

RAISED BY A CANADIAN FARMER **ON-FARM FOOD SAFETY PROGRAM AND** **ANIMAL CARE PROGRAM :** **STANDARD OPERATING PROCEDURES**

Version 6.0

These Standard Operating Procedures (SOPs) are to be updated whenever a change is made and at minimum on an annual basis. The space below is to be signed and dated whenever the SOPs are reviewed or when a change is made. The farm personnel (e.g. farmer, farm manager) who was involved with the development or the review of the SOPs is required to sign and date below.

Signature _____ Date _____ m/yr

Signature _____ Date _____ m/yr

Signature _____ Date _____ m/yr

Signature _____ Date _____ m/yr

Signature _____ Date _____ m/yr

Record any deviations from these SOPs in the Deviation Chart, along with the reasons of the deviation and any corrective actions taken to correct the deviation on the Flock Specific Record Form or similar.

OFFSP AND ACP TRAINING RECORD

- (1) Have each employee/farm staff on the farm involved with the care and handling of the birds sign and date that they have been provided with and have understood the *Raised by a Canadian Farmer* On-farm Food Safety Program (OFFSP), Animal Care Program (ACP), and Code of Practice for the care and handling of broiler chickens and the Standard Operating Procedures (SOPs) for the areas in which they are responsible. This should be updated whenever the SOPs are updated. Service personnel (e.g. feed reps, hatchery crew, catching crew) and farm personnel responsible for developing the SOPs (e.g. farmer or farm manager who signed on the first page of the SOPs) are not required to sign the training log.

Name	Signature	Date

- (2) List any other training that employees of the farm have received with respect to biosecurity, food safety and/or animal care (including euthanasia):

Name	Training	Date

ON-FARM FOOD SAFETY PROGRAM



CHAPTER 2: CONTROLLING ACCESS TO THE FARM

A) Controlling Access to the Controlled Access Zone (CAZ)

- (1) ☐ A farm diagram is available which indicates the layout of the property, barns and the location of the CAZ and the RA
- (2) Indicate to whom you have provided your farm diagram (if applicable):

- (3) ☐ A sign or a ☐ physical barrier is used to identify the entrance to the CAZ
- (4) Indicate the location of the designated parking area for visitors (if applicable):

- (5) List any specific biosecurity measures required for supplier vehicles that enter the CAZ:

B) Controlling Access to the Restricted Area (RA)

- (1) ☐ A sign is posted at the entrance to the RA to indicate the area is restricted
- (2) ☐ Barn doors and other entrances to the barn are kept locked (during the grow-out and in between flocks after the barn has been cleaned)
- (3) ☐ Indicate the type of barrier or demarcation used to separate the CAZ and the RA in each barn:

- (4) Indicate the biosecurity measures taken for farm employees entering the RA:

- ☐ Barn-specific boots or disposable boots
- ☐ Barn-specific clothing/coveralls
- ☐ Premise-specific clothing (e.g. clothing worn in the barn is not worn off of the premise)
- ☐ Clothing is only worn on farm operations under common management
- ☐ Hats/bonnets
- ☐ Masks
- ☐ Hand sanitization (using either ☐ soap & water or ☐ hand sanitizer)
- ☐ List any other biosecurity measures taken:

(5) Indicate the biosecurity measures taken for suppliers/visitors entering the RA:

- ☐ Barn-specific boots or disposable boots
- ☐ Barn-specific or premise specific coveralls
- ☐ Hats/bonnets
- ☐ Masks
- ☐ Hand sanitization (using either ☐ soap and water or ☐ hand sanitizer)
- ☐ Suppliers/visitors are required to sign a logbook
- ☐ Farm manager/employee accompanies visitors to ensure biosecurity is respected
- ☐ List any other biosecurity measures taken:

- ☐ Are there any exceptions to the list of suppliers/visitors that must follow the above protocols?

- ☐ If thinning occurs, what measures are taken by the catching crew to reduce the risks associated with this activity? (if applicable):

(6) For farm workers that have contact with another poultry operation which is not under common management, list the steps taken to avoid cross-contamination:

- ☐ Hands are sanitized prior to accessing the RA
- ☐ Clothes are changed before entering the RA or ☐ Coveralls are worn in your RA
- ☐ Boots are changed prior to entering your CAZ
- ☐ A shower is required in between farms
- ☐ There is a downtime of ____ hours or ____ days before entering your RA
- ☐ Other:

(7) Define your protocol for bringing equipment inside the RA after the barn has been cleaned and disinfected or when there are birds in the RA:

- ☐ Equipment is visually inspected to ensure no organic matter is visible; any equipment with visible organic matter is cleaned (and disinfected)
- ☐ All equipment is cleaned and disinfected
- ☐ Equipment from another premise is cleaned and disinfected
- ☐ Other:

(8) If you have a flow-through barn, list your protocols to limit cross-contamination between different aged birds:

- ☐ Movement from youngest birds to the oldest birds
- ☐ Separate biosecurity protocols used for each RA
- ☐ List any other biosecurity measures that are taken:

- (9) List any other biosecurity measures used on your farm for humans or equipment when entering the RA:
-

C) Pest Control

- (1) Pest Situation Analysis: Rate your farms' pest problems in the previous year (none, some, lots):

	None	Some	Lots
Rodents			
Wild Birds			
Flies			
Beetles			
Other Pests			

- (2) Check the boxes that reflect the pest control program used on the farm:
- ☐ Vegetation, equipment and debris kept away from the exterior of the barn(s)
 - ☐ Feed spills are cleaned up immediately
 - ☐ The barn is kept in good repair to reduce rodent activity
 - ☐ Wild birds are prevented from entering the barn
 - ☐ Domestic pets (e.g. cats and dogs) are prevented from entering the RA
 - ☐ Areas where water can stagnate are filled

- (3) Indicate the control measures used for wild birds:

- (4) Indicate the control measures used for flies:

- (5) Indicate the control measures used for rodents:

- (6) Indicate the control measures used for darkling beetles:

(7) Indicate any other pest control measures that are used on the farm:

- (8) ☐ There are no domestic waterfowl on the premises, or
☐ Any domestic waterfowl are not permitted in the CAZ and are fenced in

CHAPTER 3: FEED & WATER

A) Purchased Feed

- (1) ☐ Your feed mill has provided written confirmation that they are following a food safety program
- (2) A sample of feed from each delivery is maintained ☐ on farm or ☐ at the feed mill
- (3) ☐ A sample of any ingredient (e.g. wheat) added to a purchased feed is maintained on-farm
- (4) ☐ Feed delivery slips are kept in the producer's files for each feed delivery

B) On-Farm Feed Mixing

- (1) Describe your on-farm feed mixing control program that includes:
Regular mixer efficiency tests to ensure proper feed mixing (indicate frequency, e.g. once every 6 months, and method used, test results are kept on file):

Procedures to ensure the addition of correct quantity of feed ingredients, which include:

- ☐ Regular calibration of metering system (if volumetric mixer such as a proportioner mill is used)
- ☐ Regular mixer scale verification (if gravimetric mixer is used)
- ☐ Regular medication scale verification
- ☐ Describe frequency/Other:

Procedures for mixer equipment clean-out, which include:

- ☐ vacuuming ☐ sweeping ☐ washing ☐ flushing
- ☐ sequential production of feed
- ☐ describe process/other:

- ☐ feed samples are tested regularly for content (test results are kept on file)
- ☐ a feed mixing record is maintained
- ☐ a record of feed ingredients used (inventory list) is kept on file
- ☐ a sample of the finished feed is kept for 14 days after processing

C) Feed Handling

- (1) ☐ All feed bins on the farm are identified:

- (2) Indicate how often the feed bins are inspected for feed build-up and/or rust:

- (3) Indicate the control measures used for dealing with a medication with a withdrawal period:

- ☐ Two feed bin system
- ☐ Using a rubber mallet to knock the sides of the feed bin
- ☐ Other:

- (4) What do you do with left-over feed?

- ☐ Kept in a feed bin until the next flock; Indicate feed bin #: _____
- ☐ Stored in bags until the next flock
- ☐ Transferred to another barn on the same premise
- ☐ Transferred to another farm premise
- ☐ Returned to the feed mill

D) Water Source

- (1) Indicate your water source:

- ☐ Municipal water supply
- ☐ Well
- ☐ Surface water (e.g. lake)
- ☐ Other: _____

(2) List the type of treatment used on the farm (list the type of chemicals and frequency of use)

☐ During the grow-out:

☐ In between flocks:

☐ Water pH:

(3) If the water is treated during the grow-out, indicate how, at what location, and at what frequency the concentration of water treatment is verified:

(4) ☐ Indicate where the annual water test sample is taken:

(5) ☐ Results of the annual water test are maintained on file and corrective actions are taken as necessary:

CHAPTER 4: CLEANING & DISINFECTION

A) Cleaning and Disinfection Procedures

(1) Describe how you, or the cleaning crew, clean and disinfect your barn:

(2) If the cleaning and/or disinfection is contracted out, insert the contract at the end of this section or inscribe:

Cleaning firm name:_____

Address:_____

Telephone number:_____

B) Manure Management

- (1) Describe your manure management plan:

- (2) When do you target to remove the manure from the barn after the birds have been shipped(days)? _____

C) Equipment

- (1) Equipment used in the cleanout process is:

- ☐ Only used on the one farm premise, or
- ☐ Used on multiple farm premises. If yes, indicate the control measures used to prevent cross-contamination between premises:

CHAPTER 5: CHICKS

A) Hatchery

- (1) Indicate the hatchery federal register number: _____
- (2) ☐ Your hatchery has provided written confirmation that they are recognized by the CFIA as operating under HACCP

CHAPTER 6: MEDICATIONS & CHEMICALS

A) Medications

- (1) Describe your procedures for selecting medications to be used on your flock:

- (2) ☐ All medications are recorded on the Flock Specific Records Forms

- (3) Describe the method you use to test the accuracy of the medicator:

- (4) ☐ All medications used to treat a disease or symptom are noted on the flock sheet
- (5) ☐ All medication is kept in the original labeled packaging or ☐ label information is transfer onto a record

B) Cleaners, Disinfectants and Other Chemicals

- (1) ☐ Chemicals used on the farm are approved for farm animal premises and used according to instructions
- (2) ☐ Chemicals are stored separately from medications and/or feedstuffs
- (3) ☐ All chemical containers are labeled with the product name and concentration (if different from the original)

CHAPTER 7: THE GROW-OUT PERIOD

A) Monitoring and Back-up Systems

- (1) Describe your monitoring and back-up systems:

- (2) Describe the measure(s) taken to reduce post-harvest crop contamination during feed withdrawal:
- ☐ Communicate with processor for instructions on feed withdrawal
- ☐ Feed withdrawal occurs 6–10 hours pre-slaughter
- ☐ Organic acid is administered in the drinking water during feed withdrawal
- ☐ Other:

CHAPTER 8: DISEASE MANAGEMENT

A) Disease Recognition

- (1) Indicate how many times the flock is checked each day: _____
- (2) Indicate when the veterinarian is contacted:
 - ☐ in cases of unexplained elevated mortality or morbidity. Indicate if there is a specific mortality trigger:
 - ☐ other: _____

B) Mortalities

- (1) ☐ A daily mortality log is maintained for each flock
- (2) Indicate your protocol for disposing of mortalities:

- (3) ☐ Employees wash hands following contact with mortalities

C) Disease Response Protocols

When a contagious disease is suspected, or after a confirmation has been received from a veterinarian, the following emergency response/farm quarantine is put in place. This protocol is for a suspect or confirmed case on your farm or within the vicinity of your farm.

- ☐ Keep the barns locked and use a visitor's log to record all movement on and off the farm, not just within the RA.
- ☐ Block the laneway to the CAZ (using a gate, rope/chain, wagon, etc) to prevent unwanted traffic or access.
- ☐ Inform your provincial board office.
- ☐ Reduce movement on and off the farm (CAZ and RA) to a minimum, including family members.
- ☐ Whenever possible, conduct activities through non-contact methods, such as telephone, fax or e-mail.
- ☐ Eliminate or delay all activities that if undertaken, could act as a vector to spread disease. Avoid direct contact with off-farm poultry operations or poultry personnel.
- ☐ No other farms should be visited and avoid visiting common gathering places, such as local coffee shops or town meetings.
- ☐ Delay or reduce all service and other visits to the farm. Refer to your emergency contact list and exercise extreme caution when allowing necessary visits from input suppliers or service providers

- ☐ People entering the CAZ must wear disposable boot covers (or use of foot spray) and disposable coveralls while on farm. Used disposable supplies must remain on the farm. Hand disinfecting or vigorous washing with warm water and soap prior to entering and leaving is recommended.
- ☐ Vehicles accessing the CAZ should be run through a truck wash prior to visiting the farm. Disinfectant should be spray applied to tires, wheel wells and undercarriage (upon entry and exit). The interior truck cab including areas such as the floor, pedals, steering wheel, and door handles should also be disinfected.
- ☐ Family members attending activities away from the farm such as work or school should limit access to the barn. They should avoid contact with other feathered species (including pets). Strict biosecurity protocols must be followed to minimize risks.
- ☐ Limit flock management to specific individuals. Clean laundered clothing and dedicated footwear should be utilized for each barn. Ensure that no equipment enters or leaves the area unless thoroughly cleaned and disinfected. Hand disinfecting or vigorous washing with warm water and soap is also recommended prior to leaving the barn.
- ☐ Barn entrances should be cleaned and sanitized on a daily basis.
- ☐ Dead bird disposal should be confined on farm until the situation is clear. Practice proper composting or freezing and ensure no wild or domestic animals have access the dead birds.
- ☐ Mortalities are kept in covered containers before being moved to the disposal area and, if they are being transported off farm, are transported in covered containers.
- ☐ Garbage disposal should be well thought out, so that care and control of material generated on the farm is maintained until the situation is clear.
- ☐ If the disease is in your vicinity, review your flock health records for feed/water consumption and for signs of abnormalities. Watch your flock and report any unusual illness or mortality to your veterinarian, your provincial board office and industry personnel.
- ☐ Make every effort to heighten your biosecurity protocols.
- ☐ Indicate any other measures that would be taken on your farm:

ANIMAL CARE PROGRAM



SECTION 1: WORKERS AND MANAGEMENT

Code of Conduct

Below is a sample Code of Conduct covering bird welfare that can be signed by farm personnel.

Farm Animal Care Policy with Employee Declaration

At _____, farm/company name we are committed to providing high standards of welfare for the birds in our care, in accordance with Chicken Farmers of Canada's (CFC) *Raised by a Canadian Farmer Animal Care Program* (ACP), which is based on the standards provided in the *Code of Practice for the Care and Handling of Hatching Eggs, Breeders, Chickens and Turkeys*. We strive to foster a culture of understanding towards animal care principles and requirements that ensure our birds are healthy, comfortable, and well-cared for.

Our commitment to our customers

Every person who handles or comes into contact with an animal is required to support our core objective of responsible farm animal care and handling and to demonstrate that support by:

Reviewing this Farm Animal Care Policy and all SOPs for the OFFSP and ACP (the “**Program and Policy**”) *before* starting any work with animals

Annually reviewing this Policy

Reviewing the SOPs for the OFFSP and ACP when any changes are made, and at a minimum annually

Signing the Employee Declaration at hiring, and after each annual review of the Program and Policy.

Our commitment to our employees

Your job is valuable and important to our animals and our business. Employees may at any time discuss a matter, or seek advice on how to proceed with a matter, from _____ contact person

When you report an incident involving possible mistreatment, illness or injury involving one of our animals, we will take it seriously. We will document your concern. We will follow up to resolve the animal's situation and/or provide additional training among employees.

Our employees' commitment to us

Every one of our employees is required to handle and treat animals with respect, in a manner that aims to prevent injury and reduce stress, and in accordance with CFC's ACP as well as the federal, provincial, and municipal regulations under which we operate. Employees are required to ensure all requirements in CFC's ACP are met, and that all SOPs are followed.

When employees are on our premises and/or performing any work for us off-site, you must not take pictures or videos or other images and/or record sounds with any kind of device (camera, smartphone, tape recorder, video, etc.) for any reason, and you must not help anybody else do so, unless _____ farm/company name has given you advance written permission.

If any employee observes or receives information about or otherwise becomes aware of an animal in our care being mistreated, mishandled, or treated in a way that is contrary to CFC's ACP or this Policy, then:

- (a) The employee **must immediately** report that information to _____ or, if he/she is not available, to _____.
contact person
alternate contact person
- (b) The employee must cooperate fully in any investigation of the report. Employees are required to respect the need for confidentiality. Accordingly, employees must not disclose information from any reports or their involvement in any investigation or report, except to the extent required by _____ for purposes of a proper investigation and resolution, or as compelled by process of law. However, employees are permitted to disclose information to their own legal advisers and to their own spouses/domestic partners, who must be similarly obligated to maintain confidentiality.
farm/company name

Any breach of the SOPs for the OFFSP and ACP and/or of this Policy will result in disciplinary action, up to and including dismissal for cause in appropriate cases. _____ reserves the right to refer animal-abusers to law enforcement for prosecution.
farm/company name

If any employee deliberately breaches the SOPs for the OFFSP and ACP and/or this Policy, reserves the right to release the employee's personal information to law enforcement authorities.

MANAGER DECLARATION: As the Manager / Supervisor, I declare that I have reviewed the current SOPs for the OFFSP and ACP and this Farm Animal Care Policy with the employee(s) named below on the date shown below.

Manager / Supervisor Name

Manager / Supervisor Signature

Date

EMPLOYEE DECLARATION: As an employee of _____, I declare that I have read,

[illegible]

SECTION 3: ENVIRONMENT

(TEMPERATURE, AIR QUALITY AND LIGHTING)

Temperature

Outline the temperature schedule that you use during the cycle of your flock, including the temperature set points, and what procedures you use if the temperature moves out of range (for both high and low temperature extremes).

Air Quality

Describe your daily procedures for monitoring air quality (include the methods used, the frequency of monitoring and set points (if applicable) for humidity and ammonia).

Lighting

Outline the lighting schedule used during the cycle of your flock.

Do you provide a minimum of one continuous hour of darkness by at least 24 hrs from placement?

☐ Yes ☐ No

Do you provide at least four continuous hours of darkness starting at least by day 5 from placement until 7 days prior to catching?

☐ Yes ☐ No

Is the dark period no more than 20% of the light intensity of the light period?

☐ Yes ☐ No

SECTION 4: STOCKING DENSITY, HOUSING SYSTEM AND LITTER MANAGEMENT

Stocking Density

The following static information must be available for each barn. This information can be posted in each barn or kept in a central location that is accessible to personnel working in the barns. This form or a similar form can be used.

See appendix 1 for sample calculations.

Floor Area ¹			
	Floor Area ¹	Units	
Floor 1		ft²	m²
Floor 2		ft²	m²
Floor 3		ft²	m²

Maximum Capacity for Bird Placement							
	Target Weight	Units		Max. Density	Max. # birds @ shipping	Expected Mortality	Max. # birds @ placement
Floor 1		lb	kg				
Floor 2		lb	kg				
Floor 3		lb	kg				

¹Total floor area available to the birds. Measurements to be taken on the inside of the barn.

Available Feeders and Drinkers						
Feeders				Drinkers		
	Total # feeders or linear feeding space (1)	Manufacturers recommendation ¹ for # birds/feeder (2)	# of birds (1 x 2)	Total # of drinkers (3)	Manufacturers recommendation ¹ for # birds/drinker (4)	# of birds (3 x 4)
Floor 1						
Floor 2						
Floor 3						

¹Include the manufacturers recommendations for the number of birds per feeder or drinker for your specific type.

Litter Quality

Describe your daily procedures for monitoring the quality of the litter (include the method used and the frequency of monitoring).

SECTION 5: BIRD MONITORING AND HANDLING

Bird Handling

Describe your procedures for handling birds (incl. chicks, and boxes of chicks), to prevent injury and minimize stress:

Daily Flock Inspections

Indicate the number of times the flock is checked per day. Does this vary throughout the cycle for your flock? ☐ Yes ☐ No

Indicate what elements are observed during the daily checks:

- | | |
|--|--|
| <input type="checkbox"/> Reduced food and water intake | <input type="checkbox"/> Behavioural changes |
| <input type="checkbox"/> Changes in activity | <input type="checkbox"/> Abnormal respiratory sounds/mouth breathing |
| <input type="checkbox"/> Abnormal feather condition | <input type="checkbox"/> Lameness and inability to rise |
| <input type="checkbox"/> Abnormal droppings | <input type="checkbox"/> Body condition |
| <input type="checkbox"/> Feather condition and cover | <input type="checkbox"/> Dead, sick and injured birds |
| <input type="checkbox"/> Thermal comfort behaviour | |

Indicate any other checks that are performed:

SECTION 6: HEALTH CARE PRACTICES (FLOCK HEALTH PLAN, MORTALITY, EUTHANASIA)

Flock Health

Do you receive data on your condemnation report indicating the incidence of condemnations, hockburn, breast blisters and/or footpad lesions?

☐ Yes ☐ No

If yes, describe how you monitor the incidence of these conditions and address problems when the incidence becomes too high:

Flock Health Plan

It is recommended that a flock health plan be developed in consultation with your veterinarian. This plan supplements the records and SOP's that you are maintaining under the ACP and OFFSP (e.g. mortality and cull records, euthanasia and cull protocols, biosecurity and pest-control programs).

Who assisted you in developing your flock health plan (e.g. veterinarian, hatchery personnel)?

List the diseases you are managing against on your farm and briefly explain how you are preventing them:

Disease	Prevention method

Outline your flock's vaccination protocols:

Age	Name of vaccine	Vaccinated for what disease	Route administered

Euthanasia

Describe your primary method of euthanasia as well as the back-up method you would use if your primary euthanasia method fails:

Do you use a device to euthanize your birds?

☐ Yes ☐ No

If yes, please describe the device, including the maintenance routine for it.

Describe your protocol for determining when birds need to be euthanized (list the triggers that would signal you to euthanize a bird):

Describe how you inspect for loss of consciousness and death to ensure the euthanasia was effective:

SECTION 7: EMERGENCY MANAGEMENT AND PREPAREDNESS

Contingency Plan

Describe your procedures for specific emergency situations (e.g. power failure, fire, flooding, water interruptions, generator failure etc.):

Provide a list of emergency contact numbers:

	Name	Number
Veterinarian		
Processor		
Transporter		
Manure haulage		
Feed company		
Catching crew		
Hatchery		
Bedding supplier		
Renderer		
Pest control		
Fuel company		
Electric		
Gas		
Water		
Local police (for non-911 emergencies)		
Other		

SECTION 8. CATCHING AND LOADING

Procedures During Catching Indicate

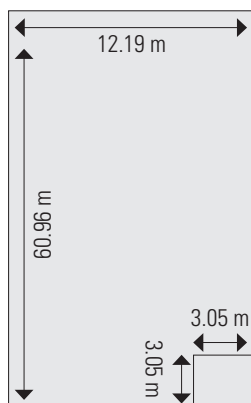
your procedures during catching:

- ☐ Feeders withdrawn in consultation with processor to minimize time off feed
- ☐ Water available until just prior to catching
- ☐ In consultation with the processor, the flock and environmental conditions (including wet birds), as well as journey duration, are taken into consideration prior to transport
- ☐ Birds are evaluated for fitness and those deemed unfit for transport are euthanized (as soon as possible and not longer than 8 hours from the end of loading) or separated out
- ☐ Farm representative and catching supervisor meet prior to catching to discuss flock fitness for transport and barn conditions
- ☐ Care for birds not loaded and not euthanized resumes as soon as possible, and not longer than 8 hours from the end of loading
- ☐ Farmer or farm representative available locally to assist catching crews

APPENDIX 1 - STOCKING DENSITY SAMPLE CALCULATIONS

1. FLOOR AREA

The following are sample calculations for determining the floor area available to the birds for a floor that is 200 ft x 40 ft with a 10 ft x 10 ft workroom. Floor area should be based on measurements taken on the inside of the barn. Note: This example illustrates the calculation for a flock that is all-in all-out.



$$\begin{aligned}
 & (\text{floor length} \times \text{floor width}) - (\text{workroom length} \times \text{workroom width}) \\
 & = (60.96 \text{ m} \times 12.19 \text{ m}) - (3.05 \text{ m} \times 3.05 \text{ m}) \text{ or } (200 \text{ ft} \times 40 \text{ ft}) - (10 \text{ ft} \times 10 \text{ ft}) \\
 & = 743.1 \text{ m}^2 - 9.30 \text{ m}^2 \qquad \qquad \qquad 8,000 \text{ ft}^2 - 100 \text{ ft}^2 \\
 & = 733.8 \text{ m}^2 \text{ or } 7,900 \text{ ft}^2
 \end{aligned}$$

2. BIRDS PLACED

The following are sample calculations for determining what the maximum number of birds at shipping should be under the following criteria:

Total floor area available to the birds: 733.8 m² or 7,900 ft²

Target weight: 2.0 kg or 4.41 lb

Maximum density: 31 kg/m² or 6.35 lb/ft²

Max # of birds at shipping	No. birds placed: max # birds at shipping + estimated mortality
$= (\text{total floor area} \times \text{max. density}) / \text{target weight}$ $= (733.8 \text{ m}^2 \times 31 \text{ kg/m}^2) / 2.0 \text{ kg}$ $(7,900 \text{ ft}^2 \times 6.35 \text{ lb/ft}^2) / 4.41 \text{ lb}$ $= \text{approximately } \mathbf{11\ 375\ birds}$	$= 11,375 \times (100) / (100-3)$ $= \mathbf{11\ 726\ birds}$

1. Floor Area ¹			
	Floor Area ¹	Units	
Floor 1	733.8	ft ²	m ²
Floor 2		ft ²	m ²
Floor 3		ft ²	m ²

2. Maximum Capacity for Bird Placement							
	Target Weight	Units		Max. Density	Max. # birds @ shipping	Expected Mortality	Max. # birds @ placement
Floor 1	2.0	lb	kg	31 kg/m²	11,375	3%	11,726
Floor 2		lb	kg				
Floor 3		lb	kg				

1. AVAILABLE FEEDERS AND DRINKERS

The following are sample calculations for determining the number of birds that can be accommodated by the available feeders and drinkers. In this example 13 to 15 in. pan feeders and nipple drinkers are used with a recommended number of 55 birds per feeder and 12 birds per nipple.

3. Available Feeders and Drinkers						
Feeders				Drinkers		
	Total # feeders or linear feeding space (1)	Manufacturers recommendation ¹ for # birds/feeder (2)	# of birds (1 x 2)	Total # of drinkers (3)	Manufacturers recommendation ¹ for # birds/drinker (4)	# of birds (3 x 4)
Floor 1	206	55	11,385	948	12	11,376
Floor 2						
Floor 3						