# DOMESTIC FOWLS

Gallus SP

## varietal range difference

Both layers and broilers are available in a range of breeds.

## physical characteristics

* **Size:** height of Bantam hen, approximately 150mm; large fowl, approximately 700mm
* **Weight:** Bantam hen, approximately 500g; large male fowl, approximately 6kg
* **Weight at birth:** 20g - 40g
* **Incubation period:** 19 - 21 days
* **Range of breeding ages:** 6 months to 7 years, depending on breed. Some birds may continue to lay longer than 7 years
* **Body temperature:** 39.5C (+/- 0.5C)
* **Heart rate:** 150 - 400 beats/minute
* **Respiration rate:** 12 - 36 breaths/minute

## ENVIRONMENT

It is no longer appropriate to keep layers in cages as a routine procedure.

All Victorian schools must apply to VSAEC for permission to house layers intensively. They must comply with the Code of Accepted Farming Practice for the Welfare of Poultry and the Code of practice for the land transport of poultry.

Grassed runs should provide a minimum of 7.5m2 per bird, although more space is desirable.

In minimum confines, the chicken must be able to turn around without losing its normal stance, have room to flap its wings and be able to walk and forage. Food and water should be easily accessible.

For layers, the preferred temperature range is 20C - 28C. Temperatures below l0C and above 32C cause stress. Newly-hatched birds are very sensitive to temperature. Day-old chicks require an environment at 33C, which should be reduced by 3C every week until it reaches 21C at 28 days of age. All young birds are unable to maintain their body temperatures and therefore need to be supplied with an artificial heat source up until four weeks of age. Supplementary heat may be required between four and six weeks of age. The chicks themselves are useful indicators of temperature: if it is too hot, they disperse and if it is too cold they huddle together.

Shedded birds must have a reasonable amount of light, with cycles of light and darkness. If they are kept in the light all the time, they may panic and smother themselves in the event of a blackout.

Avoid draughts and chilling winds. Also, ammonia build-up in intensive situations must be prevented: it causes distress to poultry as well as to humans. This can be done by reducing the number of birds and improving ventilation.

Shelter provided for birds should be sufficient to protect them from climatic extremes – temperature, wind, rain and direct sunlight. Outside pens must be covered and secured to protect the birds from predators. Bedding should be composed of clean dry litter of rice hulls, shavings from untreated timber, straw or sand. Little cleaning should be required, if the litter is kept deep and dry.

Nesting materials must be clean, dry, friable and absorb moisture: for example, clean dry sand, straw or wood shavings. Nesting boxes can be used. If available, plastic drums of approximately 15L- 25L capacity, with the bases cut out, leaving small lips to hold back nesting materials, should be available at the ratio of one nesting box for every three or four birds. The nest should be reasonably dark and sufficient to isolate one bird from another to avoid egg damage and aggressive behaviour by some birds during nesting. It is important to ensure that there is adequate perch space to accommodate all the birds at once. Each bird should be provided with at least 150 mm of perch space.

## FOOD AND WATER

Suitable food includes pellets, crumbles, mash, grain, small amount of green feed and grit. Commercially prepared food is recommended, as it meets of the birds' nutritional needs.

Adult fowls require 120g - 160g of pellets per day. These requirements vary with the quality of diet, breed and physiological status of each bird and environmental conditions. Check with the Department of Environment and Primary Industries for the correct diet.

Demand feeding should be practised, preferably at least twice a day, in the morning and evening.

A clean, adequate supply of water, placed in a cool shaded area, is required. If automatic nipple drinkers are used, they should always be fitted with fail-safe mechanisms. Consumption ranges from a few millilitres for chickens to 500mL per day in summer for adult birds.

## HANDLING

Chickens must be handled calmly and with care to prevent distress and injury to them.

Chickens should be captured and handled only when necessary and be accustomed to handling from a young age. Avoid chasing birds as this agitates them and causes them to pile up in corners. If a catching hook is used, a bird should be drawn towards the handler firmly but not so quickly as to damage shank, leg or joints. Firmly and quietly transfer the bird to the holding position.

The holding position involves restraining one hock joint between the index finger and thumb, and the other hock joint between the third and fourth fingers. The bird's breast, or keel bone, sits comfortably on the palm of the hand with the bird's head pointing towards the handler's body and the vent away.

When walking with a bird, its head can be tucked under the carrier's upper arm. The non-holding arm can be used to assist with restraining the bird and prevent the wings from flapping.

## NORMAL BEHAVIOUR

Housing and husbandry practices must allow chickens to express their normal behaviours. These include:

* foraging behaviour: chickens need to forage for food by scratching and pecking as they investigate their surroundings. If they are not allowed to forage, they peck, pull and tear at objects and other chickens, often developing feather-pecking behaviour
* locomotive behaviour: hens will walk 1km - 1.5km per day, if space permits. They will also fly to elevated perches if provided with the opportunity
* resting behaviour: chickens prefer to roost on higher rather than lower perches. They may rest by standing, lying, sleeping or dozing
* preening, stretching, flapping, dustbathing, sunbathing and body shaking are all comfort behaviours. They also help to keep the birds' feathers in good shape
* social behaviour: chickens develop fairly stable groups, with birds holding various ranks within these groups
* nesting and laying behaviour: chickens need adequate nesting sites or they become stressed and develop abnormal behaviours
* enriched environments reduce fear and stress in chickens

As chickens are flock animals, a minimum of two should be kept at a time

A healthy domestic chicken's normal behaviour is characterised by alertness, with an erect carriage.

## AVIAN INFLUENZA

This information is taken from the [Victorian Department of Environment and Primary Industries](http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/animal-diseases/poultry/avian-influenza). Always refer to that website for the latest information on this and other animal topics.

'Avian influenza' (also known as 'bird flu') is a highly contagious viral infection found primarily in avian species. Many waterfowl species can carry the disease without showing symptoms, while domestic fowls, such as chickens and turkeys, can rapidly develop a fatal condition.

Under Victorian legislation, avian influenza is a notifiable disease and must be reported to the Victorian Department of Environment and Primary Industries:

* The Customer Service Centre of the [Victorian Department of Environment and Primary Industries](https://www2.delwp.vic.gov.au/) on **136 186**
* [Emergency Animal Disease Hotline (24 hour) on **1800 675 888**](http://www.farmbiosecurity.com.au/about/emergency-animal-diseases/)
* [Local DPI Animal Health or Veterinary Officer](http://www.farmbiosecurity.com.au/about/emergency-animal-diseases/)
* [Department of Human Services](https://dhhs.vic.gov.au/contact-us) phone **1300 650 172** on (8am to 5pm Monday to Friday, recorded message after hours)

## SIGNS OF ILLNESS

Birds' health should be monitored at least daily and preferably more often. The first sign of ill health may be noticed as a change in the chickens' natural demeanour. They may be listless or lethargic. On closer examination, signs of illness can include:

* diarrhoea
* nasal discharge
* sneezing
* nervous signs or paralysis
* inactivity: head under wing, feathers ruffled, isolated from group
* pale or purple comb
* frequent shutting of eyes
* little response when touched or pushed, or often pecked at by another fowl

A failure to thrive or grow is another sign of illness.

If you are unable to identify and correct the cause of ill-health, assistance should be sought from veterinarians who are familiar with chickens. Illnesses, injuries, and treatments given should be documented in the appropriate records.

## EUTHANASIA

In the case of a bird becoming so sick, diseased or injured that recovery is unlikely or undesirable, on humane grounds euthanasia must be arranged with a veterinarian or a person competent in the technique for fowls.

Carcases must be disposed of in accordance with local council regulations.

A record of deaths is required for the annual report to VSAEC.

## FATE PLANNING

A fate plan should be considered before using chickens in any programs. As social, flock animals, chickens must not be re-homed in isolation, a minimum of two should be housed together.

Chickens can be sold privately, at auction or consigned to registered processors.

Chickens must not be released into the wild.

## MORE INFORMATION

* [Australian and New Zealand Council for the Care of Animals in Research and Teaching](http://www.adelaide.edu.au/ANZCCART/)
* [Victorian Department Economic Development, Jobs, Transport and Resources](http://economicdevelopment.vic.gov.au/)
* [University of Sydney (Faculty of Veterinary Science)](http://sydney.edu.au/vetscience/)
* A Guide to Keeping Poultry in Australia, Reading D. (1990), Ringwood, Victoria: Ringwood O'Neil