

DAIRY, FIBER AND MEAT GOATS

HUMANE FARM ANIMAL CARE

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

Humane Farm Animal Care Standards have been developed to provide the only approved standards for the rearing, handling, transport and slaughter of Goats 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 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

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HFAC Standards for Production of Goats

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PART 1: INTRODUCTION

A. The Certified Humane Label

The "Certified Humane" program was developed to certify farms adhering to these standards. Upon satisfactory application and inspection, farmers and ranchers will be certified and may use the "Certified Humanely Raised and Handled" logo. Program participants are inspected and monitored by *Humane Farm Animal Care*. Charges levied are to cover inspection and program costs.

B. Guide to the Use of the Welfare Standards

- The broad objectives of the standard are described at the beginning of each section.
- The numbered sections are the standards; all of which must be complied with.
- The 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 goat production that affect the environment or safety of their product as well as their State Veterinary Practices Acts.

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

FW 2: Free access to feed

Goats must have access to nutritious feed each day, except when directed by a 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. Goats 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. The goat's body condition must be planned, monitored and maintained according to the stage of production.
- b. Goats should not, at any time, have a body condition score of less than 2 (Matthews J, 1999. *Diseases of the Goat, Second Edition*. Blackwell Publishing, p.100-102.).

Note: many breeds of goats deposit most of their fat internally (primarily dairy breeds), and hence standard techniques that assess lumbar fat and muscle may be inaccurate. Condition scoring in goats should comprise an average of lumbar and sternal scores.

Lumbar Scores:

Score	Appearance	Condition
0	Extremely emaciated	Bones of the skeleton are obvious; junctions between vertebrae are readily perceptible to the touch; skin seems in direct contact with bones.
1	Very lean	Body angular; lumbar vertebrae prominent, with transverse processes readily palpable
2	Lean	Lumbar vertebrae less prominent; transverse processes easily palpated but with some tissue cover
3	Good condition	Lumbar vertebrae and transverse processes palpable but with reasonable cover; moderately rounded appearance to the body
4	Fat	Lumbar vertebrae only palpable with gentle pressure and the transverse processes with firm pressure; body smooth and rounded
5	Obese	Vertical processes cannot be detected even with pressure; there is a dimple in the fat layers where processes should be; transverse processes cannot be detected; loin muscles are very full and covered with very thick fat

Sternal Scores:

Score	Appearance	Condition		
0	Extremely emaciated	Chondro-sternal joints are very prominent; bony surfaces of the sternum are very obvious to the		
		touch; the hardened area of skin lacks mobility		
	Very lean	Chondro-sternal joints are rounded but still very		
1		easily felt; hollow in the midline of the sternum		
		is not filled in; the hardened area of skin is loose		
		Chondro-sternal joints are difficult to feel;		
2	Lean	considerable amount of internal fat which forms		
		a furrow along middle of sternum; subcutaneous		
		fat fills this furrow and extends to lateral border		
		of sternum and ends posteriorly at hollow of last		

		sternal joint	
3	Good condition	Bones of sternum are no longer detectable but the ribs can be felt; thickness of internal fat makes a fatty layer along the lateral edge of sternum; subcutaneous fat forms a mobile mass which extends in a thin band to the rear in hollow of last sternal joint; when whole sternum is grasped with the hand, two large depressions between these masses and the bone can be detected on each side	
4	Fat	Neither sternum nor ribs are detectable; a shallow depression can be detected on either side by palpation; at the rear, depression on last sternal joint remains	
5	Obese	Subcutaneous fatty mass is no longer mobile; contours are rounded without depressions on each side; hollow on last sternal joint is filled in	

FW 6: Avoiding changes in feed

- a. Efforts must be made to avoid sudden changes in type and quantity of feed, unless directed by a veterinarian.
- b. For both market and mature goats, systems involving high intake of cereal-based diets require an appropriate introductory feeding period, during which sufficient roughage or a suitable high-fiber concentrate must also be fed.
- c. During the adjustment period to high-fiber concentrate diets:
 - 1. High levels of concentrates should be split into more than one meal per day; and
 - 2. Mineral mixtures must be specifically designed, and appropriate for the animal to avoid causing problems (e.g., urinary problems in male animals).

FW 7: Providing fiber

Goats must be provided with feed or forage containing adequate, suitable fiber to allow rumination.

FW 8: Pasture

When climatic and geographic conditions allow, goats must have free, voluntary access to pasture or an outdoor exercise area.

FW 9: Feeding supplementary concentrates

- a. Groups of goats fed supplementary concentrates must have sufficient trough space to eat at the same time.
- b. There must be sufficient trough space for forages to ensure that, within 24 hours, all goats have sufficient access to meet their nutritional requirements.

- c. When calculating required trough space, the following must be considered:
 - 1. The size of the animals:
 - 2. The number of animals; and
 - 3. The presence or absence of horns.
- d. Sufficient trough space or feeding areas must be provided to minimize aggression due to competition for feed.

FW 10: Supplying adequate nutrients

Goats must not be kept for longer than 24 hours in an environment that is known to be nutrient deficient (e.g., holding pens, stubble, or exhausted root crops) unless appropriate nutritional supplements are provided.

FW 11: Appropriate feed for special needs goats

Goats that are unable to eat normally due to damaged, missing, or loose teeth, must be supplied with feed that they are able to eat and digest (e.g., sufficiently long grass or concentrates).

FW 12: Trough feeding

- a. Troughs must be kept clean and stale feed removed.
- b. Troughs must be designed to withstand climbing and prevent injuries to goats.
- c. Automatic feeding equipment must be:
 - 1. Cleaned at least once a week; and
 - 2. Maintained in good working order.

FW 13: Cleaning tools used for liquid feeding

Equipment and utensils used for liquid feeding must be thoroughly cleansed daily, and routinely sanitized.

FW 14: Wholesomeness of stored feed

- a. Stored feeds, such as hay and silage, must be:
 - 1. Protected from vermin and other animals;
 - 2. Of good quality; and
 - 3. Palatable to goats.
- b. To reduce contamination by bird feces and other animals, all feed hoppers/bins (storage containers) must be covered.

FW 15: Avoiding unsuitable feedstuffs

Practices must be in place to prevent access to poisonous plants and unsuitable feedstuffs.

FW 16: Weaning

- a. Kids must not be weaned before 6 weeks of age.
- b. Kids must have access to dry feed (e.g., creep feed, hay, grass) from 2 weeks of age to encourage proper rumen development.

B. Water

FW 17: Water supply

Goats, including those on pasture, must be provided with access to an adequate supply of clean, fresh drinking water each day, except when directed by the attending veterinarian.

FW 18: Emergency water supply

Provision must be made to ensure an emergency supply of suitable drinking water in case normal supplies fail (e.g., in freezing or drought conditions).

FW 19: Watering equipment

- a. Water bowls and troughs must be checked at least once daily and cleaned as necessary to ensure compliance with standard FW 17.
- b. Bowls/troughs must be sized, positioned, or protected to prevent kids from drowning.

FW 20: Dairy water supply

Drinking facilities must be sufficient, and appropriately positioned (e.g. away from the entrance/exit to the dairy), to ensure that all goats waiting in the holding pens, both prior to and following milking, have ready access to sufficient quantities of clean, fresh water.

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 behaviors.

A. Buildings

E 1: Records of facility features promoting animal welfare

For all buildings and feeding operations, key points relating to welfare must be recorded, including:

- 1. Total floor area;
- 2. Building volume available to goats; and
- 3. Number of goats in relation to age, weight, feeding and drinking, and bedding space.

E 2: Building design and maintenance

- a. There must be no physical features of the environment that cause recurring injuries or bruising to goats (to an extent significantly greater than would be caused by occasional bumps and scratches).
- b. To ensure that there are no sharp edges or protrusions likely to cause injury or distress to animals, the interior of any building, including the floor and all internal surfaces/fittings to which livestock have access, must be:
 - 1. Designed and constructed properly;
 - 2. Maintained and regularly inspected.

This includes provision of adequate and safe holding and handling facilities (whether indoors or outdoors).

E 3: Limiting the use of toxic substances in buildings

- a. Goats must not come into contact with toxic fumes or surfaces, such as paints, wood preservatives or surface disinfectants.
- b. Creosote and/or pressure treated wood must not be used in areas where the animals have direct contact with the material.

E 4: Electrical installations

All electrical institutions at main voltage must be:

- 1. Inaccessible to goats;
- 2. Well insulated;
- 3. Safeguarded from rodents;
- 4. Properly grounded;
- 5. Regularly tested; and
- 6. In adherence with local building codes.

GFCI (Ground Fault Circuit Interrupter) protection should be used wherever possible. GFCI "nuisance trips" can indicate conditions that are correctable and that could present a significant danger to personnel or livestock.

E 5: Cleaning and disinfection

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

B. Thermal Comfort, Environment and Ventilation

E 6: Thermal conditions

The animal's environment must not be so hot or so cold as to cause distress.

E 7: Ventilation

Effective ventilation of buildings to avoid high humidity, condensation, and drafts is essential, to prevent the risk of respiratory diseases.

Properly designed ventilation will permit the free circulation of air above goat's airspace and avoid drafts at goat level.

E 8: Air quality

- a. Provisions must be made to ensure that, when goats are housed, aerial contaminants do not reach a level at which they are noticeably unpleasant to a human observer (as specified by the <u>Occupational Safety and Health Administration</u>).
- b. Ammonia must not exceed 25 ppm (averaged over any 8 hour period).

In animal buildings, it is recommended that levels of inhalable dust should not exceed 10mg/m³ at animal height.

E 9: Housing for kids

- a. A dry bed and effective ventilation must be provided at all times for housed kids.
- b. When the temperature falls below the lower critical temperature (when the animals begin to shiver uncontrollably), supplementary heating must be made available for very young animals.

E 10: Shelter on pasture

When goats are being reared on pasture they must all have adequate shelter, either natural or man-made, to protect them from wind, rain and extreme heat.

E 11: Winter shelter

In winter, additional shelter or windbreaks must be provided for stock.

E 12: Reducing heat stress

In summer, goats must be protected from heat stress.

If shade or other methods are used to prevent heat stress, adequate space in the shade should be available to allow all animals access simultaneously.

Having salt near to the water helps to ensure water intake to replace water lost to perspiration.

C. Lying area/floors

E 13: Indoor lying area

- a. Goats kept indoors must be kept on, or have access at all times to, a lying area (see E17) that is:
 - 1. Of solid construction (i.e., not perforated or slatted);
 - 2. Bedded to provide a comfortable, clean, dry area sufficient to avoid discomfort; and
 - 3. Sloped as necessary to provide drainage.
- b. It must be of sufficient size to accommodate all goats lying together in normal resting posture.

E 14: Outdoor lying area

To limit build up of mud or dung on the hair when goats are kept outdoors, there must be an area, to which the goats have ready access, which is:

- 1. Dry and/or bedded with grass or straw; and
- 2. Of sufficient size for all goats to lie down.

D. Space allowances

E 15: Total floor space

Goats must always be provided with a total floor space not less than 1.5 times their minimum lying area.

E 16: Pen size

- a. Pen shape and space allowance must be such that there is sufficient freedom of movement to permit exercise.
- b. Space allowances and group size must be determined according to the age, size, and class of stock.

E 17: Minimum bedded space

Minimum lying space allowances for typical dairy breeds (ref: Ensminger) are as follows:

Type of Animal	Weight of Animal		Space Allowances For Straw Bedded Animals	
	kg.	lbs.	m^2	ft^2
Adult Does	up to 105	Up to 230	1.7	18
Young kids Up to 5 months	4-34	8 - 75	0.7 - 0.9	8 - 10
Bucks	75 - 120	165 - 265	2.8 - 3.7	30 - 40

E 18: Confinement and individual housing

Goats must not be closely confined, tethered or individually housed (see E19) except under the following conditions and even then only for the shortest period of time necessary:

- 1. For the duration of any examination, routine test, blood sampling or treatment/operation carried out for veterinary purposes;
- 2. While they are being fed;
- 3. For the purpose of milking, marking, washing or weighing, vaccination, or dipping;
- 4. While in fostering or kidding pens;
- 5. While an accommodation is being cleaned; or
- 6. While they are awaiting loading for transportation.
- 7. While they are awaiting reproductive procedures, such as artificial insemination servicing

E 19: Bucks

Bucks must be housed with other goats or at least within sight and sound of herd mates.

Bucks that fight when introduced may be put in an area small enough to prevent head-to-head combat, but only for a period necessary to allow familiarization and reduction of aggression.

E. Lighting

E 20: Sufficient light in buildings

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

E 21: Light intensity and period

Housed goats must have access for the normal period of daylight hours to an area lit to a level comparable to natural light.

F. Environmental hazards

E 22: Protection from hazards and predators

All goats, especially young kids, must be protected from environmental hazards and/or predators.

Fences should be designed and maintained to prevent predator entry.

Barbed wire should be avoided, but if used, should be installed only above the mesh type fence and at ground level to discourage predators from digging under.

E 23: Moving goats to safe areas

- a. To minimize the risk of goats being trapped in snow or unable to gain shelter, great care must be taken when using shelters, shelterbelts, and fences. As far as practical, goats must be prevented from gathering in places where they may be buried by snow and must be herded into safer areas whenever heavy snowfalls are forecast.
- b. Similarly, goats must be removed from areas prone to frequent flooding, when heavy rains or flooding are forecast.

G. Fencing

E 24: Design and maintenance of fences

- a. All fencing must be adequately inspected and maintained.
- b. Electric fences must be designed, installed, used, and maintained so that contact with them does not cause more than momentary discomfort to the goats.
- c. Electric mesh fencing must not be used for horned goats.
- d. Fences must be designed to withstand climbing and prevent injury to goats.

E 25: Fence inspection

- a. When any type of mesh fencing is used, in particular for horned goats and around kidding fields, it must be inspected frequently.
- b. Fence inspection must be carried out daily in the case of kidding fields.

H. Milking Parlor

E 26: Milking parlor hygiene

The highest standards of hygiene must be practiced in the milking parlor to reduce risk of infection:

- 1. Does must be clean and dry at milking, paying particular attention to udders and teats.
- 2. Udder, teats and flanks must be clean, dry and free from sores on entry to the parlor.
- 3. Parlor staff must have clean hands when handling teats and udders; consideration should be given to the use of clean disposable gloves.
- 4. Single-use udder cloths or paper towels must be used to clean/dry udders.
- 5. All cases of mastitis must be treated promptly and underlying predisposing factors corrected.
- 6. When the mastitis rate exceeds the target figure for >2-month period then the specific organisms involved must be identified and an appropriate treatment plan developed and implemented in consultation with the herd veterinarian.
- 7. Does with mastitis must be marked and milked last with milk discarded or pasteurized. Alternatively, they may be milked with a separate cluster and bucket.
- 8. All teats must be treated with an approved post-milking teat disinfectant. Consideration should be given to the use of pre-milking teat dips and the use of an emollient when teats are dry, chapped or cracked.
- 9. Milking machinery must be properly maintained and maintenance records available for inspection upon request (See E27).
- 10. Measures must be in place to minimize the risk/incidence of mastitis in dry does.
- 11. Herd somatic cell counts, individual clinical cases of mastitis and mastitis tube usage must be monitored and recorded. Records must be kept of all medications used and withdrawal times observed. Records must be available for inspection upon request.
- 12. Routine "fore-milk" examination must be made to identify early cases of mastitis.
- 13. Following completion of milking, does must be encouraged to remain standing for approximately half an hour to allow the teat canal sphincter to close.

E 27: Milking machines

- a. Milking machine testing must be carried out at least once annually.
- b. Proper application, function and maintenance of the milking machinery must be ensured, by practicing the following:
 - 1. Avoid under and over milking;
 - 2. Select appropriate teat cup liners;
 - 3. Check teat cup liners daily and replace damaged/rough teat liners;
 - 4. Exchange liners according to manufacture's recommendations;
 - 5. Ensure correct pulsation rate and a correct release/squeeze ratio;
 - 6. The vacuum regulator must be functioning correctly and vacuum fluctuation must be prevented.

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E 28: Waiting time

Does must not wait/stand for longer than a total of 2 hours in holding pens prior to or after milking.

I. Dairy

E 29: Dairy requirements

The dairy must meet the State and Federal Pasteurized Milk Ordinance requirements.

PART 4: MANAGEMENT

OBJECTIVES: A high degree of caring and responsible management is vital to ensure good animal welfare. Managers and caretakers 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. Managers

M 1: Understanding the standards

Managers must ensure that:

- 1. They have a copy of the Humane Farm Animal Care *Animal Care Standards for Goats*:
- 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 stockpersons, with regular updates and opportunities for continuing professional development;
- 2. Be able to demonstrate that staff with responsibility for stock care have the relevant and necessary skills to perform their duties. When deficiencies are noted, managers must provide training to ensure that all stockpersons have the skills required to perform their assigned tasks;
- 3. Develop and implement plans and precautions to cope with emergencies such as fire, flood, or interruption of supplies:
 - a) Provide an Emergency Action Plan, sited adjacent to a telephone point, highlighting procedures to be followed by those discovering an emergency such as fire, flood or power failure;
 - b) Post emergency contact numbers by phones and entrances to buildings;
- 4. Ensure the Animal Health Plan (see H1) is:
 - a) Implemented;
 - b) Regularly updated; and
 - c) That the required data are recorded appropriately;
- 5. Maintain and make available to the *Humane Farm Animal Care* Inspector records of production data and use of medications. These records must include documentation on all incoming and outgoing stock on the farm as well as types and quantities of medication;
- 6. Develop and implement a transport plan that minimizes waiting time for the goats.
- 7. Develop a plan for emergency euthanasia of any casualty animals.
- 8. Comply with all local, state, and federal regulations.

M 3: Artificial Insemination

Artificial insemination must only be performed by a veterinarian or a skilled and trained individual.

M 4: Range management systems

Range management systems must make best use of local knowledge, traditions, and practices to ensure the highest possible welfare standards.

M 5: Mitigating problems

Managers must understand the times and circumstances in which goats 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 6: Awareness of welfare implications

- a. Managers must be aware of the welfare implications of, and also be able to demonstrate their proficiency in, procedures that have the potential to cause suffering so as to minimize that suffering. Examples are:
 - 1. Kidding;
 - 2. Injection;
 - 3. Oral dosing;
 - 4. Dehorning;
 - 5. Castration;
 - 6. Shearing;
 - 7. Milking procedures;
 - 8. Hoof trimming and maintenance;
 - 9. Euthanasia
- b. They must know when to give colostrum and how to avoid the problems of mismothering.

M 7: Training

Prior to being given responsibility for the welfare of livestock, managers must be properly trained and be able to:

- 1. Recognize signs of normal behavior, abnormal behavior, pain and fear;
- 2. Recognize signs of common diseases, understand their prevention and control, and know when to seek veterinary help;
- 3. Have a basic knowledge of what constitutes proper nutrition in goats;
- 4. Have knowledge of body condition scoring;
- 5. Understand functional anatomy of the normal foot, its care and treatment; and
- 6. Have knowledge of kidding, and of the care of the newborn kid.

M 8: Compassionate handling

- a. Managers must be able to demonstrate competence in handling animals in a positive and compassionate manner.
- b. Managers must be able to demonstrate their proficiency in procedures that have the potential to cause discomfort (e.g. injections, foot trimming, dehorning, castration, and marking).

M 9: 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 the HFAC 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 products or services that affect their compliance with the 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), and
 - 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. Operators must notify *Humane Farm Animal Care* if an adverse ruling (such as suspension or revocation of certification, fine, or sanction) related to the operation's humane management practices is levied against the operation by another certifier or by a governmental program that regulates the operation.

B. Handling

M 10: Handling facilities

- a. All producers must have suitable facilities for routine handling and management of the herd.
- b. Handling systems must be designed, constructed, and maintained to minimize the stress and likelihood of injury suffered by the goats during handling.
- c. Such systems must be appropriate for the number of goats kept, and the nature of the procedures carried out.

M 11: Quiet handling

- a. Goats must be handled quietly and firmly at all times, and care must be taken to avoid unnecessary pain or distress.
- b. Goats must be handled or restrained by means of a hand or an arm under the neck with the other arm placed on or around the rear or by the use of a properly fitted collar. Lifting or dragging goats by the jaw, hair, skin, limbs, ears, or tail is not permitted. Horns can break if goats are roughly handled by their horns (see T4).
- c. Use of electric prods is not allowed under any circumstances.
- d. When possible, goats must be handled as a group, and/or with visual access to other goats, to reduce separation anxiety.

M 12: Handling pregnant does

Pregnant does within one month of kidding must only be handled when absolutely necessary, and must be handled with care to avoid distress and injury, which may result in 2005 Standards Manual: Goats March 9, 2005

premature kidding. If animals require daily handling for the purposes of supplementary feeding, then they must be socialized to such handling to minimize possible distress.

M 13: Shearing, clipping and combing (for angora or other haired goats)

- a. When shearing, clipping or combing, care must be taken not to nick or cut the skin:
 - 1. Particular care must be taken not to cut the teats and udder of female goats and not to injure the penis/sheath and/or scrotum of buck goats.
 - 2. If a wound occurs, effective treatment must be administered promptly (by a veterinarian if necessary).
- b. Shearers must disinfect shearing equipment between flocks to minimize the risk of spreading diseases such as caseous lymphadenitis and orf (sore mouth).

C. Identification

M 14: Identification

- a. Identification of goats, in the form of tattoo, ear tag, ear notching, or microchipping, must be done as quickly and humanely as possible by experienced stockpersons.
- b. Equipment must be sanitized to avoid spreading infection.
- c. If necessary, the animals must be treated to prevent pest infestation at the site of identification.

D. Equipment

M 15: Using equipment

When equipment that affects animal welfare is installed, managers 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; and
- 4. Demonstrate knowledge of actions to be carried out in event of a failure.

M 16: Automatic equipment

- a. All automatic equipment must be thoroughly inspected daily by a stockperson or other competent person to ensure proper function.
- 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 safeguard livestock from suffering unnecessary pain or distress as a result of the defect.

M 17: Automatic ventilation equipment

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

1. An alarm that:

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

M 18: Harness devices

Marking harnesses must be made of suitable material and must be:

- 1. Properly fitted and adjusted to avoid causing injury or discomfort; and
- 2. Be closely checked daily.

E. Inspection

M 19: Monitoring

Stockpersons must inspect their livestock and the equipment on which stock depend daily and record abnormal observations and actions taken.

F. Dogs

M 20: Managing stock dogs

- a. Working dogs, herding dogs and guard dogs must be properly trained and all dogs must be under control at all times.
- b. With the exception of guard dogs, no dog must ever be allowed access to the goats without an experienced person in attendance.

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. An Animal Health Plan (AHP) must be drawn up and 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; and
 - 5. Biosecurity provisions and disease prevention program.

H 2: Mitigating health problems

All sudden deaths, disease outbreaks and euthanasia performed because goats are unfit, must be:

- 1. Recorded;
- 2. Investigated as appropriate; and
- 3. The outcome of the investigation and resulting actions recorded.

H 3: Monitoring herd performance data

- a. Herd performance data must be regularly monitored for signs of disease or production disorders.
- b. If herd performance parameters fall outside tolerance limits identified in the AHP (e.g., parasite infestations), the veterinarian must be informed and the problem must be resolved.
- c. The AHP must be revised to prevent recurrence of the problem.

H 4: Care of sick and injured animals

- a. Provisions must be made for segregation and care of sick and injured animals when needed to prevent further injury or prevent spread of a contagious condition. Any goats suffering from a contagious illness or susceptible to further injury must be:
 - 1. Segregated;
 - 2. Treated without delay; and
 - 3. Able to benefit from veterinary advice when needed; or,
 - 4. If necessary, humanely euthanized.
- b. Urine and dung from hospital pens housing sick and injured animals must be disposed of in a manner that prevents 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 area.

H 5: Managing replacement animals

Replacement animals brought in from other sources must be quarantined and/or appropriately vaccinated and treated (e.g., ecto/endoparasite control) in accordance with the Animal Health Plan before integration into the flock.

H 6: Controlling parasites

- a. Practical measures must be taken to prevent or control external and internal parasitic infestations. Note: goats are particularly vulnerable to the development of resistant parasites, and parasite control programs should be developed with the advice of a veterinarian.
- b. When infestations such as fly strike are likely, goats must be given routine monitoring and treatment as necessary.

H 7: Hoof care

Close attention must be given to the condition of the hooves, which must be inspected every 4-12 weeks for signs of abnormal wear, infection and excessive growth. In dry range conditions, inspections every 4-6 months are acceptable.

- a. When there is excessive growth or abnormal wear, hooves must be trimmed appropriately.
- b. Goats must be checked for foot rot prior to housing indoors.
- c. Non-irritant solutions must be used for foot bathing.
- d. When foot rot is detected, affected animals must be:
 - 1. Treated promptly; and
 - 2. Isolated.
- e. When conventional methods prove ineffective for control of foot rot, a veterinarian must be consulted regarding immunization of the flock against the infection.

Preventive measures may include careful trimming and the regular use of a footbath. When footbaths are used, goats should not be thirsty so that they try to drink the footbath. Also, goats are adept at avoiding footbaths by jumping over them. Foot baths must be changed regularly to prevent cross-contamination and to maximize effectiveness.

B. Pregnancy/kids

H 8: Monitoring pregnant does

Body condition must be monitored throughout pregnancy and diet adjusted accordingly. Every effort must be made to maintain appropriate body condition scores (see FW 5).

H 9: Assistance during kidding

When a stockperson experiences difficulty in delivering a live kid, skilled assistance must be sought promptly.

H 10: Removing dead kids

Fetotomy (removal of dead kids from the uterus of a doe using obstetrical equipment) must be carried out only by a veterinarian.

H 11: Training for treating kids

Employees working with newborn kids must be trained in:

- 1. The use of stomach tubes for feeding weak kids and
- 2. Treatment techniques for hypothermia in kids
- 3. Perinatal care, including navel dipping.

H 12: Feeding kids

- a. All kids must receive colostrum in the first 8 hours after birth.
- b. To ensure that kids remain in good condition without dehydration, orphan kids must be fed a suitable milk substitute (e.g., milk replacer or commercial goat milk):
 - 1. A minimum of 3 times daily in the first four weeks; and
 - 2. At least 2 times daily after four weeks of age until weaning.
- c. When automatic feeding equipment is provided, kids must be trained in its use to ensure adequate intake of feed.
- d. From the end of the second week of life, kids must also have access to:
 - 1. Palatable and nutritious solid feed (which may be pasture); and
 - 2. Fresh, clean water.

H 13: Artificial rearing

Close attention to individual kid health and feed consumption and high standards of stockmanship must be applied when artificial rearing is practiced.

H 14: Physical alterations

- a. The only physical alterations that are allowed under the Animal Care Standards, are as follows (except those done for therapeutic reasons by a veterinarian):
 - 1. Castration

Castration can be avoided by marketing buck kids prior to their sexual maturity, or by practicing herd segregation to prevent indiscriminate breeding. When procedure is carried out, use of a local anesthetic and analgesics for pain management is recommended.

a) When necessary, castration may be performed on kids that are between 24 hours and 7 days old. Castration should ideally be carried out surgically by, or under the supervision of, a veterinarian. Rubber rings are acceptable when castration is performed by trained on-farm personnel, as this is a simpler

- method, with less potential for complications and infection. In tetanus prone areas, tetanus antitoxin should be administered when castration is performed.
- b) In the event of a failure, or unintentional omission of the rubber ring, the use of a bloodless castrator, a burdizzo, or surgical castration, performed by a veterinarian, on kids between the ages of 1 week to 4 weeks is allowed.

2. Disbudding

Note: Horned goats can cause serious injuries to herdmates and handlers. However, horned goats do not pose problems in well-designed facilities and horns are important in grooming and social communication. Although increased aggression is commonly cited as justification for dehorning/disbudding, horned does were not found to be more aggressive than non-horned does, although aggression is greater in both groups when lying and feeder space is less than $2 m^2/doe$ (Loretz et al. 2004)

- a) When necessary, cautery disbudding must occur between 3 and 10 days of age in order to cause the least possible distress to the kids.
- b) Dehorning with rubber rings is not acceptable in goats, due to risks of sinus infections and severe pain resulting in anorexia.
- c) The use of cautery paste for disbudding is not acceptable.
- d) Care must be taken not to overheat the kid's head during the procedure.
- e) Kids must be returned to their normal surroundings as soon as possible after the procedure.
- f) If dehorning is necessary on a kid over 10 days of age or on any adult animal, the procedure must be done by a veterinarian using local or general anesthesia.
- 3. Supernumerary teat removal If necessary, removal of supernumerary teats may be performed within 7 days of birth. Older kids or does must have teats removed under local anesthesia by a veterinarian.
- b. All of the above management procedures must be:
 - 1. Carried out by a suitably trained, competent person; and
 - 2. Done in ways that minimize suffering to the animals.
- c. There must be no cosmetic surgery carried out on goats for show purposes. Wattle removal and descenting may not be done without veterinary justifications for doing so, such as development of lesions.

H 15: Housed kids

For at least the first 3 weeks of life, housed kids must be kept in groups small enough to facilitate inspection and limit spread of disease. This is particularly important for twin and triplet kids.

C. Casualty Animals

H 16: Euthanasia

- a. Each farm must have provisions for humane slaughter of seriously ill or injured goats without delay, by either an on-farm method carried out by a named, trained, competent member of the staff, a trained slaughterperson, or a veterinarian.
- b. Euthanasia must be performed in accordance with the American Veterinary Medical Association's 2000 Report of the Panel on Euthanasia, which requires use of a captive bolt, gunshot, or other acceptable method decided by an attending veterinarian for euthanasia of kids and adult goats.
- c. Each farm shall have a written emergency euthanasia plan for each production group of stock.
- d. If there is any doubt as to how to proceed, a veterinarian must be called at an early stage to advise whether treatment is possible or whether humane slaughter is required to prevent suffering.
- e. If an animal is in severe pain that is uncontrollable, then the animal must be promptly and humanely slaughtered.

It is permissible to slaughter an animal to prevent further suffering if a method of humane slaughter is available on the premises and there is someone competent to undertake the procedure.

H 17: Carcass disposal

Disposal of carcasses must meet federal, state and all local requirements and regulations.

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

A. Handling/loading/unloading

T 1: Competent personnel

Personnel in charge of transporting goats must demonstrate competence in handling goats when loading, unloading and while in transit.

T 2: Reducing stress

Animal handlers must be trained and must understand the stress factors to which goats may be exposed (e.g., how goats react toward other goats or other animals, towards humans, to strange noises, sights, sounds, and smells).

Goats have the following behavioral characteristics, which must be taken into consideration when they are being moved:

- 1. They have a wide field of vision and can see moving objects even at long distances, so whenever possible their far vision should be restricted.
- 2. They have acute hearing, so must they must not be subjected to loud noise.
- 3. They are gregarious animals and should be in the company of compatible animals while in transit.
- 4. They are extremely agile, and frequently climb and jump out of enclosures.

T 3: Handling systems

All handling systems must be designed and operated so they do not impede movement of goats and to reduce the amount and intensity of noise.

T 4: Handling aids

- a. Sticks and flags may be used as benign handling aids, i.e., as extensions of the arms.
- b. Sticks must not be used for hitting goats.
- c. Well-trained dogs may be used.
- d. Use of electric prods is strictly prohibited.

T 5: Driving goats

- a. Goats must not be driven unless the exit or the way forward is clear.
- b. Goats must not be rushed or run along alleyways, passageways or through gateways.

T 6: Loading ramps

- a. Loading facilities must provide a ramp of no more than a 20% incline.
- b. Both loading ramps and tailboards must be fitted with equipment to prevent the goats from falling or jumping off.
- c. Ramps must be designed to minimize slippage during loading.

T 7: Alleyways and gates

Alleyways and gates must be designed and operated so that they do not impede the movement of goats.

T 8: Transporting in crates

When transporting goats and kids in crates, there must be sufficient space for all animals to stand, turn around and lie down comfortably. Hog-tying, where legs are bound together, sometimes to the head or horns is not an acceptable method of transporting or restraining goats and is prohibited.

PART 7: SLAUGHTER

OBJECTIVES: All slaughter systems must be designed and managed to ensure livestock are not caused unnecessary distress or discomfort.

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 guidelines

All slaughter systems must be designed and managed to ensure minimum distress and discomfort to the goats. Producers must use processors who follow American Meat Institute (AMI) guidelines for processing livestock. Processors will be audited based on AMI guidelines.

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