Humane Farm Animal Care
Welfare Standards
Edition 25

DUCKS

HUMANE FARM ANIMAL CARE

Humane Farm Animal Care is a 501(c)3 non-profit organization whose mission is to improve the lives of farm animals being raised for food and to assure consumers that certified products meet our welfare standards.

Our initial set standards were adapted from the RSPCA Assured program published by Royal Society for the Prevention of Cruelty to Animals in the UK. Since then, the Humane Farm Animal Care standards for the Certified Humane® program have been refined and expanded toprovide standards for the rearing, handling, transport, and slaughter of even more species of food animals under the Certified Humane® program, applicable worldwide. These dynamic documents always been informed by scientific research, veterinary advice, and the practical experience of farmers.

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
- Compassionate and respectful handling, transport, and slaughter

*HUMANE FARM ANIMAL CARE'S SCIENTIFIC COMMITTEE

Since the introduction of the Certified Humane® program in 2003, leading animal scientists, veterinarians, and producers have worked tirelessly with Humane Farm Animal Care not only to develop but continually update all the Animal Care Standards as advancements in science dictate. An up-to-date listing of these industry notables (our essential partners) is always available on our website at: https://certifiedhumane.org/scientific-committee/.

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PART 1: INTRODUCTION

A. The Certified Humane® Label

The Certified Humane® program was developed to certify products derived from animals raised for food that adhere to these standards. Upon satisfactory completion of the application and inspection process, farmers and ranchers are certified and licensed to use the Certified Humane® trademarked wordmark and logo. Program participants are inspected and monitored by the Certified Humane® program annually. Charges levied cover inspections and program costs.

Humane Farm Animal Care expects their certified farmers, ranchers and producers to adhere to all regional or national regulations governing husbandry, food production and environmental management as well as the Certified Humane® standards. If at times local regulations, especially those for biosecurity or environmental protections, are in conflict with Certified Humane® requirements, producers are expected to follow official directions from local authorities.

B. Guide to the Use of the Animal Care Standards

- The broad objectives of the standard are described at the beginning of each section.
- The numbered requirements are the standards. Compliance with all of the standards is mandatory, except where a standard is deemed not applicable (these standards are meant to be used worldwide and for a variety of systems; therefore, not all sections will apply to every operation).
- Boxed sections provide additional information or may highlight areas where the standards will be reviewed in the future.
- At minimum, *HFAC* requires compliance with any local, state, provincial, or national regulations that affect the environment or safety of their product, as well as the veterinary protocols for their jurisdiction. Producers must meet both *HFAC* standards and the above regulations. If there is any overlap, the more stringent rule must be followed.

PART 2: FEED AND WATER

OBJECTIVES: Ducks must have access to fresh water and a diet formulated or assessed to maintain full health and promote a positive state of well-being. Feed and water must be distributed in such a way that they can feed and drink without undue competition.

A. Feed

FW 1: Wholesome, nutritious feed

a. Ducks must be fed a wholesome diet which is:
   1. Pelleted or fed in a form that eases swallowing.
   2. Appropriate to their breed, age, stage of production;
   3. Fed in sufficient quantity to maintain good health; and
   4. Formulated or assessed to satisfy their nutritional needs.

FW 2: Free access to feed

a. Ducks must have free access to nutritious feed throughout each day, except when required by the attending veterinarian.
b. If feed is not provided continuously (e.g. automated system) throughout the day, feed must be provided to ducks at least in three feedings per day (early morning, noon and afternoon).
c. Withdrawal of feed to induce a molt is not permitted (see H16).
d. Meat ducks must not be deprived of feed for more than 12 hours of processing.

FW 3: Feed records

Producers must:

a. Have written record of the feed ingredients and nutrient content of each feed used, as declared by the feed manufacturer/supplier.
b. Make feed records available to Certified Humane® during inspection and at other times, upon request.
c. Retain feed records for at least one flock.

FW 4: Substances prohibited in feed

a. No feedstuffs containing avian-derived protein are permitted, with the exception of eggs.
b. Ducks of any age must not be fed antibiotics, including ionophores, coccidiostats or other substances deliberately to boost growth, feed efficiency or egg production.
c. Antibiotics can be used in the flock only therapeutically (i.e., disease treatment) as directed by a licensed veterinarian (records of which must be kept).
d. Mycotoxins, including aflatoxin, must be tested regularly in feedstuffs and finished duck feed.
e. Antibiotics can be used in the flock only therapeutically (i.e., disease treatment) as directed by a licensed veterinarian (records of which must be kept).

FW 5: Fresh feed

Feed must not be allowed to remain in feeders in a contaminated or stale condition.

FW 6: Easy availability of feed

a. There must be sufficient feeder space to allow all ducks to maintain good body condition and feed without undue competition.
b. To ensure that feed is easily available to ducks, producers must provide at least:
    - For meat ducks: 19.7 in. (50 cm) of actual linear feeder space per 100 ducks
    - For egg-laying ducks that are less than 5.5 lbs. in size: 1.0 in. (1.25 cm) of actual linear feeder space for adult laying ducks
    - Larger duck breeds may require additional feeder space
c. Feed distribution must ensure access throughout the house and uniform feed availability throughout the entire feeder system.
d. Supplementary feeders (e.g. feed trays) must be provided for ducks up to 1 week of age.
e. Ducks must show no signs of competition for feed, no abnormal behavior such as feather pecking, diminishing productivity or low flock uniformity (e.g. min. 80%).

How to Calculate Feeder Space:

Single- or Double-sided feeders: Measure the length of one side of the track. Convert to inches or centimeters. Divide the measurement by the number of ducks that can access those feeders.

Circular feeders: Measure the circumference (perimeter) of one feeder. Convert to inches or centimeters. Multiple the circumference of one feeder by the number of circular feeders ***of the same type*** *available to the ducks. Repeat with circular feeders of different sizes. Divide the total by the number of ducks that can access those feeders.*

FW 7: Placement and design of feeders

a. Feeders must:
    1. Be placed at an optimum height from access point for the size and age of the ducks (e.g. at maximum breast height, if access is from the floor or platform);
    2. Be of appropriate design to enable ducks to scoop up the feed effectively;
    3. Be checked regularly, recorded, and maintained in good repair.
b. Ducks must not have to travel more than 21 yards (19.2 m) in any direction to reach feed, including systems of more than one level.
c. Particular attention must be given to the provision and distribution of feeders in the recovery/hospital areas frequented by subordinate and injured ducks.

B. Drinking water

FW 8: Water supply

a. All ducks must be provided with free access to an adequate supply of clean, fresh drinking water each day, except when directed by a veterinarian.
b. Microbial water quality tests must be carried out at least annually and records must be available to Certified Humane® during inspection and at other times, upon request.
c. Provision must be made for supplying fresh water in climates where temperatures drop below freezing.

Ducks consume more water than the other poultry species. Water consumption by waterfowl is at least 4 times greater than their feed intake.

FW 9: Number of drinkers that must be provided is as follows:

a. The minimum number of drinkers that must be provided is as follows:
    2. 1. Bell: or at least 50cm of drinking space/100 for meat ducks, or at least 7cm wide and 7cm deep at least 50cm of drinking space must be provided per 100 ducks.; Nipple: 15 nipples/100 ducks for starting and growing ducks; 20 nipples/100 ducks for developing and laying ducks;
    3. 2. Nipple for ducks under 5.5 lbs.: 1 nipples/100 ducks for starting and growing ducks; 4 nipples/100 ducks for developing and laying ducks;
    3. Troughs: 1 inch (2.5 cm) of linear watering space per starting and growing ducks; 2 inches (5.0 cm) per duck for developing and laying ducks;
    4. Drinking cup: 1 per 20 ducks
b. Supplementary drinkers must be provided for ducks up to 1 week of age.

FW 10: Placement and design of drinkers

a. To reduce water spillage and prevent consequent problems with litter management, drinkers must:
    1. Be placed in a manor that reduces wetting of the floor/litter
    2. Be placed at an optimum height for the size and age of the ducks.
    3. Be of an appropriate design and wider in diameter than a duck´s bill.
    4. Be checked regularly, recorded, and maintained in good repair.
b. Ducks must not have to travel more than 21 yards (19.2 meters) in any direction of the house to reach water, including in systems of more than one level.
c. Particular attention must be given to the provision and distribution of water in the recovery/hospital areas frequented by subordinate and injured ducks.

Where possible, waterers should be installed nearby feeders. After eating, ducks require immediate access to drinking water to clean their bills and help them swallow.

FW 11: Emergency water supply

A method for providing clean, fresh water for a period of at least 24 hours during a shut off the main water supply must be available on site (e.g., power failure, freezing or drought).

FW 12: Forced feeding

Forced feeding of ducks is prohibited.

PART 3: ENVIRONMENT

OBJECTIVES: The environment in which ducks 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.
All cage-type housing systems designed to confine ducks are prohibited.

A. Buildings

E 1: Records of facility features that promote animal welfare

For all housings, the following key points must be documented and available at the inspection:

a. Total floor area available to the ducks (ft^2 or m^2); when applicable, this total floor area does not include nest boxes nor perching linear space;
b. Outdoor area, when applicable;
c. The initial number of ducks housed for either 1-day-old ducklings or older ducks at transferring and corresponding housing capacity;
d. Total number of drinkers/linear drinker space;
e. Total number of feeders/linear feeder space;
f. Target air quality (i.e., ammonia)
g. Minimum and maximum temperature parameters;
h. Lighting program.

E 2: Facility design and maintenance

a. There must be no sharp edges or protrusions in and around the facility that are likely to cause injury or distress to the ducks;
b. The interior portions of the building to which the ducks have access, including the floor, must be:
    1. Thoughtfully designed and carefully constructed to avoid features that could harm the ducks; and
    2. Well maintained.
c. All surfaces and structures where fecal material may accumulate must be scraped routinely to prevent build up.

E 3: Eliminating the use of toxic substances in buildings

Ducks of any age must not come into contact with toxic substances or fumes from paints, wood preservatives, or disinfectants (this does not include livestock-safe insecticides or fungicides).

E 4: Electrical installations

All electrical installations and/or main power source must be:

a. Inaccessible to the ducks;
b. Well-insulated;
c. Properly grounded.

E 5: Design of housing and equipment

Housing and equipment must be designed, constructed and positioned in the house so that all ducks can be clearly seen by caretakers.

E 6: Mitigating access to the droppings pit or manure belt

a. Housing design or maintenance must not facilitate ducks falling or jumping onto the manure belt.
b. The structure and inside of the droppings pit or manure belt (where present) must be checked at least once daily.
    1. Any ducks found must be removed.
    2. A record must be made of this check, including the number of ducks found and action taken to prevent further access to this area.

E 7: Nearby environs

a. The area immediately surrounding the outside of the house must be kept clean and tidy and must not offer shelter to wild ducks or rodents.
b. If the area immediately surrounding the house is covered with vegetation, the plants must be kept short and well managed.
c. Debris directly outside a duck house that may provide harborage for pests must be removed. An additional physical barrier may be placed around the perimeter of the house to deter rodents and soil-borne parasites.

B. Floor and litter

E 8: Design of floors

a. Bird house flooring must allow for effective cleaning and disinfection, preventing significant buildup of parasites and pathogens.
b. Housing with wired flooring is prohibited After 5 weeks of age. If used for duckling raising a Maximum of ½ inch wire opening must be used.

E 9: Concrete floors

a. When internal house floors are concrete underneath the litter, they must be of solid, smooth, hard construction.
b. They must be fully covered by sufficient litter depth or maintained in such a way to prevent injury to the foot pad.

E 10: Litter

a. Ducks must be kept on, or have daily access to, well maintained loose substrate/litter. If ducks have access to outdoor pasture no litter is required
b. The substrate/litter must:
    1. Be of a suitable material and particle size;
    2. Be of good quality;
    3. Be maintained in a dry, friable (not caked) condition;

4. Be a sufficient depth for dilution of feces so ducks' feet and plumage should be free of excessive fecal contamination and build up;
5. Be replaced or replenished as needed with fresh litter.

E 11: Slat floor under drinkers

a. When litter is used as flooring substrate, slats may be placed under water sources to help keep the litter dry.
b. Slats must be:
   1. Be of material rigid and without edges that could injure the ducks;
   2. The gaps between slats must not entangle the duck's feet;
   3. Be positioned so that ducks have no difficulty accessing water source;
   4. Be fixed and allow ducks to stand stable and safe.

E 12: Size of litter area

a. A minimum of 15% available floor space within the barn must be suitable substrate/litter, in a sufficient quantity and quality to allow the ducks to dust bathe and forage freely (see E11).
b. For housing systems which include a completely slated or grid floor, the opportunity to forage and dust bathe must be provided by suitable substrate/litter areas distributed throughout the system of a size that allows multiple ducks to dust bathe simultaneously.
c. If the ducks have access to pasture no litter is required.

E 13: Uncontaminated litter

a. Litter must not be allowed to become wet, infested with mites, and insects, or otherwise harmfully contaminated.
b. Litter or substrate that is wet or otherwise contaminated must not be introduced into duck housing.
c. Wet litter resulting from accidental flooding must be replaced immediately and corrective action recorded.

E 14: Litter Storage

When stored onsite, fresh litter must be kept indoors, bagged or encased by a material to prevent contamination and excessive moisture.

E 15: Understanding the importance of litter

a. Caretakers must be aware of the welfare problems associated with poor litter management.
b. Caretakers must understand the factors that affect litter condition e.g. moisture, ammonia content, ventilation, stocking density and caked litter.

E 16: Use of electrical wires

Permitted use is limited to the sidewalls of the house and must be accompanied by a written plan that justifies use and guarantees removal or disconnection by week 25 of age or earlier. For layer training purpose only.

C. Lighting

E 17: Light period

Within each period of 24 hours, the lighting system in the duck house must provide:

a. A minimum period of 8 hours of continuous artificial light and/or daylight; and
b. A minimum period of 6 hours of continuous darkness or the natural period of darkness, if less.

E 18: Recording light program

a. Lighting programs in all houses must be defined and recorded according to each stage of production and records must be made available to Certified Humane® during the inspection and at other times, upon request.
b. If lighting program is adjusted during rearing or laying phases, it must be recorded along with a reasonable justification.
c. If only natural light is used, it still must be recorded as a program.

E 19: Light intensity

a. Daytime light levels in the house must allow ducks to see and be inspected without difficulty at any time.
b. Unintentional patches of high or very low intensity light should be corrected within a house.
c. Reduction of overall light levels to control cannibalism must only be used as a last resort.
d. Monochromatic light (e.g. red light) is not permitted at any time during light cycle, unless it is a result of the dimming feature.
e. If artificial light is used, it must be dimmed at a step and speed compatible with natural dusking (i.e., 30-45 minutes) and homogeneously across the house for ducks to prepare for darkness.

D. Space Allowance

E 20: Sufficient freedom of movement

a. All cage systems or enclosures with non-compliant stocking density are prohibited.
b. All ducks must have sufficient freedom of movement to be able to stand normally, turn around, stretch their legs and wings, access resources, and engage in natural behaviors (e.g., preening, foraging, and socializing) without impediment.
c. In houses with more than one tier, all ducks must have access to the multiple levels and a dust bathing area.

E 21: Stocking density

Usable floor space must be calculated using interior barn measurements without considering angled ramps and nest space in the calculation, when applicable.

a. For meat ducks, in a single level, all-litter house, the density must not exceed 3.48 lb./sq.ft. (17kg/m^2);
b. For egg-laying ducks, in a single level, all-litter house, a minimum of the density must not exceed 2.7 sq. ft. (0.25m^2) per bird.

In outdoor mobile housing, and pasture raised systems , a minimum of 1 sq. ft. (0.09 sq. m) of walkable surface per duck must be provided.

E 22: Records of space allowances

To ensure that the maximum housing density is not exceeded:

a. A floor plan of every house must be available to the inspector that indicates:
   1. The total floor space available to the flock at all times;
   2. Resulting stocking density based on initial flock numbers;
   3. Maximum number of ducks permitted within the house (as E1);
b. Records must be kept that enable the space allowance to be verified easily by the producer/inspector at any time. These must include:
   1. Records of the number of ducks initially housed and the number of ducks at the time of the inspection.

E. Air Quality and Thermal Environment

E 24: Air quality in indoor housing 3

a. Ammonia concentrations must be measured at bird level with ammonia strips or an electric reader and recorded at least once every week. These records must be made available to Certified Humane® during inspections or at other times, upon request.
b. The ammonia must be equal to or less than 10 ppm routinely. Ammonia levels must never exceed 25 ppm, except during a brief period of adverse conditions (e.g. prolonged humid climate).
c. Any event of excessive ammonia concentrations (above 10 ppm) must be documented with reasons and corrective actions taken to remedy.
d. Inhalable dust and noxious fumes must not be visually or olfactorily noticeable in animal housing.

E 24: Relative humidity

a. Relative humidity inside the houses must be maintained at a moderate range to ensure friable litter and thermal comfort of ducks (40-70% is recommended).
b. In humid regions, mist or fogger must be managed along with ventilation in way to prevent duck thermal discomfort.
c. When mitigation is possible (turn off foggers, increase ventilation, open curtains), actions taken must be recorded to maintain humidity within the optimal range.

E 25: Thermal conditions

a. A Standard Operational Procedure (SOP) must be written and implemented to provide management basis for ensuring that ducks have access to a thermally comfortable environment, at all times.
b. Daily records of maximum and minimum temperatures must be kept for each house and made available to Certified Humane® during inspections or at other times, upon request.
c. When mitigation is possible, actions taken must be recorded to maintain temperature within the optimal range for ducks, according to the stage of production.

Ducks can tolerate lower temperatures than other poultry. For example, adult Pekin ducks can be managed between 50 to 60 degrees Fahrenheit (10 to 15 degrees Celsius). Ducks' thermos-neutral zone is between 46.4- and 73.4-degrees Fahrenheit (8 and 23 degrees Celsius).

F. Nesting for Egg-Laying Ducks

For egg-laying ducks, the following standards on nesting must be met.

E 26: Nesting areas

One of the following conditions must be met:

a. Individual nest boxes must be provided at no less than one nest per 5 laying ducks. The minimum nesting size recommended is 11.8 in. (30 cm) width and 11.8 in. (30 cm) in height by 15.7 in. (40 cm) deep.
b. All community (colony) nest systems must provide an overall minimum nesting area of 9 sq. ft. (0.8 sq. m) per 100 ducks.
c. If ducks are less than 5.5 lbs. Individual nest boxes must be provided at no less than one nest per 6 laying ducks. The minimum nesting size recommended is 11.8 in. (30 cm) width and 11.8 in. (30 cm) in height by 15.7 in. (40 cm) deep.
d. If ducks are less than 5.5 lbs. All community (colony) nest systems must provide an overall minimum nesting area of 9 sq. ft. () per 120 ducks.

E 27: Nest design

a. Nest boxes must be placed at ground level for all breeds, except for Muscovy ducks.
b. Nest boxes may have a front lip to prevent eggs from falling out, but not so high that ducks will struggle to enter and exit the box
c. Nest boxes must have natural or artificial flooring (removable matt or affixed) material that encourages nesting behavior.
d. Privacy curtains are encouraged for enclosing nests, when possible.
e. The next flooring must be replenished, replaced, and cleaned to maintain a healthy environment.

G. Environmental Enrichment

Studies show that ducks can spend more than 1/5th of their day interacting with water, and

bathing happens throughout the day. Therefore, water (and the ability to use water to wet preen and fulfill other natural behaviors) is a critical part of duck welfare.

E 28: Open water sources or waterers

a. Open water sources or waterers must enable all ducks, at least, to wet preen and submerge their heads.
b. If ducks use waterers to submerge their heads, there must be water quality management guidance.
d. Open water sources must be cleaned regularly and well-maintained to minimize pathogens.
e. Ponds must be filtered and well-aerated; continuous flow of water is preferred.
f. To reduce water spillage and prevent consequent problems with litter management, open water sources should be placed over the slats or outside in a drainable area when possible.
g. When ducklings have access to open water:
    1. the exit should be easy to access, and the depth of the water must not cause ducklings to drown.
    2. the water level must be lower than 2 inches until their feathers have developed a waterproof barrier.

As enrichment, the open water sources provide an opportunity for ducks to bathe, preen, forage (by sifting through the water), and explore. As a result, ducks are less likely to engage in abnormal behaviors such as feather pecking.
Some commercial duck producers provide outdoor runs with access to bathing water. Outdoor sources of open water can contribute for maintaining indoor litter quality and air quality levels while providing their ducks with water enrichment.

E 29: Stimulating enrichment

When open water is not provided, other forms of environmental enrichment must be implemented inside the barns. Ducks with free range or pasture access do not need indoor enrichment if outdoor access is being granted.

a. Enrichment materials should consist of one or a combination of the following, for instance:
    1. Hanging alfalfa bales/bunches
    2. Baskets filled with straw or grass
    3. Pecking objects such as stones
    4. Supplementary feeders with coarse calcium
    5. Hanging nontoxic strings
    6. Grain in litter
    7. Maize silage, pea-barley silage or carrots
    8. Other structure or material that is behaviorally relevant to the ducks.
c. The use of environmental enrichment must be enhanced upon an onset of feather pecking or outbreak of disease that prevents outdoor access (when applicable).

H. Specific Provisions for Ducklings

E 30: Breeder's management guidelines

a. For brooding and rearing of ducklings, the breeder's management guidelines for ventilation, temperature, humidity, and lighting must be followed.
b. Producers must retain a copy of their breed's management records and make this copy available to the HFAC inspector.

E 31: Placement of ducklings

a. Raising structure, heat, and ventilation must be in place at least 24 hours prior to duckling arrival.
b. Day-old ducklings must be handled carefully and housing managed to avoid thermal stress upon placement in the house.

E 32: Brooder environment

a. Brooder surrounds and feeding and watering equipment must be designed and constructed such that ducklings can move freely toward or away from the brooder.
b. The temperature under the brooder must be adjustable to ensure that the ducklings are comfortable (as indicated by the flock behavior and distribution pattern).
c. The behavior of the ducklings must be closely monitored throughout the brooding period and the brooders adjusted accordingly.
d. Brooder heaters must not impose a risk of fire or emission of carbon monoxide.
e. Air drafts must be avoided.

Ducklings will huddle together when they are too cold, and they will spread out and pant when they are too hot. These behaviors can determine what changes need to be made to the brooder to maintain a comfortable temperature for the young ducks.

PART 4: FREE RANGE & PASTURE RAISED SYSTEMS (OPTIONAL)

OBJECTIVES: The Animal Care Standards for meat and laying ducks do not require that ducks have access to outdoors or be raised on range. Pasture-Raised and Free-Range systems are optional. Where laying ducks have access to range or the outdoors, the following definitions and standards must also be met.

***Free Range**: This is a management system in which adult ducks are kept in houses with daily access to an uncovered outdoor area with living vegetation, weather permitting.*

***Pasture Raised:** This is a management system where adult ducks are kept on pasture 12 months of the year, in an outside area that is mainly covered with living vegetation. The ducks have access to the pasture through exits from fixed or mobile houses, and covered verandas if present.*

A. Applicable to All Outdoor Systems

R 1: Management of Outdoor Area

a. The outdoor area must be designed and actively managed to:
   1. Encourage ducks to go outside and to use the full area;
   2. Prevent and/or minimize heavily degraded, muddy, damaged, contaminated, or sodden areas;
   3. Avoid any build-up of agents (e.g., parasites, bacteria, viruses) that may cause disease; and
   4. Prevent ducks from encountering any toxic substances or plants.
b. The maximum distance that a duck must walk from the perimeter fence of the outdoor area to the nearest door into the house must be no more than 400 yards (366 m).
c. Land used for cropping (except grass, rice or hay) is not accepted as part of the minimum outdoor space available and therefore must be excluded from space calculations.
d. There must be a written parasite control plan for ducks with outdoor access (see R3).

R 2: Shade and cover areas

a. There must be sufficient well-drained, shaded areas for ducks to rest outdoors without crowding together.
b. Cover, such as shrubs, trees or artificial structures, must be distributed throughout the outdoor area to reduce the fear reactions of ducks to overhead predators and to encourage use of the area.

R 3: Housing

a. All ducks must have access to housing that keeps them dry, protects them from wind and predators, and meets the requirements in the other parts of this manual.
b. Outdoor exits must support herd animal exiting. Ducks herd together and openings should be placed to support the exit of the herd together. A 4 ft wide by 18 inches high minimum opening per every 2500 ducks shall be present.

Access to range allows ducks to perform natural behaviors and choose their environment more freely. This includes the choice of natural lighting and potentially even different spectra of light. Ducks are tetrachromatic so they have a wider range of spectral vision.

B. Applicable to Free Range System Only

R 4: Outdoor Area for Free Range Systems

a. It must consist of ground covered by living vegetation, where possible. Ground coverings such as gravel, straw, mulch or sand are alternatives when vegetation is not possible.
b. The minimum outdoor area required is 2 sq. ft. (0.19 sq. m) per duck.
c. Outdoor access must be provided for 12 months per year, every day for a minimum of 6 hours per day during the daytime, except during inclement weather or when prevented by veterinary or emergency reasons.
d. Except in the case of an emergency or due to climate conditions that compromises thermal comfort of ducks, ducks may not be confined in fixed or mobile housing 24 hours per day for more than 14 consecutive days.
e. Measures in compliance with all national, regional and local health and disease monitoring regulations, including sequestration of ducks for extended periods in compliant housing are allowed.

C. Applicable to Pasture Raised Systems Only

R 5: Outdoor Area for Pasture Raised Systems

a. It must consist of ground covered by at least 60% living/dormant vegetation/water/trees/outdoor open air shelters.
b. The minimum outdoor area required is .8 acres (1 hectare) per 1,000 ducks (or 35 sq. ft /10 m^2 per bird).
c. The outdoor area can be divided into sections in order to manage vegetation regeneration, as long as, the ducks are offered no less than 15 sq. ft. per bird at any given time.
d. The pasture must be managed to ensure regeneration of vegetation, so that ducks have ample access to vegetation (see R1).
e. Daily outdoor access must be provided continuously 12 months per year, every day for a minimum of 8 hours per day or for all daylight hours, except during severe weather, thermal cold stress to ducks, or when prevented by veterinary or emergency reasons.

f. Except in the case of an emergency, ducks may not be confined in fixed or mobile housing 24 hours per day for more than 20 consecutive days.
g. Measures in compliance with all national, regional and local health and disease monitoring regulations, including sequestration of ducks for extended periods in compliant housing are allowed.
h. When open water sources are provided via pond or flowing stream the amount of sq.ft provided by water is deducted from the required pasture required sq ft by a 5 to 1 ratio up to a maximum of 50% of the required space.

R 6: Pasture Management Plan

a. A pasture management plan must be developed, implemented and updated regularly. This plan must be submitted with the application to HFAC and be available during inspection.
b. The plan must include:
   1. Pasture rotation layout and records;
   2. Management to prevent heavily poached/muddy/worn areas;
   3. Procedure to minimize any build-up of parasites or diseases;
   4. Distribution of natural and artificial shade/shelters and cover;
   5. Drainage improvements to prevent poached areas from developing.

   If open water source is provided an open water source plan and sq.ft footage calculations must be included.

PART 5: MANAGEMENT

OBJECTIVES: A high degree of caring and responsible management is vital to ensure good animal welfare. Caretakers must be thoroughly trained, skilled, and competent in animal husbandry and HFAC Animal Care Standards.

A. Managers and Animal Handlers

M 1: Operations records*

Operations records must be kept up-to-date and made available to the inspector. These records include, at a minimum:

a. Operational checklists;
b. Animal health plans;
c. Animal emergency response plans;
d. Farm pest control plans;
e. Written standard operating procedures;
f. Local regulatory directives and certificates; and
g. Animal Welfare policies.

*See Appendix 1 for the complete list of required records.

M 2: Access to the program standards

a. Those in management must be able to access a paper or digital copy of the *HFAC* Animal Care Standards for Egg Laying Ducks (available online or via the Certified Humane app).
b. All animal handlers must be made aware of the requirements stated in the *HFAC* Animal Care Standards for Egg Laying Ducks:
    1. They must be familiar with the standards;
    2. They must be capable of implementing its content.

M 3: Emergency management

a. A written Emergency Action Plan must be developed to manage for instance disease outbreaks, accidents of any kind, interruption of supplies, fire, flood, or power failure which can compromise animal welfare, or any type of veterinary emergency.
b. The Emergency Action Plan and contact information must be easily understood and accessible to all animal handlers and farm staff.

M 4: Training of animal handlers

a. Managers must implement and document a suitable and regular training program for animal handlers. It must cover compliance with *HFAC* standards and operational SOPs while delivering compassionate care.
b. Prior to being given specific animal care, responsibilities, the designated animal handlers and managers must be trained and be able to demonstrate their aptitude. Training should be documented and must cover at least the following areas:

1. Recognize signs of normal behavior, abnormal behavior, fear and understand the signs that indicate good health and welfare;
2. Recognize impending trouble in its earliest stages, as this may enable them to identify the cause and correct matters promptly;
3. Recognize early signs of disease outbreaks, and when to seek veterinary help;
4. Conduct feather condition assessment and scoring and detect onset of feathering problems;
5. Understand the functional anatomy, care, and treatment of foot problems;
6. Implement best practices for chick and pullet care;
7. Understand signs of improper nutrition of laying ducks;
8. Understand the environmental and thermal requirements for ducks;
9. Understand the requirements for good housing maintenance;
10. Understand the requirements for biosecurity management;
11. Understand the breed requirements for the laying duck being reared;
12. Ensure that humane and compassionate methods of catching are used; and
13. Perform humane euthanasia.

c. Managers must take into account the skillset of the animal handlers before adopting new housing systems, any expansion plans or installation of new or more complex equipment.

M 5: Understanding and addressing welfare problems

The animal handlers must:

a. Be ready to address production challenges at certain times and in which circumstances ducks are prone to welfare problems.
b. Be aware of and control the factors that affect litter condition (e.g. moisture, ammonia build up in the house, ammonia content, ventilation and stocking density).
c. Be ready to promptly respond to accidental poor litter conditions preventing hard litter balls in the toes, burnt hocks, and footpad lesions.
d. Be aware of the risk and evidence of weakened/broken bones (e.g. bone fragility, duck aging, catching, nutrition, and bad landings when jumping from elevated structures).
e. Be able to demonstrate their proficiency in procedures that have the potential to cause discomfort (e.g. vaccination, catching, handling and euthanasia).
f. Be able to demonstrate competence in recognizing and dealing promptly with welfare problems.

M 6: Complaints to Operators

a. An Operation must maintain a system for recording complaints in conjunction with Certified Humane® program.
b. Whenever an Operator receives a complaint, there must be a record that includes:
    1. Date when the complaint was received;
    2. Description of the complaint as given
    3. The names of party lodging the complaint, if provided;
    4. The name of the person receiving the complaint;
    5. Action taken, if any needed, and by whom and results.
c. Records must be retained in an auditable format for a minimum of 2 years.

B. Inspection

M 7: Monitoring ducks

a. All ducks must be inspected at least twice a day to identify those that are sick, injured, trapped, or behaving abnormally.
b. Any welfare problems seen during an inspection by the caretakers must be addressed promptly.
c. Upon an onset of abnormal duck behavior, management practices leading to nutritional deficits, poor litter condition, environmental stressors must be reviewed immediately and revised to correct the problem.
d. Brooding ducks must not be allowed to remain in the nests and must be segregated. Exceptionally under this situation, brooding ducks must not access nests (stimulus for brooding) until they commence egg laying.

M 8: Records of ill, injured, and dead ducks

a. The number of sick, injured and dead ducks must be recorded daily.
b. Record must contain:
    1. Date;
    2. Causes of the illness, injury, when known;
    3. Action taken to restore health or culling if necessary.
    4. Segregation of number of culled ducks from those found dead during the inspections.

M 9: Quiet handling and compassionate care

a. Work routines and practices must ensure that ducks do not become fearful.
b. All movement throughout the unit must be slow and deliberate both to alleviate fear and reduce possible injury, piling and suffocation to the ducks.
c. Ducks must be held upright with both hands around the wings and body.

C. Housing Equipment

M 10: General equipment use and management

When equipment is installed that affects animal welfare, caretakers must be able to:

a. Demonstrate their ability to operate the equipment;
b. Demonstrate their ability to carry out routine maintenance;
c. Recognize common signs of malfunction; and
d. Take immediate actions in the event of any failure.

M 11: Automatic ventilation systems

a. For houses with solid walls that do not allow for adequate natural air flow, the use of an automatic ventilation system is required.
b. There must be an alarm that will give an immediate warning of a system failure.

c. Auxiliary ventilation equipment must be readily available for use when needed.

M 12: Auxiliary power supply

a. Auxiliary power supply must be accessible and capable of providing power to critical electrical equipment within the house.
b. The power supply, if stored on site, must be checked at the frequency recommended by the manufacturer, and these checks must be documented.

D. Farm Dogs

M 13: Managing farm dogs

Dogs (including working dogs) must be properly trained, must not cause injury or distress to ducks, and must be kept under control at all times.

PART 6: HEALTH

OBJECTIVES: The environment in which ducks are raised must be conducive to supporting good health. All producers must develop a health plan in consultation with their veterinarian.

A. Health Care Practices

Producers must develop and implement a written Animal Health Plan that covers the following areas that is regularly updated in consultation with a veterinarian:

1. Tolerance limits on flock performance parameters.
2. Biosecurity measures.
3. Hospital pens, when in use.
4. Information on treatments and other aspects of flock health.
5. Details of any vaccination program.
6. Causes of morbidity and mortality/culling.
7. Cleaning and disinfection policy.
8. Emergency health events.

In addition, producers are required to maintain the following flock records:

9. Care of sick or injured animals.
10. Monitoring of external and internal parasites.
11. Protection from pests and predators.
12. Monitoring of recurring injuries.
13. Physical alterations.

Health records can be logged in any form (e.g., spiral notebooks, checklists, phone applications) depending on what works for the producer, as long as the required information is recorded and can be provided to HFAC or the inspector upon request.

H 1: Flock performance data

a. Flock must be continually monitored for performance such as daily egg laying rate, body weight and flock uniformity, anticipated mortality rate both according to duck´s age, production diseases, infectious diseases, and injuries caused by insufficient husbandry practices, that may cause:
   1. Production benchmarks that fall beneath projected norms;
   2. Poor feather quality, pecking, outbreak of cannibalism;
   3. Toe clumps formed from wet litter;
   4. Footpad lesions and poor gait scores;
   5. Fowl mite and lice infestation;
   6. Bone and leg deformation.

b. If any flock performance parameters fall below the tolerance limits identified in the Animal Health Plan and strain guidelines, actions must be taken to investigate and remedy the issue.

c. Managers must maintain and make available to the *HFAC* inspector the records of annual Certified Humane® production data regarding flock performance.

H 2: Biosecurity measures

a. Producers must implement an effective biosecurity plan to prevent disease outbreaks.
b. To ensure the health of their flocks, producers must follow effective biosecurity measures, which may include, for instance, personal protective equipment, footbath stations, and controlled visitor access.
c. Animals being brought in to populate the houses must be observed for any deficiency, weakness, or potential disease outbreak.
d. HFAC office must be consulted if the normal house populating practices are not in accordance with the Certified Humane® program standards.
e. Measures in compliance with all national, regional and local health and disease monitoring regulations, including sequestration of ducks for extended periods in compliant housing are allowed.

H 3: Hospital pens

a. When hospital pens are used, they must be of a size that is appropriate for the age of the animal. Stocking density must be in accordance with an approved housing system (E20).
b. Biohazard materials must be properly disposed of in order to prevent the spread of disease to other ducks, animals or humans.
    1. Hospital pens must be constructed to facilitate effective cleaning and disinfection and removal of carcasses from the area.
    2. The cleaning and disinfection procedure of hospital pens must be described in the Animal Health Plan.
c. Water, feed, perch, nest, shelter, and friable litter must always be present and accessible to animals in the hospital pens, unless otherwise directed by the veterinarian.
d. Hospital pen must allow for easy access for health care assistance.

H 4: Treatment and other aspects on flock health

a. All flock treatments, either individual or group, must be recorded.
b. At the minimum, records for any treatments given therapeutically for disease must specify the:
    1. Treatment used;
    2. Dates of administration;
    3. Identification of flock or group of animals treated;
    4. Reason for treatment; and
    5. Outcome.
c. A treatment prescription authorized by the veterinarian must be present with the flock records.

H 5: Vaccinations

a. The vaccination program must:
    1. Comply with local, regional and national regulations.
    2. Be in accordance with disease prevalence in the vicinity and infectious pressure.

b. Records for vaccinations must be auditable and specify the:
   1. Type of vaccination;
   2. Dates of administration; and
   3. Flock identification and age.

H 6: Cleaning and disinfection policy

a. Premises and equipment must be thoroughly cleaned and disinfected before restocking with ducks, in accordance with an operation´s written procedure.
b. Cleaning must be carried out in the facility (including equipment) to maintain a healthy environment for the ducks.

H 7: Emergency health events

a. All sudden deaths, disease outbreaks, and euthanasia of unfit ducks must be:
   1. Recorded;
   2. Investigated thoroughly;
   3. The corrective actions taken as necessary;
   4. Reported to the veterinarians or local authorities in cases of biosecurity threats or large number of deaths.
b. The Animal Health Plan must describe the operation's plans in the case of an emergency health event.
c. Measures in compliance with all national, regional and local health and disease monitoring regulations, including sequestration of ducks for extended periods in compliant housing are allowed.

H 8: Care of sick, injured and unproductive laying duck

Any sick, injured or unproductive egg-laying duck, and those suffering from open wounds, fractures, feather pecking, or prolapse of the vent, showing difficulty in reaching feed and water must be:

a. Segregated; and
b. Treated without delay; or
c. If necessary, culled according to euthanasia guidelines by a reputable source.

H 9: Monitoring of external and internal parasites

a. There must be a detailed preventive and monitoring program for external and internal parasites defined within the Animal Health Plan.
b. There must be a detailed written procedure for monitoring parasites in the flock (e.g. routine necropsy, presence of evident preening behavior, bristling feathers).
c. Treatments used to control parasites must be recorded.

H 10: Protection from pests and predators

a. Farm pest and predator control plans must include management of debris and abandoned materials in the vicinity of barns that might encourage the presence of pests and predators.
b. Humane precautions must be taken to protect laying ducks from predators and pests. Specifically:

1. The entry of wild ducks into duck houses must be prevented;
2. There must be no human food residues (e.g. sandwiches) left unattended which can attract pests and predators;
3. Predators, including dogs and cats, are not permitted in the duck houses.
4. There must be the ability to sequester the ducks in a predator-proof area if needed, especially at night.
5. Outdoor access areas may be enclosed with an appropriately sized mesh fence (small enough to keep predators out) that carries an electric current suitable for ducks.
6. Monitoring for rodents must be conducted and recorded.
7. If there is unacceptable rodent activity within and surrounding a duck house, appropriate methods of control must be implemented and recorded.
8. Monitoring for flies must be conducted and recorded.
9. If there is unacceptable fly activity within and surrounding a duck house, appropriate methods of control must be implemented and recorded.

H 11: Preventing recurring injuries

a. There must be no recurring injuries due to unattended repairs, inappropriate construction features and/or other dangerous elements (indoors or outdoors), or poor handling procedures.
b. Attention must be paid to footpad lesions and gait problems, toe and foot cleanness (no formation of fecal/litter balls around the toes), crusty eyes and nostrils or poor feather quality. If such problems are found, a program of preventive action must be implemented and recorded.

H 12: Physical alterations

a. Bill trimming and claw trimming are not permitted.
b. Pecking objects, such as stones, must be available in cases of uneven or overgrown bills, to allow ducks to feed properly and prevent aggravation of feather pecking.

H 13: Food safety

a. A recognized Quality Assurance Program for the control of organisms that cause food safety concerns must be adopted and followed.
b. At minimum, Salmonella laboratory analysis in eggs must be carried out every 6 months and records kept.

H 14: Selecting ducks for good health and disposition

During selection of bird breeds, care must be taken to avoid genetic strains with undesirable traits, particularly aggressiveness, broodiness, bone and feet fragility, hysteria, cannibalism, and tendency to feather peck.

H 15: Genetic modification and cloning

The use of genetically modified and/or cloned laying ducks and their offspring are prohibited.

H 16: Molting restriction to egg-laying ducks

a. Withdrawal of feed to induce ducks to molt is prohibited.

b. If molting is planned, a special protocol must be pre-approved by HFAC regarding performance monitoring and records (e.g. duck age, weight loss, mortality, laying rate, diet formulation, feed provision and lighting program).

H 17: On-farm euthanasia

a. A bird must be promptly euthanized if it is in severe pain, unable to walk or not presenting any opportunity for recovery.
b. The approved on-farm methods to be carried out by a veterinarian or a trained, competent member of the staff are:
    1. Cervical dislocation; to be used in an emergency or for culling a very small number of ducks. This requires stretching the neck to sever the spinal cord and disrupt blood flow to the brain;
        2. A TED gun/captive bolt pistol may be used
    3. Handheld electrical stunning, immediately followed by neck cutting;
    4. Carbon dioxide or a mixture of carbon dioxide and argon, delivered in an appropriate container at acceptable concentrations.
c. Crushing the neck with pliers or burdizzo or neck cutting of a conscious duck is prohibited.
d. Ducks must be carefully examined to confirm death immediate after the euthanasia procedure.

H 18: On-farm carcass disposal

a. All carcasses must be disposed of based on a farm plan that prevents hazards to other animals or to the environment. Local ordinance must also be observed.
b. It must be managed so that it does not attract pests and predators.

H 19: Mass depopulation

a. When the entire flock must be depopulated due to disease outbreak and biosecurity concerns, the most current mass depopulation guidelines in accordance with local regulations and from reputable organizations like (World Organization for Animal Health) WOAH or American Veterinary Medicine Association (AVMA) must be followed.
    The permitted methods are:
        a. Containerized gassing;
        b. Water-based foam.
b. Ventilation shutdown as a form of mass depopulation is prohibited.

PART 7: DEPOPULATION OF EGG-LAYING DUCKS

OBJECTIVES: Animal depopulation must be designed and managed to ensure ducks are not caused unnecessary distress or discomfort. Personnel involved in depopulation must be thoroughly trained and competent to carry out the tasks required of them.

A. Depopulation Procedure

D 1: Depopulation Action Plan (DAP)

a. The DAP must be recorded for each house prior to depopulation and must include:
   1. A designated supervisor to coordinate the DAP;
   2. House information and number of ducks to be depopulated;
   3. Catching plan including fasting period;
   4. Catching and transportation arrangements;
   5. Destination/disposal of depopulated ducks;
   6. Plan for culling of ducks unfit for transport.

b. The method of depopulation must be endorsed by the AVMA (American Veterinary Medical Association) or recognized by local veterinary guidelines for humane depopulation.

c. The DAP records must be signed after each depopulation by the designated supervisor and made available to review by HFAC upon request.

d. Only personnel who are trained and competent should be involved in depopulation activities.

e. Catching teams must never put speed of operation before duck welfare.

PART 8: TRANSPORTATION

OBJECTIVES: Animal transport systems must be designed and managed to ensure ducks are not caused unnecessary distress or discomfort. The transport and handling of ducks 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. Depopulation

T 1: Culling unfit ducks prior to loading

a. Caretakers must inspect the flock shortly before loading and cull any sick, injured, unable to walk too compromised any way to be transported without suffering.
b. Ducks that are visibly unfit before loading must not be loaded or transported; they must be euthanized promptly.

T 2: Preparing for catching and loading

a. All feeders, drinkers, and other obstacles must be raised or removed from the house prior to catching ducks to minimize risk of bruising.
b. Access routes to the duck house must be adequately designed and maintained to permit safe passage of transport vehicles.
c. House doors and passages must be large enough to allow safe removal of ducks.
d. Vehicles must be parked as near as practically possible to the house being de-populated.
e. Loading ramps must be in good condition to ensure ducks easily access the desired area, with a gradual and maximum 15-degree angle to prevent discomfort or potential injury.

T 3: Training

Managers must ensure that all personnel involved in catching and transportation of ducks are properly trained and competent.

T 4: Providing instructions for the operation

a. Managers must communicate with the processor, transporter and catching crew to identify the number of ducks to be transported and the ducks' weight.
b. Managers must establish the stocking density to be used during transport.
c. Managers must prepare full and detailed written instruction for the catching staff
    1. All catching staff need to be aware of loading density (i.e., how many ducks per compartment); and
    2. The handlers/catchers must be aware of their duties.

T 5: Monitoring welfare during depopulation

A nominated member of the catching crew must be made responsible for supervising, monitoring, and maintaining high Animal Care Standards throughout the depopulation of the house and loading of ducks onto the transport vehicle.

T 6: Ensuring sufficient time for compassionate care

Catching crews must never put speed of operation before bird welfare. Sufficient time must be made available to ensure ducks are handled with care.

T 7: Adequate ventilation

a. Adequate ventilation at duck height must be provided for uncaught ducks up to the time of loading.
b. During loading, steps must be taken to protect ducks from:
    1. Adverse weather conditions;
    2. Sources of heat; and
    3. Condensation.

T 8: Mitigating unnecessary suffering

a. During the catching process, ducks must not suffer prolonged:
    1. Hunger,
    2. Thirst, or
    3. Deprivation of rest.
b. Specifically, ducks must have access to water up to the time of catching. Water must be given regularly to uncaught ducks by periodically lowering the drinkers.
c. Ducks must not be deprived of feed for more than 12 hours in total, including the period up to the time of processing.
d. All feeders, drinkers and other obstacles must be raised or removed from the house prior to catching to minimize the risk of bruising.
e. House doors and passages must be large enough to allow safe removal of ducks.

T 9: Catching and loading ducks

a. Catching must take place in low lighting to minimize fear reactions of the ducks.
b. Ducks must be caught around the wings and body and carried upright with the head under the armpit, the body resting on the catcher's forearm, and lightly holding the legs.
c. Ducks must not be caught or carried by the neck nor legs.
d. Ducks may be gently walked in small groups onto a loader or transport trailer instead of manually catching.
e. When fixed crates are used, ducks must be moved carefully, never thrown into the crate.
f. Ducks should be loaded one at a time.
g. When ducks are guided onto a loader from the ground, they must be moved at a slow pace to prevent smothering.

h. The person responsible for supervising depopulation and loading must ensure that the door of each crate is securely fastened, and the wings, head, or legs of any duck are not trapped in the door or any part of the fixed crate trailer.

T 10: Preventing crowding

a. During depopulation, actions must be taken to prevent ducks from crowding together.
b. When crowding occurs, catching must be stopped, and the ducks spread out calmly and quietly, then allowed to settle before catching is resumed.
c. When ducks are guided onto a loader from the ground, they must be moved at a slow pace to prevent smothering.

T 11: Transport container requirements

a. Before depopulation begins, the person appointed to supervise depopulation and loading must verify that the transport trailer:
    1. Permits adequate ventilation and protect ducks from adverse climatic conditions;
    2. Are thoroughly clean;
    3. Are well maintained; and
    4. Have no sharp edges or protrusions that could cause injury to the ducks.
b. Stocking density must be reduced when ducks are being transported during hot weather (circa more than 77°F or 25°C).

B. Transport of ducks

T 12: Competent staff

Personnel in charge of duck transporters must be able to demonstrate their competence in:

a. Handling ducks;
b. Securing the load;
c. Maintaining an appropriate thermal environment for the ducks while in transit;
d. Driving and parking safely; and
e. Following emergency procedures

T 13: Investigating mortality during transport

a. Levels of transportation mortality (in ducks from any single source) in excess of 0.3% in any three-month period must be promptly investigated by the producer.
b. When causes of mortality have been identified, prompt action must be taken to prevent further deaths, injury or suffering from occurring.
c. These records must be made available to the Certified Humane® inspector during the inspection.

T 14: Limiting the period of transport

a. Every effort must be made to ensure journeys are completed without unnecessary delays:
   1. Drivers must make an effort to be aware of any potential traffic problems; and
   2. Drivers must plan their journey to minimize its duration.
b. The person supervising the catching and loading of ducks must communicate clearly and work closely with the processing plant to minimize the time ducks spend on the vehicle after transport to the processing plant.

T 15: Minimizing noise

Noise levels, from all sources, must be minimized during loading, unloading and transport.

T 16: Avoiding thermal stress

a. The driver must avoid thermal stress to the ducks.
b. At times of high ambient temperature or when high humidity poses a threat to the ducks, catching, producers must make advance plans and take appropriate action to reduce the ducks' risk of heat stress.
c. In periods of hot weather, ducks must be transported at night or in the coolest parts of the day.
d. Ducks reared in houses with tunnel ventilation may need to be pre-adapted to warmer temperatures if they are to be transported during hot weather. Pre-adaptation programs must be submitted to the *Humane Farm Animal Care's* Certified Humane® program office for approval prior to implementation.

In hot weather, loading and transportation create particular risks of heat stress. One of the most effective methods of providing a cooling draft during transport is to keep the vehicle moving.

T 17: Ventilation

a. The transport vehicle must be equipped with curtains that can be opened/closed by a single operator.
b. When the weather is hot, a central passageway must be left free of ducks/trays to allow increased ventilation.
c. Vehicles must be equipped with fan-operated ventilation.

The technology is now becoming available to monitor temperature and humidity onboard transport vehicles. This allows drivers to take appropriate action to maintain ideal conditions for ducks. The use of such equipment is encouraged. Humane Farm Animal Care will monitor the development of such technology and review its use for future inclusion in these standards.

T 18: Shelter from extreme weather

When necessary, shelter from extremes of weather, including cold and rain during transport must be provided, such as curtains or panels.

PART 7: PROCESSING

OBJECTIVES: All processing systems must be designed and managed to ensure that poultry are not caused unnecessary distress or discomfort. The pre-slaughter handling of ducks must be kept to an absolute minimum. Personnel involved in slaughter must be thoroughly trained and competent to carry out the tasks required of them.

A. Inspection

P 1: Monitoring condition

a. To assist in the monitoring of on-farm welfare, routine assessments must be made of ducks at the processing plant and records made available to *Certified Humane*® Inspector during the inspection, and at other times, upon request.
b. This monitoring should involve the assessment and recording of
    1. Ducks dead on arrival (DOA's);
    2. Duck foot health, e.g. the incidence of footpad dermatitis; and
    3. The incidence of hock burn/breast blisters.
c. All transport trays must be examined on arrival at the slaughterhouse to identify any ducks suffering from injury, heat or cold stress.
d. Immediate action must be taken to prevent suffering and ensure that similar occurrences are prevented.
e. Any duck identified as suffering from injury, heat or cold stress must be slaughtered promptly and humanely.

B. Training

P 2: Implementing an animal welfare policy

a. Managers must develop and implement an animal welfare policy covering processing. This must include written descriptions for:
    1. Maintenance of animal welfare in the processing plant;
    2. The responsibilities and duties of staff; and
    3. Emergency procedures.
b. The animal welfare policy must be reviewed and updated at least annually.

P 3: Animal Welfare Officer (AWO)

a. Managers must appoint at least one trained Animal Welfare Officer (AWO), who is responsible for the implementation of the animal welfare policy during processing.
b. The AWO must make frequent checks throughout the day to ensure that ducks are being effectively stunned and are insensible throughout the slaughter operation.
c. When this is found not to be the case, the AWO must take prompt remedial action

P 4: Training staff about processing procedures

a. Managers, in conjunction with the AWO, must develop and implement a training program for all staff handling and slaughtering ducks.
b. They must ensure that staff are properly trained to carry out their duties and be competent to perform them.
c. This training should be documented.

A number of processing plants have installed closed circuit television (CCTV) monitors within the pre-slaughter handling and slaughter areas. This allows those responsible for animal welfare within the abattoir to ensure that Animal Care Standards are maintained. Humane Farm Animal Care recommends the installation of CCTV systems.

C. Holding Areas

P 5: Humane treatment in the holding area

a. Ducks should be placed in an environmentally controlled holding area promptly on arrival at the processing facility.
b. All ducks at the processing facility awaiting slaughter must be:
    1. Protected from direct rays of sun and from adverse weather, e.g. wind, rain, hail, snow; and
    2. Provided with adequate ventilation (this includes regular monitoring and maintenance of temperature and humidity in the holding area and within duck loads); and
    3. Humanely killed promptly, if found to be suffering.
c. The holding area must have reduced lighting.

P 6: Minimizing waiting time

a. All ducks must be slaughtered as soon as possible after arriving at the processing facility.
b. Slaughter must occur:
    1. No more than 12 hours after the time feed was withdrawn on the farm; and
    2. Within 4 hours of the ducks' arrival at the plant
c. Once ducks have arrived at the premises at which they are going to be slaughtered, they must not be moved on to other premises for slaughter.

P 7: Emergency breakdowns

Standby equipment, e.g. a generator, must be available for emergency breakdowns.

P 8: Unloading Ducks from fixed crate vehicles

When ducks are unloaded from fixed crate vehicles:

1. Staff must be provided with facilities or equipment that provide access to all the crates in each tier.
2. Care must be taken when removing ducks from crates.

P 9: Monitoring condition

a. All transport trays or fixed crates must be examined on arrival at the processing plant to identify any ducks suffering from injury, heat, or cold stress.
b. Immediate action must be taken to prevent suffering and ensure that similar occurrences are prevented.
c. Any bird identified as suffering from injury, heat, or cold stress must be slaughtered promptly and humanely.

P 10: Recording and reporting deaths and injuries

a. All deaths and injuries of ducks must be recorded and reported to the AWO and the farm manager before the next consignment from the same source is collected.
b. Records must be made available to Certified Humane® during the inspection and at other times, upon request.

D. Shackling

P 11: Training staff

Shackling teams must be thoroughly trained to handle the ducks in such a way as to avoid injury.

P 12: Sufficient personnel

Processing Plant managers must ensure that sufficient personnel are employed on shackling lines at all times to facilitate due care and diligence.

P 13: Shackling procedure

a. Ducks must be hung without causing them unnecessary pain or distress by using:
    1. Shackles of a suitable size and type, and
    2. An appropriate slaughter line speed.
b. Ducks must be hung on the shackles by both legs, with each leg placed on a separate shackle.

P 14: Keeping ducks in the correct position for stunning

Appropriate measures must be taken to prevent wing flapping and ducks raising their heads before reaching the stunning bath, such as:

1. Use of a breast bar;
2. Curtains;
3. Reduction in noise;
4. Low light intensity;
5. Running a hand down ducks at shackling; and
6. Avoiding bends in the line between shackling and stunning.

P 15: Preventing escape

a. Care must be taken to ensure that ducks cannot escape from the holding area or fall from the shackle line.
b. When loose ducks are found they must be:
    1. Taken promptly to the hanging on area; or
    2. If injured, promptly humanely destroyed away from the line.

P 16: Limiting time ducks are suspended

Ducks must not be suspended for more than 90 seconds before they are stunned.

P 17: Checking crates

All crates must be checked to ensure no ducks are left inside them.

E. Stunning

P 18: Stunning equipment

The following types of stunning equipment are acceptable:

1. Electrically live stunning bath;
2. Dry stunner incorporating an electrically live metal grid or bar;
3. Hand-operated stunner;

P 19: Limiting un-stunned ducks' view

a. Un-stunned ducks must not be able to see dead ducks.
b. The line to the stunner must be darkened.

P 20: Electrical water stunning bath

When an electrical water stunning bath is used:

1. The stunning bath must be set at a height appropriate for the size and number of ducks. In particular, the height must be set such that the heads of all ducks make effective contact with the water bath.
2. When ducks are electrically stunned or killed a current sufficient to induce insensibility in all ducks prior to neck-cutting must be used.
3. The water bath used for stunning or killing ducks must be of sufficient size and depth and the water must not overflow at the entrance. The electrode immersed in the water must extend the length of the water bath.
4. The water bath stunner must be designed and set up to prevent ducks receiving pre-stun shocks.
5. The water bath must be fitted with an ammeter to accurately monitor current flow through the bath when loaded with ducks.

P 21: Electrical hand-held stunners

When electrical hand-held stunners are used:

1. Ducks must be restrained in a cone or on a shackle;

2. Ducks must be stunned immediately after being restrained;
3. Care must be taken to ensure that the stunning electrodes are applied in the optimum position (i.e. applied firmly to either side of the head between the eye and ear);
4. The current used must be sufficient to render ducks unconscious immediately.
5. The stunner must be applied until initial wing flapping ceases (or if held in a cone, until legs become rigid and extended); and
6. Neck cutting must be performed immediately using a ventral neck cut to ensure that both carotid arteries are severed.

P 22: Maintaining and monitoring equipment

a. All stunning and bleeding equipment must be:
   1. Regularly maintained,
   2. Frequently cleaned; and
   3. Checked daily to ensure that it is in proper working order.
b. Any problems must be:
   1. Reported to the AWO; and
   2. Rectified promptly.

P 23: Dealing with unavoidable delays

There must be contingency plans made to deal with occasions when unavoidable delays may occur and it is not possible to process ducks. Specifically, if the slaughter line is stopped, for more than 3 minutes, ducks between the point of shackling and the slaughter must be removed and any ducks that have already been stunned must be humanely killed.

P 24: Checking ducks leaving the stunner

a. All ducks leaving the stunner must be checked to ensure they have been effectively stunned or killed.
b. Ducks that are not properly stunned must be humanely slaughtered before entering the scalding tank.
c. Staff must be trained to recognize the signs of an effective stun.

The most reliable indicator that a bird is properly stunned by the low voltage method is the electroplectic fit. The characteristics of this condition are:

- *neck arched with head directed vertically*
- *open eyes*
- *wings held close to the body*
- *rigidly extended legs and constant rapid body tremors.*

The physical conditions of the electroplectic fit are shorter lasting and less pronounced when cardiac arrest is induced at stunning. They are followed by:

- *completely limp carcass*
- *no breathing*
- *loss of nictitating membrane reflex*

- *dilated pupils*
- *no response to comb pinch*

F. Controlled Atmosphere Systems

Humane Farm Animal Care believes that the use of gas under controlled conditions (controlled atmosphere systems (CAS) or controlled atmosphere killing (CAK)) as a means of killing ducks can provide many welfare benefits, such as reduced manual handling and avoiding the need to shackle live ducks. However, there are still a number of unresolved humane issues surrounding the proper gas mixture to be used and when unconsciousness occurs. Until these issues are investigated through scientific study, including the onset of unconsciousness at different gas concentrations, the Certified Humane® *requires that any operation which uses CAS submit their full protocol for review by our scientific committee. CAS must be designed to kill the ducks and must not be used as a stunning method. Special attention must be given to the use of CAS for ducks as they are able to hold their breath, a factor that can reduce stunning efficacy of gas for this species.*

Where processing facilities use, or intend to gas as a method of killing, the following conditions must be met:

P 25: Proper instruction

Every person involved in gas killing must be properly instructed as to:

a. the method of operation of the CAS
b. the procedures for any necessary flushing of the CAS with atmospheric air, and
c. the procedures for any necessary evacuation of ducks from the CAS.

P 26: Mixing of gas supply

Where more than one type of gas is used, the gases must be thoroughly mixed prior to supply into the CAS.

P 27: Daily checks

Daily checks must always be undertaken to ensure that there is a sufficient supply of gas to kill all ducks to be received, prior to the start of the process.

P 28: Gas monitors/sensors

The gas concentrations and delivery of gas must be constantly monitored by sensors which are:

a. Fitted in different locations along the equipment,
b. Clearly marked and readily identified,
c. Linked to an audible and visual alarm system,
d. Calibrated at regular intervals, according to the manufacturers' advice, using certified calibration gases to ensure that correct concentrations are maintained. Documentation of these calibrations must be made available to the Certified Humane® Inspector.

P 29: Prior to entry

a. Ducks must not be subjected to any of the gas mixture prior to entry into the CAS. Appropriate equipment, such as an extractor must be fitted to the entrance to ensure no gas exposure prior to entry.
b. Ducks must not enter the equipment until the correct gas concentration has been established. This must be controlled automatically.

P 30: Ensuring a humane kill

a. Ducks must be immersed into approved gas mixtures and held there until they are dead.
b. On exiting the CAS, all ducks must be inspected immediately to ensure they are dead.
c. Any ducks found to be conscious on exiting the CAS must be removed and humanely killed immediately. Records of all instances of ducks recovering consciousness after exposure to gas mixture must be kept.

P 31: Causes of injury

On exiting the CAS, ducks must be checked to identify any signs of damage or injury which could have been caused while inside the CAS. If such damage or injury is found:

a. the cause of the injury must be investigated to determine where and how it took place,
b. if the injury took place while the ducks were still conscious,
    1. immediate action must be taken to rectify the problem, and
    2. recorded in the corrective actions log.

P 32: Contingency for failure or delays

a. In case of failure, a back-up method of humane slaughter must be available and ready for use at all times, which is capable of dealing with all ducks awaiting slaughter.
b. A contingency plan must be written and made available to the Certified Humane® Inspector, which includes details of actions taken if a breakdown occurs while ducks are still in the CAS, to avoid prolonged delays.

G. Bleeding

P 33: Cutting the blood vessels

a. Both carotid arteries and jugular veins must be effectively severed with a ventral cut (below the mandible).
b. This cut must be checked by the appointed member of staff who must be given sufficient time to sever the blood vessels manually, if necessary.

P 34: Time between stunning and neck cutting

No more than 10 seconds must elapse between stunning and neck cutting.

P 35: Checking ducks before they are scalded

a. All ducks must be accessible to workers before they enter the scalding tank so that workers can deal with any ducks showing signs of recovery of consciousness and
b. Ducks must be checked to ensure that they are dead before entering the scalding tank.

P 36: Time between neck cutting and scalding or plucking

Ducks must not be immersed in a scalding tank or plucked until at least 90 seconds have elapsed since the major blood vessels in their necks have been severed.

PART 8: OPERATIONS PROCESSING DUCK EGGS

All processing systems, including egg processors and further processing facilities where eggs from Certified Humane® farms are to be manufactured into egg products such as powder or liquid eggs, mayo, pasta, etc., must be inspected by HFAC for traceability and mass balance.

A. Egg Processing

P 1: Operations selling Certified Humane® eggs for further processing egg by-products

All processing systems must be inspected by *HFAC* for traceability to ensure that:

a. There is no commingling with non-certified eggs or egg products;
b. That the Certified Humane® logo is only being used on eggs or egg products from Certified Humane® farms;
c. *HFAC* will audit the plant for traceability according to the Policy Manual, which can be found at **www.certifiedhumane.org**, to ensure that all the products must be labeled with the Certified Humane® logo and originate from Certified Humane® farms.
d. Annual mass balance information must be recorded in an auditable format for products labeled with the Certified Humane® logo.

PART 9: OPERATIONS PROCESSING DUCK MEAT

For operations planning to process ducks as meat or selling them to a producer who will label and sell the meat as Certified Humane®, they must apply for approval of use of the slaughter and processing facilities.

A. Meat Processing

P 2: Farms selling ducks as Certified Humane® Duck Meat

a. Refer to the *HFAC* Duck animal welfare standards for transport and slaughter procedures.
b. All processing systems must be inspected by *HFAC* for traceability to ensure that:
   1. There is no commingling with non-certified meat or meat products;
   2. That the Certified Humane® logo is only being used on meat products from Certified Humane® farms.
c. The HFAC will also audit the slaughter plant for traceability according to the Policy Manual to ensure that all the products must be labeled with the Certified Humane® logo originate from Certified Humane® farms. All standards and guidelines can be found at **www.certifiedhumane.org**.
d. Annual mass balance information must be recorded in an auditable format for products labeled with the Certified Humane® logo.
e. The HFAC will also audit
f. Annual mass balance information must be recorded in an auditable format for products labeled with the Certified Humane® logo.

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Appendix 1

List of Record Keeping Requirements

At the inspection, you must be prepared to show the *HFAC* Inspector the following records:

- Death/mortality records and rates and reasons for mortality (when known, or a clear indication given when reasons are unknown)
- Culling records and rates and reasons for culling
- Hatchery and pullet information/invoices
- Treatment records retained for 1 year (including reason for use, drug used, and withdrawal/safe sale date)
- Stocking rates (initial and current flock population)
- Depopulation records with method, destination, flock size, age and identification.
- Feed tags and feed ingredient records for previous year (must have current and previous tags on hand)
- In and out records (bought and sold dates with invoices or equivalent document)
- Production data (flock weights and uniformity, feed consumption, water consumption, if possible, daily laying rates)
- Temperatures (daily minimum and maximum temperatures and percentage of humidity for each house)
- Lighting program (time that lights are turned on and off at each stage of production and when changing according to the time of the year/season, or when required due to management practices)
- Air quality records (weekly ammonia records and corrective actions taken)
- Daily checks of the manure pit for caught or dead ducks
- Pest and predator control records (SOP and regular pest control management)
- Record of vital automatic equipment maintenance checks (e.g. feeders, drinkers, fans, nests, perches)
- List of routine farm maintenance checks and repair records (e.g. litter, feed storage, lights, mists/foggers, gates and fence lines, curtains, foot baths and disinfection resources, egg belts and service area)
- Training of all caregivers (at minimum, topic, date, attendees and signatures)
- Record of complaints and responses in compliance with *HFAC* standards
- For birds with outdoor access ONLY:
    - Daily times the doors were opened and closed, and reasons when they are not opened (e.g. climate adversities, biosecurity and mandated requirements)
    - Range management plan (including rotational grazing plan, if applicable)

Humane Farm Animal Care
Welfare Standards
Edition 25

DUCKS

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