









Welfare Code Pigs

November 2004

Contents

Recommendations for the Welfare of Pigs	iii
AN INTRODUCTION BY THE MINISTER	iii
Preface	v
Introduction	1
Section 1 - Recommendations for all pigs	2
Stockmanship	2
General	2
Inspection	3
Handling	4
Transport off- farm	5
Marking	5
Health	6
General	6
Biosecurity	7
Condition Scoring	8
Lameness	8
External Parasites	9
Internal Parasites	9
Equipment for Vaccination and Treatment	10
Notifiable Diseases	10
Sick and Injured Animals	10
Record Keeping	12
Accommodation	12
General	12
Floors	13
Ventilation and Temperature	13
Lighting and Noise Levels	15
Automated and Mechanical Equipment	15
Fire and Other Emergency Precautions	
Feed, water and other substances	16
Management	18
General	18
Environmental Enrichment	19

Castration	19
Tail Docking	19
Teeth Clipping/Grinding	21
Natural Service	21
Artificial Insemination, Vasectomy and Electro-ejaculation	21
Section 2 – Specific recommendations	22
Farrowing sows and piglets	22
Weaners and rearing pigs	23
Dry sows and gilts	24
Boars	25
Pigs kept in outdoor husbandry systems	26
General	26
Biosecurity	26
Accommodation	27
Feed and water	27
Fences	28
Farrowing sows and piglets	28
Nose ringing	29
APPENDIX	30
Publications related to pig welfare available from DFFR	

Recommendations for the Welfare of Pigs

AN INTRODUCTION BY THE MINISTER

The Department of Agriculture Fisheries and Forestry is introducing a new Welfare Code for pigs, based on the Five Freedoms. The Code has been produced after consultation with all interested organisations, and will assist in the production of quality livestock under farm assured schemes.

The Five Freedoms were developed by the Farm Animal Welfare Council. They form the foundation for assessing animal welfare within the agriculture industry and help to apply standards to safeguard animal welfare.

The Code, which was laid before Tynwald on the 18th January 2005, embodies the latest scientific advice and the best current husbandry practices and takes account of the Five Freedoms.

The **Five Freedoms** are –

1. Freedom from hunger and thirst

By ready access to fresh water and a diet to maintain full health and vigour;

2. Freedom from discomfort

By providing an appropriate environment including shelter and a comfortable resting area;

3. Freedom from pain injury or disease

By prevention or by rapid diagnosis and treatment;

4. Freedom to express most normal behaviour

By providing sufficient space, proper facilities and company of an animal's own kind;

5. Freedom from fear and distress

By ensuring conditions and treatment to avoid mental suffering.

In acknowledging these Five Freedoms, those people who care for livestock should demonstrate –

- Caring and responsible planning and management;
- Skilled, knowledgeable and conscientious stockmanship;
- Appropriate environmental design (for example, of the husbandry system);
- Considerate handling and transport;
- Humane slaughter.

The Preface to the Code identifies good stockmanship as a key factor in farm animal

welfare. The Department recognises that there are already high standards in the industry due to the hard work of farmers. This Code should be an essential tool to measure those standards by.

The Preface also explains the status of the Code in relation to the Island's legislation.

R W Henderson

Minister of Agriculture, Fisheries and Forestry

This Welfare Code was laid before Tynwald on the 18th January 2005.

Preface

This preface is not part of the Code, but is intended to explain its purpose and to indicate the broad considerations upon which it is based.

The Code, comprising paragraphs 1 to 127, was laid before Tynwald on the 18th January 2005. It has been prepared following consultation as required by section 30 of the Animal Health Act 1996 (Part III: Welfare of Livestock) which reads as follows:

The Department may, after consultation with such organisations as appear to it to be representative of interests substantially affected –

- prepare codes containing such recommendations with respect to the welfare
 of livestock for the time being situated on agricultural land or on or in any
 vehicle, container or moveable structure as it considers proper for the
 guidance of persons concerned with the livestock; and
- revise any such code by revoking, varying, amending or adding to the provisions of the code in such manner as the Department thinks fit.

The following further extracts from the Animal Health Act 1996 and The Welfare of Farmed Animals Order 2002, explain the status of the Code in relation to the Island's legislation –

Animal Health Act: section 28

Any person who -

- Causes unnecessary pain or unnecessary distress to any livestock which are under his control, or
- Permits any such livestock to suffer any such pain or distress of which he knows or may reasonably be expected to know, shall be guilty of an offence under this Act.

Animal Health Act: section 30(4)

A failure on the part of any person to observe a provision of a code for the time being issued under this section shall not of itself render that person liable to proceedings of any kind; but such a failure on the part of any person may, in proceedings against him for an offence under section 28, be relied upon by the prosecution as tending to establish the guilt of the accused unless it is shown that he cannot reasonably be expected to have observed the provision in question within the period which has elapsed since that provision was first included in a code issued under this section.

The Welfare of Farmed Animals Order 2002, article 3(1)

Owners and keepers of animals shall take all reasonable steps –

- to ensure the welfare of the animals under their care; and
- To ensure that the animals are not caused any unnecessary pain, suffering or injury.

The Welfare of Farmed Animals Order 2002, article 10

Any person who employs or engages a person to attend to animals shall ensure that the person attending to the animals –

- Is acquainted with the provisions of all relevant statutory welfare codes relating to the animals being attended to;
- Has access to a copy of those codes while he is attending to the animals; and
- Has received instruction and guidance on those codes.
- Any person who keeps animals, or who causes or knowingly permits animals
 to be kept, shall not attend to them unless he has access to all relevant
 statutory welfare codes relating to the animals while he is attending to them,
 and is acquainted with the provisions of those codes.

Nearly all livestock husbandry systems impose restrictions on the stock and, if care is not taken, some of these can cause an unacceptable degree of discomfort or distress by preventing the animals from fulfilling their basic needs. Provisions meeting these needs, and others which must be considered, include –

- Comfort and shelter;
- Readily accessible fresh water and a diet to maintain the animals in full health and vigour;
- Freedom of movement;
- The company of other animals, particularly of like kind;
- The opportunity to exercise most normal patterns of behaviour;
- Light during the hours of daylight, and lighting readily available to enable the animals to be inspected at any time;
- Flooring which neither harms the animals, nor causes undue strain;
- The prevention, or rapid diagnosis and treatment of vice, injury, parasitic infestation and disease;
- The avoidance of unnecessary mutilation;
- Emergency arrangements to cover outbreaks of fire, the breakdown of essential mechanical services and the disruption of supplies.

The basic requirements for the welfare of livestock are a husbandry system appropriate to the health and, so far as practicable, the behavioural needs of the animals and a high standard of stockmanship.

The recommendations which follow are designed to help stockmen, particularly those who are young or inexperienced, to attain the required standards. The part that training has to play in the development of the stockman's awareness of welfare requirements cannot be overstressed. Detailed advice on the application of the Code in individual circumstances is readily available through the DAFF Field Staff and in advisory publications, some of which are listed at the end of this Code.

The pig husbandry systems in current use do not equally meet the physiological and behavioural needs of the animals. Nevertheless, within the framework of the statutory powers under which the Code has been prepared, an attempt has been made, on the basis of the latest scientific knowledge and the soundest current practices, to identify those features where the pigs welfare could be at risk unless

precautions are taken. The Code sets out what these precautions should be, bearing in mind the importance to pigs of their total environment and the fact that there is often more than one way in which their welfare can be safeguarded.

The legislation quoted in the document is not part of the Code but is intended to highlight the relevant legal requirements. The law quoted is that in force on the date of publication.

Any reference in this Code to advisory publications is for information only and does not form part of this Code.

Certain aspects of livestock husbandry can present hazards to the health and safety of the stockman. Advice on these matters is available from the Department of Local Government and the Environment, Health and Safety Section.

Introduction

- 1. This Code covers all pigs. The word "pigs" refers to all porcine stock, and includes wild boar kept for farming purposes. A piglet refers to a pig from birth to weaning.
- 2. The Code's recommendations apply to pigs under all husbandry systems. Section 1 of the Code gives the recommendations that apply to all ages and types of pig. Section 2 covers the recommendations that apply to specific categories of pigs (such as boars or pigs kept outdoors). If these recommendations are followed, they will help to protect the stock's welfare. The Code's recommendations are not a complete list and they are not meant to replace expert advice such as from a veterinary surgeon.
- 3. The husbandry system that is used and the number of pigs kept at any one time, should depend on
 - the suitability of the farm environment;
 - How many animals the farm can accommodate at one time;
 - The competence of the stock-keeper; and
 - How long the stock-keepers have to carry out their duties.
- 4. Organic pig farming is conducted according to additional, legally enforced standards. However, nothing in those standards affects the legal responsibilities of organic farmers regarding positive animal welfare. Any matters which appear to conflict with organic standards, should be discussed with your organic certifying body. In addition, you should seek expert advice, such as from a veterinary surgeon.
- 5. No changes should be made to husbandry, equipment or production until the possible effects on animal welfare have been considered. In particular, the possible effect on animal welfare should be considered before installing more complex or elaborate equipment than has previously been used. In general, the greater the restriction imposed on the animal and the greater the complexity of the overall system, the less the animal is able to use its behaviour to modify the effect of unfavourable conditions. Systems involving a high degree of control over the

environment should only be installed where conscientious staff skilled in both animal husbandry and the use of the equipment will always be available.

6. The relevant animal welfare legislation applies to owners as well as to anyone looking after pigs on their behalf, whether the pigs are on the farm or during transport. A written contract can be useful in making sure that everyone involved is clear about his or her animal welfare responsibilities. However, the obligations imposed by law will still apply, whether or not a contract exists.

Section 1 – Recommendations for all pigs

Stockmanship

General

- 7. The stock-keeper has the most significant influence on the welfare of pigs. In general, the larger the size of the unit the greater the degree of skill and care needed to safeguard welfare. The size of a unit should not be increased, nor should a large unit be set up, unless it is certain that the level of stockmanship will be sufficiently high to safeguard the welfare of each individual pig.
- 8. The stock-keeper should draw up a written health and welfare plan with the herd's veterinary surgeon and, where necessary, other technical advisers. You should review and update your health and welfare plan at least once a year. This plan should set out health and husbandry activities that cover the cycle of production and include strategies to prevent, treat or limit existing disease problems. The plan should include enough records for you to assess the basic output of the herd and monitor the welfare of the pigs.
- 9. Those responsible for managing the farm should make sure that the pigs are cared for by enough well motivated and competent staff. These staff need to be aware of the welfare needs of pigs and be capable of protecting them from all expected problems before they are given any responsibility. This means that the staff need

specific knowledge and skills, which they should develop on-farm by working with a skilled stock-keeper who is experienced in the relevant system. Wherever possible, staff should also attend relevant courses run by a suitable training organisation. Ideally, the training should lead to formal recognition of competence. Any contract or casual labour used on the farm should be trained and competent in the relevant activity.

- 10. Stock-keepers should be knowledgeable and competent in a wide range of animal health and welfare skills, which should include:
 - Handling skills (see paragraphs 14 − 17);
 - Preventing and treating lameness (see paragraphs 30 32);
 - Preventing and treating internal and external parasites (see paragraphs 33 34);
 - Giving medicines by injection (see paragraph 35);
 - Providing appropriate care to sick and injured pigs (see paragraphs 38 44)
 - Care of the sow and her litter (see paragraphs 93 –99); and
 - Management of pigs to minimise aggression (see paragraph 101).

If the stock-keeper is expected to perform specific tasks on-farm (for example, artificial insemination or teeth clipping/grinding), then they should be trained and competent.

Inspection

- 11. The health and welfare of animals depends on them being regularly inspected.

 Adequate lighting must be available to enable thorough inspection of the stock. All stock-keepers should be familiar with the normal behaviour of pigs. Badly managed and unhealthy pigs will not thrive, and it is essential that the stock-keeper should watch for signs of distress, disease or aggression towards an animal by other pigs in the group. To do this, it is important that stock-keepers have enough time to
 - Inspect the stock;
 - Check equipment; and

- Take action to deal with any problem.
- 12. The stock-keeper should always be looking out for signs of ill health in pigs, which include
 - separation from the group;
 - Listlessness;
 - Swollen navel, udder or joints;
 - Rapid or irregular breathing;
 - Persistent coughing or panting;
 - Shivering;
 - Discolouration or blistering of the skin;
 - Loss of body condition;
 - Sneezing;
 - Lameness (inspection of the feet and legs is particularly important);
 - Lack of co-ordination;
 - Constipation;
 - Diarrhoea;
 - Poor appetite; and
 - Vomiting.
- 13. You should be able to anticipate problems or recognise them in their earliest stages and, in many cases, you should be able to identify the cause and put matters right immediately. Always consider the possibility that the pigs may be affected by a notifiable disease (see paragraphs 36 37). If the cause is not obvious, or if your immediate action is not effective, a veterinary surgeon or other expert should be called in immediately failure to do so may cause unnecessary suffering.

Handling

14. Pigs should be moved at their own pace. You should encourage them gently – especially around corners and where it is slippery underfoot. You should avoid too much noise, excitement or force. You must not put pressure on or strike at any

particularly sensitive part of the body. Anything you use, such as pig boards and flat slap sticks, to guide the animals should only be used for that purpose and slap sticks must not have a sharp or pointed end. The use of electric goads on adult pigs should be avoided as far as possible. If goads are used you should always ensure that there is sufficient space for the pigs to move forward.

- 15. You should make sure that all floors and walkways are well maintained and provide a non-slip surface. The floor should not slope too steeply, as steeper slopes can cause leg problems.
- 16. All stock-keepers must have access to easy to use and efficient handling systems.

 This is to allow you to routinely manage and treat the animals, and make sure that they are quietly and firmly handled.

Transport off- farm

17. You should have the facilities on-farm to load and unload pigs onto and from a vehicle, with as little stress as possible. Stock-keepers should know how to handle animals during loading and unloading, including when and how to use pig boards to guide the animal.

Marking

- 18. Permanent marking of pigs by, for example, ear or body tattooing or ear tagging, should be carried out only by a trained and competent operator using properly maintained instruments and under hygienic conditions. Ear tags should be suitable for use in pigs. Slap marking is an acceptable method where identification is required immediately prior to transporting the pigs to slaughter. Where, for herd management purposes, ear marking is by notching or punching, you should use appropriate equipment.
- 19. When ear tagging, notching or tattooing, you must properly restrain the animals.

 Take care to position and insert tags correctly by following the manufacturer's

instructions, avoiding main blood vessels and ridges of cartilage.

20. If you are using aerosols or paints for temporary marking, make sure only non-toxic substances are used.

Health

General

- 21. Maintenance of good health is the most basic requirement affecting the welfare of the pig. Measures to protect health include good hygiene, good husbandry and effective ventilation. Vaccinations may be appropriate against certain diseases. You should ensure that only authorised veterinary medicinal products, including vaccines, are used. Useful information on the health status of the herd can be obtained from feedback at meat inspection in the abattoir.
- 22. The written health and welfare plan (see paragraph 8) should also, as a minimum, look at
 - (a) biosecurity arrangements on-farm and during transport;
 - (b) purchased stock procedures;
 - (c) any specific disease control programmes, such as Salmonella, erysipelas, E. coli, mycoplasma and parvo virus;
 - (d) vaccination policy and timing;
 - (e) isolation procedures;
 - (f) mixing and grouping of pigs;
 - (g) external and internal parasite control;
 - (h) lameness monitoring and foot care;
 - (i) routine procedures, such as ear tagging; and
 - (j) prevention and control of vices such as tail biting.

The health and welfare plan should make sure that animals get any necessary medical treatment at the correct time and in the correct dose.

Biosecurity

- 23. Biosecurity means reducing the risk of disease occurring or spreading to other animals. Good biosecurity can be obtained through
 - good management/husbandry;
 - Good hygiene;
 - Reducing stress in the herd; and
 - Effective disease control systems such as vaccination and worming programmes.

Biosecurity results in -

- Farm units being more secure from the introduction of new infectious diseases; and
- The spread of any diseases on the unit itself being kept to a minimum.

If you and your stock-keepers take proper precautions when you move within the farm or you move animals and equipment, you can greatly reduce the chance of spreading any disease.

- 24. Incoming stock presents the greatest risk to the health of the herd as regards infectious disease. You should ask the vendor to provide you with information on the health status of the herd and the herd's routine vaccination and other treatments (for example, worming) or disease prevention measures. You should have isolation facilities so that you can isolate and observe/test incoming stock for a suitable period when they arrive, before they join the rest of the herd.
- 25. Only essential visitors should be allowed onto the unit and they should follow disinfection procedures and wear unit clothing and footwear. A visitor book should be provided and visitors asked to sign to say they have not been near other pigs or livestock for an agreed period, as stipulated in your herd health and welfare plan. A system should be provided to alert staff of visitors at the gate.

- 26. Loading facilities and, where possible, feed bins should be sited at the unit perimeter. Vehicles, which visit other pig units, should be kept off the unit wherever possible but where entry is essential, wheels and footwear should be cleansed and disinfected thoroughly.
- 27. A programme of pest control should be in place for, for example, rodents. Every effort should be made to make housing proof against birds, such as starlings.

 Domestic pets, feral cats and other wild animals should be discouraged.
- 28. It is not possible to prevent all airborne infections from entering a unit, but when planning new units these should be sited as far as is practicable from other pig units, as this will reduce the risk of spread of airborne infectious diseases. You can find more information in the DEFRA publication, *Better biosecurity provides peace of mind, healthy stock and a more viable business* (see the Appendix).

Condition Scoring

- 29. Body condition scoring can contribute greatly to good husbandry and help to avoid costly welfare problems. Condition scoring is an easy technique to learn. Basically, it means that you can quickly assess the body reserves (that is, fat) of individual animals. The technique will be of benefit if you use it as a routine management tool to check that sows are in the target body condition for the various stages of the breeding cycle. This will be particularly useful at
 - Mid-pregnancy;
 - Farrowing/early lactation; and
 - Weaning/drying off.

You should adjust feeding as necessary for animals that have become too fat or too thin. You will find more information in the DEFRA booklet, *Condition scoring of pigs* (see the Appendix).

Lameness

- 30. Lameness in any animal is usually a sign that they are in pain. Lameness in pigs is a sign of ill health and discomfort. It clearly affects an animal's welfare, as well as their performance and production. If a significant percentage of your pigs have severe lameness, this is a sign of disease or poor overall welfare standards within the herd. In these circumstances, you should seek urgent veterinary advice. You can find more information in DEFRA's booklet, *Lameness in pigs* (see the Appendix).
- 31. If lame pigs do not respond to treatment, you need to call a veterinary surgeon immediately. Lameness can have a number of causes and early and accurate diagnosis of the specific type of lameness affecting the herd will enable you to take rapid and appropriate action.
- 32. If a lame animal does not respond to the veterinary surgeon's treatment, you should have it culled rather than leave it to suffer. If you cannot transport lame animals without causing them more pain, you should slaughter them on the farm (see paragraphs 40 42). Also, you must not transport any pig off-farm that cannot stand up unaided or cannot bear their weight on all four legs when standing or walking.

External Parasites

33. You should control diseases caused by external parasites – especially where the animal's skin is irritated and it is rubbing the area – with the appropriate parasiticides. You should treat your animals for parasites in accordance with veterinary advice and ensure that control and treatment regimes form part of your herd health and welfare plan.

Internal Parasites

34. You should control internal parasites by using effective anthelmintics (drugs to treat parasites) or vaccines. As part of your herd health and welfare plan, you should ensure that treatment is based on the life cycle of the particular parasites you are tackling. You should treat your animals for parasites in accordance with veterinary advice. Organic producers, in particular, should seek veterinary advice on this aspect

of their herd health and welfare plan.

Equipment for Vaccination and Treatment

35. You must make sure that all the equipment you use for vaccinating and treating the animals is in good working order. You should regularly clean and sterilise any equipment you use for injections, to avoid infections and abscesses and, ideally, use disposable needles. Any dangerous objects should be disposed of safely.

Notifiable Diseases

- 36. If you suspect that any animal is suffering from a notifiable disease, you have a legal duty to notify the Department as soon as possible.
- 37. The following are the main notifiable diseases which affect pigs (Please note that this is not a complete list)
 - African swine fever
 - Anthrax
 - Aujeszky's disease
 - Classical swine fever
 - Foot-and-mouth disease
 - Rabies
 - Swine vesicular disease
 - Teschen disease
 - Vesicular stomatitis

For more information on these diseases contact your veterinary surgeon or the Animal Health Division.

Sick and Injured Animals

38. You should take action immediately if any pigs are injured or appear ill or distressed. It is important to exclude the possibility of notifiable diseases. If you are in any

doubt about the cause of the ill health or the most effective treatment, consult your veterinary surgeon without delay. Likewise, if an animal you have treated does not respond to treatment, seek your veterinary surgeon's advice.

- 39. Your health and welfare plan should specify a procedure for isolating and caring for sick or injured animals. Hospital pens should be available for each category of pig on the unit. These pens should be easily reached so that you can regularly check on the animal. When moving sick or injured pigs to the hospital pens, you should ensure that unnecessary suffering does not occur. In these hospital pens, you should make sure that drinking water is freely available, and that there are feeding facilities. Particular care is needed where recumbent animals are isolated to ensure that there is easy access to water and feed and that the animals are eating and drinking.
- 40. If an unfit animal does not respond to treatment, it should be humanely killed onfarm (culled). You should cull any animals suffering from painful and incurable conditions immediately.
- 41. You can only transport an unfit animal if you are taking it to a veterinary surgeon for treatment or diagnosis, or to the nearest available place of slaughter and then, only provided they are not likely to be subject to unnecessary suffering during the journey by reason of their unfitness. More information can be found in DEFRA's booklet, Guidance on the transport of casualty farm animals (see the Appendix).
- 42. In an emergency, you may have to slaughter an animal immediately to prevent its suffering. In such cases, you should destroy the animal humanely and, where possible, it should be done by someone who is suitably trained and competent both in slaughter methods and use of the equipment. Under these emergency circumstances a slaughter licence is not required.
- 43. If you have to slaughter the animals on-farm in a non-emergency situation, you must do so using a permitted method that is in line with current welfare at slaughter legislation.

44. After slaughter, you must dispose of the carcass by a suitable method. At present, burial or burning is only permitted in very limited circumstances. If you plan to bury the carcase on-farm, you should first check that the Department of Local Government and the Environment allows this.

Record Keeping

- 45. Only authorised veterinary medicinal products should be used. You must keep full records of all medicines used, including where it was bought. You must also keep records for at least three years of
 - the date you treated the animals;
 - The identity and quantity of medicine used; and
 - Which animal or group of animals you treated.

You will find more information in the Code of Practice on responsible use of animal medicines on the farm (see the Appendix).

46. In terms of individual animal management, you may find it useful, as part of the health and welfare plan, to note specific cases of mastitis, lameness and other disorders, and where appropriate, the relevant treatment given.

Accommodation

General

- 47. You should seek appropriate welfare advice when new buildings are to be constructed or existing buildings modified. Some specialised buildings use complex mechanical and electrical equipment which require additional technical and management skills and may require training to ensure that husbandry and welfare requirements are met.
- 48. The internal surfaces of housing and pens should be made of materials that you can

- easily clean and disinfect regularly, and easily replace when necessary.
- 49. If you are going to treat these surfaces, use paints or wood preservatives that are safe to use with animals. There is a risk of lead poisoning from old paintwork, especially if you use second-hand building materials.

Floors

- 50. Good floor design and adequate maintenance is essential. Poorly constructed floors, slats that are not properly matched to the weight/size of pig and surfaces that are worn and/or damaged, can cause injury to the feet and legs of pigs. Excessive gaps should be avoided as they can trap the feet/claws and may cause physical damage. Damaged floors must be repaired immediately.
- 51. The lying area should always be kept dry and pen floors, including the dunging area, should be drained effectively. Where bedding is provided, this must be clean and dry, regularly topped up or changed, and not detrimental to the health of the pigs.

Ventilation and Temperature

- 52. All new buildings should be designed with the animals' comfort in mind, and with the aim of preventing respiratory diseases. The buildings should provide enough ventilation throughout the year for the type, size and number of stock to be housed in them. In addition to meeting the ventilation requirements, the system should be designed to avoid draughts affecting the pigs' living space.
- 53. Effective ventilation is essential to the well-being of the stock as it provides fresh air, removes noxious gases and aids in controlling temperature. Excessive heat loss should be prevented either by the structural insulation of the external walls, roof and the floor in the lying area, or by the provision of adequate bedding. Heat gain to buildings in hot conditions will be minimised by the insulation in the walls and roof.
- 54. Pigs have a very limited ability to sweat and are acutely susceptible to heat stress.

Possible cooling methods, including blowing air over the pigs in a part of the pen, providing water spray/misting systems or simply wetting part of the floor with a hosepipe, can be used to ensure that pigs in buildings do not become overheated in hot weather. There should always be some dry lying area available as a matter of choice so that the pigs can move away from the cooler conditions.

55. Live weight, group size, floor type, air speed and feed intake markedly affect temperature requirements and you must take these factors into account when determining the minimum temperature appropriate in each case. Slatted floors and low feed levels generally increase temperature requirements, whilst straw bedding, high feed levels and higher body weights decrease requirements. For most circumstances, an appropriate minimum temperature can be found within the range given below –

Category of Pig	Temperature (°C)	Temperature (°F)
Sows	15 - 20	59 – 68
Suckling pigs in creeps	25 – 30	77 – 84
Weaned pigs (3 – 4 weeks)	27 – 32	81 – 90
Later weaned pigs (5 weeks +)	22 – 27	71 – 80
Finishing pigs (porkers)	15 – 21	59 – 70
Finishing pigs (baconers)	13 - 18	55 – 64

56. You should avoid wide or abrupt

fluctuations in temperature in housing systems within any 24-hour period. Wide fluctuations in the daily temperature regime can create stress that may trigger outbreaks of vice, such as tail biting, or disease such as pneumonia. You should maintain a higher than normal level of vigilance at these times.

57. When pigs are moved to new accommodation, the possibility of cold stress occurring as a result of sudden changes in the thermal environment should be reduced. This can be done by ensuring that the pen is dry, by the provision of bedding, such as straw, or by preheating the building.

58. When you are removing slurry from under slats, you must take special care to avoid fouling the air with dangerous gases (such as ammonia), which can kill both humans and animals. Buildings should either be empty or very well ventilated during this procedure.

Lighting and Noise Levels

- 59. You should have enough fixed or portable lighting available at any time if you need to inspect any animals, for example, during farrowing.
- 60. The siting of machinery such as feed milling units should be appropriate to minimise the noise impact on housed stock. Any bell or buzzer which is likely to occur erratically, for example, a visitor to the site, should be sufficiently loud to attract human attention but without causing undue alarm to the stock.

Automated and Mechanical Equipment

- 61. All mains electrical equipment should meet relevant standards and be properly earthed, safeguarded from rodents and out of the pigs' reach.
- 62. All equipment, including feed hoppers, drinkers, ventilation equipment, heating and lighting units, fire extinguishers and alarm systems, should be cleaned and inspected regularly and kept in good working order.
- 63. All automatic equipment used in intensive systems should be thoroughly inspected by the stock-keeper, or other competent person, not less than once each day to check that there are no defects. Any defect must be rectified immediately.

Fire and Other Emergency Precautions

64. There should be plans in place to deal with emergencies at your farm, such as fire, flood or disruption of supplies. The owner should make sure that all the staff are

familiar with the appropriate emergency action. You will find more information in the DEFRA booklets, Emergencies on livestock farms and Farm fires: advice on farm animal welfare (see the Appendix).

- 65. It is important that you get advice about design when you are building or modifying a building. You need to be able to release and evacuate livestock quickly if there is an emergency. You should consider installing fire alarms that can be heard and responded to at any time of day or night.
- 66. You can get expert advice on all fire precautions from fire safety officers at the Isle of Man Fire and Rescue Service.

Feed, water and other substances

- 67. All pigs need a balanced daily diet to maintain full health and vigour. You should plan any changes in the diet and introduce them gradually.
- 68. When introducing pigs to unaccustomed housing, you should make sure that the animals are able to find the feed and water points. When newly weaned piglets are moved to pens where water is provided through nipple drinkers unfamiliar to the piglets, it is good practice to provide alternative water sources for the first few days.
- 69. Where pigs are fed on a rationed feed level to control intake, you should ensure that adequate trough space is provided to ensure that all pigs can receive their allocation.

 The following guidelines for trough space per pig apply –

WEIGHT OF PIG	TROUGH SPACE
(kg)	(cm)
5	10
10	13
15	15
35	20
60	23
90	28
120	30

- 70. Good hygiene is necessary for storage and feeding systems as moulds can develop in stale feed which can have a detrimental effect on pigs. Feed bins should be cleaned out regularly.
- 71. There are several factors you should take into consideration when looking at the provision of water to pigs
 - the total volume available;
 - The flow rate (pigs will not spend a long time taking water);
 - the method of provision e.g. the type of drinker; and
 - its accessibility to all stock.
- 72. The following is a guide to minimum daily water requirements for various weights of pig –

Weight of Pig (kg)	Daily requirement	Minimum flow rate
	(Litres)	through nipple
		drinkers (litres/minute)
Newly weaned	1.0-1.5	0.3
Newly Wealled	1.0 1.5	0.5
Up to 20 kgs	1.5-2.0	0.5-1.0
20-40 kgs	2.0-5.0	1.0-1.5
Finishing pigs up to 100kg	s 5.0-6.0	1.0-1.5
Sows and Gilts -	5.0-8.0	2.0
pre-service and in-pig		
Sows and Gilts -	15-30	2.0
in lactation		
Boars	5.0-8.0	2.0

73. Waste water and excessive flow rates can be detrimental, particularly for sows in farrowing accommodation and very young pigs.

- 74. You should carefully consider the height at which water nipples and bowls are placed. All pigs must be able to access the drinking point. This might require height-adjustable, or several different, drinkers at various heights when groups of pigs of a range of weights are housed together or when pigs are housed in a pen for a long period.
- 75. Where nipple drinkers are used, a drinking point should be available for each ten pigs on rationed feeding. On unrestricted feeding, one nipple drinker should provide adequate supply for 15 pigs given sufficient flow rates. Where trough systems are used, the following guidelines should be applied –

WEIGHT OF PIG	TROUGH SPACE PER HEAD
(Kg)	(cm)
Up to 15	0.8
15 - 35	1.0

- 76. If you use a wet feeding system, pigs must have access to a separate fresh water supply.
- 77. Feed and water should not be completely withdrawn from sows which are being dried off.

Management

General

- 78. You should keep all buildings, fields and paddocks clear of debris, such as wire, plastic and sharp objects that could injure the pigs or rip out their ear tags and damage their ears.
- 79. You should take all practical measures to remove all pigs from areas that are in imminent danger of flooding.

Environmental Enrichment

- 80. Environmental enrichment provides pigs with the opportunity to root, investigate, chew and play. Straw is an excellent material for environmental enrichment as it can satisfy many of the pigs' behavioural and physical needs. It provides a fibrous material which the pig can eat; the pig is able to root in and play with long straw; and, when used as bedding, straw can provide the pig with physical and thermal comfort.
- 81. Objects such as footballs and chains can satisfy some of the pigs' behavioural needs, but can quickly lose their novelty factor. The long term use of such items is not, therefore, recommended unless they are used in conjunction with materials such as those listed above, or are changed on a weekly basis.

Castration

82. Stock-keepers should consider carefully whether castration is necessary. Castration is a mutilation and should be avoided wherever possible. If it cannot be avoided, it must be carried out in accordance with the law by a trained and competent operator or a veterinary surgeon.

Tail Docking

- 83. Tail biting and other vices, such as ear and flank biting, are associated with some form of stress. They can be triggered by a wide range or combination of factors, including: overstocking, feed deficiencies, incorrect temperature levels, fluctuating temperature levels, inadequate ventilation, draughts, high levels of dust and noxious gases (for example, ammonia) and lack of environmental enrichment. Sometimes changes in external weather conditions can also trigger an outbreak.
- 84. If tail biting does occur, it can spread quickly through the pen and the degree of injury increases very quickly. You should ensure that affected pigs are removed to a hospital pen and treated without delay. If possible, you should try to identify the

instigator and remove the animal to a separate pen.

- 85. Routine tail docking is not permitted. Tail docking should only be used as a last resort, after improvements to the pigs' environment and management have proved ineffectual. Where it is necessary to tail dock, it must be carried out in accordance with the law by a competent, trained operator before the seventh day of life, or by a veterinary surgeon. All equipment used must be cleaned and disinfected between pigs.
- 86. As part of your herd health and welfare plan (see paragraphs 8 and 22), you should have a strategy for dealing with outbreaks of vice such as tail biting. Although much has been learnt from research and practical on-farm experience, it is not possible to produce a definitive solution suitable for all cases. A thorough assessment and planned approach is therefore recommended to identify the particular cause of an outbreak on the unit and to find the appropriate solution to the problem.

1) Quantify the problem

 Note the position of pens and numbers of pigs affected, check records of previous incidents.

2) List possible causes

These might include interruption or inadequate supply of feed or water, lack
of environmental enrichment, inadequate ventilation, draughts, incorrect
temperature levels, overstocking, competition at feeding, excessive light
levels, elevated dust/noxious gas levels. Different causes may be found in
different pens on the same unit.

3) Modify health and welfare plan

 having identified areas for improvement, in consultation with the herd's veterinary surgeon and other technical advisers, modify your health and welfare plan to implement the necessary changes with a view to preventing future outbreaks of tail biting.

Teeth Clipping/Grinding

- 87. Routine clipping or grinding of teeth is not permitted. Tooth reduction to the upper and lower corner teeth ('eye' or canine teeth) of piglets should only be used as a last resort. Your health and welfare plan should identify circumstances where tooth reduction may be necessary. These might include large litter size, cross fostering, gilts and poor milk let down such as mastitis.
- 88. Where tooth reduction is to be carried out, it may not always be necessary for the whole litter. Where it is necessary, it should be carried out before the seventh day of life, in accordance with the law, by a trained and competent operator or by a veterinary surgeon. Suitable sharp, clean clippers or an appropriate grinder should be used. All equipment used should be cleaned and disinfected between pigs. Teeth grinders are recommended as there is a reduced risk of shattering the teeth.

Natural Service

89. All boars should have good and safe service conditions. Slatted floors and slippery conditions underfoot are not suitable for mating animals. As part of your health and welfare plan, you should discuss with the herd's veterinary surgeon how to avoid injury to boars and sows through excessive mating activity.

Artificial Insemination, Vasectomy and Electro-ejaculation

- 90. You should keep the sows in their groups until insemination, at which time they can be moved to an appropriate stall or pen and inseminated. Sows should be allowed time to settle down in the stall or pen, and then exposed to a boar in order to encourage the standing reflex before artificial insemination takes place.
- 91. Sows should be left undisturbed, to allow uterine contractions, for up to thirty minutes after artificial insemination (and natural service), but they should then rejoin their group in order to minimise bullying within the group hierarchy. When double insemination is used, sows may be penned separately until 30 minutes after

the second insemination, but pens must allow the animal to turn round easily.

92. Semen collection and artificial insemination should only be carried out by a trained, competent and experienced operator. Vasectomy or electro-ejaculation may only be carried out by a veterinary surgeon.

Section 2 – Specific recommendations

Farrowing sows and piglets

- 93. You should manage the feeding of sows and gilts so that they are in a suitable body condition at the time of farrowing. A target score of 3.5 4 should be aimed at just prior to farrowing. You should then gear the feeding regime to minimising any loss in body condition during lactation.
- 94. Nesting material should be provided, whenever possible, particularly in the 24 hours prior to farrowing to satisfy the sow's need to nest-build and therefore minimise stress.
- 95. The environmental requirements of the sow and litter are considerably different. In an environmentally controlled farrowing house a heated creep area up to 32°C should be provided for the piglets. This can be by artificial heating for example, overhead infra-red lamps, a heat pad, underfloor heating or alternatively by providing a well bedded lying area. The sow, however, has different environmental requirements. The temperature in the farrowing room as a whole should be around 18°C 20°C. High temperatures for the sow can impair feed intake and her milking ability.
- 96. Where overhead lamps/heaters are used they should be securely fixed and should be protected from interference by the sow or piglets.
- 97. Farrowing accommodation should be so constructed and sufficiently big enough to

allow the sow to rise up and lie down again without difficulty. You should be experienced and competent in the techniques of farrowing and should pay particular attention to hygiene, especially at assisted farrowings. Mechanical farrowing aids should only be used by a trained, competent operator.

- 98. Problems associated with weaning are related to the age at weaning. The earlier the weaning age the better must be the system of management and nutrition if welfare problems are to be avoided. Piglets should not be weaned from the sow at less than 28 days, although orphaned, sick and surplus piglets requiring special attention are obvious exceptions. The all-in-all-out system of managing pig housing maximises opportunities to prevent disease introduction or spread on a unit. Where these conditions are met, weaning may occur up to seven days earlier. At weaning, piglets should be moved into a specialised house which has previously been completely emptied of pigs, cleaned and disinfected.
- 99. It is particularly important that you watch piglets carefully for signs of diarrhoea or respiratory disease, such as coughing or rapid or laboured breathing, both of which can spread rapidly. If the piglets do not respond to treatment promptly or properly, you should seek advice from your veterinary surgeon.

Weaners and rearing pigs

The Welfare of Farmed Animals (Amendment) Order 2003, Schedule 6, Part VI, paragraph 52 provides that –

The unobstructed floor area available to each weaner or rearing pig reared in a group shall be at least –

- a) 0.15 m² for each pig where the average weight of the pigs in the group is 10kg or less;
- b) 0.20 m² for each pig where the average weight of the pigs in the group is more than 10kg but less than or equal to 20kg;
- c) 0.30 m² for each pig where the average weight of the pigs in the group is

- more than 20kg but less than or equal to 30kg;
- d) 0.40 m² for each pig where the average weight of the pigs in the group is more than 30kg but less than or equal to 50kg
- e) 0.55 m² for each pig where the average weight of the pigs in the group is more than 50kg but less than or equal to 85kg
- f) 0.65 m² for each pig where the average weight of the pigs in the group is more than 85kg but less than or equal to 110kg; and
- g) 1.00 m² for each pig where the average weight of the pigs in the group is more than 110kg
- 100. The figures in the box above are minimum requirements, the type of housing and its management may mean that greater space allowances are necessary. The total floor space should be adequate for sleeping, feeding and exercising. The lying area, excluding the dunging and exercise areas, should be of sufficient size to allow all the pigs to lie down on their sides at the same time.
- 101. Your herd health and welfare plan should include a strategy for managing mixing and establishing groups of pigs. Plenty of space, sufficient environmental enrichment and using shower sprays/sprinklers can all help to minimise aggression at mixing. Wherever possible, pigs for fattening should be in same sex groups to avoid unnecessary sexual activity as gilts come into oestrus.

Dry sows and gilts

102. Innate aggressiveness can present a severe problem where sows and gilts are kept in groups. Much depends on the temperament of individual animals. Adequate space is particularly important at the time of mixing sows so that animals can escape from aggressors. First parity sows and sows that have lost body condition should be managed as separate groups. Stock-keepers should ensure that persistent bullying, which could lead to severe injury or deprivation of food, does not take place. You should remove any animal suffering persistent bullying to different accommodation.

- 103. Feeding facilities in which animals can be fed individually and thereafter released are recommended. However, if you feed sows using a system that does not include some form of protection during feeding, such as floor feeding, then you must distribute the feed widely and in such a way to ensure that all members of the group can obtain their allocation.
- 104. Breeding sows and gilts should be fed simultaneously wherever possible to avoid undue excitement. Some feeding systems have been designed to feed animals sequentially without interference from pen mates. You need to pay special attention to the proper functioning of such equipment and also make sure that all members of the group can obtain their allocation.
- 105. The provision of bedding in loose housing systems for sows and gilts is strongly recommended.

Boars

- 106. Walls between pens should be high enough to prevent boars climbing and/or jumping into adjacent pens. Pens should be sited so that boars can see other pigs. You should not enter boar pens without a pig board and you should be able to escape easily from the pen if the boar becomes aggressive.
- 107. Boars are generally individually housed and need either plenty of bedding material or a closely controlled environmental temperature. Extremes of temperature can lead to temporary infertility and may affect a boar's willingness or ability to work satisfactorily.
- 108. As a guide, individual accommodation for an adult boar should have a floor area of not less than 7.5 m2 if used for living purposes only. Bedding should be provided in the lying area. In a pen intended for mating purposes, the whole floor area should be kept dry or sufficient bedding provided to give adequate grip during service. The use of small quantities of coarse sand on floors will reduce the risk of slipping.

Pigs kept in outdoor husbandry systems

General

- 109. Sites for outdoor pig enterprises must be chosen carefully. Land prone to flooding, poorly drained sites, stony (especially flinty) soils and sites with heavy soils (especially in areas with high rainfall), are generally unsuitable for outdoor systems. Free-draining soils, in low rainfall areas, with low frost incidence are most suitable.
- 110. Field stocking densities must reflect the suitability of the site and the system of management. A guideline of 25 sows per hectare overall is reasonable for suitable sites. You may need to reduce stocking densities on less ideal sites or in extreme circumstances during periods of adverse weather. More information can be found in DEFRA's booklet, *Site suitability for outdoor pig farming* (see the Appendix).
- 111. Stock selected for outdoor production must be suitable for outdoor conditions. Most breeding companies provide lines that have been developed for outdoor use.
- 112. Your herd health and welfare plan should include a strategy for dealing with emergency situations such as, water provision in freezing conditions and feed provision to the site and to the paddocks in snow or severe wet weather.

Biosecurity

- 113. If you take proper precautions when you move within the farm or you move animals and equipment, you can greatly reduce the chance of spreading disease (see paragraphs 23 28). Incoming replacement stock will also need to be acclimatised to outdoor conditions. It is especially important to provide warm comfortable accommodation for these animals.
- 114. To prevent the build-up and transfer of disease organisms, you should re-site arks between batches of pigs and the straw bedding etc. should be removed. More

information on biosecurity can be found in the DEFRA publication, *Better biosecurity* provides peace of mind, healthy stock and a more viable business (see the Appendix).

Accommodation

- 115. All arks and huts used should be liberally provided with bedding and have a warm, draught-free lying area. This is especially important for the sow and litter at farrowing, during the suckling period and for newly weaned pigs.
- 116. You should properly maintain arks and huts, especially to ensure that damage through handling or by the pigs does not produce sharp edges that may injure the animals.
- 117. Adequate shelter must be provided to protect the animals from extreme weather conditions. Arks should be well fixed to the ground, particularly in cold windy conditions and should be sited so that the doorways can be adjusted to allow for changing weather circumstances. Wet conditions create greater welfare problems than the cold, as moisture is easily carried into the arks on feet and bodies, causing chilling in piglets, and provides the ideal environment for micro-organisms to flourish.
- 118. Adequate shelter must also be provided to protect the animals from the sun in summer. Wallows should be provided for breeding stock to allow them to cool themselves and to produce mud that can help prevent sunburn. More information can be found in DEFRA's booklet, Heat stress in pigs (see the Appendix).

Feed and water

- 119. Food should be distributed widely and evenly to minimise aggression between animals, unless an alternative method is used to ensure even consumption.
- 120. You should carefully monitor the body condition of pigs during extremes of weather

and adjust feed provision if necessary.

121. Arrangements should be in place to ensure the supply of water to stock in all weathers. Particular attention is needed at times of freezing conditions.

Fences

- 122. Electric fencing should be designed, constructed, used and maintained properly, so that when the animals touch them they only feel slight discomfort. All power units for electric fences must be properly earthed to prevent short circuits or electricity being conducted anywhere it should not, for example, gates and water troughs.
- 123. New breeding animals are unlikely to have been trained to electric fencing. You should have a training paddock with secure fencing, such as pig netting, outside the electric fencing to help the animals see the fencing and to ensure that they cannot escape from the unit.
- 124. Every effort should be made to protect pigs, particularly young piglets, from predation. Steps such as a predator control programme should be considered.

Farrowing sows and piglets

- 125. In hot conditions, lactating sows may be prompted to leave the ark to seek more comfortable conditions outside, effectively abandoning her litter. Farrowing arks should be insulated and have provision for some degree of extra ventilation such as manually controlled flaps.
- 126. Farrowing arks should be sited on level ground to reduce the risk of overlying. Suitable restrainer boards should be used to prevent very young piglets from straying during the post-farrowing period.

Nose ringing

127. Nose ringing is a mutilation and should be avoided wherever possible. It is usually carried out to deter excavation of the paddocks and damage to the cover vegetation through excessive rooting. Nose ringing can reduce the risk of environmental pollution, where there is a risk of soil erosion and leaching of nutrients from faeces. Where it is necessary to nose ring pigs, it should only be carried out by a suitably trained and competent operator. All equipment should be cleaned and disinfected between pigs.

APPENDIX

Publications related to pig welfare available from DEFRA

PB No.	Title	
0409	Code of Practice – The Welfare of Animals in Livestock Markets	
0621	Farm Fires: Advice on Farm Animal Welfare	
1147	Emergencies on Livestock Farms	
1148	Lameness in Pigs	
1316	Heat Stress in Pigs – Solving the Problem	
1381	Guidance on the transport of casualty farm animals	
2594	Explanatory guide to the Welfare of Animals (Slaughter or Killing) Regulations 1995	
3840	Condition scoring of pigs	
3575	Assessment of practical experience in the handling, transport and care of animals: guide to employers	
3766	Guidance on the Welfare of Animals (Transport) Order 1997	
4444	Site suitability for outdoor pig farming	
7350	Better biosecurity provides peace of mind, healthy stock and a more viable business.	
Veterinary Medicines Directorate	<u>.</u>	Code of practice on the responsible use of animal medicines on the farm (2001)

You can get copies of all these publications, free of charge, from – DEFRA Publications, Admail 6000, LONDON, SW1A 2XX

Telephone orders (for free publications): 0845 955 6000

Telephone enquiries: 0845 955 6000

Email: defra@iforcegroup.com Website: http://www.defra.gov.uk

These publications are updated regularly. For more information on the most current

versions and new publications, please contact: DEFRA

Animal Welfare Division, Tel: 020 7904 6521

Guidance on Manx legislation including notes on the Welfare of Livestock during Transport Order 1997 can also be obtained from Animal Health.







