



Humane Farm Animal Care
Animal Care Standards
March 2013

PIGS

PIGS

HUMANE FARM ANIMAL CARE

Humane Farm Animal Care is a non-profit charity whose mission is to improve the lives of farm animals by providing viable, credible, duly monitored standards for humane food production and assuring consumers that certified products meet these standards.

Humane Farm Animal Care is supported by a consortium of Animal Protection Organizations, Individuals, and Foundations, such as the American Society for the Prevention of Cruelty to Animals and the Humane Society of the United States.

The Humane Farm Animal Care Standards have been developed to provide the only approved standards for the rearing, handling, transport and slaughter of Pigs for use in the “Certified Humane” program. These standards incorporate scientific research, veterinary advice, and the practical experience of the farming industry. The standards are based on the Royal Society for the Prevention of Cruelty to Animals (RSPCA) guidelines, current scientific information and other practical standards and guidelines recognized for the proper care of animals.

Animal welfare is improved when livestock managers adhere to the following:

- Access to wholesome and nutritious feed
- Appropriate environmental design
- Caring and responsible planning and management
- Skilled, knowledgeable, and conscientious animal care
- Considerate handling, transport, and slaughter

HUMANE FARM ANIMAL CARE'S SCIENTIFIC COMMITTEE

Leading animal scientists, veterinarians, and producers work with Humane Farm Animal Care to develop the *Animal Care Standards* for humane farming and continue to work with Humane Farm Animal Care to continually review new information pertaining to improving the lives of farm animals.

Kenneth E. Anderson, PhD North Carolina State University

Michael Appleby, PhD World Animal Protection

Richard Blatchford, PhD Asst. Coop Extension Specialist, UC Davis

Elisabetta Canali, PhD Università degli Studi, Milan, Italy

Sylvie Cloutier PhD Associate Director of Assurance, Canadian Council
of Animal Care, Ottawa, Canada

Brenda Coe, PhD Pennsylvania State University

Hans Coetzee, PhD Iowa State University

Luiz Dematte, DVM, PhD Industrial Director of Korin Ltd, and General
Coordinator Of Mokichi Okada Research Institute

Inma Estéves, PhD Research Professor, Neiker-Tecnalia University, Spain

Anne Fanatico, PhD Appalachian State University, Boone, NC

***Valentina Ferrante, DVM, PhD,
DIPL ECAWBM-AWSEL*** University of Milan, Italy

Trent Gilbery, MS North Dakota State University

Alan Goldberg, PhD The Johns Hopkins University

Temple Grandin, PhD Colorado State University

Thomas G. Hartsock, PhD University of Maryland

Jörg Hartung, DVM Institute of Animal Hygiene, Welfare and Farm
Animal Behavior, University of Veterinary Medicine,
Hanover, Germany

Brittany Howell, PhD Fort Hays State University

<i>Pam Hullinger, DVM, MPVM</i>	University of California Lawrence Livermore National Laboratory
<i>Joy Mench, PhD</i>	University of California, Davis
<i>Suzanne Millman, PhD</i>	Iowa State University College of Veterinary Medicine
<i>Malcolm Mitchell, PhD</i>	SRUC, Scotland's Rural College
<i>Priya Moutupalli, PhD</i>	IKEA Food Global Sustainable Sourcing Specialist, Sweden
<i>Ruth Newberry, PhD</i>	Associate Professor, Norwegian University of Life Sciences; Adjunct Professor, Washington State University
<i>Abdullah Ozen, PhD</i>	Professor, Firat University, Elazig, Turkey
<i>Edmond Pajor, PhD</i>	University of Calgary, Alberta, Canada
<i>Jose Peralta, PhD, DVM</i>	Western University of Health Science, College of Veterinary Medicine, Pomona, CA
<i>Rosangela Poletto, DVM, PhD</i>	Professor, Instituto Federal do Rio Grande do Sul, Brazil
<i>Martin Potter, PhD</i>	Animal Welfare Consultant, Member of FAWT, UK and Advising Member of EIG
<i>Mohan Raj, PhD</i>	Honorary Visiting Fellow, School of Veterinary Sciences, Bristol University, Bristol, UK
<i>Jean-Loup Rault, PhD</i>	Research Fellow, The University of Melbourne, AU
<i>J.K. Shearer, PhD</i>	Iowa State University
<i>Marilyn M. Simunich, DVM</i>	Director, Animal Health Laboratory, Division of Animal Industries, Idaho State Dept. of Agriculture
<i>Carolyn Stull, PhD</i>	Chairman, Scientific Committee University of California, Davis
<i>Janice Swanson, PhD</i>	Michigan State University

William VanDresser, DVM

Retired Extension Veterinarian

Andreia De Paula Vieira, DVM, PhD

Animal Welfare Scientist, Universidade de São Paulo,
Brazil

Daniel M. Weary, PhD

Professor and NSERC Industrial Research Chair,
Animal Welfare Program, University of British
Columbia

Julia Wrathall, PhD

Director, Farm Animals Division, RSPCA, West Sussex,
UK

Adroaldo Zanella, PhD

Professor, Departamento de Medicina Veterinária
Preventiva e Saúde Animal\Faculdade de Medicina
Veterinária e Zootecnia Universidade de São Paulo,
Pirassununga, SP, Brazil

TABLE OF CONTENTS

PART 1: INTRODUCTION1
A. The Certified Humane Label1
B. Guide to the Use of the Welfare Standards.....1
PART 2: FEED AND WATER2
A. Feed2
FW 1: Wholesome, nutritious feed2
FW 2: Free access to feed.....2
FW 3: Feed records.....2
FW 4: Substances prohibited in feed2
FW 5: Body condition2
FW 6: Avoiding changes in feed3
FW 7: Restricted feeding program3
FW 8: Avoiding competition for feed3
FW 9: Easy availability of feed3
FW 10: Feeding equipment4
FW 11: Wholesomeness of stored feed4
FW 12: Weaning.....4
FW 13: Creep Feeding.....4
FW 14: Feeding of weaned pigs4
B. Water.....4
FW 15: Water supply.....4
FW 16: Extra drinker when using wet and dry feeders4
FW 17: Watering equipment4
FW 18: Drinkers for lactating sows.....5
FW 19: Emergency water supply5
PART 3: ENVIRONMENT5
A. Buildings.....5
E 1: Records of features of facilities that promote animal welfare5
E 2: Facility design5
E 3: Preventing injuries from facilities.....5
E 4: Limiting the use of toxic substances in buildings6
E 5: Electrical installations6
E 6: Cleaning and disinfection.....6
B. Thermal environment & ventilation6
E 7: Thermal conditions.....6
E 8: Ventilation.....6
E 9: Air quality6
E 10: Reducing heat stress7
C. Lying Area/Floors7
E 11: Lying area.....7
E 12: Service pens7
D. Space allowances7
E 13: Total floor space.....7
E 14: Bedded space for growing pigs7

E 15: Space allowance for sows and gilts.....	8
E 16: Boar pens.....	8
E 17: Space allowance in hot conditions	8
E 18: Freedom of movement	8
E 19: Confinement.....	8
E 20: Grouping animals	9
E 21: Preventing aggressive behavior.....	9
E 22: Mitigating aggressive behavior	9
E. Farrowing Systems.....	9
E 23: Farrowing area	9
E 24: Before farrowing	9
E 25: After farrowing.....	9
E 26: Environment suitable for piglets	10
F. Environmental Enrichment	10
E 27: Stimulating environment.....	10
E 28: Mitigating abnormal behaviors	10
E 29: Isolation.....	11
G. Lighting	11
E 30: Sufficient light in buildings.....	11
E 31: Light intensity and period	11
H. Outdoor Housing	11
E 32: Winter shelter	11
E 33: Summer shelter.....	11
PART 4: MANAGEMENT	12
A. Managers	12
M 1: Understanding the standards	12
M 2: Management and record keeping activities.....	12
M 3: Complaints to Operators	12
B. Caretakers	13
M 4: Mitigating problems.....	13
M 5: Training.....	13
M 6: Compassionate treatment	13
C. Handling.....	14
M 7: Frequent handling	14
M 8: Quiet handling.....	14
D. Identification.....	14
M 9: Identification methods.....	14
E. Equipment	14
M 10: Using equipment	14
M 11: Automatic equipment.....	14
M 12: Automatic ventilation equipment.....	15
F. Inspection	15
M 13: Monitoring	15
PART 5: HEALTH	16
A. Health Care Practices.....	16
H 1: Animal Health Plan.....	16

H 2: Certified health programs16
H 3: Mitigating health problems.....16
H 4: Monitoring herd performance data16
H 5: Managing brought-in animals.....16
H 6: Care of sick and injured animals17
H 7: Controlling parasites17
H 8: Foot care17
H 9: Physical alterations17
B. Casualty animals18
 H 10: Euthanasia.....18
 H 11: Carcass disposal.....18
PART 6: TRANSPORTATION19
 A. Preparing for Transportation19
 T 1: Food and water.....19
PART 7: SLAUGHTER19
 A: Slaughter procedures19
 S 1: Minimizing pre-slaughter handling19
 S 2: Trained personnel19
 S.3: Slaughter Requirements19
REFERENCES20

PART 1: INTRODUCTION

A. The Certified Humane Label

The “Certified Humane” program was developed to certify animals and the products derived from them. Upon satisfactory application and inspection, farmers and ranchers who meet the *Humane Farm Animal Care* standards may use the “Certified Humanely Raised and Handled” logo. Program participants are inspected and monitored by *Humane Farm Animal Care*. The charges levied are to cover inspection and program costs. Any surplus income will be used to fund consumer education and research into farm animal welfare.

B. Guide to the Use of the Welfare Standards

- The broad objectives of the standards are described at the beginning of each section.
- The numbered requirements are the standards, all of which must be complied with.
- These standards are written to cover facilities in varying geographic and temperature regions and facilities utilizing different systems. Therefore, not all sections in these standards will apply to each facility.
- Boxed sections provide additional information or may highlight areas where the standards will be reviewed in the future.
- Farmers must also comply with any local, state, or federal requirements or regulations for pig production that affect the environment or safety of their product as well as the Veterinary Practice Acts in their State.

PART 2: FEED AND WATER

OBJECTIVES: *Livestock must have access to fresh water and a diet designed to maintain full health and promote a positive state of well-being. Feed and water must be distributed in such a way that livestock can eat and drink without undue competition.*

A. Feed

FW 1: Wholesome, nutritious feed

- a. Pigs must be fed to meet or exceed nutrient requirements as determined by the National Research Council.
- b. Pigs must be fed a wholesome diet which is:
 1. Appropriate to their species, stage of production, and age.
 2. Fed to them in sufficient quantity to maintain them in good health; and
 3. Sufficient for their nutritional needs.

FW 2: Free access to feed

Pigs must have access to nutritious feed each day, except when directed by the attending veterinarian.

FW 3: Feed records

- a. Producers must have written records of the feed constituents, the inclusion rate and constituents of compound feeds, and feed supplements, including records from the feed mill or supplier; and
- b. These records must be made available to the *Humane Farm Animal Care* Inspector upon request.

FW 4: Substances prohibited in feed

- a. No feedstuffs containing mammalian or avian-derived protein sources are permitted, with the exception of milk and milk products.
- b. Pigs must not be fed antibiotics, or other substances deliberately to promote growth or feed efficiency.
- c. Antibiotics can be used in individual animals only therapeutically (i.e. disease treatment) as directed by a veterinarian.

FW 5: Body condition

- a. Sows must be fed so that their body condition is likely to sustain full health and normal reproductive capacity over their maximum foreseeable life span.
- b. Body condition change in sows must be carefully planned and maintained according to the stage of production cycle.
- c. As a general rule, no animal must, at any time, have a body condition score less than 2 or more than 4. Sows must have a score of at least 3 by the 70th day of pregnancy.

Score	Appearance	Condition
1	Extremely thin	Hips and backbone very prominent; very flat sides; bone structure apparent.
2	Thin	Tube-shaped, but with flat sides. Hips and backbone readily felt without palm pressure; somewhat prominent.
3	Normal	Tube-shaped. Hips and backbone only felt with firm palm pressure and not visible
4	Fat	Hips and backbone cannot be felt; tail root surrounded by fat. Tending to bulge.
5	Obese; Bulbous	Hips and backbone heavily covered with fat; tail root submerged. Midline appears as slight hollow between rolls of fat.

FW 6: Avoiding changes in feed

Efforts must be made to avoid sudden changes in the type and quantity of feed, except as recommended by an attending veterinarian.

FW 7: Restricted feeding program

All pigs that are on a restricted feeding regime (i.e., not allowed to feed to satiety at least once per day) must have dietary or environmental supplementation such as adding bulk to the diet or suitable rooting material (peat, straw, sawdust, woodchips, dirt, stones, branches, leaves).

FW 8: Avoiding competition for feed

- a. Sows must be fed in ways that avoid bullying.
- b. Pigs may be fed from the floor as long as the surface is dry and clean and individual feed consumption is not limited by social competition.

FW 9: Easy availability of feed

- a. For ration feeding pigs in a trough, there must be enough feeding space (1.1 times shoulder width) for all pigs to feed simultaneously. A feeding place is described as space required by a single pig while eating.
- b. For ad lib feeding there must be no more than:
 - 1. 6 pigs per feeding place when using a dry feeder with no full head barriers between each feeding place;
 - 2. 10 pigs per feeding place when there are full head barriers; or
 - 3. 14 pigs per feeding place when there is the opportunity to mix water with the feed (wet and dry feeders).
- c. If wet feeding of sows indoors is used, head and shoulder barriers must be erected between each feeding place.

FW 10: Feeding equipment

- a. When pigs are not fed on the ground or floor, the feeders must be kept clean.
- b. Feeders or feeding places must be free from manure, urine, and other contaminants.
- c. Feeders must be checked twice daily to be sure they are functional.
- d. Feeders must allow easy access by swine with minimal waste of feed.

FW 11: Wholesomeness of stored feed

To reduce contamination by bird feces and vermin, all feed hoppers/bins used for storage must be covered.

FW 12: Weaning

Piglets must not be weaned from the sow before the fourth week after farrowing, unless a veterinarian confirms that the welfare or health of the sow or piglets would otherwise be adversely affected. When batch farrowing practices are used, the average age of the batch at weaning should be 28 days or more.

FW 13: Creep Feeding

Solid feed, of appropriate nutritional and palatable quality, must be provided to all piglets from 10 days of age but inaccessible to the sow.

FW 14: Feeding of weaned pigs

Particular care is needed in feed provision for newly weaned piglets, providing easily accessible feeders which provide enough space for most or all piglets to eat simultaneously.

B. Water

FW 15: Water supply

- a. All pigs must have access to an adequate supply of clean, fresh drinking water each day, except when directed by the attending veterinarian.
- b. Special care must be taken to ensure that drinkers are adjusted (height and flow rate) so that water is accessible for every pig.

FW 16: Extra drinker when using wet and dry feeders

When wet and dry feeders are used (i.e. both the feeder and drinker are within a single pig place), an additional drinker must be supplied in the pen.

FW 17: Watering equipment

- a. Drinking bowls must be kept clean.
- b. Drinkers must be checked twice daily to be sure they are functional. If nipple drinkers are used they must be regularly checked to see that they are working and not clogged.

FW 18: Drinkers for lactating sows

A continuous supply of clean drinking water must be available to lactating sows at all times. A minimum flow rate of .75-quarts/minute is required in nipple drinkers used by lactating sows.

FW 19: Emergency water supply

Provisions must be made to ensure an emergency supply of suitable drinking water in case normal supplies fail (e.g., in the case of freezing temperatures, drought or contamination of the local well resource).

PART 3: ENVIRONMENT

***OBJECTIVES:** The environment in which livestock are kept must take into account their welfare needs and be designed to protect them from physical and thermal discomfort, fear and distress, and allow them to perform their natural behavior.*

A. Buildings

E 1: Records of features of facilities that promote animal welfare

- a. For all accommodations, the key points relating to welfare must be recorded in the farm log book or on the farm site plan, and if practical, be displayed at or near to the entrance to each building and be amended accordingly.
- b. These must include:
 1. Total floor area;
 2. Building area available to pigs; and
 3. Current number of pigs in relation to age and weight, and consequent feeding, drinking, and bedding space per pig.

E 2: Facility design

- a. There must be no physical features of the pigs' environment that cause recurring injuries to them.
- b. To ensure that there are no sharp edges or protrusions likely to cause injury or distress to the pigs, the interior of any building, including the floor and all internal fixings/surfaces to which livestock have access must be:
 1. Carefully designed and constructed;
 2. Well maintained; and
 3. Regularly inspected.

E 3: Preventing injuries from facilities

In both indoor and outdoor systems, there must be no recurrent injuries visible on the pigs that could be attributed to physical features of their environment (injury is defined as damage severe enough for the formation of granular scar tissue and to an extent significantly greater than would result from accidental bumps and scratches).

E 4: Limiting the use of toxic substances in buildings

Except when preservatives with an insecticidal or fungicidal role are used, pigs must not come into contact with toxic fumes or surfaces from paint, wood preservatives, or disinfectants.

E 5: Electrical installations

All electrical installations must be:

1. Inaccessible to pigs;
2. Well insulated;
3. Safeguarded from rodents;
4. Properly grounded; and
5. Regularly tested for stray voltage.

E 6: Cleaning and disinfection

Internal surfaces of housing and pens must be made of materials that can be readily cleaned and disinfected or be easily replaced when necessary.

B. Thermal environment & ventilation

E 7: Thermal conditions

- a. The environment must be thermally maintained so animals do not experience cold or heat distress.
- b. Recommended temperature ranges for pigs are:

Weight		Temperature Range	
<i>Lbs</i>	<i>Kg</i>	<i>°F</i>	<i>°C</i>
7-33	3-15	79-90	26-32
33-77	15-35	64-79	18-26
77-154	35-70	59-77	15-25
154-220	70-100	50-77	10-25
> 220	> 100	50-77	10-25
Nursing sow		59-79	15-26
Litter		90	32

E 8: Ventilation

Effective ventilation of buildings to avoid high humidity, condensation and drafts is essential as pigs can be susceptible to respiratory diseases.

Properly designed ventilation will permit the free circulation of air above pig height and avoid drafts at pig level.

E 9: Air quality

- a. Provisions must be made to ensure that, when pigs are housed, aerial contaminants do not reach a level at which they are noticeably unpleasant to a human observer.

Inhalable dust should not exceed 5 mg/m.³

- b. The ammonia should be less than 10 ppm, and must not exceed 25 ppm except during brief periods of severe inclement weather when ventilation is affected. Ammonia concentrations at pig level should be recorded at least once every two weeks and these records made available to *Humane Farm Animal Care* during inspections and at other times, upon request.

E 10: Reducing heat stress

For summer conditions, provisions must be made to protect pigs from heat stress (e.g., use of wallows, shade, evaporative coolers, drippers, cooling mats, misters, and/or fans).

C. Lying Area/Floors

E 11: Lying area

- a. Pigs kept indoors must be kept on, or have access at all times to, a lying area (see E 14) that is:
 - 1. Of solid construction (i.e. not perforated);
 - 2. Bedded to a sufficient extent to avoid discomfort; and
 - 3. Either sloped to provide drainage or bedded to a sufficient extent to provide a dry surface.
- b. Pigs kept in outdoor systems must have access to a comfortable, dry lying surface of sufficient size to allow all pigs to lie down at the same time. In inclement weather, (i.e., rain, snow, cold) the pigs must have access to a covered comfortable, dry lying surface of sufficient size to allow all pigs to lie down at the same time.

E 12: Service pens

- a. In service pens, the whole floor area must be kept dry or sufficient bedding provided to give an adequate footing during service.
- b. Pens must be large enough to allow courtship and mating.

D. Space allowances

E 13: Total floor space

Pigs must always be provided with a total floor space no less than 1.5 times their minimum lying area.

E 14: Bedded space for growing pigs

The minimum bedded space and total space allowances for growing pigs are as follows:

Live weight		Lying area		Total area	
(kg)	(lbs)	(m ²)	(ft ²)	(m ²)	(ft ²)
10	22	0.10	1.1	0.15	1.7
20	44	0.15	1.6	0.22	2.4

30	66	0.20	2.2	0.30	3.3
40	88	0.26	2.8	0.40	4.2
50	110	0.31	3.3	0.47	5.0
60	132	0.36	3.9	0.55	5.9
70	154	0.41	4.4	0.61	6.6
80	176	0.45	4.8	0.67	7.2
90	198	0.47	5.0	0.71	7.5
100	220	0.50	5.4	0.75	8.1
110	242	0.53	5.7	0.79	8.5
120	264	0.57	6.1	0.85	9.1

E 15: Space allowance for sows and gilts

Sows must be given a minimum total floor space of 37.6 sq. ft (3.5m²)/sow for mature adults, and 28.9 sq. ft. (2.5m²) /sow for first and second parity animals, though this may exceptionally be slightly altered (for different breeds, genetic lines) with the agreement of the Humane Farm Animal Care Inspector. Lying area must be at least equal to the square of the length of the pig, which roughly equates to a minimum of 16 sq. ft. (1.5m²) for each adult sow and 11sq.ft. (1m²) for first and second parity animals.

(See E23 for farrowing space requirements)

E 16: Boar pens

Adult boar pens must be of such dimensions so as to enable animals to turn around easily and lie fully stretched.

E 17: Space allowance in hot conditions

Extra space may be required to allow pigs to lie apart in hot conditions, together with systems of ventilation or other heat remediation (drippers, misters, cooling mats, evaporative coolers, wallows) to maintain the pigs' temperatures within acceptable range.

E 18: Freedom of movement

The pig must be free to turn around without difficulty at all times. Individual stalls or crates that prevent pigs from turning around (except for hospital pens) and tethers for pigs are prohibited.

E 19: Confinement

Pigs must not be closely confined or restrained except in the following circumstances, and even then only for the shortest period of time necessary:

1. For the duration of any examination, routine test, blood sampling, treatment or operation carried out for veterinary purposes;
2. While they are being fed on any particular occasion;
3. For the purpose of marking, washing or weighing;
4. While accommodation is being cleaned;
5. During artificial insemination; or
6. While they are awaiting loading for transportation.

E 20: Grouping animals

- a. Pigs must be kept in stable groups with as little mixing as possible.
- b. Subdivision is permitted as pigs grow.

E 21: Preventing aggressive behavior

Facilities in which animals can feed without undue interference from other animals must be provided.

E 22: Mitigating aggressive behavior

- a. If pigs have fought to the extent that injury has resulted, a plan must be devised, written in the Animal Health Plan (AHP; see H1) and implemented to prevent further injuries.
- b. The plan must address the following factors as potential methods for preventing injury due to fighting:
 1. Environmental enrichment;
 2. Reduction in stocking density; or
 3. Changes in feeding regimen.
- c. Particular care must be taken with sows and gilts kept in groups.

E. Farrowing Systems

E 23: Farrowing area

- a. A sow must be housed in a farrowing environment that is bedded (such as straw) and allows her to turn around.
- b. Approximately 48 hours prior to farrowing materials must be provided in sufficient quantities and be of a type which allows sows to carry out their natural nesting behaviors. Sawdust and sand are not acceptable as nesting material for the sow.
- c. Traditional straight, narrow farrowing crates are not permitted.
- d. Established farrowing systems such as the sloped farrowing pen and outdoor pastures with huts are all acceptable substitutes for the traditional farrowing crate.
- e. Farrowing Pens must be at least 6 x 8 ft (1.8 x 2.4m).
- f. Farrowing pens of 10 ft x 10 ft (3 x 3 m) are preferred because they provide more room for the sow to move around, but when using pens of this size or larger, a protected zone for piglets must be provided. The protected zone must be at least 8 sq.ft. (0.8 m²) in size and be zone heated.

E 24: Before farrowing

- a. Sows must be settled into clean, comfortable farrowing quarters before the piglets are due to be born.
- b. Caretakers must be experienced and competent in the techniques of farrowing.

E 25: After farrowing

- a. Sows must be kept in the farrowing area for at least 28 days after farrowing.
- b. Piglets must not be weaned from the sow before the fourth week after farrowing, with the average age of each farrowing batch being 28 days or more, unless a veterinarian

confirms that the welfare or health of the sow or piglets would otherwise be adversely affected.

E 26: Environment suitable for piglets

- a. Farrowing quarters must have some form of protection for piglets from crushing by the sow.
- b. A temperature suitable for piglets must be maintained by provision of supplementary heating.

Due to the common practice of batch farrowing where groups of litters born within the same week are weaned together, if the average age of the batch is 28 days of age, some litters will be 25-27 days old and some will be 29-31 days old. The earlier the weaning age of the piglets, the greater the chance of them suffering welfare problems; therefore, a more careful system is required with respect to management and nutrition of all piglets that are weaned before 28 days, those weaned at 25 -27 days.

F. Environmental Enrichment

E 27: Stimulating environment

- a. Pigs are naturally inquisitive and show a high level of motivation to perform rooting behavior. They must, at all times, have access to straw or other suitable media such as wood chips, sawdust or peat for the expression of rooting, pawing, mouthing and chewing behaviors.
- b. Provision of other objects for manipulation, such as chains, balls and materials such as rope is also required.

E 28: Mitigating abnormal behaviors

- a. When pigs develop abnormal behaviors that injure other pigs (e.g., tail, flank, ear, or vulva biting), they must promptly be given additional stimuli to encourage foraging or other non-injurious behavior.
- b. When such incidents occur, the caretaker must implement ways of avoiding/eliminating the problem.
- c. Each incident must be recorded, together with action taken, in the farm records.

Avoidance/reduction of stereotypic or abnormal behaviors may be aided by topping up foraging substrate daily, by scattering whole grain or feed pellets not less than twice weekly, or by otherwise sustaining foraging behavior to channel the animals' motivations away from abnormal behavior. Adding bulk to diets may also reduce abnormal behaviors near feeding time in limit-fed animals.

- d. If abnormal behaviors develop repeatedly in any particular pen:

1. The veterinarian must be consulted about a program of modification and enrichment;
2. The program must be implemented promptly; and
3. Pursued until the problem is overcome.

E 29: Isolation

- a. Pens must not be sited or constructed in such a way as to isolate any pig from the sight, sound or odor of other pigs, except for quarantine.
- b. Sick or injured pigs may be isolated temporarily for treatment after consultation with the veterinarian.

G. Lighting

E 30: Sufficient light in buildings

When pigs are housed, adequate lighting, whether fixed or portable, must be available to enable them to be thoroughly inspected at any time.

E 31: Light intensity and period

Housed pigs must have access for the normal period of daylight hours to an area designed to be lit to a level of at least 5.0 foot candles (50 lux) at pig eye level (bright enough to allow a person of normal eyesight to read standard newsprint without difficulty).

H. Outdoor Housing

E 32: Winter shelter

For extensively kept pigs during winter, a windproof and waterproof shelter must be accessible that has:

1. Sufficient space to allow all pigs to lie down at the same time; and
2. Sufficient supply of dry bedding material.

E 33: Summer shelter

- a. For summer conditions, when there is a risk of heat stress and sunburn, a shaded area must be accessible that has sufficient space
 1. To allow all pigs to lie down at the same time, and
 2. To lie apart from each other if they wish to.
- b. Wallows, drips or sprinklers must be provided.
- c. Local and state environmental regulations must be complied with when locating outdoor units and planning animal stocking densities.

PART 4: MANAGEMENT

OBJECTIVES: *A high degree of caring and responsible management is vital to ensure good animal welfare. Managers must be thoroughly trained, skilled and competent in animal husbandry and welfare, and have a good working knowledge of their system and the livestock under their care. A predictable daily management routine must be provided for pigs.*

A. Managers

M 1: Understanding the standards

Managers must ensure that:

1. All caretakers have a copy of the current *Humane Farm Animal Care Standards for Pigs*;
2. They and the caretakers are familiar with the standards, and
3. They and the caretakers understand their content.

M 2: Management and record keeping activities

Managers must:

1. Develop and implement a suitable training program for caretakers with regular updates and opportunities for continuing professional development;
2. Develop and implement plans and precautions to cope with emergencies such as fire, flood, or interruption of supplies, and post emergency contact numbers by phones and entrances to building;
3. Provide an Emergency Action Plan adjacent to a telephone highlighting the procedures to be followed by those discovering an emergency such as fire, flood, or power failure;
4. Ensure that the Animal Health Plan (see H1) is implemented and regularly updated, and that the required data are recorded appropriately;
5. Maintain and make available to *Humane Farm Animal Care* Inspectors, records of production data and use of medication. These records must include documentation on all incoming and outgoing stock on the farm as well as types and quantities of medicines used;
6. Develop and implement a transport plan that includes a method of identifying animals (see M9) and minimizes waiting time and regrouping of pigs; and
7. Develop a plan for emergency euthanasia of any casualty pig.

M 3: Complaints to Operators

- a. To be certified, an operation must maintain systems for receiving, responding to, and documenting complaints alleging the operation's failure to comply with *Humane Farm Animal Care* standards (ISO §15).
- b. Whenever an operator receives a complaint, the operator must:
 1. Take appropriate action to respond to the complaint and
 2. Correct any deficiency in the products or services that affect their compliance with requirements for certification.

- c. Written records must be retained by the operation for a minimum of 3 years from the date of the records' creation. Records must contain information documenting:
 - 1. All complaints received (written or verbal),
 - 2. Actions taken by the operator to respond to the complaint,
- d. These records must be made available to *Humane Farm Animal Care* upon request. *Humane Farm Animal Care* will review these records at least annually, during the operation's annual inspection.
- e. If an operation is registered as organic, then operators must notify *Humane Farm Animal Care* if an adverse ruling related to the operation's organic status (such as suspension or revocation of certification, fine, or sanction) is levied against the operation by another certifier or by a governmental program that regulates the organic industry.

B. Caretakers

M 4: Mitigating problems

Caretakers must understand the times, circumstances, and conditions under which pigs are prone to welfare problems in their own unit, and must be able to demonstrate their competence in recognizing and dealing with these problems.

M 5: Training

- a. Prior to being given responsibility for the welfare of livestock, caretakers must be given proper training for their specific area of responsibility. All caretakers must be able to:
 - 1. Recognize signs of normal behavior, abnormal behavior and fear;
 - 2. Recognize signs of common disease and understand their prevention and control, and know when to seek veterinary help;
 - 3. Have a knowledge of body condition scoring;
 - 4. Understand the functional anatomy of the normal foot, its care and treatment;
 - 5. Have knowledge of farrowing and the care of the newborn piglet;
 - 6. Have knowledge of humane methods of handling and loading; and
 - 7. Have knowledge of methods of humane euthanasia.

M 6: Compassionate treatment

- a. Caretakers must be able to demonstrate competence in handling animals in a positive and compassionate manner.
- b. Caretakers must also be able to demonstrate their proficiency in procedures that have the potential to cause suffering (e.g. injections, trimming the tips of incisor teeth, and castration).

C. Handling

M 7: Frequent handling

Pigs must be frequently and considerately handled by the caretakers to reduce fear and improve welfare and management.

M 8: Quiet handling

- a. Pigs must be handled quietly and firmly, and efforts must be made to avoid unnecessary pain or distress.
- b. They must not be pulled or dragged by the tail, ears or limbs.
- c. Use of electric prods is prohibited except when animal or human safety is in jeopardy and is the means of last resort. In the case of such emergency use, a detailed explanation must be documented in the farm records.
- d. Pig paddles and sorting boards can be used when handling pigs, but must not be used to hit the animal forcefully such that welts or bruises are produced on the animal.

D. Identification

M 9: Identification methods

- a. When it is necessary to mark pigs for permanent identification, ear tagging, slap marking and tattooing are permissible.
- b. These operations must be carried out by a trained, competent caretaker, using properly maintained instruments.
- c. Ear notching is prohibited as a routine method of identification. If ear-notching is necessary, justification must be given to HFAC.

E. Equipment

M 10: Using equipment

- a. When equipment is installed that affects animal welfare, stock keepers must be able to:
 1. Demonstrate their ability to operate the equipment;
 2. Demonstrate their ability to carry out routine maintenance;
 3. Recognize common signs of malfunction;
 4. Demonstrate knowledge of action to be carried out in event of a failure; and
 5. Understand and use protective equipment (cf. Occupational Safety and Health Administration specifications) as needed.

M 11: Automatic equipment

- a. All automatic equipment must be thoroughly inspected by a caretaker, or other competent person, not less than once each day to confirm that there are no defects.
- b. When a defect is found in automatic equipment:
 1. The defect must be rectified promptly; or

2. If this is impracticable, measures must promptly be taken (and must be maintained until the defect is rectified) as required to prevent livestock from suffering unnecessary pain or distress as a result of the defect.

M 12: Automatic ventilation equipment

When automatic equipment includes a ventilation system, the system must contain:

1. An alarm that will provide adequate warning of the failure of that system to function properly (and that will operate even if the principal electricity supply to it has failed); and
2. Additional equipment or means of ventilation (whether automatic or not) that, in the event of a failure of the ventilation system, will provide adequate ventilation so as to prevent livestock from suffering unnecessary distress as a result of the failure.

F. Inspection

M 13: Monitoring

Caretakers must inspect their livestock and the equipment on which such stock depend at least twice daily and record observations and action taken.

Any welfare problems seen during an inspection by the caretakers must be dealt with appropriately and without delay.

Welfare problems of sufficient severity that they should have been noticed and dealt with by the caretaker on previous daily inspections, will be taken by the Humane Farm Animal Care Inspector as evidence of negligence of duties by the caretaker

PART 5: HEALTH

OBJECTIVES: *The environment in which livestock are housed must be conducive to good health. All producers must develop a health plan in consultation with their veterinarian.*

A. Health Care Practices

H 1: Animal Health Plan

- a. All pig units must have a written Animal Health Plan (AHP) that is regularly updated in consultation with a veterinarian.
- b. The AHP must include:
 1. Details of any vaccinations;
 2. Information on treatments and other aspects of herd health;
 3. Causes of morbidity and mortality, when known;
 4. Tolerance limits on overall herd performance;
 5. Bio-security provisions; and
 6. Cleaning and disinfection policy

H 2: Certified health programs

All units must enroll in trichinae- and toxoplasmosis-certified health status as it becomes available and be certified as pseudo-rabies-free and brucellosis-free.

H 3: Mitigating health problems

- a. All sudden deaths, disease outbreaks, and humane killings of unfit pigs, must be:
 1. Recorded;
 2. Reported to the veterinarian;
 3. Investigated appropriately; and
 4. The outcome and action recorded.
- b. All federal and state health and disease monitoring regulations must be complied with.

H 4: Monitoring herd performance data

- a. Herd performance data must be continuously monitored for signs of disease or production disorders.
- b. If any herd performance parameters fall below the tolerance limits identified in the Animal Health Plan, the veterinarian must be informed and the Health Plan revised to attempt to remedy the problem.

H 5: Managing brought-in animals

- a. Replacement animals brought in from other sources must be quarantined and/or appropriately treated before integration.
- b. Replacement animals must have negative test results for Porcine Reproductive and Respiratory Syndrome (PRRS), brucellosis, and pseudo-rabies.

H 6: Care of sick and injured animals

- a. Provisions must be made for segregation and care of sick and injured animals. Any injured, ailing or distressed pig must be:
 1. Segregated; and
 2. Treated without delay (including seeking veterinary care when needed); or
 3. If necessary, humanely killed according to the American Association of Swine Practitioners and the National Pork Producers Council's euthanasia guide.
- b. Urine and dung from hospital pens containing sick and injured animals must be disposed of separately to reduce the risk of spreading infection to other stock.
- c. Pens must be constructed to facilitate effective cleaning and disinfection of surfaces and the possible removal of a carcass from the box.

H 7: Controlling parasites

All practical measures must be taken to prevent or control external and internal parasitic infestation.

H 8: Foot care

- a. Close attention must be given to the condition of the feet, which must be regularly inspected for signs of abnormal wear, excessive growth or infection.
- b. An action plan for dealing with lameness and foot problems must be included in the Health Plan.

H 9: Physical alterations

- a. The only potentially injurious husbandry procedures that are allowed under the Animal Care Standards are as follows (except those done for therapeutic reasons by a veterinarian):
 1. Needle teeth of newborn pigs may be trimmed as early as possible and not later than 48 hours after birth, or in the case of weak or sick piglets, within 3 days of birth.
 - a) Tooth trimming must only be carried out by a trained and competent person.
 - b) No more than the first third of the tooth may be removed.
 - c) The procedure must leave an intact smooth surface to the teeth.
 - d) Grinding of the sharp point of the teeth is preferable to clipping, as this is less likely to break the tooth or remove too much of the tooth.
 2. Ear-notching is prohibited as a routine method of identification. Ear tagging, slap-marking and tattooing are permissible.
 3. Tail docking must not be carried out routinely. If the risk of tail-biting exists, , other measures should be taken to prevent tail biting such as environmental enrichment or reducing stocking densities. If by veterinary recommendation tail docking should be done, HFAC must be notified before tail-docking is permitted. The method and age of the animals, as well as the justification for the procedure will be reviewed. Following review the producer will be notified on the decision from HFAC.
 4. Castration of pigs is permitted but must be done before pigs are 7 days of age. If older pigs are castrated for veterinary reasons, anesthetic and post-operative analgesic must be used. Castration must be done using sanitized equipment.

Scientific data have shown that castration of piglets causes pain-related behavior during and following castration procedures. Even though the pain is momentary and the discomfort continues for up to 24 hours, we have been reviewing studies on the use of an intra-testicular injection of anesthetic agent prior to castration (to try) to alleviate this pain. However, after a careful review of the literature and available data, we considered that the existing protocols are not ready to be implemented practically on the farm. Immunocastration studies and experimental pain relieving protocols are currently being investigated, and these studies are promising. We will continue to review these studies, and will revise the standards when a method is developed that will have a positive net benefit to the welfare of piglets on the farm. In some countries, producers do not castrate pigs at all and send them to market prior to reaching puberty, generally before five months of age.

5. The trimming of tusks in boars may be undertaken only by the attending veterinarian, or other competent and trained person, and only to ensure the safety of other animals and protect caretakers from injury.
6. Nose rings are prohibited.
- b. All of these practices must be performed in a way that minimizes suffering and by veterinarians or trained and competent caretakers.

B. Casualty animals

H 10: Euthanasia

- a. Each farm must have provisions for humane slaughter, or euthanasia without delay, of casualty pigs either by on-farm methods carried out by a named, trained, competent staff member, or by a licensed veterinarian. Acceptable procedures are those listed in the National Pork Board's euthanasia guide; these procedures should be posted in each building that house animals.
- b. If there is any doubt as to how to proceed, the veterinarian must be called at an early stage to advise whether treatment is possible or whether humane slaughter is required to prevent suffering. If an animal is in severe pain that is uncontrollable, then the animal must be promptly and humanely euthanized.

H 11: Carcass disposal

- a. Off-farm carcass disposal:
 1. All carcasses must be disposed of through a USDA inspected facility or a state licensed rendering facility or must be buried or burned.
 2. A record must be kept of the name of the outlet through which all carcasses are disposed of.
- b. On-farm carcass disposal: All local, state and federal environmental regulations must be followed for on-farm burial.

PART 6: TRANSPORTATION

Objectives: Animal transport systems must be designed and managed to ensure livestock are not subjected to unnecessary distress or discomfort. Transport and handling of livestock must be kept to an absolute minimum. Personnel involved with transport must be thoroughly trained and competent to carry out the tasks required of them.

A. Preparing for Transportation

T 1: Food and water

- a. Pigs must have access to water up to the point of transport.
- b. Pre-transport fasting is recommended to prevent vomiting during transit.
- c. Food must be withdrawn at least 4 hours before loading onto transport, but fasting must not exceed 18 hours prior to slaughter.

Personnel, other than the producers and caretakers, who are responsible for transporting animals, e.g. livestock haulers, should have completed some form of welfare and handling training course, such as the Trucker Quality Assurance Program of the National Pork Board.

PART 7: SLAUGHTER

A: Slaughter procedures

S 1: Minimizing pre-slaughter handling

The pre-slaughter handling of livestock must be kept to an absolute minimum.

S 2: Trained personnel

Personnel involved in slaughter must be thoroughly trained and competent to carry out the tasks required of them.

S.3: Slaughter Requirements

All slaughter systems must be designed and managed to ensure livestock do not experience unnecessary distress or discomfort. Producers must use processors who follow American Meat Institute (AMI) guidelines for processing pigs. Processors will be audited by *Humane Farm Animal Care* Inspectors based on the AMI Guidelines (2007).

REFERENCES

- Animal Behavior and the Design of Livestock and Poultry Systems*. Proceedings from the Animal Behavior and the Design of Livestock and Poultry Systems International Conference, Indianapolis, IN. Pub. NRAES (Northeast Regional Agric. Eng. Service) April 1995.
- Animal Care Series: Swine Care Practices*. California Pork Industry Group, University of California Cooperative Extension. June 1996.
- Behavioral responses to piglets to castration: The effect of piglet age, Taylor, AA, Weary DM, 2001 *Applied Animal Behavior Science*, 73, 25-43
- Castration of piglets: the analgesic effects of intratesticular and intrafunicular lidocaine injection*. Haga, H.A. and Ranheim, B. 2005. *Veterinary Anaesthesia and Analgesia*. 32:1-9.
- Guide for the Care and Use of Agricultural Animals in Agricultural Research and Teaching*. 1st Revised Edition. Federation of Animal Science Societies, Savoy, IL. January 1999
- Guidelines For The Care And Use Of Animals In Production Agriculture*. Nebraska Food Animal Care Coalition.
- Livestock Handling Guide*. Livestock Conservation Institute. 1988
- Local anaesthesia for pigs subject to castration*. Ranheim, B. and Haga, H.A. 2006. *Acta Veterinaria Scandinavica*. 48 (Suppl 1): S13
- On Farm Euthanasia of Swine – Options for the Producer*. American Association of Swine Practitioners and National Pork Producers Council. 1997.
- Nutrient Requirements for Swine*. National Research Council Publication. 1998 10th ed. National Academy Press, Washington, DC.
- Profitable Pork: Strategies for Hog Producers*. Sustainable Agriculture Network: The National Outreach Arm of USDA-SARE. October 2001.
- RSPCA Welfare Standards for Pigs*. RSPCA West Sussex, United Kingdom. October 2005.
- RSPCA Veterinary Health Plan: Pig Guidance notes*. RSPCA West Sussex, United Kingdom. June 2000.
- Swine Housing Equipment Handbook*, 4th Ed. Midwest Planning Service Pub. (MWPS-8). Iowa State University Press, Ames, IA. 1991.
- Swine Source Book: Alternatives for Pork Producers*. Alternative Swine Production Systems Program; joint program of Dept. of Animal Science and Minnesota Institute for Sustainable Agriculture at the University of Minnesota. Pub #PC-7289-S. 1999.
- Trucker Quality Assurance Program*. National Pork Board, Des Moines, IA. www.pork.org
- Vocal responses to piglets to castration: identifying procedural sounds of pain, Taylor, AA, Weary DM, 2000 *Applied Animal Behavior Science*, 70, 17-26



Humane Farm Animal Care
Animal Care Standards
January 2008

Copyright 2008 by Humane Farm Animal Care.
PO Box 727, Herndon VA 20172
www.certifiedhumane.org
All rights reserved.