



Animal Welfare Standards for Laying Hens

- Whole Foods Market believes it has an obligation to look after the welfare of the animals that provide food for its stores and customers. The company has been engaged in developing animal welfare standards and applying them to a growing number of product categories in its stores since 2005.
- The following animal welfare standards for laying hens were developed after more than 200 visits to laying farms and consultation with farmers, poultry geneticists, pullet growers and animal welfare scientists. The standards are designed to improve the level of animal welfare and meet the expectations of Whole Foods Market customers.
- Standards were developed for each System Category (production system) in which laying hens are raised for eggs sold at Whole Foods Market. The intention of these standards is not to imply that one production system is better than another, but rather that each system is unique and has different ways to achieve good animal welfare.
- All standards for a System Category must be met to receive certification to that System Category.
- During audits of each farm, information and photographs are collected. The information is then reviewed, corrective actions issued if required and, when all standards have been met, certification awarded for a specific System.
- Audits are conducted by independent auditors or by the Whole Foods Market Quality Standards Coordinator for Animal Products. All audits are reviewed by the auditing company's oversight staff and/or their animal welfare consultant before certifications are issued.
- The audit process is designed to determine whether each farm meets all required standards and to work with the farm to correct any outstanding issues for a successful certification.
- Traceability of eggs from laying house to carton is required for assurance that all eggs are produced in the System Category stated on the carton.
- Each farm is audited every 15 months so that over time, all farms are assessed during each season, preventing farms from being seen repetitively at their best or at their worst.

Further stipulations:

- No standard in this document may supersede local, regional or national regulations or laws.
- If in a particular situation or circumstance a standard as written might compromise the welfare of birds in the producer's care, the producer should contact Whole Foods Market Quality Standards for determination.

System Categories:



- Birds must be able to move about freely in housing. They must be able to dust bathe and forage in high-quality litter, to perch and to isolate themselves or escape aggressive flock mates. Birds live entirely in housing or might have access to an outdoor area that does not meet all requirements for the Outdoor Access System Category. Beak trimming is permitted, but only within strict guidelines on length and balance to maintain functional use as in their natural state. Infrared trimming is strongly encouraged.



- All standards for the Cage-Free Plus System Category are required for Outdoor Access. Additionally, birds must have access to an outdoor area that is at least equal to the area of the house for at least half of daylight hours. Water is required in the outdoor area; shade and cover must accommodate at least half the number of birds outdoors.



- Birds live in permanent housing and have access to grassland or rangeland throughout the day. Cover and shade must accommodate 75% of the birds outdoors, be visible from the house and distributed throughout the pasture to encourage birds to use the entire outdoor area. Rangeland is preferred as it provides shade and cover in a natural setting that encourages natural behavior. Grassland must be maintained with at least 50% vegetative cover, measured from 50ft (15m) outside the perimeter of a permanent house. Beak trimming is permitted, but only within strict guidelines on length and balance to maintain functional use as in their natural state. Infrared trimming is strongly encouraged.



- Birds live outdoors on grassland or rangeland during daylight hours for their entire production cycle with mobile housing available for laying eggs and secure roosting at night. Mobile housing must be moved frequently to ensure at least 75% vegetative cover is maintained on grassland or birds have continuous access to rangeland environments. Shade and cover must accommodate all birds in the flock. Beak trimming is prohibited.

- **Unacceptable:** Cages, enriched colony cages and basic cage-free systems are not permitted by Whole Foods Market Animal Welfare Standards for Laying Hens.

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Section 1: Traceability

1.1: Traceability: All systems

There must be a traceability program in place to ensure that all farms supplying eggs to Whole Foods Market have successfully been audited and meet all practices outlined in these standards to achieve one of the acceptable system categories.

- If there are multiple production systems in use on the same farm and eggs from these systems are differentiated, there must be a traceability program in place to ensure all eggs are traceable back to the production system in which they are produced.
- If caged birds are kept on the farm, there must be a traceability program in place to ensure no eggs from caged birds enter Whole Foods Market's supply.
- Traceability must be demonstrated at the packing plant that substantiates a chain of custody program that follows eggs from farm to carton,
 - Eggs in a carton labeled "Cage Free Plus" must be from farms that have achieved this System Category.
 - Eggs from an Outdoor Access or Pasture Raised system can be used to fill cartons labeled Cage Free Plus.
 - Eggs in a carton labeled "Outdoor Access" must have achieved this System Category.
 - Eggs from a Cage Free Plus system cannot be used to fill cartons labeled as Outdoor Access.
 - Eggs from a Pasture Raised system can be used in cartons labeled as Outdoor Access.
 - Eggs in a carton labeled "Pasture Raised" must be from farms that have achieved this System Category.
 - Eggs from Cage Free Plus or Outdoor Access systems cannot be used to fill cartons labeled Pasture Raised.
 - Eggs from a Mobile Houses on Pasture system can be used in cartons labeled Pasture Raised.
 - Eggs in a carton labeled "Mobile Houses on Pasture" must be from farms that have achieved this System Category.
 - Eggs from no other type of system may be used in cartons labeled Mobile Houses on Pasture.

Section 2: Farm plan

2.1: Farm plan: All systems

The farm must have a written farm plan. The plan must include the following:

- Biosecurity procedures and protocols.
- Rationale for strain of bird used.
- Health plan and schedule (such as vitamin and mineral supplementation, vaccination programs, parasite control and/or other practices used to promote health).
- Routine husbandry and production procedures.
- Animal handling and catching procedures.
- Brooding procedures.
- Pullet rearing procedures.
- Depopulation details.
- Training program for all persons who work with the birds, gather or wash eggs

- Appropriate demeanor in the henhouse
- Handling and catching procedures
- Procedure for recognizing ill or injured birds
 - Guideline for determining action to be taken to address ill or injured birds
- Competence in conducting euthanasia using an approved method
- All aspects of egg collection and washing, if applicable.
- Routine maintenance, including:
 - Building, fixtures and equipment.
 - Litter condition
 - Nest condition.
 - Feeder and drinker condition.
- Procedures for addressing:
 - Feather pecking and cannibalism.
 - Extreme feather loss.
 - Pests and predators.
- Emergency plan:
 - Delivery of feed, water and air flow during an emergency.
 - List of essential and emergency contacts such as farm veterinarian and flock manager.

2.2: Management plan for outdoor area: **Outdoor Access, Pasture Raised, Mobile Houses on Pasture**

Farms that provide outdoor access for birds must have a written outdoor management plan. The plan must cover all aspects of management necessary to provide a meaningful environment outdoors for the birds, specific to the location of the farm. At minimum, it must include the following:

- Maintenance of vegetation quality.
- Rotation plan if birds occupy different segments of the outdoor area at different times
- Management of bare earth areas around the house.
- Management of cover and shade.
- Response to pests and predators.
- Diagram of the outdoor area which birds will occupy that shows:
 - Overall dimensions and total area
 - Position of natural shade and/or shade structures if used.
 - Type(s) of vegetation.
 - If pasture rotation is practiced:
 - Number of individual locations within the larger outdoor area.
 - Size of each location within the larger outdoor area.
 - Type of vegetation in each rotational area, if there is a variation.

Note: This can be an aerial image from the internet with the farm details drawn on the image.

Section 3: Records and Documentation

3.1. Training records: All Systems

Records must be kept that confirm all persons who work with birds are trained in all aspects of husbandry required to meet these standards.

3.2. Flock records: All systems

The farm must maintain written records that cover the life of each flock. Each flock must have a unique number or method of identification.

3.2.1. Delivery records: All systems

- If the farm raises pullets from chicks, the following records must be kept for each delivery of chicks.
 - Date and time of delivery of chicks.
 - Date and time of placement of chicks after delivery.
 - Source of birds. (hatchery)
 - Strain of birds.
 - Age of chicks delivered.
 - Number of chicks delivered.
 - Condition of chicks upon delivery.
 - Confirmation that beak trims occurred if ordered at the hatchery.
 - Date of beak trim if conducted on farm.
 - Name of service and/or person conducting beak trims.
 - Number of chicks dead on arrival.
 - Date and time of movement from pullet house to laying house.
- If the farm receives pullets from a pullet grower or raises pullets on another farm, the following records must be kept for each delivery of pullets.
 - Date and time of delivery/movement of pullets.
 - Date and time of placement of pullets after delivery.
 - Source of birds. (pullet grower or farm location)
 - Strain of birds.
 - Age of birds placed.
 - Number of birds placed.
 - Condition of birds upon delivery/placement.
 - Beak trim quality.
 - Number of birds dead on arrival.

3.2.2. Ongoing flock records: All systems

- Feed ration ingredients and ratio of ingredients, noting changes to ration at different stages of development.
- Edible foraging material when provided as supplement to ration.
 - Type of foraging material provided
 - Method of provision
 - Dates of provision
- Depth of litter provided at placement.
 - Litter material provided.
- Dates of any litter replenishment
 - Litter material used to replenish
 - Amount of litter added

- Light readings taken in several locations at bird height throughout the house.
 - For readings taken by service personnel to meet this standard, site visits must occur at least quarterly.
- Date when cover or blinds were first provided in housing.
 - Type and number of objects for cover or blinds.
- Date and severity of feather pecking behavior.
 - Actions taken to address and prevent feather pecking.
- Treatment of a flock for any illness, injury, parasitic infestation, sudden feather loss or other malady, including alternative remedies and/or medications.
- Treatment of individual birds if a hospital pen is used including:
 - Date bird was removed from the flock
 - Reason for removal
 - Treatment or procedure applied to bird
 - Date bird was returned to the flock or date of euthanasia
- Date and reason for high or unusual mortality.
- Dates of induced molting, including feed regimen and lighting schedule for molting period.
- Date of onset of outdoor access if the farm is an Outdoor Access, Pasture Raised or Mobile Houses on Pasture system.
- Dates and method of depopulation.
 - Destination of depopulated birds.
- Maintenance completed.

3.3: Daily inspection records

3.3.1: All systems

All occupied houses must be inspected daily and the following items recorded:

- Ill or injured birds, using guide in Appendix III.
- Air quality using either a meter or the guide in Appendix V.
- Time lights are turned on and off each day.
- Presence of feed and drinking water.
- Temperature.
- Functionality of closeout equipment in community nest systems.
 - Birds caught in nests.
- Number of birds found dead in housing (mortality) and cause of death.
- Number of birds euthanized (culls) and reason for culling. Identification of any immediate hazards to bird health such as structural damage, equipment failures, damaged fittings, sharp objects, toxic materials, etc.
- Inspections must include hospital pens if they contain birds.

3.3.2: Outdoor Access, Pasture Raised, Mobile Houses on Pasture

All occupied outdoor areas must be inspected daily and the following items recorded:

- Times popholes or doors are opened and closed each day.
- Outdoor daily high and low temperatures and weather conditions
- Ill or injured birds using guide in Appendix III.
- Number of birds found dead in the outdoor area (mortality) and the cause of death.
- Number of birds euthanized in the outdoor area, (culls) and reason for culling.

- Presence of drinking water if provided in pans and/or functionality of nipple drinkers.
- Predator activity and any actions taken if activity is noted.

3.4: Weekly inspection records

3.4.1: All Systems

All occupied houses must be inspected weekly and the following items recorded:

- Number of birds at the beginning and end of each week.
- Litter condition in all permanent housing, including whether:
 - Litter covers solid flooring
 - Litter is friable.
 - Original litter material still distinguishable.
- Cleanliness and functionality of feeders and drinkers.
- Cleanliness of individual nest systems using scoring guide in Appendix VI.
- Condition of buildings and fixtures.
- Inspections must include hospital pens if they contain birds.

3.4.2: Outdoor Access, Pasture Raised, Mobile Houses on Pasture

All occupied outdoor areas must be inspected weekly and the following items recorded:

- Cleanliness of pan or trough drinkers.
- Fencing integrity.
- Vegetation condition.
- Shade and cover condition.
- Actions taken to mitigate any hazards or contamination in the outdoor area that could impact bird health.

3.5: Outdoor access records: Outdoor Access, Pasture Raised, Mobile Houses on Pasture

- Date of onset of outdoor access.
- Dates and reasons for any restrictions to housing.
- Dates and reasons for any restrictions from grassland or rangeland.
- If pasture rotation is practiced:
 - Identification of the area to which birds have access.
 - Dates in and out of each outdoor area.

3.6: Records of grassland or rangeland management: Pasture Raised, Mobile Houses on Pasture

The following records must be kept of actions taken to manage grassland or rangeland.

- Actions taken to maintain vegetative cover, such as planting grasses, legumes, herbs, trees, shrubs and bushes, etc.
- Monthly vegetative cover scores. (Appendix VII)

3.7: Records of mobile house location: Pasture Raised, Mobile Houses on Pasture

The following records must be kept of the locations of mobile houses.

- Dates houses were moved.
- Reason for changing location (moved to access fresh pasture or to shelter from extreme weather, etc.)
- Location to which mobile house was moved.

Section 4: Health and Wellbeing

4.1: Strain selection: All systems

Strain selection must be based on suitability to the system in which birds will be raised and must focus on welfare traits as well as production targets.

- If problems such as high mortality, chronic feather pecking or feather loss are seen, alternate strain selection must be explored.

Note: High productivity is frequently a criteria for strain selection, but productivity levels are often predicated on specific temperature, lighting and environmental conditions. Some strains may not produce as expected in outdoor environments and could exhibit increased negative issues such as poor feather condition and/or aggressive behavior. Similar issues can occur when birds that perform well in outdoor environments are chosen for indoor systems.

4.2: Prohibited substances: All systems

4.2.1: Medications

Administration of antibiotics, sulfa drugs or ionophores to individual birds or flocks is prohibited.

4.2.2: Mammalian or avian by-products

Mammalian or avian by-products in feed are prohibited with the exception of dairy probiotics or eggs.

4.2.3: Growth hormones

Administration of growth hormones is prohibited.

4.3: Health and functioning: All systems

Birds must be maintained in a healthy and functioning state.

- Ill, injured or lame birds must be removed from the flock immediately upon discovery and action taken in accordance with Standard 4.4 and/or 4.5. (See Appendix III for identification of illnesses. Injuries include cuts, broken bones, etc.)
- Functionality and mobility must be maintained at all times. Birds that are compromised must be treated and/or euthanized. This includes birds with excessive claw growth that impedes their ability to move about freely, birds with mis-aligned beaks, blindness, etc.
- Dead birds must be removed from the flock immediately upon discovery or upon euthanasia.

Note: Signs of poor health or poor function include poor feather condition, feather loss, heat stress, morbidity and injuries from aggressive behavior of flock mates.

4.4: Reduction of suffering: All systems

All persons who work within proximity of the birds must be trained to recognize signs of illness and injury and to take action to reduce suffering.

- Ill or injured birds must not be allowed to suffer and must be moved to a hospital pen or euthanized.
- Birds that are ill or injured and have been removed to a hospital pen must be permitted to recover and given treatment if necessary.
 - Any treatment prescribed by a veterinarian must be administered.
 - If treatment includes prohibited medications, the eggs from treated birds must be withdrawn from supply and Whole Foods Market Quality Standards contacted.
- Birds that are ill or injured and have been removed from the flock for euthanasia must be euthanized immediately or removed to a separate location to await euthanasia.
- Euthanasia must only be conducted by a trained person.
 - If a trained person is available, the bird must be euthanized immediately.
 - If a trained person is not immediately available the ill or injured bird must be removed from the flock and euthanized within 4 hours of discovery.
- The person conducting euthanasia must verify death.
- Only preferred or acceptable methods of euthanasia are permitted.
- Euthanasia must result in immediate death or in insensibility immediately followed by death.

Note: Preferred methods of euthanasia are cervical dislocation or use of an individual controlled atmosphere killing (CAK) chamber.

4.5: Hospital pen: All systems

The hospital pen must meet all requirements outlined in Section 7 and include litter, nests, perches, cover or blinds.

- The provisions in the hospital pen must be accessible to birds that are ill or injured.
- Records must be kept of:
 - Date birds are put into the hospital pen.
 - Any treatment they receive.
 - Date they are removed from the hospital pen.
 - Whether birds are returned to the flock or euthanized.

Note: Hospital pens are not required. If they are used, they must meet all requirements above.

4.6: Temperature in housing: All systems

The indoor temperature must be managed to provide a comfortable environment for the birds. Supplemental heating or cooling or another method of temperature control must be implemented as necessary.

4.7: Feather condition: All systems

Feather condition must be monitored at least monthly using the scoring guide in Appendix IV. There must be a plan in place to respond to feathering issues. If feather condition drops below the scores defined for each type of system the response plan must be implemented immediately to identify causes and correct the problem.

- If a sudden flock-wide feather loss event occurs, Whole Foods Market Quality Standards must be notified immediately and provided with a corrective action plan for rectifying the situation.

4.7.1: **Cage-Free Plus**

Feather condition for the flock must not exceed a score of 2 at 25 weeks, 3 at 35 weeks, 3.5 at 45 weeks and older.

4.7.2: **Outdoor Access**

Feather condition for the flock must not exceed a score of 1.5 at 25 weeks, 2.5 at 35 weeks, 3 at 45 weeks and older.

4.7.3: **Pasture Raised**

Feather condition for the flock must not exceed a score of 1 at 25 weeks, 1.8 at 35 weeks, 2 at 45 weeks and older.

4.7.4: **Mobile Houses on Pasture**

Feather condition for the flock must not exceed a score of 1 for the first 30 weeks and 1.5 at 45 weeks and older.

Note: Addressing feather pecking behavior can entail removing the aggressive birds from the flock, adding edible foraging material to enhance the birds' ability to productively forage, adding areas that provide cover or blinds, adding fresh litter, etc. Feather loss, distinct from feather pecking or normal molting, can be feed related and the batch of feed and the feed storage system should be evaluated and eliminated first.

4.8: **Integrated production: System distinction**

4.8.1: **All systems**

When heaters are no longer required for thermoregulation, young birds must be provided with resources and given exposure to environments to prepare them for the system in which they will be placed.

- These resources include:
 - Litter in sufficient depth for dust bathing and foraging.
 - Perches
 - Cover or blinds.
 - If feed and water will be provided on platforms in the laying house, birds must be trained to move from the floor to a platform or elevated surface before placement.
 - This can be accomplished by putting feed and water on strips of plastic platform material and raising them over the course of rearing so birds learn how to move from the floor to a platform.
- Lighting must be managed so that at placement, it coincides with lighting intensity and schedule in the laying house.

Section 5: Water and Feed

5.1: Water: All systems

All birds must have free and continuous access to clean drinking water in all areas to which they have access including indoor areas, outdoors, porches and wintergartens.

***Note:** If water is provided only in housing/wintergartens but not in outdoor areas, the farm can achieve Cage-Free Plus but cannot meet requirements for Outdoor Access or Pasture Raised. In mobile housing systems, water is not required inside the house providing doors to the outdoors are open at all times or are opened no later than 1 hour past dawn as required in Standard 8.6.3.*

If outdoor temperature is below the freezing point for water, drinking water does not have to be provided in the outdoor area.

5.2: Feed: All systems

Birds' nutritional needs must be met through a comprehensive daily feeding program.

- Fresh feed must be provided at least daily and must be available to the birds throughout the day.
- If feeders are empty at any time during the day, edible foraging material must be available.
- Feed must be provided in a manner that minimizes competition.
- Feed must not be contaminated.
- If a modified molt is conducted, it must not be stimulated by interrupting feed availability.

5.3: Edible foraging material:

5.3.1: Cage-Free Plus, Outdoor Access

Edible foraging material must be provided to birds indoors at any time after placement when the primary feed ration is not available.

- Edible foraging material must be distributed throughout the house in sufficient locations to enable all birds to forage productively.
- If whole grains are provided as foraging material indoors, insoluble grit must be available.

5.3.2: Pasture Raised

If birds are restricted to housing for more than 24 hours, edible foraging material must be provided indoors.

***Note:** See Appendix I for the definition and purpose of indoor foraging material.*

Section 6: Physical Alterations

6.1: Physical alterations: All systems

Physical alterations are prohibited with the exception of beak trimming. Prohibited physical alterations include the application of blinkers, wing clipping, dubbing, desprurring, etc.

6.2: Beak trimming:

6.2.1: Cage-Free Plus, Outdoor Access, Pasture Raised

Beak trimming practices must meet the following criteria:

- Beak trimming must be conducted by a trained person.
- Beak trimming must occur by 10 days of age.
- Beaks must not be trimmed more than once in the lifetime of the bird.
- No more than ¼ of the beak can be removed.
- Upper and lower beaks must meet evenly at the tip after trimming.
- The average beak trim score for the flock must not exceed 2.25 on the Whole Foods Market Beak Trim Scoring Scale in Appendix II.

Note: Infrared trimming at the hatchery is the preferred method of beak trimming.

6.2.2: Mobile Houses on Pasture

Beak trimming is prohibited.

Section 7: Housing

7.1: Cages: All systems

Birds must not be confined to cages at any time during their life.

- Brooding structures composed of drawers or compartments are prohibited.

Note: Placing birds in crates is permitted only during transport.

7.2: Placement in laying house: All systems

Birds must be placed in the laying house prior to the onset of lay.

7.3: Aviary systems: Cage-Free Plus, Outdoor Access

Aviary systems are acceptable only for Cage Free Plus or Outdoor Access System Categories. If birds are raised in an aviary system, the following requirements must be met:

- All surfaces to which birds have access, including solid flooring and all platform flooring, are to be included in the calculation of total area of the house.
- At no time are birds to be restricted from freedom of movement throughout the house.
- Ramps must be in place to facilitate movement between the tiers.
- No more than three tiers are permitted in an aviary.
- Aviaries must be designed to enable daily inspection of all birds on all levels.

Note: Keel bone fractures can result from rapid deceleration when birds jump from an aviary tier as they descend. It is advisable to ensure there is enough space between the aviary structures to allow birds to descend safely without colliding with the structure or floor. Keel bone assessments may be conducted during audits. When a benchmark has been identified for unacceptable levels of keel bone fractures in aviary systems, a tolerance standard will be implemented.

7.4: Indoor space:

7.4.1: Permanent housing systems: Cage-Free Plus, Outdoor Access, Pasture Raised

There must be enough space in housing for all birds to move freely and safely among resources (feed, water, nests, perches, litter and enrichments), flap their wings, run, dust bathe and forage.

- There must be a minimum of 1.2ft² (0.11m²) per bird in permanent housing.

7.4.2: Mobile housing systems: Pasture Raised, Mobile Houses on Pasture

There must be enough space in mobile houses for all birds to move freely and safely among resources and for all birds to roost at night.

7.4.3: Space in pullet housing: All systems

There must be a minimum of 1ft² (0.09m²) per bird in pullet housing.

7.5: Litter provision in permanent housing systems: Cage-Free Plus, Outdoor Access, Pasture Raised

All solid floor areas in housing occupied by hens or pullets, whether concrete, wood, clay or dirt, must be entirely covered with litter.

- Litter must be deep enough that birds can forage and dust bathe throughout the available scratch area.
- The solid floor area must be entirely covered with litter.
 - The solid floor must be at least 30% of the total area of the house, including raised platforms.
 - For housing constructed or remodeled before January 1, 2015, the solid floor area must be at least 15% of the total floor area of the house, including raised platforms.

***Note:** If the area of solid flooring is not sufficient to meet this standard, solid surfaces can be added on top of nests, in boxes on the platform or on solid platforms installed for this purpose. If these types of solid floored provisions are used they must be constructed in a way that litter is contained.*

7.6: Litter provision during nest training: Cage-Free Plus, Outdoor Access, Pasture Raised

- Restriction to a reduced litter area is prohibited except for nest training.
 - During nest training, the available litter area must be at least 15% of the total floor area, including solid flooring and platforms.
- Litter area restriction must last no longer than 4 weeks.
 - If feather pecking is observed while the litter area is restricted for nest training, the restriction of litter area must cease immediately though electric wires may remain in place for the remainder of the 4-week nest training period.
- If electric wires are used during nest training they must be placed within 6" (15cm) of the wall or platform.
- Use of electric wires in the litter area is prohibited after the 4-week nest training period.

7.7: Litter quality: Cage-Free Plus, Outdoor Access, Pasture Raised

Litter must be composed of absorbent, non-toxic plant-based organic material.

- Good condition of litter must be maintained throughout the life of the flock.
 - Litter must not become compromised such that it poses a risk to birds' health.
 - Litter material must remain distinguishable from fecal matter throughout the life of the flock.
 - Fresh litter must be added if the litter material is indistinguishable.
- Litter must support dust-bathing behavior.
- Litter must be friable.

7.8: Air Quality: All systems

Air quality must be maintained at an acceptable level in each building in which birds are housed. Acceptable levels are determined using one of the two following methods:

- A sensory air quality score of 0 or 1 on the sensory evaluation scale in Appendix V must be maintained at all times.

- If at any time the score is 2 or above, a plan must be immediately implemented to improve air quality.
- An ammonia level of below 20ppm if an ammonia meter is used.

7.9: Light: All systems

A light intensity of at least 20 lux must be maintained throughout the house during daylight hours.

- Each 24-hour cycle must consist of at least 6 hours uninterrupted darkness and at least 8 hours of uninterrupted light.

Note: If possible, changes between light and dark should be made gradually over at least 15 minutes.

7.10: Nests: All systems

There must be enough individual or community nests so that all birds can meet their laying needs.

- Nests must contain substrate that the birds can manipulate (straw, wood shavings, etc.) or fixed padding such as AstroTurf® that is manipulable.
- Nest cleanliness must be monitored.
 - Nest cleanliness must be maintained with a score no higher than 1 on the Nest Cleanliness Scale in Appendix VII.
- Nest substrate condition must be maintained.
 - Nest pads that are worn must be replaced.
 - Straw or wood shaving substrate must be in good condition and not permitted to become matted or to exceed the tolerance of the Nest Cleanliness Scale.
- If using individual nest boxes, there must be at least 1 nest box per every 7 hens.
- Nests must enable birds to seek seclusion during their nesting period.
 - For systems with individual nest boxes, this can be achieved by curtains or with an elevated front panel.
 - For systems with community nests, at least every second curtain must be down to provide sufficient seclusion.
- Nests must have a staging platform or rail.

7.11: Perches:

7.11.1: All systems

- To be considered a perch, the rail or bar must be 16" (41cm) or more above the floor or platform and allow birds to adopt a secure roosting posture with their feet wrapped around the rail.
 - Floor slats, edges of platforms and staging rails in front of nests do not qualify as perches.
- Perch design and placement must not pose a risk of injury to the birds.
- Perches must be distributed throughout the house.
- If square rails are used, the corners must be blunted to protect birds' feet.
- Perch rails that are part of a structure must be angled to prevent roosting birds from being directly above or beneath one another.
- Adjacent perch rails must be at least 12 inches apart.
- Perches cannot be so close to the ceiling that birds perching on the top rail touch the ceiling when roosting at night.

7.11.2: Mobile housing systems: **Pasture Raised, Mobile Houses on Pasture**

There must be at least 6 linear inches (15 cm) of elevated perch space per bird in all mobile houses.

7.12: Cover or blinds in housing: **Cage-Free Plus, Outdoor Access, Pasture Raised**

Objects that act as cover or blinds must be placed to be available to any bird in the flock at any time.

- Cover or blinds must be provided in housing no later than 4 weeks after placement.
- Cover or blinds must be positioned to be accessible from no more than 30ft. (9m) from any point in the house.
 - If the platform is in the middle of the house, objects must be provided equally on both sides of the platform.
- Nests do not qualify as cover except for accessible spaces under nest structures.
- Plastic buckets, tunnels or tubes that do not accommodate multiple birds or enable the bird to stand erect, and feed pans or bell drinkers do not meet this requirement.

***Note:** Bales of hay are excellent blinds and also provide edible foraging material. Hay can also be provided in net slings suspended from the ceiling low enough for birds to pull out pieces of hay and high enough they can use them as blinds.*

7.13: Mobile houses: **Mobile Houses on Pasture**

Mobile houses are the only acceptable type of house.

- Mobile houses must be large enough to provide space for all birds to roost at night and find shelter from extreme weather during the day.

Section 8: Outdoor Access and Environment

Birds must not be forced to go outdoors to qualify for specific system category.

8.1: Doors and popholes: **Outdoor Access, Pasture Raised, Mobile Houses on Pasture**

- Doors or popholes must be large enough to permit more than one bird to pass through at the same time without obstruction.
- Doors or popholes must be provided in sufficient number to provide easy outdoor access from any point in the house.
- Doors or popholes must be positioned and designed to facilitate bird movement between indoor and outdoor environments.
 - Ramps or steps must be provided if there is more than 16" (41 cm) difference from the bottom of the pophole to the floor of the house or the ground.

8.2: Condition of outdoor area: **Outdoor Access, Pasture Raised, Mobile Houses on Pasture**

The outdoor area must not present a risk to the birds' health, either due to contamination or the presence of hazardous objects.

- The outdoor area to which birds have access must be maintained in a manner such that birds can move about and avoid standing in water or mud.

***Note:** For permanent houses, this can be achieved by spreading gravel around the house.*

8.3: Outdoor environment: System distinction

8.3.1. Outdoor space: Outdoor Access, Pasture Raised, Mobile Houses on Pasture

All birds must be able to run, flap their wings, scratch and peck in the outdoor area without being obstructed by other birds.

8.3.2: Size of outdoor area: Outdoor Access

The outdoor area must be equal to or greater than the area of the house or houses that open onto the area.

8.3.3: Size of grassland or rangeland area: Pasture Raised, Mobile Houses on Pasture

The outdoor area to which birds have access must be large enough to be sustained as grassland or rangeland.

8.3.4: Rangeland requirements: Pasture Raised, Mobile Houses on Pasture

To qualify as rangeland, there must be sufficient accessible areas of plants, bushes and/or trees surrounding the house that accommodate all birds.

8.3.5: Grassland requirements: Pasture Raised

To qualify as grassland the area must average at least 50% rooted vegetative cover, measured across the outdoor area, beginning 50 ft. (15.2m) from a permanent house or 25 ft. (7.6m) from a mobile house and extending 500 ft. (152m) or to the fence-line, whichever is closer.

8.3.6: Grassland requirements: Mobile Houses on Pasture

To qualify as grassland for the area must average at least 75% rooted vegetative cover, measured across the outdoor area beginning 25 ft. (7.6m) from the mobile house and extending 500 ft. (152m) or to the fence-line, whichever is closer.

8.3.7: Movement of mobile houses: Mobile Houses on Pasture

Mobile houses must be moved at least every two weeks.

- Houses must be moved at any point bare earth extends more than 25 ft. (7.6m) from the house.

***Note:** See definitions in Appendix 1 and assessment protocols in Appendix VII. If grassland or rangeland is sustained, there is sufficient space in the outdoor area. If grassland or rangeland degenerates, there is not sufficient space.*

8.4: Grassland or rangeland composition: Pasture Raised, Mobile Houses on Pasture

The grassland or rangeland environment must be maintained at all times.

- Whether grassland or rangeland, living edible material such as plants and insects, must be available at all times.
- For plants in a grassland area to qualify as pasture, they must:
 - Consist of a mixture of species that provides nutritive value and are palatable for laying hens, whether naturally present or planted.
- Clovers and forb species must be present in addition to grasses.

8.5: Onset of outdoor access: System distinction

8.5.1: Outdoor Access

Outdoor access must begin by 25 weeks of age.

8.5.2: Pasture Raised

Access to grassland or rangeland must begin by 22 weeks of age and full daily outdoor access in place by 24 weeks of age.

8.5.3: Mobile Houses on Pasture

Full daily outdoor access to grassland or rangeland must begin by 10 weeks of age.

8.6: Duration of daily outdoor access: System distinction

8.6.1: Outdoor Access

To qualify as an outdoor access day, all doors or popholes must be open for more than half of daylight hours on a daily basis.

- The number of popholes open can be reduced by half on each side of the house only if the outdoor temperature is below freezing or there is severe weather.
 - This must be supported by recorded weather conditions that warrant reduced access to the outdoors rather than the use of arbitrary or fixed dates.
- If the house has larger doors on or near the ends of the building, all doors must remain open.

8.6.2: Pasture Raised

To qualify as an outdoor access day, all doors or popholes must be open from within three hours of sunrise until one hour before sunset.

- The number of popholes open can be reduced by up to half on each side of the house only while the outdoor temperature is below freezing or there is severe weather.
 - This must be supported by recorded weather conditions that warrant restriction from the outdoors rather than the use of arbitrary or fixed dates.
- If the house has larger doors on or near the ends of the building, all doors must remain open.

8.6.3: Pasture Raised, Mobile Houses on Pasture

In mobile housing systems, all birds must have continuous daily access to grassland or rangeland from one hour after sunrise until one hour before sunset.

8.7 Outdoor or grassland/rangeland access parameters: System distinction

8.7.1: Outdoor access: Outdoor Access

If birds are restricted from outdoor access for more than 14 days during a calendar month, it is considered a restricted access month.

- There must be no more than 6 restricted access months in any 12-month period.

8.7.2: Access to grassland or rangeland: Pasture Raised

Birds must have access to grassland or rangeland throughout the year except during extreme weather.

- Only if weather conditions pose a risk to the birds' welfare can they be withheld from pasture, and then for no more than 7 days in any calendar month.

8.7.3: Access to grassland or rangeland: Mobile Houses on Pasture

Birds must live on grassland or rangeland throughout the year except during extreme weather.

- Only if weather conditions pose a risk to the birds' welfare can they be withheld from pasture. See 8.7.3.

8.8 Restriction to housing: System distinction

8.8.1: Outdoor Access

Restriction to housing is prohibited except during extreme or seasonal weather and must be supported by recorded weather conditions that warrant restriction from the outdoors rather than the use of arbitrary or fixed dates.

Note: In winter there are days that are mild and would be fine for birds to use the outdoor area. Doors should be open on those days.

8.8.2: Pasture Raised

Restriction to housing is prohibited except during extreme weather and must be supported by recorded weather conditions that warrant restriction from the outdoors rather than the use of arbitrary or fixed dates.

- Restriction to housing must not exceed 7 days in any one calendar month.
- If birds are raised in mobile houses, restriction protocols must follow those outlined in 8.8.3.

8.8.3: Pasture Raised, Mobile Houses on Pasture

Restriction to a mobile house is prohibited except during extreme weather and must be supported by recorded weather conditions that warrant restriction from the outdoors.

- Restriction to the mobile house must not exceed 48 continuous hours.
- Water and feed must be provided within the mobile house during any restriction to housing that lasts longer than three hours past dawn.
- If restriction exceeds 48 hours, additional space must be provided that meets all standards in Section 7.
 - Restriction to housing with additional space must not exceed a total of 7 days in any calendar month and can occur in no more than two calendar months in any winter season.

Note: The mobile house can be moved into a larger structure to meet this standard.

8.9: Cover and shade placement: Outdoor Access, Pasture Raised, Mobile Houses on Pasture

Cover and/or shade must be visible to the birds from the doors of the house to facilitate their movement to the outdoor area.

- Cover and/or shade must be distributed throughout the available outdoor area to encourage birds to range over the entire outdoor area.

8.10: Amount of cover and shade: System distinction

8.10.1: Outdoor Access

There must be enough cover/shade to provide 25% of the number of the birds in the flock with at least 0.4ft.² (0.4 m²) of effective cover/shade at all hours of the day.

8.10.2: Pasture Raised

There must be enough cover/shade to provide 50% of the number of the birds in the flock with at least 0.4ft.² (0.4 m²) of effective cover/shade at all hours of the day

8.10.3: Mobile Houses on Pasture

There must be enough cover/shade to accommodate all of the birds with at least 0.4ft² (0.4m²) of effective cover/shade at all hours of the day.

- The mobile unit and attached awnings or overhangs can be included as part of the shade/cover requirement providing:
 - The floor of the mobile unit is at least 2ft (0.6m) above the ground.
 - The ground under the mobile unit is not contaminated with fecal matter to the extent that it poses a risk to the health of the birds.
 - The fixtures in the mobile unit do not leak and soil birds' feathers.
- The combined cover/shade provided by the mobile unit and awnings or overhangs can qualify as no more than 25% of the total area of shade/cover.
- The balance of the cover and shade must be distributed throughout the area as required in 8.9.

Note: Cover and shade are best provided using natural components of the environment. Consider letting tall plants that were previously considered weeds to grow. Bushes, woodlands, brushy areas fallen trees or piles of cut branches are the preferred environments for birds. Achieving equivalent results with artificial shade structures is acceptable but can be more expensive and more difficult to maintain.

Appendix I: Definitions

Animal by-products

Feed ingredients derived from the slaughter process

Aviary

A multi-tiered environment for hens which allows for higher housing density per cubic foot than floor houses or houses with one platform on which nests, feed and water are provided.

Blinds

Objects birds can hide behind, such as vertically placed boards, nest structures that sit in the middle of the floor, etc. Blinds provide an area of limited visibility where birds can seek protection from aggressive flock mates. Note that nests themselves are not considered blinds.

Cage

A cage is any boxlike enclosure of bars, slats or wires, or a brooding structure composed of drawers or compartments, within which birds are confined.

Cover

Because of their innate fear of overhead predators, chickens seek out areas where they can be under objects that make them feel safe, whether indoors or out. In their native habitat, this would be bushes and low-growing trees and plants.

Indoor cover:

Low objects or installations birds can go under for protection.

Outdoor cover:

Natural vegetation, low objects or structures that birds can go under for protection.

Edible Foraging Material

Chickens' natural behavior is to forage for food throughout the day. In modern production systems feed is provided in such a manner that their nutritional needs are met without the need to forage, but the behavior pattern is embedded in their DNA. One of the principal causes of feather pecking and cannibalization is the driving need to forage with nothing in their environment to satisfy that urge. Providing supplemental feedstuff that encourages foraging behavior helps mitigate the negative behaviors observed in systems where their natural environment is not adequate to support their natural tendencies. Edible foraging material can be provided in pans, scattered in litter or in the outdoor foraging area, or can be hung in net slings. Examples of edible foraging materials are whole or sprouted grains, seeds, hay, vegetables or insects. Hay bales are an excellent choice because they provide vegetative components the birds can eat and also act as blinds behind which they can find shelter.

Enrichment

An object provided in the environment that is not a behavioral need (such as perches or litter) but provides novelty and stimulation. Provision of enrichments significantly reduces feather pecking behavior. Enrichments can be suspended over the scratch area or platform, or can be placed on the floor itself, such as a bale of hay or straw. Several studies have found that some of the more effective enrichments to be suspended are pieces of braided rope or string that birds can unravel. To be effective, enrichments should be provided early in the birds' lives.

Farm

A production system owned and operated as one farm that may be composed of one or more sites that are close in proximity.

Farm plan

A written outline of farm practices and protocols that both ensure consistency in farm operations and provide a guide for anyone who steps in to manage the farm, such as during family vacations or emergencies.

Feather loss

Different from feather pecking, feather loss is generally the response of large numbers of birds to stressors in their environment. Feed-related issues are the most common cause of feather loss. Feed can be rancid or spoiled, it can suddenly be mixed differently with slightly different ratios of components, or the amount of feed can be inadequate. Sudden changes in lighting or air quality can also stimulate a spontaneous molt, as can other stressful conditions such as heat, cold, disease and lack of adequate amounts of water.

Flock

All the birds in one house or in a group of mobile houses.

Fresh feed

Fresh feed is that which is provided newly each day rather than left over from the previous day. This is especially relevant in systems where feeders are filled manually. Fresh feed must not be compromised in quality.

Friable

Dry and crumbly, a qualifier for functional litter.

Hospital or sick pen

An area where birds that are injured or ill can recover. If a bird's injury or illness is severe, it must be euthanized.

Integrated production

Coordinated production of all stages from the placement of chicks in the pullet house, the transition to laying environment and extending through end of lay.

Lux

A unit of illumination that is used for defining the amount of ambient light in an area.

Morbidity

The state of being unhealthy.

Outdoor-based systems

Systems in which birds primary living space is outdoors.

Outdoor environments**Rangeland**

A type of outdoor environment comprised of a variety of tall plants, forbs, shrubs, bushes, rocks, woodlands, orchards, etc. that attracts birds by providing cover, shade and foraging. Rangeland vegetation must be visible to birds from the door of the house and close enough to be accessible to the birds.

Essential attributes of a rangeland environment are overhead cover to encourage ranging and vegetative material that stimulates foraging. Trees, bushes and tall plants are examples of overhead cover. Fallen branches, twigs and leaf litter are examples of productive and interesting foraging opportunities. A properly managed rangeland system will also offer a variety of insect populations that attract birds to forage. Although there can be areas of bare ground, the environment that provides cover, shade and foraging must meet the requirements of Standards 8.9 and 8.10.

Grassland

A type of outdoor environment with more than 50% rooted vegetative ground cover composed primarily of low growing grasses, legumes and herbs. Vegetation can be growing or dormant, depending on the season, but must have intact roots. Grassland vegetation must begin within 50ft. (15.2m) from the door of a permanent house and 25ft. (7.62m) from a mobile house. Important attributes of a grassland environment are that the vegetation is edible and dense enough to be attractive to birds. The minimum vegetative cover requirement of 50% for Pasture Raised and 75% for Mobile Houses on Pasture are averaged throughout the outdoor area.

Outdoor management plan

Farm protocols and practices that result in continuously robust outdoor environments for the birds, including rotation protocols, inspection criteria and management of stocking rate, contamination, cover and shade.

Pecking behavior

Feather pecking

Feather pecking can range from gentle pecks to the ends of the feathers to vigorous pecking that can cause bleeding which exacerbates pecking and can lead to cannibalism.

Vent pecking

Generally caused by attraction to a drop of blood on the vent. Most common with young hens at the onset of lay.

Aggressive pecking

Generally focused on the head or neck, this type of pecking is related to aggression and so is a different issue with different causes than feather pecking or vent pecking.

Perches

Perches are rails, usually on an angled frame that enable birds to grasp the rail and balance in their sleeping posture. Perches are elevated above the floor or platform. Sections of slats that are raised above the floor level, even when constructed of boards with spaces between, do not qualify as perches.

Staging platform or rail





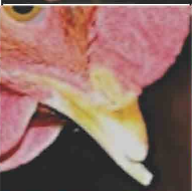





A rail or platform in front of nests to provide birds with a place to stand as they wait for a nest and as they perform nesting rituals.

Traceability

Protocols and records that show the path of eggs from hen to carton in Whole Foods Market stores to ensure all eggs in cartons are from farms that have been validated by a third party to meet Whole Foods Market Animal Welfare Standards for Laying Hens rated for the same System Category and have also met either FDA requirements for egg packing facilities or Whole Foods Market Food Safety Standards for Small Farms.

Appendix II: Beak Trim Scoring







Beak Trim Score-Brown Birds

0	<ul style="list-style-type: none"> No beak trim 		
1	<ul style="list-style-type: none"> Beak trim just visible Upper and lower beaks even Infrared beak trim at hatchery or excellent hand trim 		
2	<ul style="list-style-type: none"> More than ¾ beak remains Upper and lower beaks even 		
3	<ul style="list-style-type: none"> More than 1/2 beak remains Difference between upper and lower beaks minor 		
4	<ul style="list-style-type: none"> Between ½ and ¼ of beak remains Food compaction in nares Imbalance between beaks Minor neuroma 		
5	<ul style="list-style-type: none"> Less than ¼ beak remaining Major difference between upper and lower beaks - ½ length Major neuroma like a pea Major splitting, cracking or damage to beak 		

Procedure: Score 30 birds per house and calculate average score

At 4 or 5, just one criteria listed is sufficient to score that level. To score 1, 2 or 3 all criteria must be met. Scores of 2.25 or better are acceptable. Scores of 3 or higher must prompt urgent corrective action with the beak trimmer.







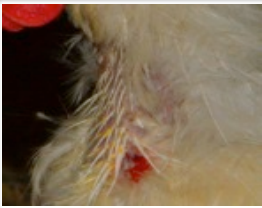

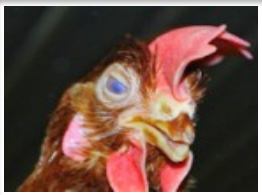

Beak Trim Score-White Birds

0	<ul style="list-style-type: none"> No beak trim (Also notice the facial, beak and comb color of this bird raised outdoors) 		
1	<ul style="list-style-type: none"> Infrared beak trim at hatchery only Beak trim just visible Upper and lower beaks even 		
2	<ul style="list-style-type: none"> More than 3/4 beak remains Upper and lower beaks even 		
3	<ul style="list-style-type: none"> More than 1/2 beak remains Difference between upper and lower beaks minor 		
4	<ul style="list-style-type: none"> Between 1/2 and 1/4 of beak remains Food compaction in nares Imbalance between beaks Minor neuroma 		
5	<ul style="list-style-type: none"> Less than 1/4 beak remaining Major difference between upper and lower beaks - 1/2 length Major neuroma like a pea Major splitting, cracking or damage to beak 		

Procedure: Score 30 birds per house and calculate average score
Scores of 2.25 or better are acceptable. Scores of 3 or higher must prompt urgent corrective action with the beak trimmer.

Appendix III: Ill or Injured Birds

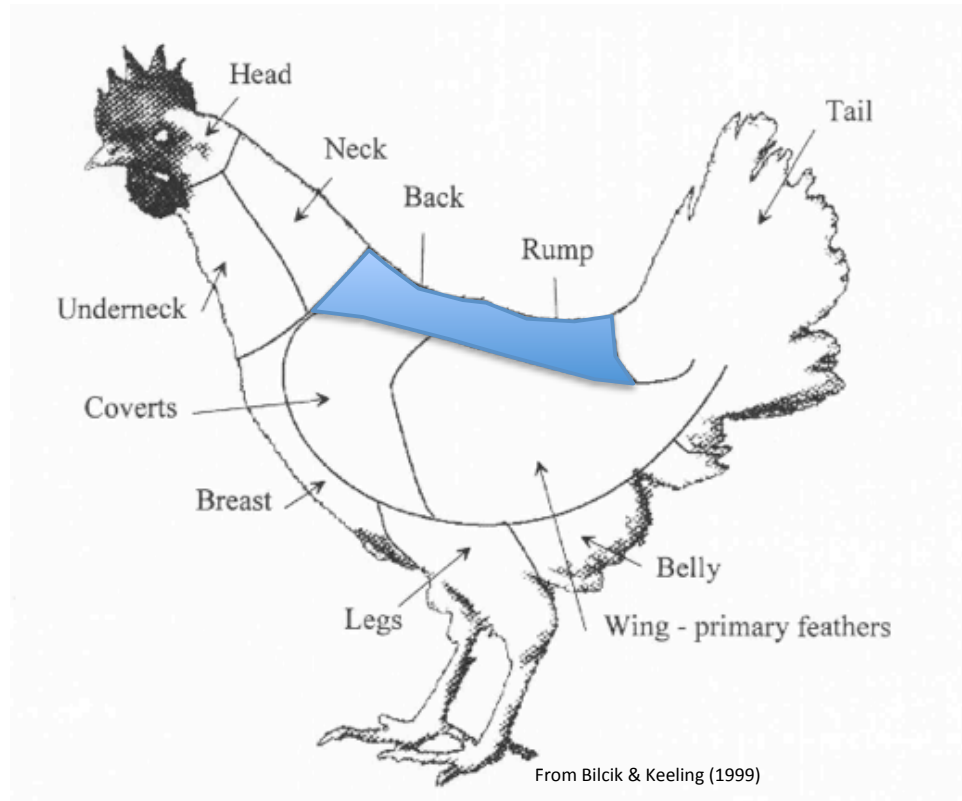
Ill or injured bird identification

Vent gleet	<ul style="list-style-type: none"> • Oozing white or yellow discharge from vent • Feathers generally wet and sticky 		
Prolapse	<ul style="list-style-type: none"> • Red tissue emanating from the vent • Can be covered with litter or soil • Can attract flies • Can exacerbate pecking behavior 		
Morbid	<ul style="list-style-type: none"> • Bird's posture is generally indicative • May be crouched in corners or high away from other birds • Look dull, often the head is pulled back on the neck so it nestles into the body 		
Broken limb	<ul style="list-style-type: none"> • Can be a leg or wing, clearly dysfunctional 		
Cuts or wounds	<ul style="list-style-type: none"> • Fresh red blood, often on the comb or vent if the result of pecking • Injuries resulting from equipment edges or other objects • Don't count wounds that are obviously old and healed 		
Blind birds	<ul style="list-style-type: none"> • Eyes are missing or creamy • Can be the result of pecking or a spike in ambient ammonia levels 		

Appendix IV: Feather Condition Scoring

Feather Score Guide

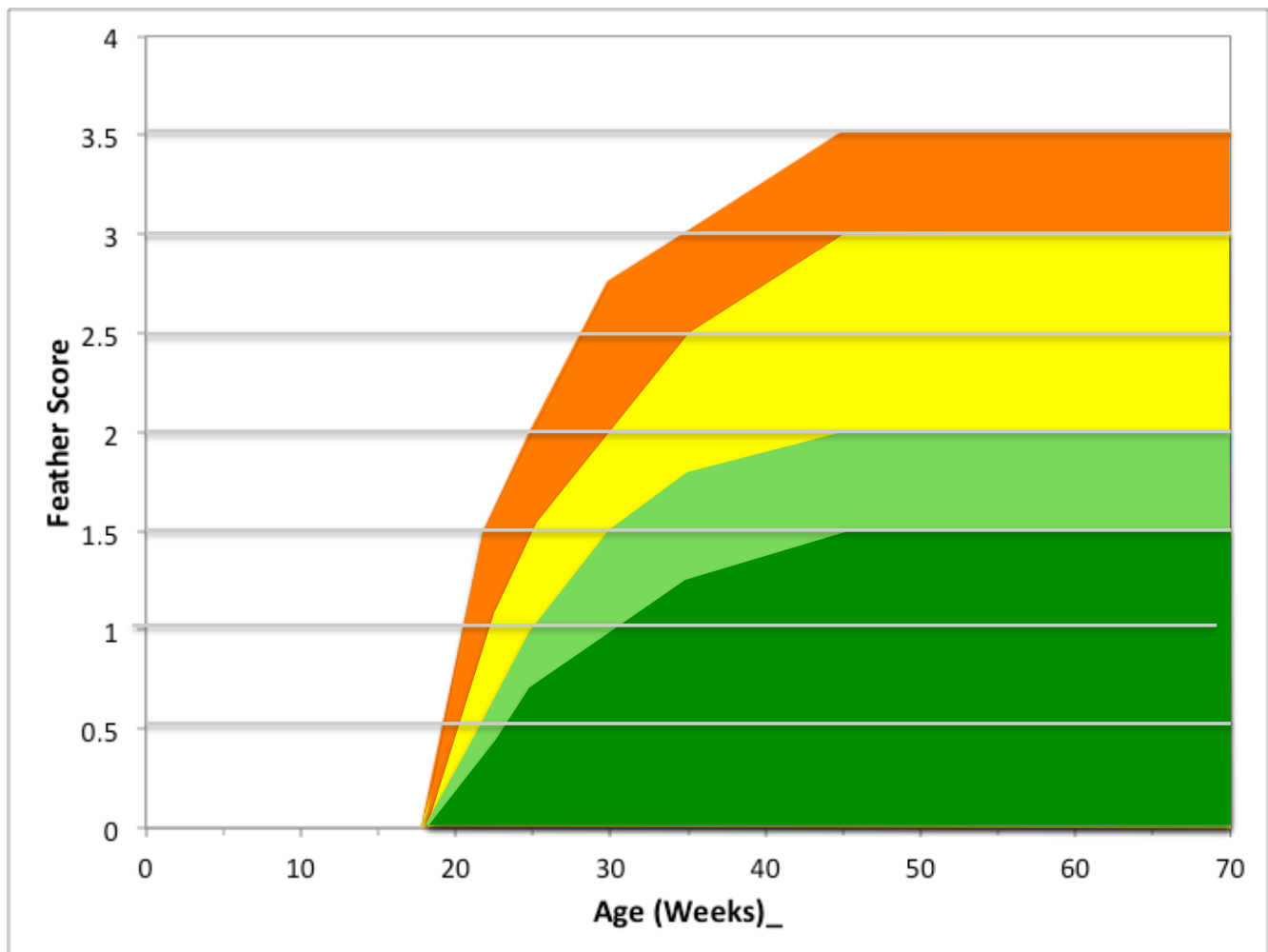
0	<ul style="list-style-type: none">• Intact feathers• No sign of damage		
1	<ul style="list-style-type: none">• Signs of damage or disturbance to feathers• Very few feathers are missing		
2	<ul style="list-style-type: none">• Clearly feathers are missing• May just see some skin		
3	<ul style="list-style-type: none">• Obvious bare patch that is less than 50% of back/rump area		
4	<ul style="list-style-type: none">• Bare patch that is greater than 50% of back/rump area		
5	<ul style="list-style-type: none">• Completely bare		



SCORING REGION IN BLUE

Photograph from behind to see the back easier

Reviewer will score 20 birds from each group and calculate average for each group and for the farm as a whole. Referring to the table below, determine the average score for the farm and the level at which they fall.



Feather score level calculator

Calculate the average feather score and trace across horizontally until you reach the age of the flock in weeks

Week	18	22	25	30	35	45	50	60	70
Orange	0	1.5	2	2.75	3.0	3.5	3.5	3.5	3.5
Yellow	0	1.0	1.5	2.0	2.5	3.0	3.0	3.0	3.0
Green	0	0.6	1.0	1.5	1.8	2.0	2.0	2.0	2.0
Green Plus	0	0.4	0.7	1.0	1.25	1.5	1.5	1.5	1.5

Appendix V: Air Quality Scoring Scale

Sensory Air Quality Scoring Scale

Score air quality when you first enter the barn and when you are about to leave the barn. A score higher than 2 is unacceptable and requires immediate action to reduce levels of ammonia and dust.

0 Zero: Odor or dust not noticeable (easy to breathe)

1 Weak: Odor or dust hardly noticeable

2 Moderate: Odor or dust distinct, annoying

3 Strong: Odor or dust irritating (watery eyes and/or coughing)

4 Very Strong: Odor or dust just bearable (stinging eyes and mouth, excessive coughing and/or pain when swallowing)

5 Overpowering: Odor or dust unbearable, you need to leave the barn (hurts to breathe)

Appendix VI: Nest Cleanliness Scale

0 Clean: there is no fecal material visible in the nests

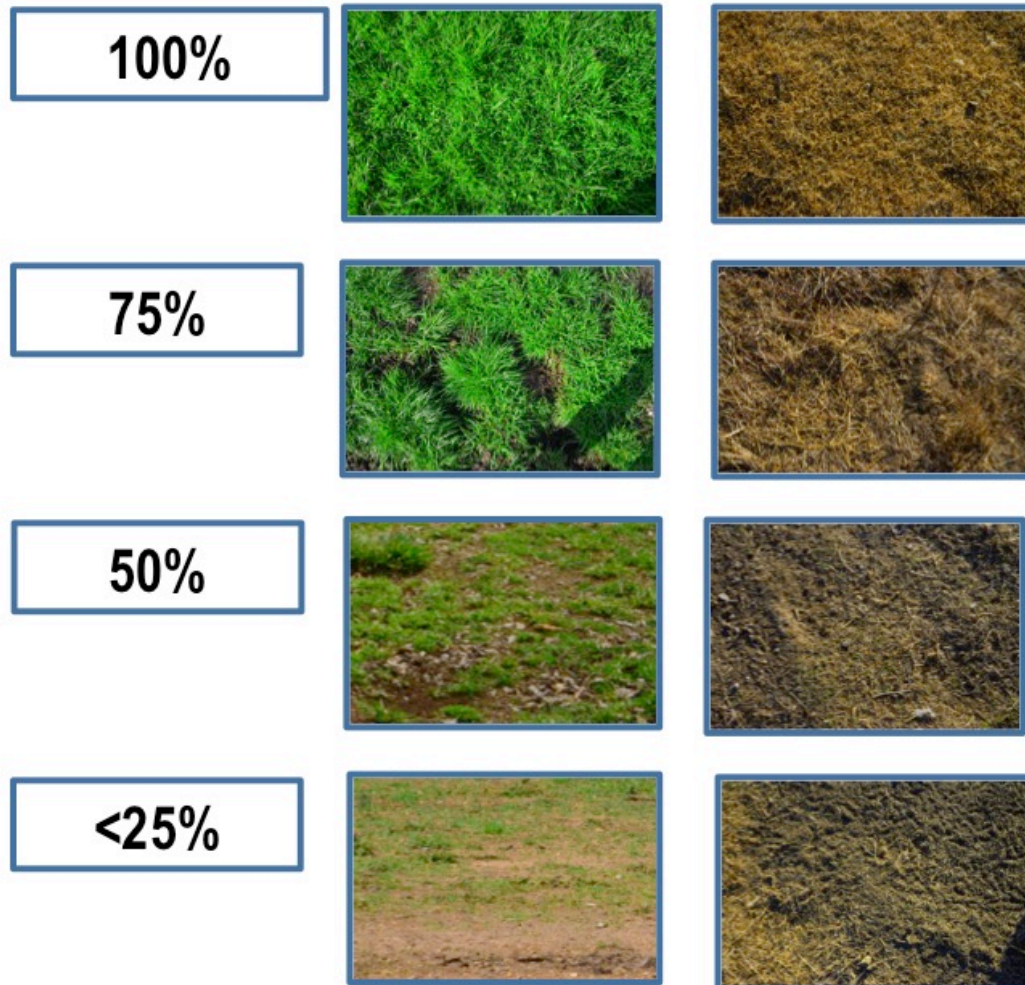
1 Low: less than 1/4 of the nest floor is covered with fecal material

2 Moderate: between 1/4 and 1/2 of the nest floor is covered with fecal material

3 Excessive: more than 1/2 of the nest floor is covered with fecal material

Appendix VII: Vegetation assessment

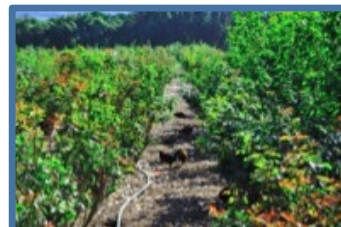
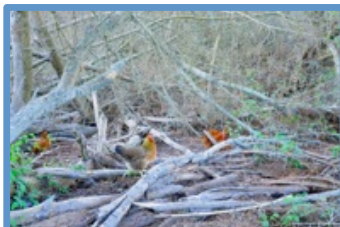
Vegetation Assessment for Grassland



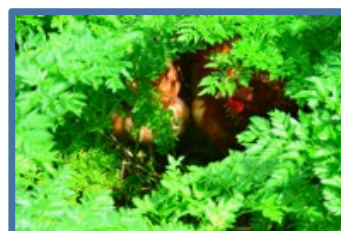
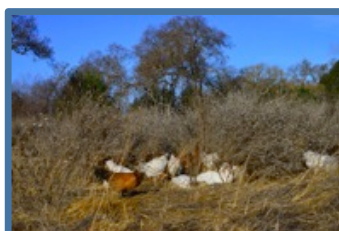
Separately score all outdoor areas through which birds are rotated, whether currently occupied or not. For a permanent house system, beginning 50 ft from the house, take photos looking straight down at the ground. In a mobile house system, begin 25 ft from the mobile unit. Walk across the entire outdoor area, stopping and taking photos every 6-10 paces. Take a minimum of 10 photos, optimally closer to 20 for accurate assessment. Farm self assessments do not require photos, but it creates a good record and is advisable.

Rangeland Vegetation Assessment

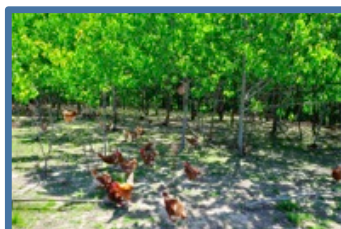
**Low tree or
bush cover**



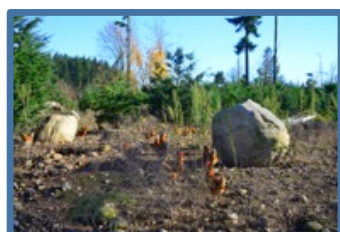
Tall plants



**Orchard or
woodland**



**Unique natural
objects**



Describe vegetation in terms of the above four categories in each outdoor area. Take photos of the entire outdoor area outside the house or houses and everywhere vegetation provides cover for birds. If the area includes both grassland and rangeland, assess vegetation according to both grassland and rangeland assessment protocols with photos to show the distribution of vegetative areas available to the birds. If there are different environments available in different areas of rotation, try to show the entire area and each division of the larger area so it is clear what resources the farm is using for the birds.