

# Comprehensive Biosecurity Plan for Jacaranda Hill Farm

## 1. Introduction and Purpose

This Biosecurity Plan outlines the measures implemented at Jacaranda Hill Farm to protect our pasture-raised laying hens from infectious diseases, pests, and other biological contaminants. Our primary goal is to maintain a healthy flock, ensure the production of safe, high-quality pasture-raised eggs, and safeguard the economic viability of our operation.

Given the unique nature of our pasture-raised system, which involves the regular movement of mobile shelters and direct interaction with the outdoor environment, this plan emphasizes strategies to mitigate risks associated with wildlife, environmental exposure, and farm traffic, while leveraging the natural disease-reducing benefits of pasture rotation.

This plan adheres to the principles outlined in the "Environmental Code of Practice for Poultry Farms in Western Australia – May 2004" and the "Fact Sheet: Poultry Farms" provided by the Shire of Murray, and aligns with industry best practices for pasture-raised poultry.

## 2. Principles of Biosecurity

Biosecurity is the protection of the farm from biological contaminants such as pest or disease organisms. Disease can be spread through various means, including:

- **Animals:** Wild birds, feral animals, domestic animals (pets, other livestock).
- **People:** Farm personnel, visitors, contractors.
- **Vehicles:** Farm vehicles, delivery trucks, personal vehicles.
- **Equipment:** Shared or external equipment.
- **Water Supply:** Contaminated water sources.
- **Feed:** Contaminated feed.
- **Dust/Aerosols:** Airborne pathogens.

Our approach focuses on preventing the introduction of pathogens and, should an introduction occur, minimizing their spread within and off the farm.

## 3. Farm Layout and Access Control

### 3.1 Farm Zoning and Restricted Access Points

- **Controlled Access Points:** The farm will have designated entry/exit points for vehicles and personnel. Signage will clearly indicate biosecurity protocols.
- **Perimeter Fencing:** The entire farm perimeter is [or will be] secured with appropriate fencing to deter unauthorized access by people and larger feral animals (e.g., foxes, wild dogs).

- **Internal Fencing (Pasture Rotation):** Pasture areas will be divided into smaller paddocks using temporary electric or permanent fencing to facilitate rotational grazing. This allows for rest periods for each section, breaking potential disease cycles.

### 3.2 Vehicle Management

- **Designated Parking:** All non-essential vehicles (e.g., visitor vehicles, personal staff vehicles) will be parked in a designated area away from poultry housing and pasture areas.
- **Delivery/Service Vehicles:** Delivery and service vehicles (feed, egg collection, veterinary) will be restricted to designated access routes and loading/unloading zones, minimizing their contact with the main poultry areas.
- **Cleaning/Disinfection:** Vehicles entering the immediate poultry production areas (if absolutely necessary) will undergo a basic wash-down or tire disinfection if deemed a high risk.

### 3.3 Personnel and Visitor Management

- **Farm Personnel:**
  - All farm personnel will be trained in biosecurity protocols.
  - Dedicated work clothing and footwear will be used on-farm, or changed upon entry to poultry areas. Separate shoes can be used by personnel if required.
  - Handwashing facilities (or hand sanitiser) will be available at entry/exit points to poultry areas.
  - Personnel who have had recent contact with other poultry (commercial or backyard) will declare this and follow enhanced biosecurity measures.
- **Visitors:**
  - All visitors (including contractors, sales representatives, family members) must report to the farm office/designated entry point.
  - A **Visitor Logbook** (as per Appendix 7.5 of the Environmental Code of Practice) will be maintained, recording:
    - Date and time of entry/exit.
    - Visitor's name, contact details.
    - Purpose of visit.
    - Recent contact with other poultry or livestock.
  - Visitors will be required to wear disposable boot covers and/or use footbaths upon entering poultry areas.
  - Non-essential visits to poultry areas will be discouraged.
  - Any visitor who has been on another poultry farm within [e.g., 48-72 hours] will be denied access to poultry areas.

## 4. Poultry Management and Flock Health

### 4.1 Source of Birds

- All new birds introduced to the flock will come from reputable, disease-free hatcheries or pullet growers with their own robust biosecurity programs.
- Health certificates will be obtained for all new bird deliveries.

## 4.2 Introduction of New Birds (Quarantine)

- New birds will undergo a minimum 2-4 week quarantine period in a separate, isolated area before integration with the main flock.
- During quarantine, birds will be observed for any signs of illness.
- Personnel attending to quarantined birds will do so after attending to the main flock, and will use separate equipment or disinfect equipment thoroughly.

## 4.3 Flock Health Monitoring

- Daily observation of the flock for any signs of illness, changes in behaviour, feed/water consumption, or mortality.
- Any unusual symptoms or increased mortality rates will be immediately reported to [responsible person, e.g., Farm Manager, Robert Cass] and, if necessary, a veterinarian.
- A **Mortality Logbook** will be maintained, recording:
  - Date.
  - Number of mortalities.
  - Observed symptoms (if any).
  - Disposal method.

## 4.4 Pasture and Range Area Management

- **Rotation:** Strict pasture rotation schedules will be maintained to prevent the buildup of pathogens in any single area. Rest periods allow for natural breakdown of manure and reduction of pathogen load.
- **Vegetation Management:** Maintaining healthy pasture cover is crucial. Overgrazing will be avoided to prevent exposed soil, which can increase dust and create less desirable conditions for pathogen survival.
- **Water Sources:** Natural water sources on pastures (e.g., dams, creeks) will be fenced off or managed to prevent direct access by chickens, minimizing exposure to wild bird faeces or other contaminants. Mobile waterers will be used and regularly cleaned.

## 4.5 Feed and Water Management

- **Feed Storage:** Feed will be stored in vermin-proof silos or containers, protected from moisture and wild animals.
- **Feed Delivery:** Feed delivery vehicles will operate under biosecurity protocols, minimizing contact with poultry areas.
- **Water Quality:** Drinking water for chickens will be from a potable source. Mobile waterers will be cleaned regularly to prevent biofilm buildup and contamination.

# 5. Cleaning and Disinfection

## 5.1 Mobile Shelters

- While hens are regularly moved, periodic thorough cleaning and disinfection of mobile shelters will be undertaken during longer rotation cycles or between batches if applicable.

- This involves removing accumulated litter, sweeping/vacuuming, and applying approved disinfectants.

## 5.2 Equipment

- All equipment (feeders, waterers, egg collection carts) will be cleaned and disinfected regularly.
- Equipment shared between different pasture sections or brought onto the farm will be cleaned and disinfected before and after use.

## 6. Pest and Vermin Control

- **Rodent Control:** A comprehensive rodent control program will be implemented, including bait stations (secured and placed away from bird access), traps, and maintaining a tidy farm environment to eliminate harbourage areas.
- **Insect Control:** Measures to control flies and other insects will be employed, primarily through effective manure dispersion on pastures and good general hygiene.
- **Wild Bird Control:** While complete exclusion is challenging in a pasture-raised system, measures to discourage wild birds include:
  - Minimizing standing water.
  - Securing feed storage.
  - Avoiding feed spillage.
  - Considering overhead netting in specific, high-risk areas if practical (e.g., around feeders if wild bird pressure is extreme).
- **Feral Animal Control:** Regular monitoring for signs of feral animals (foxes, wild dogs) and implementation of humane control measures as necessary, in coordination with local authorities.

## 7. Dead Bird and Unhatched Egg Disposal

- **Prompt Removal:** Dead birds and unhatched eggs will be collected promptly (at least daily) to prevent disease spread and attraction of scavengers.
- **Temporary Storage:** If immediate disposal is not possible, dead birds will be stored in a cool room or weather/vermin-proof receptacle (e.g., 240-litre wheeled bin) away from poultry areas and public view.
- **Disposal Method:**
  - **Composting:** On-site composting in a dedicated, secure, and contained composting facility will be the preferred method for routine mortalities. This facility will be located away from water sources and property boundaries, as per guidelines.
  - **Off-site Disposal:** For larger mortalities or if composting is not feasible, dead birds will be transported off-site to an approved rendering facility or landfill, ensuring proper containment during transit to prevent spillage or odour.
- **Mass Mortality Events:** In the event of mass bird deaths (e.g., due to extreme heat or suspected disease outbreak), the protocol outlined in Section 4.1 of the Environmental Code of Practice will be followed:
  - Immediately contact a local government Environmental Health Officer (EHO).
  - EHO will report to the Department of Agriculture and Department of Health.

- Guidance on disease control, hygiene, and disposal will be sought from these agencies.
- On-site controlled incineration or chemical-aided processing/burial may be necessary under extreme circumstances, with consultation from the Department of Environment regarding site suitability.

## 8. Staff Training and Awareness

- All farm staff will receive regular training on biosecurity protocols, their importance, and their role in maintaining farm health.
- Training will cover:
  - Farm entry/exit procedures.
  - Personal hygiene.
  - Signs of disease in poultry.
  - Reporting procedures for illness or biosecurity breaches.
  - Proper use and cleaning of equipment.
  - Emergency response procedures.
- Regular refreshers and updates will be provided.

## 9. Record Keeping

Accurate and up-to-date records are essential for effective biosecurity management and for demonstrating compliance. The following records will be maintained:

- **Visitor Logbook:** As detailed in Section 3.3.
- **Mortality Logbook:** As detailed in Section 4.3.
- **New Bird Introduction Records:** Source, date, number, health certificates.
- **Veterinary Visits and Treatments:** Dates, diagnoses, treatments administered.
- **Cleaning and Disinfection Schedule:** Dates, areas, products used.
- **Pest Control Activities:** Dates, methods, observations.
- **Feed Delivery Records.**
- **Pasture Rotation Schedule.**

## 10. Review and Improvement

This Biosecurity Plan will be reviewed annually, or more frequently if there are significant changes to farm operations, disease threats, or regulatory requirements. Feedback from staff and external experts will be incorporated to ensure continuous improvement of our biosecurity measures.