

### INTRODUCTION

Geese can be kept for egg production or meat. This leaflet focuses on rearing geese for their meat; usually these are known as “table” birds. It does not cover the topic of goose liver pâté. It should also be noted that force-feeding geese for liver pâté production is illegal in the UK.

Christmas is the main season for sales of geese, although the traditional season for eating goose meat runs from Michaelmas (29<sup>th</sup> September) through to the new year. Almost all the geese reared in the UK are for this seasonal market. In 2007, Defra reported that there were approximately 300 seasonal geese producers throughout the whole of the UK, raising approximately 300,000 birds. Of these, around 100,000 birds were produced by one company. Excluding this major producer, the average flock size for seasonal producers is 200 to 300 birds.

A major attraction of geese is their efficient digestive system and natural grazing habit. This means that birds of marketable size can be produced from a largely grass based system.

### GOOSE MEAT

Goose meat is rich in protein (typically around 25g per 100g). The fat content of the meat varies depending on: the breed of bird used; the way it has been managed; and the feed it has eaten. The fat content of the meat once cooked depends greatly on the cooking method. Goose meat without its skin is not particularly high in fat. Furthermore, it tends to have a relatively high proportion of monounsaturated fatty acids. In recent years, the demand for goose fat in its own right has grown exponentially following promotion by TV chefs as the ideal fat to use when cooking roast potatoes.

### PRODUCTION

Birds are usually either killed at around 10 weeks of age, as a lightweight “green” bird; or they are kept on until approximately 24 weeks of age. In between these ages, the birds are difficult to pluck as they have a high proportion of “pin feathers” (feathers at the developmental stage which still have a blood supply).

The birds’ most rapid period of growth is up until approximately 10 to 12 weeks of age. Thereafter, they will grow much more slowly. Birds for the Christmas market can be held on an almost exclusively grass based ration until a few weeks before Christmas. At that stage, supplementary feeding begins again to ensure the birds are in peak and plump condition at killing.

To produce the traditional heavy Christmas birds, day old poults will need to be bought, from a reputable supplier, in June or July. For the first three weeks, birds need to be kept indoors with supplementary heating and lighting. Day old chicks need to be kept at around 30°C. This temperature is gradually reduced over a three week period as the birds’ feathers develop and they become acclimatised to the ambient temperature.



## BREEDS

European breeds of domesticated goose have been bred from the wild greylag goose (*Anser anser*). The two most commonly kept breeds of geese for meat production are the Embden (white plumage) and the Toulouse (similar brown / grey colouring to the wild greylag geese, but with a much heavier build). Within the breeds, strains of birds have been developed with particular characteristics. The main strain for UK seasonal turkey production is the Legarth, which puts weight on quickly without becoming excessively fatty.

There are, however, many different breeds of geese. In recent years, the popularity of Asian geese for table bird production has increased. These birds tend to be smaller, producing carcasses of a more manageable size for most households throughout the year.

Male geese (ganders) produce a heavier bird than the females. Embden males will finish at around 15kg, females at around 9kg (liveweights). Goslings are sexed by “venting” – i.e. examination of reproductive organs.

## FEED & WATER

Geese are naturally grazing animals and can subsist on grass alone provided stocking densities are low and the geese are allowed to free range: while doing this, they will inevitably be eating a diverse range of small invertebrates which supplement the grass. The appropriate stocking density will depend on the composition of the sward the birds have access to; as a guideline, 150 birds per hectare is about average.

Geese prefer to eat young, fresh growth, so the sward needs to be managed to maximise this. If the sward height is more than 10cm-12cm, mowing is recommended because long grass can cause crop-binding. This is a blockage in the crop that prevents the bird from feeding.

In practice, for commercial production, grazing is supplemented by additional feed. It is possible to mix a ration with wheat as the main feed. This is something to discuss with your veterinarian or feed supplier to ensure that the appropriate balance of nutrients is achieved. Alternatively, specialist waterfowl feeds are available. The main ration types are:

- Starter crumbs/pellets – from day one to week three (high protein, c.20%)
- Grower pellet – from week three to week eight or ten
- Holding ration (either specialist pellets, or wheat) - until three weeks before slaughter
- Finisher pellets - three weeks prior to slaughter (nb – birds should be fasted the day prior to slaughter)

As with all poultry, it is essential to ensure the birds have access to grit and clean water at all times.

The age at which a bird finishes will depend on market and customer requirements. In general, seasonal birds finish at around 24 weeks.

## HOUSING

Free range birds need access to a place of shelter at all times (they will seek shelter in inclement weather). They also need protection from predators, particularly foxes and dogs.

For these purposes, a simple, watertight structure which can be closed up at night is all that is required. The house will need frequent cleaning as geese are quite dirty animals. A thin layer of woodchip is recommended as the bedding material.

Whilst every effort is made to ensure the information provided in this leaflet is correct, CALU cannot be held responsible for the consequences of any actions taken on the basis of its content.

[www.calu.bangor.ac.uk](http://www.calu.bangor.ac.uk)

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## COSTS

Costs of production will be very dependent on the amount of bought in feed used. At the time of writing, small volume purchases of feed average around £0.50 per kilogram. At an average feed conversion rate of 4:1 this would represent a cost of approximately £20 for a 10kg bird (liveweight) if only feeding on bought in feed. In practice this cost will be reduced as the birds will also graze.

Other costs to consider include labour, housing, veterinary supplies, the cost of slaughter and dressing (including transport to slaughter if the birds are slaughtered off-site).

The price achieved at retail for free range birds is very variable, and quite dependent on the demographic characteristics of the area in which the birds are sold. In 2008 CALU identified free range Christmas birds retailing at prices ranging from £7.50 to £20.00 per kilogram for oven ready birds.

## SLAUGHTER

Producers rearing less than 10,000 birds per annum and selling direct to the final consumer may slaughter the birds on their premises, provided that:

- the Food Standards Agency (FSA) and Local Authority have been notified and given approval;
- the premises have appropriate health and safety measures in place and have been approved by the State Veterinary Service;
- AND the slaughter person holds a Registered Licence for slaughtering geese with the specific equipment to be used. Note that licenses for slaughtermen are very specific to both the species and the equipment that the assessment took place on.

For larger producers, birds must go to a registered slaughter premises. A list of currently registered poultry slaughterhouses is available on the FSA website ([www.food.gov.uk](http://www.food.gov.uk)).

## HEALTH AND WELFARE

Geese, particularly when free ranging, tend to be relatively robust and free from health problems. One inconsistency with this statement is that free ranging birds are more liable to parasitic worm infestations (treatable with proprietary worming products).

Younger birds are more susceptible to health problems than mature birds. Regular observation of the birds will help to ensure that any health problems are quickly spotted. Good management practices, e.g. ensuring birds are only bought in from reputable suppliers, keeping breeding birds away from fattening birds, inspecting younger birds before older birds, minimising contact with visitors and wild birds, will all help to reduce the likelihood of health problems.

## LEGISLATION

The welfare of farmed geese (and all other farmed animals) is protected by the Animal Welfare Act 2006 and by the Welfare of Farmed Animals (Wales) Regulations 2007. Anybody keeping more than 50 birds **must** register their holding on Defra's Great Britain Poultry Register (tel: 0800 634 112 or visit <http://www.defra.gov.uk/animalh/diseases/vetsurveillance/poultry/index.htm>). It is good practice to register with Defra, even if you keep fewer than 50 birds.