



# agnote

For all districts

## Code of accepted farming practice for the welfare of the domestic fowl

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### Protection of Animals Act 1966

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### Introduction

This code is intended as a guide for people responsible for the welfare and husbandry of the domestic fowl (*Gallus gallus*). It recognizes that the basic requirement for welfare of poultry is a husbandry system appropriate to their physiological and behavioural needs. The basic needs of fowls are:

- readily accessible food and water to maintain health and vigor
- freedom of movement to stand, stretch and lie down
- visual contact with other fowls
- accommodation that provides protection from the weather and neither harms nor causes distress
- rapid identification and treatment of vice, injury and disease.

The code emphasises that, whatever the form of husbandry, managers and others responsible for the day-to-day needs of domestic fowls have a responsibility to care for animals under their control.

The importance of competent stockmanship in animal welfare cannot be over-emphasised, those responsible should seek expert opinion when fowls are in ill-health. Managers are encouraged to treat their animals efficiently and with consideration.

Assistance with the establishment of poultry farms and advice on the management of fowls can be obtained from qualified advisers in private or government employment.

This code is based on the knowledge and technology available at the time of publication and may need to be varied in the light of future knowledge. It does not replace the need for experience and commonsense in the husbandry of the domestic fowl.

### Accommodation

#### 1. Floors and other surfaces

Floors and other surfaces should be designed, constructed and maintained so as to minimise the risk of injury and disease, and adequately support fowls so that they can stand and move freely.

Deep litter floors should be checked frequently for dryness and friability. When litter is caked, wet, or excessively dusty the problem should be rectified.

#### 2. Housing

Advice on welfare aspects should be sought when new buildings are to be constructed or existing buildings modified. Such advice is available from qualified advisers in private practice or government employment.

Nest boxes and roosting areas should be easily accessible and should not be so high above the floor level that birds can be injured when ascending or descending.

In cages, fowls should be able to stand at normal height. Layer cages should be at least 400mm high if the fowls cannot extend their heads through the top.

Cage doors should be of sufficient size to allow fowls to be placed in cages or removed without injury.

Multi-deck cages should be arranged so that fowls in the lower tiers are protected from excreta from above.

Nest litter should be changed regularly so as to be clean, dry, friable and moisture absorbent.

### 3. Space

It is recommended that stocking density be periodically reviewed and adjusted, having regard to age, breed, strain and type of fowl, colony size, temperature, ventilation, lighting, quality of housing and occurrence of disease and cannibalism.

Maximum stocking densities for fowls are presented in Appendix 1.

### 4. Equipment

All equipment to which fowls have access should be designed and maintained so as to avoid causing either injury or pain.

Feeders and waterers should be checked for efficient operation at least once each day.

Automated hatchery equipment should have adequate back-up systems.

### 5. Lighting

Young chicks reared away from the hen require a light intensity of about 40 lux on the food and water for the first three days after hatching in order to learn to find food and water. It may then be reduced to as low as 2 lux during rearing.

During inspection of fowls a light intensity of at least 10 lux at bird level is required.

Where young fowls are housed in enclosed sheds using continuous light, a "blackout" training period of one hour in total in each 24 hours is recommended to prevent panic should lighting fail.

Where fowls do not have access to daylight they should be given lighting over a period of at least 8 hours per day. Photoperiods in excess of 20 hours per day may be detrimental to the laying fowl and should be discouraged.

### 6. Ventilation

Ventilation is required at all times to provide fresh air and prevent accumulation of water vapor, heat, ammonia, hydrogen sulphide, carbon dioxide, carbon monoxide and dust particles. Consideration should be given to the use of dust filters where air is recirculated in poultry houses.

The presence of ammonia is usually a reliable indicator of the build-up of noxious gases; it should not be allowed to exceed 20 parts per million (ppm) of air measured at bird level in enclosed buildings without immediate corrective action being taken. (A level of 10 to 15 ppm of ammonia in the air can be detected by smell. An ammonia level of from 25 to 35 ppm will cause eye and nasal irritation in man).

If stocking density on deep litter exceeds 28 kg/m<sup>2</sup> in summer months and 32 kg/m<sup>2</sup> in winter months mechanical air movement is essential. In force ventilated sheds assisted ventilation should be capable of moving up to 4.6 m<sup>3</sup> air/hour per kg liveweight during the summer months with an optimum velocity of air movement past the bird of 0.25 to 1.0 m/second.

Force-ventilated sheds should have automatic alarm systems to warn of power failure. A back-up alarm system to warn of temperature increase in such sheds is also essential and should operate through an alternative circuit to the power failure alarm system. In fan-ventilated sheds emergency ventilation provisions should be available.

### 7. Temperature

#### (a) Young chickens (day-old to five weeks)

Newly-hatched chicks have a poor ability to control body temperature and so they require supplementary heat to bring their environmental temperature up to the comfort temperature range of 28°-32°C, as evidenced by alert and active behavior.

Supplementary heat may be required for up to 5 weeks of age. Chick behavior is the best indicator of comfort and whether insufficient or excessive heating is being provided.

### *(b) Growing and adult fowls*

Fowls should be protected from draughts during cold weather and from direct sunlight during hot weather.

Adequate precautions should be taken to relieve stress produced by temperatures high enough to cause prolonged panting, particularly when a high temperature is accompanied by high humidity. Under such conditions fowls find it difficult to maintain normal body temperature. In hot weather provision of adequate cool water and ventilation is essential. Where high temperatures are causing distress foggers, roof sprinklers, fans or other systems should be used to control heat build-up within buildings.

It is essential that no stocking density or other constraining practice be allowed to prevent fowls adopting behavior to facilitate body heat loss in hot weather, such as panting, vibrating the floor of the mouth cavity ("gular flutter") standing erect with wings held away from the body and raising of the scapular feathers.

The construction and positioning of nest boxes should be such that they do not become heat traps.

### **8. Protection**

Fowls should be protected from predators and, if necessary, other fowls.

Poultry accommodation should be sited so as to be safe from the effects of fires and floods.

Fire-fighting equipment should be available to all fowl houses; fire hoses should be capable of delivering water of sufficient volume and pressure to control a fire in any building or part of any building.

When planning new buildings, consideration should be given to the use of construction materials with a high fire resistance, and all electrical and fuel installations should be planned and fitted so as to minimise the fire risk.

New buildings in which birds are housed should incorporate sufficient exits to allow for emergency evacuation of the building.

## **Food and water**

### **1. Food**

Fowls, other than newly-hatched chicks, should have access to food at least once each 24 hours with the exception of induced moulting and feeding regimes to control obesity (see Appendix 2). The period for newly-hatched chicks may be extended to not more than 72 hours.

Fowls should receive a diet containing adequate nutrients to meet their requirements for good health and vitality. Fowls should not be provided with food that is deleterious to their health.

Medicated food should only be used on competent professional advice, as the overuse or mixing of medicaments, or the medicament itself, may cause toxic injury.

When using mechanical systems for delivery of food alternative methods of feeding should be available. There should be enough food on hand, or ready means of obtaining food, in the event of failure of supply.

A trough length of at least 100mm per adult bird should be provided to enable each bird in a cage to feed at the same time.

### **2. Water**

Fowls should be provided with sufficient drinkable water to meet their physiological requirements. Water should be cool in summer. Newly-hatched chicks require water within 72 hours, otherwise dehydration may become irreversible.

Under no circumstances should fowls other than newly-hatched chicks be deprived of water for more than 24 hours.

Water that is stale, contaminated or deleterious to health should not be provided.

Medicated water should only be used on competent professional advice, as the overuse or mixing of medicaments, or the medicament itself, may cause toxic injury.

A minimum of one day's calculated water requirements should be available in storage or auxiliary supply in case of breaks, repairs or failure of pumping equipment.

When a poultry enterprise is first established, or when a new water source is obtained, the water should be tested for salt content and microbiological contamination and advice obtained on its suitability for poultry. As the composition of water from bores, dams or water holes may change with changes in flow or evaporation, the water may require more frequent monitoring for suitability for fowls. Information on water testing can be obtained from the local office of the Department of Agriculture and Rural Affairs.

A water channel of at least 100mm per adult bird or not less than two nipple drinkers or drinking cups should be provided within reach of each cage.

## **Health**

Those responsible for the care of domestic fowls should be aware of the signs of ill-health. Signs of ill-health in fowls include reduced food and water intake, reduced production, changes in the nature and level of their activity, abnormal condition of the feathers or droppings, or other physical features. If the person in charge is not able to identify the causes and correct them, he should seek advice from those having training and experience in such matters. Such persons may be specialist poultry veterinarians or other qualified advisers in private or government employment.

Poultry producers should also operate an effective program to prevent infectious disease and internal and external parasitism. Vaccinations and other treatments applied to poultry should be undertaken by people skilled in the procedures.

When an outbreak of feather picking or cannibalism occurs, or an outbreak appears imminent, environmental factors that may aggravate it should be examined and appropriate adjustments made, such as reducing the stocking density, light intensity, temperature, humidity or disturbances to the pecking order; removing birds with traumatic injuries; removing fowls observed to be instigating pecking, or eliminating shafts of bright sunlight.

Dead birds should be removed and disposed of promptly and hygienically. Records of mortalities, treatment given and response to treatment should be maintained to assist disease investigations.

Fowls with an incurable sickness or a painful deformity should be removed from the flock and humanely destroyed as soon as possible.

Premises and equipment should be thoroughly cleaned and, where required, disinfected at suitable times, (for example, before restocking) to control the carry-over of disease-causing organisms to incoming batches.

## **Inspections**

The frequency and level of inspection should be related to the likelihood of risk to the welfare of fowls, but should be at least once each day. Inspections are best made at feeding times. Under certain circumstances more frequent inspections may be required, such as during hot weather or during outbreaks of disease or cannibalism. Checks should also be made of the effectiveness of any automated feeding or watering systems where these have been installed.

Where cages are installed in multiple tiers it should be possible to easily and routinely inspect birds in all tiers.

Fowls should be checked regularly for evidence of internal and external parasites and effective treatment should be instituted according to the manufacturer's directions.

### **Hatchery management**

Culled or surplus chicks awaiting disposal should be treated as humanely as those intended for retention or sale. They should be removed and humanely destroyed as soon as possible.

Hatchery waste, including unhatched embryos, should be treated quickly and effectively to ensure its rapid destruction.

Chicks should be brooded within 72 hours of hatching. Weak, deformed and unthrifty chickens should be culled and destroyed humanely.

Chicks in brooders should be inspected at least twice every 24 hours and action taken to correct deficiencies in husbandry as they occur.

## Appendix 1. Maximum recommended stocking densities for domestic fowls according to housing type under good management conditions

System	Density (live-weight per unit of floor area)	Qualifications
<b>1. Deep litter</b> (where greater than 50 per cent of the floor is litter)		
Rearing of fowls for laying and rearing of layer and meat chicken breeders	30 kg/m <sup>2</sup> (applies to terminal live-weight at 16-22 weeks)	Floor area to include any slatted or metal mesh area and any area occupied by feeding and watering equipment.
Laying and breeding fowls	25 kg/m <sup>2</sup>	Floor area to include any slatted or metal mesh area and any area occupied by feeding and watering equipment and nest boxes. In the case of birds kept for breeding, liveweight to include weight of cockerels.
Meat chickens	40 kg/m <sup>2</sup>	Includes area occupied by feeding and watering equipment
<b>2. Cages</b>		
Rearing of fowls for laying or breeding	40 kg/m <sup>2</sup>	Relates to cage floor area.
Laying or breeding fowls (includes cockerels) 3 or more fowls per cage	52 kg/m <sup>2</sup>	Density relates to cage floor area.
2 fowls per cage	40 kg/m <sup>2</sup>	Irrespective of the number of birds per cage, each bird should have a minimum trough space of 10 cm.
Single fowl cages	26 kg/m <sup>2</sup>	
<b>3. Free range arks</b>		
Arks with slatted floors	40 kg/m <sup>2</sup>	
Solid floor houses	20 kg/m <sup>2</sup>	

## Appendix 2. Management practices

### 1. Artificial insemination

Artificial insemination is a highly skilled procedure which should be carried out only by competent, trained personnel maintaining a high standard of hygiene and taking care to avoid unnecessary disturbance or injury to the fowls.

### 2. Beak trimming

When performed as a preventive measure beak trimming should be performed by a competent operator soon after hatching. The operator may remove not more than half of the upper beak and one-third of the lower beak.

Further trimming of the beaks of pullets may be necessary to prevent vice during the laying period.

### 3. Dubbing

If dubbing is necessary it should be carried out by a competent operator within two weeks of hatching.

### 4. Toe trimming

To avoid injury to hens during mating, the last joint of the two inside toes of male breeding birds may be removed within 72 hours of hatching.

For all other classes of fowls, trimming, if necessary, should be limited to the nail of the toe only.

### 5. Blinkers ("spectacles")

Blinkers should only be used to control outbreaks of cannibalism where beak trimming has not been previously performed.

Blinkers should be applied by a competent operator and those which cause mutilation of the nasal septum should not be used.

Blinkers that may injure the fowl if they become entangled should not be used.

Blinkers should be applied to poultry only when nest boxes are situated at ground level.

### 6. Castration ("surgical caaponising")

This operation requires entry into the abdominal cavity and therefore is an act of veterinary surgery requiring anaesthesia and surgical training appropriate only to a registered veterinary surgeon.

### 7. Decrowing

This is an unacceptable practice and should not be undertaken.

### 8. Flight restriction

De-winging, pinioning, notching or tendon severing to restrict flight in fowls are unwarranted practices and should not be performed.

If flight restriction is required, the flight feathers of one wing may be trimmed with scissors.

### 9. Moulit inducement and controlled feeding

Methods of moulit inducement and controlled feeding that deprive fowls of water for more than 24 hours or feed for more than 48 hours should not be used.

Both practices should only be carried out on healthy fowls under close management supervision and under conditions that will not cause cold stress.

### 10. Wing and leg bands

Wing and leg bands for bird identification should be checked regularly and where necessary loosened or removed to avoid injury to the fowl.

### 11. "Pick-up" and crating of fowls

Fowls should be herded for pick-up only under the supervision of an experienced person to avoid suffocation and bruising. Fowls should be handled and crated gently to avoid joint dislocation and bone breaks. At all times care should take precedence over speed and labor costs.

Sick fowls should not be crated and should be treated or humanely destroyed.

If the operation of a poultry processing plant is disrupted, and the holding period of crated fowls exceeds 24 hours, crated fowls should be released into a shed where they have access to feed and water.

## Appendix 3. Additional recommendations for free range fowls

### 1. Management

Range fowls should not be kept on land that has become contaminated with poisonous plants or organisms that cause or carry disease to an extent that could seriously prejudice the health of poultry. The time taken for land to become so contaminated depends upon the type of land and the stocking density. Flocks should be moved before this stage is reached. Portable houses should be moved regularly to avoid continuously muddy conditions which may lead to the discomfort of the fowls.

Precautions should be taken to protect fowls against foxes, cats, dogs and other predators.

Shelter from sun and rain should always be available. Windbreaks should be provided in exposed areas.

### 2. Housing

The maximum recommended density for housing fowls on free range systems is presented in Appendix 1.

When fowls are transferred to range houses, precautions should be taken to avoid crowding and suffocation, particularly during the first few nights. Cannibalism is a danger under this system. Fowls should not be confined for too long during hours of daylight or subjected to direct sunlight during confinement.

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