must be recorded clearly (including an indication of the active pharmacological substances involved), together with details of the diagnosis, the dosage, the method of administration, the duration of the treatment and the legal withdrawal period. This information is to be declared to OF&G (Scotland) before the livestock or livestock products are marketed as organically produced (declaring to OF&G (Scotland)). 'Before the products are marketed' is interpreted as meaning that the relevant veterinary records must be available to assess at that time should OF&G (Scotland) wish to view them – they do not have to be sent to OF&G (Scotland). In particular, the records must be able to verify that withdrawal periods and maximum number of treatments have been adhered to – see 3.6.6 below).

Livestock treated must be clearly identified, individually in the case of large animals; individually or by batch, in the case of poultry and small animals.

3.6.6 **Organic medicine withdrawal periods must be observed:**

The withdrawal period between the last administration of an allopathic veterinary medicinal product to an animal under normal conditions of use, and the production of organically produced foodstuffs from such animals is to be:

- Two times the legal withdrawal period in the case of chemically synthesised allopathic veterinary medicinal products
- Fourteen days for milk or eggs and 28 days for meat in the case of chemically synthesized allopathic veterinary medicinal products used off licence under veterinary supervision or where none is specified
- Forty eight hours in the case of allopathic veterinary medicinal products where the legal withdrawal period is not specified or is stated as zero
- None for homeopathic remedies - unless otherwise specified

In the case of a chemically synthesised allopathic veterinary medicinal product used in a manner other than that specified in the Marketing Authorisation (only under the responsibility of the veterinary surgeon), the withdrawal period is:

- 7 days in the case of eggs or milk;
- 28 days for meat from poultry or mammals (including fat and offal).

In these Standards, topical sprays and treatments are considered as chemically synthesised allopathic veterinary medicine and are therefore subject to the relevant withdrawal periods specified above.

Disinfectants are not subject to withdrawal periods.

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With the exception of vaccinations, treatments for parasites and any compulsory eradication schemes established by Member States (i.e. DEFRA or Scottish Government), where an animal or group of animals receive more than three courses of treatment with chemically synthesised allopathic veterinary medicinal products or antibiotics within one year (or more than one course of treatment if their productive lifecycle is less than one year), the livestock concerned, or produce derived from them, may not be sold as organic, and the livestock must undergo the conversion periods as stated in these Standards for individual livestock categories, subject to the agreement of OF&G (Scotland).

Excluded from this are vaccines, internal and external parasite treatments and compulsory eradication orders.

A course of treatment means all necessary measures taken to restore the animal to health following a particular disease episode.

Veterinary treatments to animals, or treatments to buildings, equipment and facilities, which are compulsory under national or EU legislation are permitted, including the use of immunological veterinary medicinal products when a disease has been recognised as present in a specific area in which the production unit is located.

3.6.7 **The use of some medicines in organic livestock production requires special consideration:**

The foreseeable use of medicinal products should be described in the Animal Health Plan (see 3.6.3) and should follow the principles outlined above. In addition, the following rules apply:

Prophylactic medication;

- Prophylactic use of veterinary medicinal products is not permitted where no known demonstrable farm problem exists.

The prophylactic use of probiotics is not allowed in these Standards.

The use of substances to promote growth or production, (including antibiotics, coccidiostats and other artificial aids for growth promotion purposes) and the routine use of hormones or similar substances to control reproduction (for example induction or synchronisation of oestrus), or for other purposes, is prohibited in these Standards.

Complementary and natural therapies may be used:

- Where these methods have been shown to be effective.
- Under professional veterinary guidance; and in particular when conventional therapies are not available or are unsuitable.

Antibiotics:

- Should only be used under the advice of the responsible veterinary surgeon where effective alternative treatments are not available and where they are considered the best method of reducing suffering, saving life or restoring an animal to health.
- May be used in clinical cases only where no other remedy would be effective or after major trauma as a consequence of surgery or accident.
- May not be used prophylactically (animals treated in this way must undergo the conversion periods stated section 3.2.4 of these Standards and in any case must not be used for organic meat production).

Hormones:

- May only be administered to an individual animal, as a form of therapeutic veterinary treatment under the responsibility of the responsible veterinary surgeon.

Vaccines

Vaccination is permitted only in cases where there is a known disease risk on a farm or neighbouring land, which cannot be controlled by any other means.

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The simplest vaccine should be used for the disease to be treated, single, two in one or four in one vaccines are preferred to more complex vaccines unless such cover is specifically required. Vaccine choice and use should be agreed with the responsible veterinary surgeon to ensure adequate disease protection during the conversion phase with, where possible, progressive reductions in use as the organic unit becomes established.

The vaccinations used and the reasons for them must be recorded in the Animal Health Plan.

Avermectin based worming treatments:

- Avermectin products leave residues in the faeces and interfere with the normal breakdown of the dung and should not be used in organic livestock production.

3.6.8 Controlling and preventing Sheep Scab

In Scotland sheep scab is a notifiable disease and members must comply with the Sheep Scab (Scotland) Order 2010. SOPA recognise that sheep scab is a highly contagious disease that significantly affects flock management practices. It is for this reason that the 'sheep scab control programme', a strategy initially proposed by the Scottish Sheep Scab Initiative, has been adopted and is recommended for SOPA members who have identified a high risk of Sheep Scab in their flock.

However, participation by an organic producer in a scab control programme will be subject to strict control measures.

If a producer is at high risk to infestation by the sheep scab mite, *Psoroptes ovis*, it would be beneficial to coordinate treatment with neighbours to prevent/control the spread of scab and a 'sheep scab control programme' may be granted approval by OF&G (Scotland).

Before a control programme and any treatment can begin a sheep scab control programme agreement must be submitted to OF&G (Scotland) for prior approval. A guide to the information required to be included in a sheep scab control programme agreement is available from SOPA.

The use of Organo-phosphorus and Organo-chlorine (gamma HCH) compounds: As dips for external parasites for the blanket treatment of a whole flock is not permitted by these Standards.

With OF&G (Scotland) approval or this has been approved as part of your health plan you may use the following treatments for sheep scab:

- two treatments of moxidectin ten days apart when you suspect infection, and
- doramectin as a single injection to treat flocks that are showing signs of infestation

With OF&G (Scotland) approval organo-phosphorous compounds may be used for the treatment of sheep scab or in order to comply with statutory requirements:

- only breeding animals may be treated and retain their organic status.
- the animals must not be used for organic meat production.
- all treated animals must be marked at the time of treatment.
- Where animals, not intended for breeding, are treated they must be permanently marked at the time of treatment and must not be used for organic meat.

3.6.9 Storage of medicines

Only short term storage of allopathic veterinary medicinal products and antibiotics are permitted to be stored on holdings provided that their potential use is identified in an approved Animal Health plan, and that they have been prescribed by a veterinary surgeon in connection with treatment.

These products must be stored in a supervised location and must be locked at all times when not in use. The medicine store must be clearly marked.

3.7 Handling and transportation of live animals and birds

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3.7.1 Welfare Principles for handling and transportation

The principles for the welfare of organic livestock must also be applied to their handling and transportation. Careful handling of animals in transit will reduce the risk of fatigue, pain, injury and stress-induced physiological changes to the meat at slaughter.

In accordance with this principle the transport frequency should be minimised.

Liaison between the producer, the haulier and the consignee on the time of collection and arrival should be established and the journey time arranged to ensure that the transit time between the holding and the destination is kept to a minimum. Where practicable the nearest appropriate approved abattoir is to be used.

When animals, including birds, are transported they must be handled with proper care and concern for their welfare and in accordance with all relevant legislation and DEFRA/Scottish Government Codes of Recommendation for the Welfare of Animals.

During the making up of loads, loading to vehicles, during transit and on unloading, the animals must be handled in conditions that minimise stress and avoid the likelihood of injury. In this regard care should be taken to:

- ensure that the operations are carried out by experienced staff in a relaxed manner.
- avoid the mixing of animals from different social groups.
- avoid the use of unnecessary physical force on the animals.
- ensure that correctly designed and maintained handling facilities are provided at the points of loading and unloading.
- ensure that the vehicles are adequately ventilated throughout the journey.
- ensure that any one journey does not exceed eight hours from start to finish including loading and unloading (excluding sea journeys between the Scottish mainland from remote Islands).

The journey time is defined as the time from loading the first animal/bird to unloading the last animal/bird in the consignment.

By derogations from these Standards chicks may be transported in a temperature controlled vehicle for no more than 24 hours.

Loading and unloading must be carried out with caution and without the use of any type of electrical stimulation to coerce the animals.

Vehicles used for transporting animals must be suitable for the purpose and be properly equipped and maintained in a clean and hygienic condition. Except where animals are transported in successive loads within the holding the vehicles must be cleaned and disinfected between loads.

It is the responsibility of the Member to ensure that the vehicles in which his/her livestock are to be transported are cleaned and disinfected and fit for the purpose.

Vehicles must be driven with care, avoiding high speeds, sudden starting or stopping or rapid cornering, in order to avoid damage or injury to the animals.

When animals have to wait for a period before being slaughtered, the following conditions must also be made available:

- for an anticipated waiting time of six hours or more bedding must be provided from the beginning and there must be sufficient space for the animals to lie down.
- for an anticipated waiting time of 12 hours or more they must in addition be provided with organic feed.

The use of any allopathic tranquilliser, prior to and during transport, is prohibited.

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3.7.2 **Special consideration must be given to the transport arrangements for cattle, sheep and pigs:**

Properly designed handling facilities should be provided on farms, and where races and hurdles are required for moving animals, they should be of a solid construction.

Driving boards should be used to move pigs in the required direction.

If it is likely that the animals will have to be fed during transit or during a holding period at an abattoir lairage, the producer should provide the requisite amount of organic feed.

Vehicles used for transporting animals should be properly equipped for the purpose and in particular:

- Gates must be used to partition animals from different social groups to ensure that they are kept apart during transport.
- When a vehicle is only partly full, gates should be used to restrict the movement of animals during transit.

Producers are reminded that only fit animals may be transported (unless under veterinary supervision) and they must be presented in a clean and rested condition. The cleanliness of animals may be improved by feeding hay for 12 hours prior to transport.

Organic and non-organic livestock must not be mixed during lairage and transportation.

3.7.3 **Special consideration must be given to the transport arrangements for poultry:**

During transit, each bird should have sufficient space to rest and stand up without restriction; they should be protected from undue fluctuations in temperature, humidity and air pressure and sheltered from extremes of weather.

Where there is a delay in unloading, vehicles should not be left unattended stationary for a lengthy period unless suitable facilities exist for providing ventilation.

Only fit birds may be transported, those which are unfit should be treated without delay or killed as quickly as possible using approved humane slaughter methods.

During loading, unloading and during the period while awaiting slaughter, the birds must be protected from the elements.

3.8 **Standards for Livestock Markets.**

3.8.1 These standards apply to livestock markets to be used for the following purposes only:

- the sale of organic store cattle and sheep
- the sale of organic breeding cattle and sheep
- collection centres for store cattle and sheep being moved out of a region to a finisher
- collection centres for finished cattle and sheep being moved out of a region to an abattoir.

Only market premises that are certified by an approved organic certification body may be used for the sale or collection of organic livestock by SOPA producers.

3.8.2 The first choice for movement of animals should be directly between farms, or transported direct from the farm to an abattoir so as to maximise herd or flock bio-security and minimise stress to the animals. However, SOPA acknowledges that there is an identified need in the Scottish organic sector for a proportion of stock to pass through livestock markets, and the following standards outline the requirements for maintaining organic certification status.

Producers involved in the purchase or sale of animals through livestock markets must pay careful attention to bio-security and animal welfare. All measures taken to meet this requirement must be

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detailed in the Animal Health Plan prior to any trading, consignment or collection of livestock. Any necessary amendments to the Animal Health Plan must be submitted to OF&G (Scotland) for approval in advance of using market premises.

Producers should use the nearest suitable market to the location of their organic unit in order to minimise the distance that animals are transported.

3.8.3 Markets must not be used for the purchase, sale or collection of the following classes or categories of livestock

- calves under the age of 6 months
- sheep or goats under the age of 12 weeks.
- pregnant sheep or goats
- cattle within 16 weeks of calving

Responsibilities of the producer or vendor

3.8.4 Any organic or in conversion breeding animal may attend a market sale no more than twice. Producers must clearly identify animals that have previously been traded through a market with organic status on the Livestock Transfer Document.

Any organic or in simultaneous conversion store animal may attend only one market sale in its life.

3.8.5 All organic livestock must be individually identified by a method that includes the holding number of the farm of origin.

3.8.6 All animals must be entered for the sale prior to the advertised closing date.

3.8.7 Only those animals described in the catalogue may be transported to a sale.

3.8.8 A copy of each of the following documents must accompany each individual or batch of animals entered for a sale or delivered to a collection centre:

The organic certificate for the producer's unit. (The certificate must be current and clearly refer to the category of livestock entered for the sale). If the Organic certificate has a 'trading schedule' this must also be included. (Animals not accompanied by this document will not be eligible for sale)

A completed Livestock Transfer Document (Animals not accompanied by a correctly completed document will not be eligible for sale).

A copy of each set of documents must be retained by the producer for at least three years.

3.8.9 All livestock must be healthy and show no signs of disease or infection. Particular attention must be paid to ensuring that feet are in good condition. Any feedback from the market or purchasers must be recorded in the complaints register (see SOPA Standard 1.13.1)

3.8.10 The use of bloom dips, sprays and powders to alter the appearance of animals is not permitted.

3.8.11 All SOPA Livestock Standards regarding the handling and transport of live animals must be adhered to.

3.8.12 Organic and non-organic stock must be kept separate at all times and should not come into contact with each other.

3.8.13 Should an animal or group of animals be unsold the vendor must remove the animals promptly from the market without delay and return them to the holding of origin

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Should an animal be sent to a sale or collection centre that will entail it being away from organic land for more than 24 hours before the sale or collection, then the vendor must ensure that food of organic status from a registered holding is provided and records kept for on-farm inspection.

Responsibilities of the Market

- 3.8.14 Auction premises must be certified by OF&G (Scotland) or another Defra approved organic certification body.

Livestock Auction Markets must be certified by the Quality Meat Scotland Assurance Scheme - Auction Markets or Red Tractor Assurance Livestock Market & Collection Centre Scheme.

- 3.8.15 The sale of organic or 'in conversion' livestock may only take place as part of a catalogue sale.

The date of each sale and the closing date for entries must be notified in advance to the organic control body as detailed in SOPA Standard 3.8.20 below.

- 3.8.16 Organic livestock must not be mixed with non-organic livestock at the market. Handling and sale of organic and non-organic must be in a separate place, at a separate time, or all organic lots sold through the ring first. There must be no mixing of organic and non-organic animals at the sale. A plan detailing these arrangements must be approved by OF&G (Scotland) prior to advertising of the sale.

- 3.8.17 There must be a nominated member of staff responsible for the implementation of these standards who must be familiar with organic principles. The name of the responsible member of staff must be notified to OF&G (Scotland).

All market staff involved in the sale or handling of organic livestock should have an understanding of these standards.

- 3.8.18 Where a market operates as a collection centre the following requirements must be observed:

the facilities used by the organic livestock must be physically and operationally separate from those used for non-organic livestock. Market staff must not handle both non-organic and organic livestock without thoroughly disinfecting their outer garments.

All facilities including gangways and loading ramps must be thoroughly clean prior to use by organic livestock.

Loading and unloading bays, corridors and pens used by organic animals must be clearly marked while organic livestock are present on the market premises.

The organic status of the stock must be clearly displayed at the pens.

- 3.8.19 The collection period or sale order must be arranged to minimise time stock spend in the market.

Standards for store and breeding stock to be auctioned

- 3.8.20 Livestock entered in the sale must be catalogued (or equivalent) in advance with their organic status clearly stated (organic, approved simultaneous converting meat animals, converted organic breeding stock). The closing date for the sale must be agreed with OF&G (Scotland) in advance of the sale being organised. OF&G (Scotland) will require at least three clear working days so as to allow sufficient time for the status of all livestock to be verified prior to publication of the catalogue.

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- 3.8.21 Livestock should be sold in pens, however, if this is not practical, organic stock may go through the sale ring provided that all animals are handled calmly and systematically in an unhurried manner by competent and experienced staff.

The use of sticks or goads must be kept to a minimum and these should never be used to coerce animals to pass obstacles or obstruction. Such obstacles must not be present in the market.

- 3.8.22 Market staff must supply the purchaser with a copy all relevant certificates and transfer documentation for the livestock purchased.

Copies of all documents and a full record of all sales and purchases must be retained for three years. These records must be available for inspection on demand.

- 3.8.23 The Market must have in place a complaints system to record any complaints or disputes arising from the sale or handling of organic livestock. The system must record the nature of all complaints received and record how these are evaluated and what action (if any) is taken.

Lairage and transport of stock away from markets

- 3.8.24 Livestock must be removed from the market by the purchaser (or in the case of the stock being unsold, the vendor) without delay on the day of sale. Failure to comply with this requirement will result in the livestock losing its organic status.

In the event of unforeseen circumstances, the purchaser must provide organic food or pasture. In any case, stock must be removed from the market within 20 hours of the end of the sale. The market must notify all failures to comply with this standard to OF&G (Scotland) in writing.

- 3.8.25 Lairage facilities must be clean prior to use, and bedded with fresh bedding.

- 3.8.26 Details of intended journey and destination must be recorded by market officials.

- 3.8.27 Standards for the Quality Meat Scotland Assurance Scheme - Auction Markets or Red Tractor Assurance Livestock Market & Collection Centre Scheme must be obeyed and whenever possible organic livestock must be transported separately from non-organic stock.

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SOPA Deer Standards

In conjunction with these deer standards you must read:

- Section 1. Organic principals and methods
Conversion and planning
The Certification process
Labelling
- Section 2. Production Standards on Crop production
Grassland and forage
- Section 3. Organic livestock principals
General management of livestock enterprises
Livestock feed
Animal Health and veterinary treatments
- Section 4. Organic soil management
Manure management

3.9 Origin of deer and Conversion of deer enterprise.

3.9.1 Only commercial domesticated deer can be certified:

- Red deer
- Fallow deer
- Park deer

Domesticated deer are those that are farm bred and reared for at least four generations. They MUST not be wild deer.

3.9.2 Conversion:

For offspring to be eligible for organic status there are two options for conversion; a Standard Conversion where the land converts first and the livestock converts immediately afterwards or a simultaneous conversion where the land and livestock convert at the same time (See Section 1.3.6).

Standard Conversion – the land goes through organic conversion for 2 years and then the deer convert. The deer must be mated on organic land for their offspring to gain organic status.

Simultaneous Conversion – The land and deer convert at the same time over a period of 2 years, at the end of the 2 years any offspring conceived after the start date will now have gained organic status, see section 3.2.10.

3.9.3 Replacement stock:

Where appropriate, organic deer production should seek to establish a closed herd see section 3.2.2. If this is not possible the policy for replacements are detailed in Section 3.2.4-6.

Males for breeding may be brought in from non-organic farms provided that the animals are subsequently reared and always fed according to these standards.

3.9.4 Health and Welfare:

Animals must be maintained in good health by the adoption of effective management practices, including high standards for animal welfare, appropriate diets and good stockmanship.

The management of all aspects of animal health and welfare must be described and monitored through the development of an Animal Health Plan. The Health Plan must address all the areas in Section 3.6.2 and must be drawn up by the farmer, who should consult with his veterinary surgeon. The Health Plan must then be approved by OF&G (Scotland).

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3.9.5 Grazing Management of organic deer:

The management of organic livestock must be designed and undertaken to maximise animal welfare.

Deer must have access to extensive grazing all year round. In Scottish conditions, suitable housing should be provided to give shelter from winter weather and protect land from poaching and to ensure livestock have access to sufficient feed, see section 3.3.1. The stocking density must be appropriate for the herd behaviour, and must not exceed 5 hinds & followers per hectare.

Grazing management should be integrated with the cropping plan and address parasite control, sward management, provisions for rotational grazing, prevention of over stocking and over manuring and describe reseeding plans where appropriate. For the control of surplus grazing see section 2.4.3.

Organic livestock must not graze non-organic land.

3.9.6 Deer Fencing:

Perimeter fencing should be at least 1.8m high and paths, tracks and gateways should be at least 3.5m wide to allow deer to move freely and stress free. There must not be any jump in points in any areas of the fencing.

During the rutting season stags must not be kept in adjacent fields.

3.9.7 Housing of Deer:

Housing for livestock is not mandatory in areas where appropriate climatic conditions enable suitable native breeds of animals to live outdoors.

Animal housing must maximise the welfare of livestock and protect their health. The stocking density in buildings must provide for the comfort and well being of the animals, depending on the species, breed and age.

Under the following conditions deer may be housed;
in severe weather, sick or injured deer, calves during the winter period, post weaning and deer in the final fattening stage for up to 2 weeks.

Provisions must be made to house groups of similar ages, individual sick animals, bullied deer and for rearing orphaned calves if needed.

Animal housing must provide a clean, safe environment and be kept free from pests See section 3.4.2.

3.9.8 Feeding of Deer:

The natural health and vitality of farm livestock is based on sound nutrition from before conception and throughout life. In principal, livestock should be fed only on organic feed. Where practical the organic production unit should be able to supply all the nutritional requirements for the deer enterprise. Livestock must be fed 100% organically grown feed of good quality See section 3.5.1 - 3.5.3.

Accurate and comprehensive records must be kept of all feedstuffs, including the constituent ingredients of the feed.

In conversion feeds may be used to feed organic animals see section 3.5.4 – 3.5.5.

Organic livestock feed may be supplemented by certain major minerals, trace elements and vitamins see section 3.5.9.

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The feeding of youngstock must be based on natural, preferably suckled maternal milk. All mammals must be fed on natural milk for a minimal period, depending on the species concerned. Ideally deer should be allowed to wean naturally, and must not be weaned prior to 12 weeks of age. SOPA recognises that in certain circumstances that maternal milk may not be immediately available i.e. for an orphaned calf, organic milk replacer must be used.

3.9.9 Handling and transportation of live deer:

The principals for the welfare of organic livestock must be applied to handling and transportation.

When handling deer you should if possible use; low level lighting in order to reduce stress; make sure they are in sight of other deer and handlers and keep separation of individuals to a minimum. You must ensure that your handling facilities are good enough to enable your stock to remain safe and well. You must provide barriers of at least 2 meters in height.

Goads are not permitted when handling or transporting deer.

The transport of live deer should be kept to a minimum see section 3.7.1.

The following must not be transported to an abattoir;

- Deer under 5 months of age
- Hinds more than 5 months in calf
- Hinds with calves at foot
- Males over 24 months during the rut
- Sick or injured deer

3.9.10 Slaughtering of deer:

All the terms of the Welfare of Animals (Slaughter and Killing) Regulations 1995 must be met during the slaughtering and killing of deer. All efforts must be made to keep the deer as stress free as possible by ensuring that the handling prior to slaughter is kept to a minimum and by using thoroughly trained and competent stockman.

The following methods of slaughter and killing are the only permitted methods in these standards;

1) You should where possible shoot deer in appropriate sized fields, and from a suitable distance, unless there are exceptional circumstances. The deer must be bled out straight after shooting. The shot should be in the head, neck or ideally the chest to achieve rapid death using a trained and experienced marksman. The rifle should be a high velocity rifle and the ammunition should meet the legal requirements of the Deer Act 1991. If the kill is not clean, the wounded deer must be killed straight away.

2) If you have your own licensed farm game handling and processing facility you may use a captive bullet. Ensure that the deer are restrained in a drop floor crush, hydraulic crush or suitable pen. The 'stun to stick' interval should be no greater than 1 minute, and after incision of the blood vessels no procedures are permitted until the all the brain stem reflexes have ceased.

3) You may use a specialised licensed abattoir where the staff is experienced with the slaughtering and killing of deer, and the abattoir has the suitable facilities for handling deer.

3.10 Standards for Organic Wool

3.10.1 For wool to be sold as organic the following condition must apply:

- o be managed to organic standards for at least 12 months before shearing, (if you purchase non-organic gimmers/ewe hoggs as part of your breeding policy this wool MUST be clearly separated from the organic wool)
- o has had a period of 3 months (or 3x the legal withdrawal period, whichever is the greater) between the last treatment with an external veterinary product and shearing, e.g. vetrazin, crovect, spot on.

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- If a natural product or homeopathy product is used as an external product please check with the OF&G (Scotland) office regarding withdrawal dates.
- Be listed on your organic certificate

This information will be checked at your inspection.

The Wool Marketing Board will supply all members selling organic wool with 'green' organic wool sacks, but wool must be on your current certificate.

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Section 4 - Soil, soil nutrients and care of the environment

4.1 Organic soil management

4.1.1 Good husbandry of the soil underpins organic production:

The maintenance and development of a healthy, living soil is required for the wellbeing and productivity of the organic unit. Even in extensive Scottish upland and mountain farms and those lowland farms with only permanent pasture the fitness and vitality of livestock is closely linked to the capacity of the soil to provide essential nutrients to the plants, which provide their feed. The ability of a low ground organic unit to support crop production in the long term depends on the farmer developing an intimate understanding of the properties and requirements of the soil and ensuring that these are satisfied. Care and management of soil in accordance with the principles and rules of these Standards is central to organic production. The health of the soil will be reflected in the health of livestock, crops and ultimately the success of the organic farming unit.

The soil must be managed with the aim of developing and protecting an optimum soil structure, biological activity and fertility. Soil management must ensure the following:

- a regular input of organic residues in the form of organic manures and compost and plant remains to maintain the level of humus, biological activity and plant nutrients.
- a level of microbial activity sufficient to initiate the decay of organic materials and breakdown of non-soluble minerals into simple nutrient salts capable of being absorbed by the plant roots.
- conditions conducive to the continual activity of soil fauna and other soil-stabilising agents and the ensuing improvement of the soil structure by their action.

Materials that may pollute the soil or damage soil life e.g. heavy metals, must be avoided and appropriate steps must be taken to limit their application.

4.1.2 Soil husbandry should aim to conserve and protect the farms soil resources:

Where practicable the protection of soil may be achieved through maintenance of a protective covering of vegetation, for example green manure or growing crop, to protect surface living organisms and soil structure from damage by exposure to dry conditions, heavy rain or strong winds. In Scotland where spring cropping predominates, special care should be taken to preserve soil and soil nutrients over the winter period (e.g. stubble residues left in situ). Compaction and erosion should be avoided.

Appropriate cultivations required for crop production should aim to achieve:

- deep loosening of the sub-soil to break plough or compaction pans, for example sub-soiling, where appropriate.
- minimal disruption of the soil profile, for example shallow ploughing or no-till systems.
- timeliness of cultivations to ensure appropriate tilth production and to avoid damage to existing soil structure.
- minimal risk of soil erosion, for example caused by direction of cultivation.

4.1.3 Soil nutrient status and pH must be monitored to support cropping and grassland production:

The monitoring of organic matter levels pH, available plant nutrients and nutrient reserves in the soil by means of regular soil analysis and nutrient budgeting is required by these Standards (see 1.4.3). This analysis should be used to support the strategic management of soil fertility through the effective use of manures, plant residues, composts, permitted mineral fertilisers and supplementary nutrients in accordance with the requirements of these Standards.

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Soil nutrient management and budgeting must not be founded solely on current crop or current season needs, but must be based on the identified long-term or rotational requirements.

Where producers rent in or rent out land for specialist production, in particular potato and carrots, both parties must take proper account of the soil fertility and nutrient status of the land and this cropping must be compatible with an approved rotation for the unit that the land belongs to. Members of the SOPA Organic Scheme must notify OF&G (Scotland) of any agreement (formal or informal) to take land from another registered unit or to allow registered land to be used by another registered producer, prior to the commencement of any land occupation. A party renting organic land for organic crop production must also be a member of the SOPA Organic Scheme, or certified by another CB. Details of the proposed cropping and day to day responsibility for management and record keeping must be declared in advance to OF&G (Scotland). One of the parties must hold all records relevant to the production of the crop to facilitate an inspection. A certificate for the produce will normally be issued to the producer who has responsibility for the management of the crop.

4.1.4 **Arable and horticultural rotations must be balanced to protect the soil:**

In accordance with the principles and rules of these Standards organic cropping must take place in the context of a sound rotation that meets the requirements of section 2.2.2 of these Standards.

4.1.5 **Home produced manures should be the basis of soil fertility** - They can be supplemented by certain other manures and fertilisers only under closely defined circumstances:

The effective recycling to the soil of manures and plant wastes produced on the organic unit is essential for optimising nutrient cycles and preventing nutrient loss. Sufficient quantities of biodegradable material of microbial, plant or animal origin should be returned to the soil to increase or at least maintain its fertility and the biological activity within it. In principle such materials produced on organic units, in conjunction with a sound OF&G (Scotland) approved rotation including legumes and where appropriate green manures and grazing crops in the field, should form the basis of the fertilisation programme

The use of all manures, composts plant residues and soil fertility inputs must be in accordance with the detailed rules specified below in these Standards.

4.2 Manures and plant wastes

4.2.1 **Effective rotations and on farm nutrient recycling are the key to organic soil fertility:**

Careful collection, management and application of manures and residues produced on the organic unit is a requirement of these Standards

The use of any manure or soil fertility input should minimise nutrient losses and maximise the benefit to soil and crops: This is best achieved by using stabilised materials such as composted manures that are not contaminated with damaging substances e.g., viable weed seeds or heavy metals.

4.2.2 **All manures should be stabilised by composting or stacking:**

The SOPA standards recommend the composting of all manures to be applied to the organic unit. The aerobic fermentation of manures and plant wastes can be achieved by stacking and actively turning the heap.

For a composted material, stabilisation and sanitisation (i.e. killing of seeds, pathogenic organisms and degradation of chemical residues) you should

- Store the manure and plant wastes, ideally covered (under plastic) and on a hard surface where you can collect run off
- Monitor where you can collect run off
- Monitor the temperature throughout the composting process
- Analyse the compost to ensure human pathogens have been removed
- Record 3 day's continuous temperature exceeding 55 degrees centigrade

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- Allow it to mature for three months prior to application.

Compost activators, microbial and plant extracts and Biodynamic preparations may also be used without restriction.

Where composting is not possible organic manures should be stacked and applied only when they are well rotted.

4.2.3 Permitted Organic manures, plant waste and compost

To optimise nutrient cycles and prevent nutrient loss you must where possible return manure and plant wastes to the soil. SOPA standards permit the following:

- Organically produced straw, farmyard manure (FYM) and poultry manure, preferably after composting.
- Organically produced slurry, urine and dirty water, preferably after aerating.
- Plant waste materials and by products from organic food processing, preferable after treating
- Sawdust, shavings and bark from untreated timber

Manure from other organic farms, plant wastes and by-products from organic food processing may be used: Manure and residues (preferably composted – see section 4.2.2) from other organic units may be used to make up any identified soil deficits to the extent that the quantities involved do not exceed 170kgN/ha of total agricultural area of the organic unit receiving the manure as defined in 4.3.3 of these Standards.

The transfer of manure between organic units should generally be on the basis of exchange e.g. for animal feed or bedding, so as to ensure that the nutrient budget for each unit is as balanced as possible.

Plant waste materials and by products from organic food processing industries may be applied to organic land following appropriate treatment.

4.2.4 Non organic manures/plant wastes and composts and digestate may be used only in restricted circumstances:

In accordance with the principles of these Standards brought-in manures or plant wastes from non-organic sources must not form the basis of a manurial programme, but should be adjuncts, used exceptionally where other means of maintaining soil health and fertility are inadequate.

SOPA acknowledges that some production units, such as those specialising in small scale intensive horticultural systems or fruit production, may not readily have access to sufficient organic manures or residues and OF&G (Scotland) will take account of the individual circumstances of such units when considering their use of non-organic manure (see section 2.2.2 of these Standards).

The use of all plant wastes and animal manures from non-organic sources must be approved in advance in writing by OF&G (Scotland). The need for their application must be demonstrated and approved by OF&G (Scotland) and they must receive the treatments specified in these Standards before use. A SOPA Derogation form for the application of non-organic manure/compost MUST be completed, submitted and approved prior to non-organic material arriving on farm.

Details of the non-organic manure must be provided to OF&G (Scotland);

- Details of its source and the animal species and husbandry system from which it came.
- Submit a GM free declaration (see SOPA Record Sheet 17). The GM free status of all manures and plant wastes must also be demonstrated to the satisfaction of OF&G (Scotland). SOPA Organic Standards require that animals must not have received any GM feeds for three months prior to producing any manure to be used on an organic farm.
- Submit justification for its use, normally a soil analysis for the fields you wish to apply the non-organic manure

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Details of the non-organic compost must be provided to OF&G (Scotland);

- Details of the supplier
- A list of all the ingredients
- Heavy metal analysis
- A GM free declaration (see SOPA Record Sheet 17)
- Submit justification on why you want to use it, e.g. a soil analysis for the fields you wish to apply the non-organic manure
- PAS100 certificate – this specifies the minimum requirements for the process of composting, the selection of input materials and the quality of the composted materials.
This does not include requirements for organic production.

For digestate to be permitted it must only contain the following products;

- Farm yard manure and slurries from organic systems;
- Farm yard manure and slurries from non-organic systems as defined in section 4.2.5 of the SOPA standards;
- Other plant-based products as defined in section 4.2.5 of the SOPA standards (including energy crops);
- Dairy products from organic and non-organic production.

Details of the digestate must be provided to OF&G (Scotland);

- Completed copy of Derogation Form 4 (RD714) Non-organic manure and compost;
- PAS 110 certification;
- If not PAS 110, a copy of the analysis for the digestate (PTE levels must be equivalent to PAS110 requirements);
- List of source ingredients;
- Justification for use of digestate;
- Non-GMO of all inputs.

4.2.5 Only certain manures may be imported from non-organic sources:

The following detailed requirements for the origin of any manure to be imported onto the organic unit (subject to the requirements of 4.2.4 above) must be observed:

Permitted for use by SOPA Standards.

Non-Organic Poultry manure

Poultry manure and deep litter from the following non-organic systems, after being properly composted for six months or stacked for twelve months:

- egg producing (defined by EEC Regulation No. 1274/91):
 - free range (maximum 1,000 birds/ha)
 - semi-intensive (maximum 4,000 birds/ha).
 - deep litter (maximum seven birds/m²).
 - deep litter pullet rearing systems (max housing density of birds 30kg/m²).
- meat producing (defined by EEC Regulation No. 1538/91):
 - free Range.
 - traditional free range.
 - extensive indoor barn reared (maximum housing density of mature birds - 12 birds or 30kg/m²).

Other non-organic manures, plant wastes and composts

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- Straw, FYM and stable manure from non-organic sources – after being properly composted for three months or stacked for six months
- Manures from non-organic straw-based pig production systems, after being properly composted for six months or stacked for twelve months.
- Plant wastes and by-products, including green waste composts
- By-products from non-organic food processing industries, after being composted for three months or stacked for six months.
- Mushroom composts made from non-organic animal manures conforming to this section and composted for three months or stacked for six months.
- Worm composts made from non-organic animal manures conforming to this section.
- Animal slurry from non-organic sources conforming to this section or from other extensive systems subject to prior approval by OF&G (Scotland).

Composts from household waste – only source separated and produced in a closed and monitored collection system, after being composted for three months or stacked for six months and conforming to the following maximum concentrations in mg/kg of dry matter:

- cadmium 0.7
- copper 70
- nickel 25
- lead 45
- zinc 200
- mercury 0.4
- chromium (total) 70
- chromium (VI) 0 (limit of determination)

Care must be taken to ensure that this compost does not become a source of contamination, for example heavy metals, plastic, pesticide residues and GM derivatives. If the product is not licensed by a DEFRA Approved Organic Control Body, full details of the product, including all the above, must be supplied to OF&G (Scotland).

Prohibited by SOPA Standards

Sewage sludge, effluents and sludge based composts.

Peat as a soil conditioner.

The use of animal residues and manures (other than processed animal products from slaughterhouses and the fish industries) from livestock systems that do not comply with this section. These include:

- poultry battery systems.
- Table bird units with stocking rates over 25kg/m².
- indoor tethered sow breeding units.
- other systems where stock are not freely allowed to turn through 360 degrees, where they are permanently in the dark, or are kept without bedding.
- Animal By Product compost (ABP)

4.3 Manure management and application

4.3.1 Manure Management

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Manures must be managed and handled so that they maximise benefit to the organic unit and minimise any risk to consumers and the environment: It is a requirement of these Standards that the handling storage and application of any manure or compost must comply with all relevant codes of good agricultural practice (especially the PEPFAA Code and NVZ rules where appropriate) and any relevant statutory requirements. Failure to meet the requirements of these documents will be regarded as a non-compliance with these Standards.

The production of a farm waste management plan where this is required by the PEPFAA Code (or equivalent DEFRA COGAP where appropriate) is of particular importance in assisting in meeting the requirements of these Standards and demonstrating good management to those charged with protecting environmental resources e.g. SEPA. SOPA Member Services can provide assistance in drawing up a plan. The Plan can also assist in identifying the most effective use of manures for sustaining soil fertility.

4.3.2 Manure/compost treatments and harvest intervals

Where manures are used in horticultural crops (excluding potatoes) special precautions must be observed. The following table details recommended time periods for treatments and time periods between application and harvesting.

Material	Non-organic origin		Organic origin	
	Treatment	Harvest interval	Treatment	Harvest interval
Slurry	none	1 year	none	1 year
Fresh manure	none	Prohibited	none	6 months
Stacked manure	6 or 12 months	3 months	3 months	3 months
Composted manure	3 or 6 months	3 months	2 months	2 months

Note: see section 4.2 for details of treatment

4.3.3 The total quantity of manure applied to the organic unit must be within the limit specified in these Standards:

The total amount of manure, as defined in directive 91/676/EEC, applied on the registered unit may not exceed 170kg of nitrogen (N) per year per hectare of agricultural area used. Where necessary the total stocking density must be reduced to avoid exceeding this limit

In these Standards manure is defined as animal excreta (urine and faeces) together with any bedding that may be mixed with it. Included is manure deposited directly onto fields by animals and also brought-in dried and/or pelleted manure; excluded are fertilisers, leguminous crops and other supplementary nutrients.

The 170kg N/ha/yr should be calculated over the whole area of the holding or linked units used for agriculture – it is not the maximum that can be applied to any one field. A linked unit is a unit that has a physical or financial arrangement with the main organic unit. This could also exist through a third party.

Where the calculation involves, for example, shorter periods than one year and/or stock of a different body weight, the values in the following table above should be adjusted accordingly.

The appropriate number of livestock equivalent to 170kg of nitrogen per hectare, per year is defined as in SOPA Standard 3.3.2.

Organic holdings may establish co-operation with other organic holdings and enterprises with the intention of spreading surplus manure from organic production. The maximum limit of 170kg of nitrogen from manure per year per hectare of agricultural area used will be calculated on the basis of all the organic production units involved in such co-operation.

Co-operating farms must be organic farms – manure cannot be spread onto non-organic land. 'Co-operation' is defined as some form of ongoing relationship (more than just a one-off transaction). The ideal would be a reciprocal arrangement whereby manure was exchanged for straw and/or feed see 4.2.2 above). The OF&G (Scotland) approved Conversion Plan should detail how the farm will comply with this Standard.

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4.4 Mineral fertilisers and supplementary nutrients

4.4.1

Certain mineral fertilisers may be used in closely defined circumstances. In accordance with the principles of these Standards mineral fertilisers are regarded as a supplement to, and not as replacement for, nutrient recycling within the farm and may be applied only to the extent that adequate nutrition of the crop is not possible by the methods given in sections 4.1 of these Standards.

Permitted and prohibited mineral fertilisers and supplementary nutrients	
The following materials may be used subject to observance of the specified restrictions:	
Name	Permission needed
Products or by-products of animal origin as below: Blood, hoof, horn, bone and meat meals. Feather, hair and 'chiquette' meal Wool and hair Dairy products Fur ⁽¹⁾ Hydrolised proteins ⁽²⁾ Fish meal ⁽³⁾	Prior written approval from OF&G (Scotland) (1) Maximum concentration in mg/kg of dry matter of chromium (VI): not detectable (2) Not to be applied to the edible parts of the crop (3) in protected cropping and propagating composts only; and on perennial crops (fish meal or fish emulsion should be either from sustainable sources or derived as a by-product of wild-caught fish for human consumption)
Seaweeds and seaweed products	Prior written approval from OF&G (Scotland) As far as directly obtained by: (i) Physical processes including dehydration, freezing and grinding; (i) Extraction with a water or aqueous acid and/or alkaline solution; (ii) Fermentation
Hydrolysed proteins of plant origin (Article 3 (4) Annex IA 2.4)	Prior written approval from OF&G (Scotland)
Appropriate preparations of micro-organisms	Not genetically modified Approved for use in agriculture May be used to improve the overall condition of the soil or the availability of nutrients in the soil or in the crops
Soft ground rock phosphate	Product as specified in point 7 of Annex IA.2. to Regulation (EC) No 2003/2003 of the European Parliament and of the Council relating to fertilisers, 7 Cadmium content less than or equal to 90 mg/kg of P ₂ O ₅
Calcium-aluminium phosphate	Product as specified in point 6 of Annex IA.2. of Regulation 2003/2003, Cadmium content less than or equal to 90 mg/kg of P ₂ O ₅ Use limited to basic soils (pH > 7,5)
Basic slag	Prior written approval from OF&G (Scotland)

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	Any product must be listed in point 1 of Annex IA.2. of Regulation 2003/2003
Crude potassium salt or kainite	<p>Prior written approval from OF&G (Scotland)</p> <p>Following soil analysis and supported by a written FACTS qualified recommendation</p> <p>Products as specified in point 1 of Annex IA.3. of Regulation 2003/2003</p>
Potassium sulphate, possibly containing magnesium salt	<p>Prior written approval from OF&G (Scotland)</p> <p>Only where exchangeable K levels are defined as 'low' and clay content is less than 20%, following soil analysis.</p> <p>Use must be supported by a FACTS qualified recommendation.</p> <p>Product obtained from crude potassium salt by a physical extraction process,</p>
Stillage and stillage extract e.g. Pot Ale Syrup	<p>Prior written approval from OF&G (Scotland)</p> <p>Ammonium stillage excluded</p>
Wood ash	From wood not chemically treated after felling
Products and by-products of plant origin	Examples: oilseed cake meal, cocoa husks, malt culms
Magnesium and calcium carbonate	<p>Only of natural origin</p> <p>e.g. magnesian chalk, ground magnesium, limestone</p>
Calcium sulphate (gypsum)	<p>Products as specified in point 1 of Annex ID. of Regulation 2003/2003</p> <p>Only of natural origin</p>
Calcium carbonate (chalk, marl, ground limestone, Breton ameliorant, (maerl), phosphate chalk)	Only of natural origin
Magnesium sulphate (kieserite)	Only of natural origin
Calcium chloride	<p>Prior written approval from OF&G (Scotland)</p> <p>Foliar treatment of apples trees, after identification of calcium deficiency</p>
Industrial lime from sugar production	<p>Prior written approval from OF&G (Scotland)</p> <p>By product of sugar production from sugar beet</p>
Industrial lime from vacuum salt production	<p>Prior written approval from OF&G (Scotland)</p> <p>By-product of the vacuum salt production from brine found in mountains</p>
Elemental sulphur	<p>Prior written approval from OF&G (Scotland)</p> <p>Products as specified in Annex ID.3 of Regulation 2003/2003</p>
Trace elements	<p>Prior written approval from OF&G (Scotland)</p> <p>Following soil analysis or other evidence of deficiency e.g. FACTS or BASIS qualified advice.</p>

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	Inorganic micronutrients listed in part E of Annex I to Regulation 2003/2003
Sodium chloride	Only mined salt
Stone meal: including Adularia shale, ground basalt magnesium oxide (talc), diatomaceous earth:	
Leonardite (Raw organic sediment rich in humic acid)	Prior written approval from OF&G (Scotland) Only if obtained as a by-product of mining activities
Humic and fulvic acids	Only if obtained by inorganic salts/solutions excluding ammonium salts: or Obtained from drinking water purification
Xylite	Only if obtained as a by-product of mining activities (e.g. by-product of brown coal mining)
Chitin (polysaccharide obtained from the shell of crustaceans)	Prior written approval from OF&G (Scotland) Only if obtained from sustainable fisheries, as defined in Article 3(e) of Council Regulation (EC) No 2371/2002 or organic aquaculture
Organic rich sediment from freshwater bodies formed under exclusion of oxygen (e.g. sapropel)	Prior written approval from OF&G (Scotland) Only organic sediments that are by-products of freshwater body management or extracted from former freshwater areas When applicable, extraction should be done in a way to cause minimal impact on the aquatic system Only sediments derived from sources free from contaminations of pesticides, persistent organic pollutants and petrol like substances Maximum concentrations in mg/kg of dry matter: cadmium: 0,7; copper: 70; nickel: 25; lead: 45; zinc: 200; mercury: 0,4; chromium (total): 70; chromium (VI): not detectable
Biochar – pyrolysis product made from a wide variety of organic materials of plant origin and applied as a soil conditioner	Only from plant materials, untreated or treated with products included in these standards. Maximum value of 4 mg polycyclic aromatic hydrocarbons (PAHs) per kg dry matter (DM). This value shall be reviewed every second year, taking into account the risk of accumulation due to multiple applications

For materials or products not specifically mentioned above Producers are cautioned to seek further information from OF&G (Scotland).

4.4.1 Prohibited materials

The following materials are not permitted by SOPA Standards;

- Fresh Blood
- Urea
- Slaked lime & quick lime
- Plant growth regulators

4.4.2 Storage of approved mineral fertilisers and supplementary nutrients

Only materials approved by these Standards for use on the unit may be stored on the unit.

Approved fertilisers must be stored on a hard surface, where spillage can be contained rather than

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carried by run-off water into drains or burns. Any approved liquid fertiliser should be stored in secure, well supported tanks or bowzers.

Storage on the unit of input products other than those compatible with these Standards is not permitted.

These products must be stored in a supervised location and they must be entered in the farm register. The store must be clearly marked on the farm plan. Units, including the livestock buildings and storage areas, on a holding registered as in-conversion, organic or non-organic must be clearly identified as such on the Farm Plan. All farm personnel must be made aware of this so as to avoid the incorrect use of prohibited materials on in-conversion or organic land.

4.5 Organic Production and Care of the Environment

4.5.1 Observance of organic principles can benefit the environment: By observing the principles and rules contained in these Standards SOPA organic farmers use only methods that produce optimum quantities of food of good nutritional quality while avoiding the use of agro-chemical inputs and minimising damage to the environment and wildlife.

The principles include:

- Working with natural systems rather than seeking to dominate them;
- The encouragement of biological cycles involving micro-organisms, soil flora and fauna, plants and animals;
- The maintenance or development of valuable existing landscape features and adequate habitats for the production of wildlife with particular regard to endangered species;
- Careful attention to animal welfare considerations;
- The avoidance of pollution;
- Consideration for the wider social and ecological impact of the farming system.

When applied these principles result in production practices whose key characteristics are:

- The adoption of sound rotations;
- The extensive and rational use of animal manure and vegetable wastes;
- The use of appropriate inputs;
- Appropriate cultivation, weed and pest control techniques; and
- The observance of conservation principles.

Concern for the environment should manifest itself in willingness to consult appropriate conservation bodies and in high standards of conservation management throughout the organic holding.

The specific practices needed to respect the conservation principles of organic production will depend upon the individual circumstances on each farm. However, the following principles should be followed where applicable:

- Natural features such as streams, ponds, wetlands, heathland and species-rich grassland should be retained as far as possible and should be managed to protect and enhance the habitat features

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- Grazing management of natural (or semi natural) habitats such as grassland, heath, moorland, heather and bog and rushy upland, should aim to prevent poaching of the soil and over grazing. Localised heavy stocking particularly in the nesting season should be avoided;
- Hedges and walls should be retained and managed using traditional methods and materials as far as possible;
- In hedge and ditch maintenance, the nesting season and wildlife requirements for winter feeding or shelter should be taken into account. Hedge trimming and ditch cleaning should not take place between 1 March and 31 August. Where practicable, the maintenance of hedges should result in hedges at diverse stages of growth;
- If it is considered that there are reasonable grounds for alteration to hedges or to field boundaries these should first be discussed with a Conservation Advisor. If alteration does prove to be necessary, consideration should be given to the need for compensatory environmental work;
- The retention and management of trees in accordance with local custom and woodland practice is essential. Where re-planting is to take place, indigenous varieties of trees and shrubs should be given preference. Where practicable, natural re-generation and coppicing of appropriate species should be practiced. Hedge and Tree planting on organic land should incorporate use of turving, mounding or mulching using straw, composted material or mulch mats and not employ herbicide spot sprays.
- Clear felling should be restricted so as to retain a diversity of age classes and habitat within the woodland areas of the holding;
- Care should be taken in the spreading of manures and slurry. The application of manure within 10 meters of ditches and watercourses and within 50 meters of wells and boreholes should be avoided. The spreading of manure or slurry on frozen ground or on saturated ground should be avoided, so as to prevent excessive run off;
- The land management should seek to preserve features of archaeological or historical value or interest avoiding, for example, the leveling of ridge and furrow, and the cultivation of monuments or earth works;
- New buildings should be designed and located to have minimum impact on the landscape;
- Existing rights of access should be maintained.