



**Intensive Pig Policy Background
Suggested Welfare Policy Statement for IVA
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The Veterinary Profession has traditionally defended the welfare interests of farm animals by persuasion and education and a vets primary interest is always that of the animal under his care.

The profession has sought to influence the production climate and the development of Welfare Legislation in the interest of animals, while insisting on routine involvement on the farm in a special relationship based on trust and respect with his farming client.

Vets have the individual animal, traditional surgical skills and the ability to define and solve problems. These skills allow the development of trust by both the farmer and the public that animals are produced in an acceptable system and that treatments and medications have been recorded and properly withdrawn. The veterinary profession is at the forefront of the development of Food Quality Assurance and good animal welfare systems. Which are increasingly transparent and auditable.

PIG WELFARE

Different countries have different attitudes towards standards of welfare and perhaps the UK has higher standards than other parts of Europe and they have drawn up and legislated for specific Statutory Requirements under The Welfare of Livestock Regulations 1994. These are supported by animal Welfare Codes of Practice from such bodies as F.A.W.C. The Farm Animal Welfare Council. In Ireland the situation depends on older more general cruelty legislation and E. U Directives.

The Welfare Codes State

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

Stockmanship is a key factor because no matter how otherwise acceptable a system may be in principle, without competent, CARING and diligent stockmanship the welfare of animals cannot be adequately provided for.

THE 5 FREEDOMS

- 1) **Freedom from hunger and thirst.**
Easy access to fresh clean water and a balanced ration which maintains Full health and vigour.
- 2) **Freedom from discomfort**
Provision of a suitable environment and a comfortable resting area.
- 3) **Freedom from pain, injury and disease.**
Prevention where possible and prompt diagnosis and proper treatment.
- 4) **Freedom to express normal behaviour**
Provision of sufficient and appropriate space, interest and the company of other pigs.
- 5) **Freedom from fear and distress.**
Caring stockmanship, constant comfortable environment and freedom from aggression by other pigs.

These five freedoms represent the ideal which is regrettably rarely achieved and the most important freedom is the freedom from Pain, injury and disease. Many diseases result directly from welfare failures. Muirhead and Alexander have produced lists of problems associated with welfare failure and these are included for reference, more detail is available in chapter 16 of their book **Managing Pig Health and the Treatment of Disease**.

Freedom to express normal behaviour

This is the most controversial area and the most difficult to provide in intensive systems. We very often look at animals in human terms resulting in strong emotions and anthropomorphic opinions and we can forget that the natural response of a pig to any interference is to squeal loudly and retreat as rapidly as possible. However recently castrated lambs don't vocalise or leave the flock for sound evolutionary reasons such as avoiding attention and predators. Normal behaviour implies freedom of movement, the ability to turn round, and the ability to interact with other pigs in a normal way.

Stall and Tether ban

The U.K. has banned the use of stalls and tethers since Jan 1999 while the E.U. Directive 91/630/EEC permits the use of existing stalls until Jan 2006, but no new ones should be built. The U.K. supermarkets are now demanding pigs from stall free units and various inspection and welfare friendly quality control systems have developed such as "The Malton Code" and the FAB pigs Quality Assurance scheme. These all seek Veterinary Certification and include welfare requirements. Countries exporting to the U.K. are changing their systems but Ireland still has 90% confinement based units, Northern Ireland has changed but 40% of pig units have gone out of production and there certainly has been no evidence of higher prices or a better position in the market. In Contrast there has been a period of problems with lowered production and poor welfare.

Changing from stalls and tethers to loose housing replaces one set of welfare problems with another, particularly in relation to individual sow feed rationing and aggression. Good pen or yard design is required combined with skilled stockman ship if freedom from fear, distress, pain and injury are to be achieved.

Housing must be such that animals can stand, lie down and turn without difficulty, have a clean place in which to rest and have contact with other pigs.

Good welfare results in less disease Production and more profit

With regard to pig welfare the 5 freedoms imply and lead onto

7 Further Freedoms.

- Caring and Knowledgeable Management.
- Light during the day.
- No unnecessary Mutilations .
- Emergency Systems to cover fire and ventilation failure
- Proper Hospitals
- Proper transport and movement systems
- Humane emergency and routine slaughter

Factors responsible for good welfare

Number one is the person looking after the pigs.

Almost any system can be made to function satisfactorily by a good knowledgeable caring stock person, preferably the owner or with a direct line to decision-making management. Attention to detail and the monitoring of daily established routines are vital.

Observation

Daily examination of all the pigs on a unit is essential. Sick animals should be marked, treated and if necessary removed to a hospital pen. This is particularly important for a tail bitten pig.

Careful mixing of pigs

Whenever pigs are mixed there are varying degrees of fighting and injury. Stable group sizes, splitting to smaller pens, reducing light intensity, adlib feed and scent masking are all useful in overcoming the requirement to mix pigs on most farms.

Stocking density

There are recognised standards for various ages and weights of pigs and figure 16.1 in appendix I (ref Muirhead), provides the accepted standards. If you can see one third of the floor area of the pen at anyone time the stocking rate is usually adequate.

Overstocking produces marked reduction in performance and increases levels of disease.

Food and Water

Food should be presented in a way that allows all pigs to eat comfortably without distress or fear and trough spaces must be adequate (see Appendix 1). Daily inspection of hoppers and automatic feeding systems are necessary to ensure that pigs receive a supply of food at least once per day.

There must be a sufficient number of accessible drinkers per pen for every pig to drink easily and every drinker should be checked daily for an adequate flow rate. Keep water clean and fresh and avoid blockages by covering and cleaning header tanks regularly, ideally you should be prepared to drink the same water as the pigs. Adequate water is particularly important for recently weaned pigs and lactating sows. Pipeline wet feeding systems should have a second ad lib drinker and a single space hopper with an integral nipple drinker should not be the only source of water to a pen of growing pigs. All outside pipes should be insulated to avoid freezing.

Floor and wall surfaces.

The floors should be free from projections, well maintained, easily cleaned and if solid with good drainage to the exterior of the pen. Slats and perforated floors should be well maintained and of suitable size and design for the age and type of pig to prevent injury and disease. (Appendix I fig16-2)

Bedding is highly desirable particularly in the first 48 hrs of life and where it is used the maintenance of a clean dry lying area is mandatory. The walls and partitions should be smooth and easily cleaned without projections or sharp edges.

Automatic equipment and emergency systems.

All automatic equipment should be inspected every day and emergency backup systems provided. Pressure ventilation systems require alarms and automatic magnetic falling roof or wall panels in case of power interruption. Smoke alarms and fire exits are also required. Electrical fittings should not be accessible to pigs and should be correctly earthed with trip out switches. They should be protected against damage (from rodents) and contamination from water during cleaning.

" All-in, All-out" housing and management systems

Segregating one age group of pigs from another both within farms and between farms batch farrowing, cleaning and disinfection of each section between each batch of pigs is a major component in disease control and hence good welfare. Segregated early weaning SEW, medicated early weaning MEW, hysterectomy derived minimal disease MD systems and farms when combined with the principles of straight line distribution batch cleaning and " All-in, All-out" stocking have contributed very significantly to the reduction of disease and improved daily live weight gains (up to 120g per day).

.A comfortable environment Temperature -

Pigs need to be kept within their comfort zones, once their local temperature drops below their 'lower critical temperature' LCT pigs will huddle and use energy. The failure to maintain a stable comfortable temperature is one of the most important trigger factors in the development of diseases such as post weaning diarrhoea and pneumonia.

Humidity -Relative humidity should be maintained between 60 and 80 percent.

Ventilation -The object is to maintain freshness to ensure toxic gases are adequately removed without dropping the temperature below the required comfort zones. A light draught e.g. an increase in air movement from 0.15 m/sec to 0.5 m/sec can lift the lower critical temperature LCT by 4°C (7°F) or more. Automatic mechanically ventilated systems should be checked daily, thermostats and temperature readings calibrated weekly.

Light -Pigs should not be kept in darkness but have sufficient light to satisfy their behavioural and physiological needs. The period of light should be at least that of natural light. Sufficient light should also be available to allow adequate daily inspections. Adequate light has an important role in maximising reproductive efficiency.

.Proper hospital pens

There must be sufficient "acute" hospital pens to allow the removal and treatment of individual pigs that cannot fend for themselves e.g. tail bitten severely lame acutely ill etc. These are usually heated or well bedded and insulated pens for a maximum of three to four pigs. Recovered pigs should then be removed to a series of convalescent hospital pens of a larger group size before being returned to the main unit. A requirement of between 5 to 10 percent of the number of growing/finishing places should be provided. Cleanliness, disinfection, caring management and recorded therapy followed by prompt euthanasia in hopeless cases are essential. Every large unit should have a licensed captive bolt humane killer and a suitably trained operator.

.Mutilations

Mutilations include nose-ringing of sows, tattooing, ear-tagging or notching, tail docking, tooth clipping and boar tusk removal. It is generally accepted that some of these procedures are necessary on intensive units. Castration is now regarded as being unnecessary as pigs in the UK and Ireland achieve slaughter weights before they are sexually mature reducing the incidence of boar taint. Those procedures that are thought to be necessary must be carried out by well trained operators at the correct age and in a manner that minimises pain and distress. Clipping the eye teeth and tail docking should be carried out within seven days of birth preferably under three days. It is important to justify the requirement to tail dock by assessing the current position with regard to tail biting in the unit. All equipment should be well maintained and kept clean and disinfected .

.Proper transport and movement systems

Pigs have very specific behaviours and are notoriously difficult to move. They respond better to well designed raceways and will readily move from darkness into light and not the reverse. The same applies to ascending ramps, problems always occur on the descent. Electrical goads are highly undesirable, boards and moving barriers and a gentle touch on the back are all that are necessary .

Lorries should be specifically designed for pig transport with proper penning, ventilation and flooring. Ramps should not be too steep and a lifting hydraulic tailgate pen is highly desirable. Controversy surrounds the correct stocking densities for pigs during transport, but in general terms pigs should have enough room to lie down and be supported by the presence of their neighbours. They should not be so lightly stocked that they are tossed around or so heavily stocked that they are on top of one another .

.Humane slaughter

At the abattoir pigs should be handled carefully and properly in the lairage and moved to the slaughter point quietly and without fear. No electrical goads, a flapper stick will make enough noise to achieve the same purpose.

Pigs should be completely and properly stunned prior to sticking and bleeding. On the farm casualty animals should be assessed on a daily basis according to the guidelines laid down by the Pig Veterinary Society (see attached booklet) and the guidelines for the humane destruction of pigs on the farm should be followed.

Areas of Concern

1) The Welfare Standards of Production Systems of Imported Food are often lower than ours.

Good Animal Welfare requires rounded knowledgeable judgement and opinions and backgrounds of vets, consumers and farmers and even countries will vary .Opinion varies certainly within Europe. The animal interests are always primary and as knowledge improves animal husbandry system are altered to be more welfare friendly by legislation.

However food is often imported from countries with very much lower welfare standards and consumers are not aware of this.

2) Animal Remedies and Residues Regulation's and associated Heavy Penalties

Have produced a climate of fear in pig producers which has resulted in a deterioration in animal welfare. The necessary treatment of animals within 6 weeks of slaughter may be abandoned and animals may be left to recover without treatment or deteriorate, die or be shot, rather than risk the production of a residue and the associated regulatory hassle.

This causes great concerns for vets who given an opportunity to see and treat animals always do so, insisting on sufficient hospitals to allow adequate withdrawal periods to obey the regulations.

References

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DISEASE PROBLEMS IN STALLS AND TETHERS ASSOCIATED WITH WELFARE FAILURES Condition/Problem and Welfare Failures

Abortion

- Badly maintained concrete. Pools of urine
- Decreasing daylight length
- High air flow.
- Lack of boar contact
- Lameness
- Low feed levels
- Low intensity of light
- Low variable temperatures
- Poor hygiene
- Stressful environment

Abscess

- Arthritis
- Bad slats
- Bursitis / trauma
- Bush foot / trauma
- Environmental trauma
- Faulty vaccination
- Poor concrete
- Stalls too small

Arthritis

- Leg weakness (OCD)
- Slippery floors
- Stalls too small
- Trauma
- Worn slats
- Bursitis
- Poor concrete surfaces
- Trauma

Cystitis pyelonephritis

- Frozen pipes
- Infrequent urination
- Lameness
- Once a day feeding
- Poor access to water
- Water shortage

Hygroma

- Poor concrete surfaces
- Pressure sores
- Trauma (Cont.)

**DISEASE PROBLEMS IN STALLS AND TETHERS
ASSOCIATED WITH WELFARE FAILURES (Cont.)
Condition/Problem and Welfare Failures**

Inability to express natural behaviour

- Total individual confinement

Leg weakness (OCD) Lameness

See arthritis

- Bush foot
- New concrete or slats
- Poor muscle tone
- Poor selection of gilts
- Poor slippery floor surfaces
- Thin weak bones from lack of exercise
- Worn slats
- Young animals

Mastitis

- Bad drainage
- Poor hygiene
- Solid gates in stalls
- Trauma
- Udder contamination

Neck and girth sores

- Old worn-out or dirty tethers
- Poor management
- Tethers too tight, poor design

Overgrown distorted claws

- Lack of exercise
- Leg weakness factors
- Slats wrong way, gaps too wide
- Smooth surfaces

Prolapse rectum or vagina

- Badly designed tail gates
- Short standing area and a deep step
- Slippery floors
- Sloping floors

Shoulder sores

- Poor concrete surfaces
- Slippery floor surfaces
- Thin animals .

Slow farrowing

- Lack of muscle tone
- Old sows

Stereotypic behaviour

- Boredom

Thin sow syndrome

Bullying
Disease (Cont.)

ASSOCIATED WITH WELFARE FAILURES (Cont)

Condition/Problem and Welfare Failures

Draughts
Low feed intake
Mange
Parasite burdens
Poor environments (cold)
Poor nutrition

Vulval discharge

Build up of faeces behind the sow at the bottom of
the tail gate
Dirty weaning pens
Dirty wet boar pens

(Fig.16-10)

**DISEASE PROBLEMS IN CUBICLES AND FREE
ACCESS STALLS ASSOCIATED WITH WELFARE
PROBLEMS**

Condition/Problem and Welfare Failures

Abortion

Decreasing daylight length
High air flow.
Lack of boar contact
Lameness
Low feed levels
Low intensity of light
Low temperatures
Low stocking density
Poor building Insulation
Stress
Trauma

Abscess

Arthritis
Bad slats
Bullying
Bursitis from trauma (Cont.)

**DISEASE PROBLEMS IN CUBICLES AND FREE
ACCESS STALLS ASSOCIATED WITH WELFARE
PROBLEMS (Cont.)**

Condition/Problem and Welfare Failures

Bush foot from trauma
Environmental trauma
Faulty vaccination

Fighting
Poor concrete

Aggression

A feature of cubicle housing
Establishment of pecking order
Uneven group mixing of sows

Arthritis

Bullying
Bush foot -poor concrete
Fighting
No bedding
Leg weakness (OCD)

Bursitis

Fighting
Bullying
Trauma

Bush foot

Bad slats
Concrete kerbs
Poor concrete surfaces
Trauma

Cystitis pyelonephritis

Frozen pipes
Leg weakness
Poor access to water
Slippery concrete surfaces
Sows reluctant to drink
Water shortage

Erysipelas

Straw systems
Wet feeding
Wet pens

Fear and distress

From bullying
Mixing sows

Haematoma

Vulval biting

Hygroma

Pressure sores
Trauma (Cont.)

DISEASE PROBLEMS IN CUBICLES AND FREE ACCESS STALLS ASSOCIATED WITH WELFARE PROBLEMS (Cont.)

Condition/Problem and Welfare Failures

Infertility

High return rate and "not in pig" from aggression

Leg weakness (OCD)

Poor slippery floor surfaces
Water available at tile front
Wet dunging areas
Wet lying areas
Young animals

Mastitis

No bedding
Poor concrete
Poor hygiene
Trauma
Wet pens

Parasites

Continuous access to faeces
Inability to remove faeces adequately

Prolapse rectum or vagina

Badly designed tail gates
Slippery floors

Shoulder sores

Poor concrete surfaces
Thin animals
Trauma as animals rise

Thin sow syndrome

Disease
Draughts
Low feed intake
Low house temperature
Parasite burdens
Poor environments
Poor nutrition

Vulval biting

Occurs towards the latter end of pregnancy

Vulval discharge

Dirty weaning pens
Dirty wet boar pens
Wet defecating areas

**DISEASE PROBLEMS IN GROUP HOUSING
ASSOCIATED WITH WELFARE FAILURES
Condition/Problem and Welfare Failures**

Abortion

- Inadequate access to food
- Lack of bedding
- Lack of boar contact
- Low feed
- Low temperatures
- Poor body condition
- Reduced daylight length
- Stress
- Wet bedding

Abscess

- Fighting
- Trauma

Aggression

- Adding new sows
- High stocking density
- Mixing

Anaemia

- Gastric ulceration
- Haemorrhage -vulva
- Trauma

Arthritis

- Environmental trauma
- Damage at oestrus
- Leg weakness (OCD)

Bursitis

- Shortage of bedding
- Trauma

Bush foot

- Trauma due to poor concrete surfaces

Erysipelas

- Dirty bedding (Cont.)

**DISEASE PROBLEMS IN GROUP HOUSING
ASSOCIATED WITH WELFARE FAILURES (Cont.)
Condition/Problem and Welfare Failures**

- Ease of spread from clinically ill animals
- Stress

Foot rot

- Dirty wet bedding
- Poor management

Fractures

- Leg weakness

Slippery floors
Trauma

Haematoma

Fighting

Hygroma

Trauma

Infertility

Stress induced embryo losses

Leg weakness (OCD)

Poor floor surfaces
Trauma

Mastitis

Permanently bedded yards
Poor hygiene

Internal parasites

Access to faeces
Wet dirty areas

Prolapse rectum or vagina

Abdominal pressure
Nutrition

Thin sow syndrome

Bullying
External and internal parasites
Poor environment
Variable feed intake

Vulva biting

Feeding methods
Pen design
Stocking density

(Fig.16-12)

**PROBLEMS IN ELECTRONIC FEEDER SYSTEMS
ASSOCIATED WITH WELFARE FAILURES
Condition/Problem and Welfare Failures**

Aggression

Adding sows to an established group
Group systems
Shape of yard

Infertility

Stress after feeding
Stress at feeding

Loss of sow identification

Lost transponder tags / collars
Thin sow
Education -understanding
Poor design and maintenance

Skin abrasions

Aggression

Stress at mixing

Badly designed ESF system

Variable litter size

Embryo reabsorption / stress

Vulva biting

Feeder design

Poor pen/yard design

Queuing for feed

**DISEASE PROBLEMS IN FARROWING AND
LACTATING SOWS AND SUCKING PIGS
ASSOCIATED WITH WELFARE FAILURES**

Condition/Problem and Welfare Failures

SOWS

Agalactia / udder congestion

A change from straw to no bedding

Constipation

Frozen pipes

Incorrect feeding

Poor nutrition

Poor water supply

Leg weakness (OCD)

Leg stresses

Particularly first litter animals

Poor nutrition

Slippery floors or slats

Loss of condition

Cold / draughts

Failure to foster piglets from large litters

Poor nutrition

Under feeding

Mastitis

Failure to clip teeth of piglets

Poor hygiene

Poor management

Shortage of water

Wet pens

Metritis

Ascending infection from the vulva

Dead piglets

Problems at farrowing

Unhygienic manual assistance

Prolapse: vagina / uterus / rectum

Difficulty in the sow rising

Obstructed or prolonged farrowing

Faulty tail gates in the crates

Increased abdominal pressure

Old age

Slippery surfaces
Sloping floor

Vulval haematoma

Crushing of the vulva by the tail gate or crate
projections
Previous damage in yard (Cont.)

**DISEASE PROBLEMS IN FARROWING AND
LACTATING SOWS AND SUCKING PIGS
ASSOCIATED WITH WELFARE FAILURES (Cont.)
Condition/Problem and Welfare Failures**

PIGLETS

Arthritis

Joint infections
Faulty teeth clipping
Lack of colostrum
Poor hygiene. Dirty udders
Rough floors
Starvation
Trauma to teeth and tails
Sore knees from rough concrete surfaces

Atrophic rhinitis

High humidity
High levels of dust

Coccidiosis

Poor pen hygiene

Diarrhoea

Wet draughty dirty pens
Lack of colostrum
Lack of sow immunity

Greasy pig disease

Poor pen maintenance
Poor teeth clipping
Skin trauma

High mortality

Badly designed crates
Cold
Damp
Draughts
Excessive disturbance
Failure to obtain colostrum
Lack of supervision in first 24 hours
Overweight sows
Poor management

Hypoglycemia

Agalactia
Badly designed crates
Chilling
Cold
Failure to suckle
Poor management

Poor teat access
Slippery floors
Splay legs

(Fig.16-14)

**DISEASE PROBLEMS IN NEWLY WEANED SOWS
ASSOCIATED WITH WELFARE FAILURES
Condition/Problem and Welfare Failures**

Abscess

Trauma -loose-housing
Fighting

Bruising and skin abrasions

Fighting
Heavy boars
Trauma
Variable sizes of sows

Fracture

Fighting
Mixing different sizes of pigs
Slippery floors
Trauma -loose-housing

Haematoma

Fighting
Trauma

Lameness

Activity at oestrus
Foot damage
Heavy boars at mating
High stocking densities
Inadequate bedding
Poor bone strength
Slippery floors

Leg weakness (OCD)

Gilt rearing and selection
Inadequate nutrition
Poor body condition
Poor crate design
Poor slippery surfaces
Trauma

Muscle tearing

Damage during suckling
High stocking density
Lack of exercise
Poor floors

Mastitis

Poor hygiene
Trauma
Wet floors

(Fig.16-15)

DISEASE PROBLEMS IN WEANED AND GROWING PIGS ASSOCIATED WITH WELFARE FAILURES
Condition/Problem and Welfare Failures

Abscess

- Faulty injections
- Fighting
- Lameness factors
- Mixing of pigs
- Tail biting
- Trauma

Bursitis

- Badly designed slats
- Foot problems
- Incorrect slat: gap ratio
- Lameness
- Poor floor surfaces
- Trauma
- Weight too heavy for slats

Colitis

- Disease
- Faulty nutrition
- Poor building hygiene

Erysipelas

- Dirty wet conditions in finishing pens
- High exposure in straw based systems

Enteric diseases in growing pigs

- Infections such as those that cause PE, swine dysentery, salmonellosis
- Poor hygiene
- Poor nutrition
- Poor environments

Greasy pig disease -Exudative epidermitis

- Faulty teeth clipping
- High humidity
- High stocking densities
- Infection
- Skin abrasions

Gastric ulcers

- Faulty nutrition
- Feed too finely ground
- Stress

Haematoma and haemorrhage

- Fighting
- Mange
- Trauma from the environment

Lameness

- Fat sprayed diets
- High stocking densities (Cont.)

DISEASE PROBLEMS IN WEANED AND GROWING PIGS ASSOCIATED WITH WELFARE FAILURES
Condition/Problem and Welfare Failures

Poor nutrition
Slippery floor surfaces (fat sprayed diets)
Increasing gap size between slats caused by
Wearing

Leg weakness (OCD)

Gilts served too young
Heavy stocking densities
Poor floor surfaces

Pneumonia

House not split into modules
Permanently populated housing
Poor management
Poor environment
Poor nutrition
Specific infections

Post-weaning diarrhoea

Excess feed
Failure to clean and disinfect between batches
Fluctuating temperatures
Poor environment
Stale feed

Rectal prolapse

Poor environment
Poor nutrition
Respiratory disease

Respiratory disease

Fluctuating temperatures and humidity
High stocking densities
Permanently populated houses
Poor nutrition

Vice (Abnormal behaviour)

An unhappy pig
Poor environment

{Fig.16-16)

WELFARE AND DISEASE PROBLEMS - OUTDOORS
Condition/Problem and Welfare Failures

Abortion

Cold wet conditions
Draughts
Feed intake
Heat stress

Parasites
Poor nutrition
Season
Sunlight

Agalactia

Faulty nutrition
Frozen or inadequate water supplies

Clostridial infections

No vaccination

Erysipelas

Exposure to the organism and failure to vaccinate

Infertility

Fighting
Hot weather
Lack of adequate wallows
Lame boars
Overuse of boars (especially young ones)
Shortage of shade
Trauma to the boar's penis

Haemorrhage from the penis

Associated with the sandy soils

Lameness

Bad feet
Flint land
Mycoplasma
Leg weakness (OCD)
Wet land

Leptospirosis

Associated with the constant exposure of sows to
contaminated wallows or water
Exposure to rodents

Loss of body condition

Associated with the leaner genotype that is used
as a terminal sire
Inadequate feed
Poor feed presentation
Poor parasite control

Mortality (piglets)

Bad management

WELFARE AND DISEASE PROBLEMS . OUTDOORS (Cont.)

Condition/Problem and Welfare Failures

- Cannibalism
- Crows
- Foxes
- Poor bedding
- Poor environment
- Sloping floors

Parasites

- Continual exposure to eggs and larvae particularly the stomach, nodular and lung worms
- No worming programme
- Old pastures

Sunburn

- Lack of shelter
- No wallows
- White breeds

(Fig.16-17)