Code of Practice for Duck Table Egg Producers

August 2010

Introduction

This document includes the general requirements for the rearing of point of lay ducks for the production of table eggs and the general requirements for egg production systems. Duck egg producers should seek advice from recognised sources and consult the relevant and current guidelines/publications produced by DAFF and other appropriate bodies.

Objectives

The primary objectives of this code of practice are:

- To set out the requirements for best practice in the production of eggs at farm level.
- To reduce the prevalence of salmonella serotypes of public health significance in duck eggs.
- To reduce the prevalence of other pathogens of public health significance in duck eggs.

Disclaimer

DAFF will not be liable for any losses, damage, charges, costs or expenses of whatever nature (including consequential loss) which any producer may suffer or incur by reason of, or arising directly or indirectly from the administration of this code of practice.
Registration of flocks

All flocks must be registered with DAFF. Applications for registration must be made through the local DAFF Regional Office.

Traceability

Flock keepers who supply eggs for human consumption are considered to be food business operators and have to be registered as such. Registered producers will be issued with a producer code unique to them, which should be stamped on eggs to allow for full traceability. Applications for registration as a food business operator and for the unique identifying code must be made to:
Pigmeat and Poultry Section,
Agriculture House,
4 Centre,
Kildare Street,
Dublin 2,
Telephone: (01) 6072198.

Hygiene and Disease Control

All flock keepers should be aware of the need to minimise the risk of disease transmission. Legislative control of Salmonella Enteriditis and Salmonella Typhimurium exists in Ireland and both types are currently notifiable diseases (this list is subject to change at any time). Antibiotics must not be used to treat flocks for salmonella infections. Flock keepers should be aware that the health of the birds is crucial to food safety and productivity on the farm. Flock keepers should have a close relationship with their veterinary surgeon and be conscious of the need to try to prevent disease, in particular salmonella and other transmissible diseases. To this end, flock production records (daily/weekly) should be maintained. Any unusual increase in mortality or a major decrease in bird performance that may cause concern should be reported to your veterinarian and investigated immediately by a veterinary laboratory.

An effective salmonella-monitoring programme must be in place and must comply with the minimum level recommended by DAFF. Sampling must be carried out in accordance with the relevant procedure and the analysis must be done in a laboratory that is DAFF approved (see Annex 1).

A documented procedure should be put in place to ensure that the eggs of both suspect and infected flocks are not used for human consumption, unless they are pasteurised. Where a salmonella breakdown has occurred, egg supply must not
recommence until there is official confirmation from DAFF that the problem has been resolved. Records of these events should be maintained.

Vaccination of ducks against salmonella will be a matter between the flock keeper and his/her private veterinary practitioner (PVP).

Each producer must operate and maintain a rodent control programme (see below).

An effective control measure (e.g. physical barrier / foot dip) should be provided at the entry to the area where the ducks are kept. Where foot dips are used, the disinfectant solution should be replenished as required, but at least on a weekly basis and a record be maintained. A cover should be provided for foot dips to avoid dilution with rainwater.

Staff and all those in frequent contact with the laying birds ought not to keep or have any contact with any other live birds whatsoever (for food or hobby purposes) and this should be demonstrated through records (e.g. staff declarations).

Hand washing with hot water (ideally premixed to 44°C) or hand sanitizing facilities should be available on site and hands should be washed / sanitized before entering the area where the birds are kept. Hands should be washed before and after handling eggs with perfume free soap (to prevent taint).

Producers should familiarise themselves with the current Salmonella Code of Practice (available from DAFF).

**Record keeping**

Records should be kept of all flock purchases, feed purchases, vermin control, medicines used and egg sales for a minimum of three years.

**Biosecurity**

1. **The site**

Biosecurity is the term used for all measures that may be taken to prevent the introduction or spread of disease into a flock. The site should be clearly signposted and secured at all times to prevent any entry of unauthorised personnel or vehicles. The perimeter of the site ought to be clearly identified and, if possible, fenced. On-farm roadways should have a hard surface, which
can be cleaned effectively. Roadways should be kept clear of faecal contamination so that vehicles do not become contaminated.

The site must be kept clean and tidy to discourage wild birds, rodents and flies. Vegetation should be kept under control to minimise rodent cover and wild birds. The area around where the ducks are kept should be free of debris, equipment etc., since these can be a source of attraction for vermin. Pets (such as cats and dogs) and other farm animals should be excluded from the area.

2. The buildings

Ducks must be provided with shelter, which gives protection from wind, rain and excessive heat. The perimeter around any housing on the site should be of a hard surface/gravel, designed to avoid standing water and help to discourage rodents. Houses should be vermin-proof and screened against wild birds, rodents and other animals (such as domestic pets). They should be structurally sound (i.e. no holes, cracks or leaks in the structure in the roof, walls or floor). All surfaces within the house and shelters should be in good condition, smooth and easy to clean. Dust should not be allowed to accumulate on surfaces, walls, ceilings and floor areas.

Birds should not be housed where surfaces have been treated with strong smelling wood preservatives or disinfectants or any toxic substance that could present a significant toxin in the birds or in the eggs.

Dead birds should be removed on a daily basis and stored in a vermin-proof container. They must be disposed of by a licenced collection contractor for rendering or licenced incineration, and a record of deaths and disposals must be kept.

3. Equipment

Equipment on the site should be constructed of a durable material and be capable of being cleansed and disinfected effectively. Equipment should not be shared between sites or with other farmers.

4. Vermin control

All buildings should be proofed against entry by wild birds, rodents and other animals. Their presence in the vicinity should be discouraged by general tidiness, clearing of vegetation and an immediate cleaning up of any food spillages. A service provider with knowledge of pesticides and their placing should undertake the control of pests. An appropriate plan should be established for the farm and a record kept of the pesticide usage in compliance with the relevant legislation.
Supplementary baiting at high-risk areas (e.g. dung-heaps, streams, hay-barns, outhouses etc.) should be considered. It is recommended that a record be kept that bait points are inspected at least eight times annually and more frequently where there is a specific risk, and corrective action as recommended by the manufacturer/service provider is taken.

5. Feed

Finished feed or ingredients for home-mixing should be obtained from a mill or supplier who operates in accordance with the legal requirements in relation to the control of salmonella. The producer should retain all feed delivery records. Properly labeled feed samples, from each delivery, must also be retained for three months after the supply has been used. The label must show batch number, date of delivery and supplier.

Feed should be stored in closed bulk storage bins hoppers or sealed bags. Feed bins, hoppers and lines should be cleaned and disinfected on a regular basis. Any feed spillage must be cleaned up immediately so as not to attract wild birds and vermin. Feed should only be added to bins that are dry after cleaning.

6. Water

Water must be fresh and clean and sourced from a mains supply or another source that is tested yearly for bacteriological quality by an approved laboratory. Corrective action must be taken if there is a failure in bacteriological quality. The water storage tank should be kept covered at all times to prevent contamination. On free-range sites access to streams and surface water should be avoided.

7. Visitors

Visitors and traffic movement should be kept to a minimum. A Visitors Log should be kept, recording at a minimum the name, date, organisation, sites visited on the same day and vehicle registration of the visitor. Visitors who need to enter the area where the ducks are kept should be provided with full protective clothing and requested to wash hands on entry to and exit from the area.

Medicines

All animal remedies for use in food-producing animals are currently authorised by either the Irish Medicines Board (IMB) or by the European Medicines Evaluation Agency (EMEA). Prescription medicines must only be administered as directed by a veterinary surgeon and withdrawal periods must be adhered to in all cases.
Medicines must be stored in a secure cabinet and a record kept of their use - date of administration, supplier, name of the person who administered the animal remedy and the name of the prescribing veterinary surgeon (if applicable). Eggs must not be supplied for human consumption until the withdrawal period for the medicine has been reached.

**Flock Sourcing**

In the sourcing of birds, safety, traceability, bird quality and welfare are key considerations. Where birds/flocks from more than one rearing house/farm are used for restocking, the same sourcing information should be provided for each bird/flock. If birds/flocks are to be sourced from the Republic of Ireland they should be sourced from a registered operator.

**Delivery**

Each shipment, upon arrival, should be clearly identified with the registration number of the farm of source. The shipment date, the number of birds received, the vehicle registration number, the cleanliness of the vehicle, the date of lay should be noted and a record of these maintained.

Documentation should be available for inspection to demonstrate that the day-olds sourced in Republic of Ireland were supplied from hatcheries registered with DAFF, and there should be written documentation available for inspection to confirm that they come from parent flocks that were tested and proved negative for salmonella within the previous twenty-eight days. A written declaration should be received from the haulier to the effect that all equipment used was dedicated to the transportation of day-olds alone. Where older birds are sourced in Republic of Ireland, the flock keeper must ensure that they came from farms registered with DAFF and there should be written documentation available for inspection to confirm that they come from flocks that were tested and proved negative for salmonella within the previous twenty-eight days. Where day-olds and older birds are imported under licence, they must have accompanying EU inter trade health certificate and appropriate transport documentation, as well as written documentation available for inspection to confirm that they come from parent flocks/flocks, which were tested and proved negative for salmonella within the previous twenty-eight days.

The supplier/hatchery should be aware that time of delivery ought to be coordinated with the rearer, so that adequate help is available to place the young birds in their new environment as quickly and efficiently as possible. Flock keepers will be aware of the need for close collaboration regarding welfare and
the importance of disease control, especially with regards to salmonella and other transmissible diseases.

The flock keeper should ensure the birds are left for a short time to familiarise themselves with their new surroundings. Later, the flock keeper should check to ensure that all birds have access to water and feed. If housed indoors any necessary adjustments must be made to equipment and temperature.

**Egg Collection/ Storage**

**Collection**

Equipment used for the collection of eggs must be kept clean and in good repair. Personnel involved in egg collection should not eat, drink or smoke during the collection or in rooms where eggs are stored. These personnel should ensure that their hands are washed before and after egg collection, with perfume-free soap (to prevent taint). Eggs must not be washed as washing renders them porous.

All equipment used in the handing of eggs should be cleaned regularly, ideally at the end of each working day. Any disinfectant that is used must be compatible with food production use. Egg trays should be visibly clean and free from faeces, broken eggs and feathers. All trays should be stored in a clean and dry environment that is free from dust and that is vermin-proof.

The flock-keeper must aware that the handling of eggs should be kept to a minimum to avoid contamination and breakages.

**Storage**

Eggs must be stored as soon as possible after collection in a cool, ventilated and insulated egg store that is not exposed to direct sunlight. The egg store should be separate from the laying house and should only be used to store eggs. Dirty, cracked and broken eggs should be separated out as soon as possible and handled independently, as higher risk items thereafter.

**Packaging**

Packaging should include instructions to cook duck eggs thoroughly.
Cleaning and disinfection

Dry Clean

Staff should remove all residual food from the feeding system and bulk feed bins. Feeders, drinkers, nest boxes, equipment, etc. should be dismantled and removed from inside the house for cleaning. Litter and manure should be removed from the site in a covered vehicle for disposal. Surface dust from ceilings, rafters, edges, fans etc should be vacuumed down. The bulk feed tanks should be cleaned and vacuumed. The floor should be swept and all the remaining debris removed to a vehicle for disposal. Personnel must turn off the power to all electrical devices.

Washing

Washing, using a high-pressure hose, should remove all dirt and debris. Work should start at the back of the house and proceed towards the front of the building. Next, the water storage tank should be washed. Ceilings, walls, passageways, steps, platforms, cages, and all equipment should be washed and cleaned thoroughly. Particular attention ought to be paid to the underside of all equipment. Bulk feed bins are also to be washed down. Water lines need to be cleaned and disinfected. This is a necessary procedure in order to avoid transfer of infection from flock to flock via the drinking water system. The header tank should be drained and checked to ensure that it is free of debris. The tank should then be filled with the required amount of diluted water and suitable disinfectant. This solution should be allowed to fill the drinking system, and left to stand for 2 hours and then thoroughly flushed out.

Any necessary repairs should be attended to at this time. A visual inspection using a checklist should be carried out after final wash, and before starting the disinfection programme.

Disinfection of House and Equipment

A suitable broad-spectrum disinfectant should be used and diluted with clean water. The manufacturer's instructions must to be followed. Note: Disinfectants are effective only on visually clean surfaces. The pressure washer should be set at low pressure and all surfaces saturated for the manufacturer's recommended contact time. Only disinfected equipment should be returned to a disinfected house. All surfaces should be allowed to dry thoroughly. The working order of all electrical equipment etc. should be checked.

Fumigating, misting or fogging is only effective on an airtight house. Protective clothing must be worn and the manufacturer's instructions followed.
Afterwards the house should be closed and secured to prevent recontamination. The perimeter fencing should be checked for any damage. Potholes should be refilled with fresh sand/soil mix.

**Manure Spreading**

Manure and waste water spreading and disposal shall be in compliance with S.I. No. 101 of 2009, EUROPEAN COMMUNITIES (GOOD AGRICULTURAL PRACTICE FOR PROTECTION OF WATERS) REGULATIONS 2009.

**Recommended Salmonella testing regime for duck egg flocks**

Duck flocks intended for the production of table eggs should be tested for salmonella at least at the day-old stage, at four weeks of age, at two weeks before moving to the laying phase or laying unit, at 22 to 28 weeks and every fifteen weeks during the laying phase.

**Day-old ducks**

Day-old ducks should be sampled as follows-

- samples should be taken, on the day of delivery of the ducklings to the holding, from the internal linings of the boxes in which the ducklings were delivered to the holding from the hatchery, with a minimum of one box-liner being sampled for every 500 ducklings delivered and each sample to consist of at least one centimetre square from each liner,

- samples shall be taken of the carcasses of all dead ducklings, up to a maximum of 60, found dead on arrival on the day of delivery to the holding,

**Adult laying flocks and young flocks**

Adult laying flocks, and young ducks that will move to the laying phase or laying unit in two weeks, should be sampled as follows-

Two pairs of boot (or sock) swabs should be taken from each house to which ducks have access. Samples should be collected from inside the house. All sections in a house should be represented in the sampling in a proportionate way. Each pair of boot swabs should cover about 50 % of the area of the house. The ducks should be housed for a sufficient length of time to provide an adequate supply of faeces for sampling.
The sampler should at all times follow biosecurity procedures as outlined by their private veterinary practitioner. Once inside the house, plastic overboots are put on over disinfected footwear. This prevents disinfectant from footbaths contaminating the boot swabs.

Moisten the boot swab cover with maximum recovery diluent (MRD: 0,8 % sodium chloride, 0,1 % peptone in sterile deionised water) or sterile water or any other diluent approved by the Department of Agriculture, Fisheries and Food (DAFF). Farm water containing antimicrobials or disinfectants should not be used. The boot swabs can be moistened by pouring liquid inside them before putting them on. The diluent can also be applied after the boots are put on, by using a spray or wash bottle.

Walking around shall be done in a manner that will sample representatively all parts of the house. All separate pens within a house should be included in the sampling. After collection of samples the boot swabs should be removed carefully, so as not to dislodge adherent material. The swabs can be inverted to retain the material. Place the swabs in a suitable, labeled, bag or pot.

**Manner in which the sample should be dealt with**

The sample should be packaged in a manner that ensures its integrity and dispatched to an approved laboratory on the day of collection. The list of approved laboratories is in attached Annex.

The sample should be identified in a manner that enables the laboratory to which it is sent to know-

- the name of the owner or person in charge of the laying flock and, if different, the address of the farm, date on which the sample was taken, description of sample taken and identity of the flock.

The flock keeper should keep a record of samples taken for the purposes of salmonella testing which contains at least the following information-

- date on which the sample was taken, description of sample taken, identity of the building or group of buildings sampled and the result of the test.

This record and the laboratory report should be retained for two years.
## Annex 1

**Laboratories approved to conduct salmonella testing of flocks**

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<thead>
<tr>
<th>Laboratory Name</th>
<th>Address</th>
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<tbody>
<tr>
<td>Anser Laboratories Ltd</td>
<td>69A Killyman St, Moy BT7I, Co. Tyrone</td>
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<tr>
<td>Complete Laboratory Solutions</td>
<td>Ros Muc, Connemara, Co. Galway</td>
</tr>
<tr>
<td>Enva Ireland Ltd</td>
<td>Raheen Industrial Estate, Ringaskiddy Road, Monkstown, Co. Cork</td>
</tr>
<tr>
<td>Microlab Ltd</td>
<td>Drumillard Little, Monaghan Road, Castleblaney, Co. Monaghan</td>
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<tr>
<td>Alpha Analytical Services Ltd</td>
<td>Cappagh Cross, Fermoy, Co Cork</td>
</tr>
<tr>
<td>Monaghan Veterinary Laboratory</td>
<td>Clones Road, Monaghan</td>
</tr>
<tr>
<td>Oldcastle laboratories Ltd</td>
<td>Cogan Street, Oldcastle, Co. Meath</td>
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<tr>
<td>Q-Lab Ltd</td>
<td>P.O. Box 27, Kerlogue Industrial Estate, Drinagh, Co Wexford</td>
</tr>
<tr>
<td>Mid-Antrim Laboratory Service</td>
<td>42A Broughshane Rd, Ballymena, Co. Antrim</td>
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<tr>
<td>Enfer Micro Laboratories,</td>
<td>Carrigeen Business Park, Clonmel, Co Tipperary</td>
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