



The Welfare of Turkeys



Around 14 million turkeys were slaughtered in the UK for meat in 2017¹; it is estimated that in the UK, around 10 million turkeys are eaten at Christmas time². In the UK turkeys reared for meat may be kept in indoor and outdoor systems. The RSPCA is concerned that the way in which many turkeys are reared, handled, transported and slaughtered/killed could be greatly improved, and is working in a number of ways to help safeguard the welfare of turkeys at all stages of their lives.

Turkey natural history and behaviour³

Modern farmed turkeys descend from wild turkeys that are thought to have originated in Mexico. They were first domesticated around 2,500 years ago, and brought to the UK in the sixteenth century. Intensive development into the present day domesticated turkey has only taken place over the last 50 years or so.

Wild turkeys can be found in a variety of habitats from forests to plains, in North America down to southern Mexico. Turkeys are omnivorous and spend the majority of the daytime searching for food, such as plants, seeds, insects and worms. They roost in trees at night and for protection from predators. Wild turkeys are very active birds, reaching speeds of up to 25 miles per hour when running and can fly in short bursts.

Wild turkeys form strong and complex social structures, communicating by means of calling, touching and visual displays. In the winter, wild turkey stags (males) and hens (females) live in large separate flocks. As the breeding season begins, stags become territorial and attract hens by vocalising with gobbling sounds and performing elaborate displays with tail-fanning. Hens will seek cover for building nests, laying 8-15 eggs, sitting on them for 28 days. Young turkeys (called poults) stay with the hen until they are about six to seven months old.

The average weight of a wild turkey stag is around 7.5kg. Through selective breeding for faster growth rates, some domesticated commercial turkey stag breeds can reach around 20kg in 20 weeks.

Commercial breeds of turkey have many of the same behavioural drives as their wild relatives, including a wide range of comfort and grooming activities, such as preening – involving the arrangement, cleaning and general maintenance of the feathers by the beak or feet, raising and ruffling the feathers, stretching the wings, and dustbathing.

Domestic turkeys can show many anti-predator responses, such as freezing, alarm-calling, running rapidly away, flying away or attempting to take off, and vigorous struggling if caught. Sudden events, in particular noises, may cause such responses.

Turkeys have unusual looking flaps and protrusions of skin covering their beak (the 'snood'), below their chin (the 'wattle') and on the neck ('caruncles'). These are often more prominent on males and can become brighter red when turkeys are excited, courting, aggressive or scared. Stags have spurs on the back of their legs that they use to spar with other males, and large tail fans that they display to hens. Turkeys have no external ears, but have good hearing, and can see in colour.

Breeding

Because of the large size of typical commercial turkey breeding stags (males) compared to the smaller and lighter turkey breeding hens (females), natural mating is rare as it is difficult for the stag to get close enough to the hen without causing injury to her. Instead, most breeding is carried out by artificial insemination. This also helps to ensure successful fertilisation. Semen is gathered from breeding stags, (which tend to be kept separately to make this process easier) and the breeding hens are then inseminated with the semen.

The welfare of turkeys

Commercial turkey production

In 2017 around 14 million farmed turkeys were killed/slaughtered in the UK¹. Globally, the USA is the top producer and consumer of turkey meat⁴. In 2016 the USA produced around 2.7 million tonnes of turkey meat; in the same year the European Union produced around 2 million tonnes, and the UK produced 164,000 tonnes⁵.

The most common breed of commercially reared turkey in the UK is a white feathered, faster growing bird which is used for the general turkey meat market. Smaller, slower growing bronze and black breeds are also farmed, in particular for specialist and seasonal markets. Both females and males are used.

Turkeys are reared to a range of weights and size, depending on what is required. Demand for a larger bird with greater amounts of breast meat has meant that the modern-day commercial turkeys are now heavier and have much greater developed breast muscles.

Hatching

Turkeys hatch in 28 days in incubators, in a specialist hatchery. They are then separated into males and females before being transported to either an indoor, pole barn or free-range production system.



1102012 ©RSPCA Assured

Turkeys in a pole barn

Production systems

There is no specific legislation covering the welfare of turkeys, although general requirements for farmed animals in EU legislation apply. European law does set minimum standards which must be adhered to if the meat is marketed using terms such as 'extensive indoor', 'free range' or 'organic'.

INDOOR

The majority of turkeys in the UK are reared indoors in large, purpose-built sheds or converted farm buildings. Up to 25,000 birds may be housed in one building. The environment is closely controlled, including the lighting, temperature and ventilation. Aside from the litter on the floor, feeders and drinkers, the birds' environment may be fairly barren. In the UK, where farms are working to the main industry standard, the birds are provided with some environmental enrichment.

There is no EU legislation setting a maximum stocking density (amount of space provided per bird) for turkeys, however the main industry standards for turkeys in the UK sets maximum stocking densities dependent on the birds live weight, for example, turkeys with a live weight of 13kg can be stocked at around 51kg/m²⁶.

Some farmers may go above standard industry practice by providing birds with more space, more environmental enrichment and/or natural daylight through windows for turkeys. Where the term '**extensive indoor**' is used, European legislation requires that the stocking density of turkeys does not exceed 25kg/m² floor space.

POLE BARN

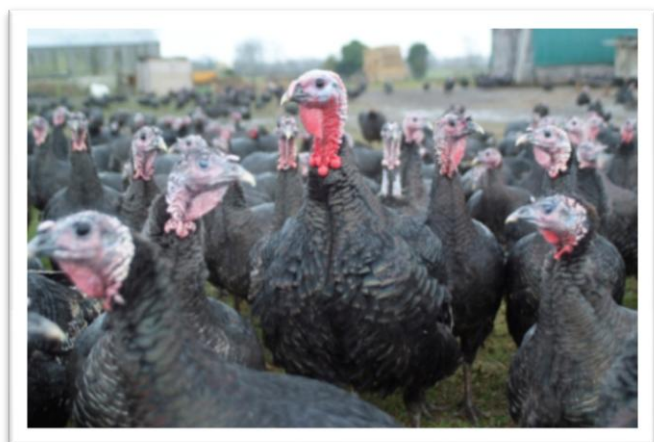
Pole barns tend to be used for seasonal turkey production, often making use of converted buildings. The upper part of the barn walls are open, allowing natural light and air in, with supplementary light provided just for the darker winter months. Similar to indoor farms (described above), birds may have few opportunities to express their natural behaviours, but there is often more space given to the turkeys.

Turkeys may not spend their whole life in this system. Many start in an indoor production house on a separate farm, before being transported to the pole barn at around 6 weeks of age.

The welfare of turkeys

FREE-RANGE AND ORGANIC

Housing for free-range turkeys may be similar to 'extensive indoor' systems, having a maximum indoor stocking density of 25kg/m² but with the addition that birds have access to an outside range area. The birds may also be brooded elsewhere for the first 6 weeks. Legislation for free-range turkeys requires birds have continuous daytime access to at least 4m² of range per bird – which is mainly covered by vegetation – for at least half their life. Free-range turkeys may also be organic, and in which case subject to the requirements of an organic certification body.



Free-range RSPCA Assured turkeys

Catching, transport & slaughter/killing

The average liveweight of turkeys at slaughter in 2017 was around 13kg¹. Larger birds tend to be grown year-round for portioned or processed products, whilst birds sold whole – usually for the Christmas market – tend to be smaller. Once at the required weight for slaughter/killing, turkeys will be placed into crates for transportation to the abattoir. Most turkeys in the UK are killed with a humane mix of gases, either inert gases, such as nitrogen or argon, or inert gases mixed with a maximum of 30% carbon dioxide, or carbon dioxide delivered in two phases.

Key welfare issues

SPACE

All turkeys should be able to freely move around, stretch and be active. Turkeys reared in standard indoor systems may not be provided with enough space to move around freely and properly exercise. Insufficient space can lead to increased risk of foot pad lesions, caused by the birds standing or sitting on litter which may have high levels of ammonia from a build-up of droppings, and heat stress.

ENRICHMENT

All turkeys should be able to express their natural behaviours including perching, foraging and dustbathing. Turkeys reared in standard indoor systems may not be provided with sufficiently varied and / or accessible facilities to fully meet these needs and as a result, can suffer from boredom and frustration.

Environmental enrichment can include bales of straw, perches and hanging pieces of rope, bottles and vegetables. The provision of natural light also helps to encourage these natural behaviours.

INJURIOUS FEATHER PECKING

Turkeys can sometimes peck and pull at each other's feathers, which can lead to injuries and sometimes cannibalism. The possible reasons for injurious feather pecking occurring can vary widely, but can include the housing environment, space, nutrition, health and any sudden changes.

To reduce the risk of injurious feather pecking, turkeys may be beak trimmed to remove the pointed tip of the beak. This procedure reduces the risk of damage caused to other turkeys, but can be painful, particularly if using a 'cold-cutting' technique. A more consistent and non-invasive technique using infrared energy is now more commonly in use.

LIGHTING

Turkeys may be kept in low levels of light to help reduce the risk of injurious feather pecking. However, keeping turkeys in low light can lead to blindness and prevents the birds from performing many of their natural behaviours.

The welfare of turkeys

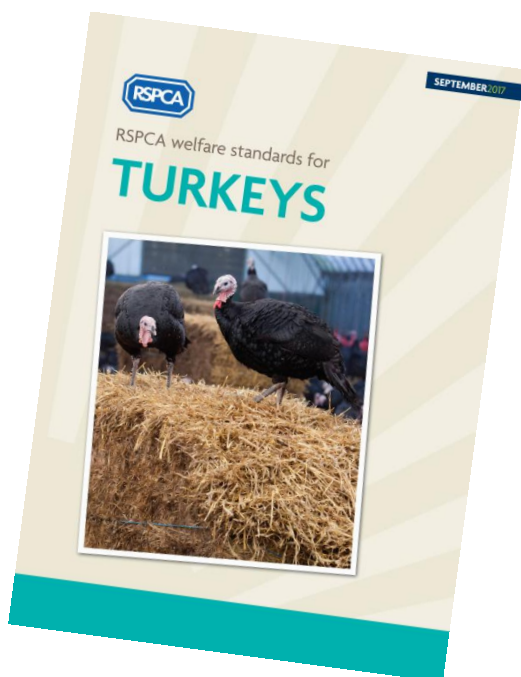
The RSPCA believes that turkeys should be provided with natural daylight. However, whether turkeys are kept under natural or artificial light, the lighting levels should be sufficient to encourage bird activity, to allow the birds to see without difficulty and be properly inspected. Providing turkeys with natural light is likely to increase bird activity, and enrich the birds' environment. Natural light provides a range of light levels throughout the day within the house and is also spectrally different to artificial sources.

BREEDING

Customer demand for a larger bird with greater amounts of breast meat means that the modern-day strains of turkeys can be very heavy, with much greater developed breast muscles. This is particularly the case for male turkeys, which has led to the vast majority of turkeys now being produced via artificial insemination, in order to prevent injury to the hens and help ensure successful fertilisation. The potential to cause distress during such sensitive procedures is high, and as such, the procedure needs to be carried out by trained and competent operators.

HANDLING AND TRANSPORT

Turkeys can experience considerable suffering if not handled carefully. They are particularly vulnerable when they are caught at the end of rearing and put into transport crates, and during transport. If turkeys are not handled appropriately during this time, there is the risk of causing broken legs, wings, dislocated hips and bruising.



Work of the RSPCA to improve turkey welfare

WELFARE STANDARDS

The RSPCA encourages all turkey producers to adopt the 'RSPCA welfare standards for turkeys'. These are intended to represent 'good practice' and are regularly updated with input from expert scientific, industry and veterinary advice to help ensure that they continue to be at the forefront of farm animal care and welfare, and are also achievable on commercial farms. The standards cover all areas that can affect turkey welfare at all stages of their lives, including the environment, handling, transport and slaughter/killing. The welfare of turkey poults at hatching is also covered in detail in the 'RSPCA welfare standards for hatcheries'.

Some key requirements of the RSPCA welfare standards for turkeys are:

- plenty of space for turkeys to move around and exercise
- natural daylight to encourage activity
- environmental enrichment (including straw bales, perches and rope to peck at) allowing turkeys to perform their natural behaviours
- natural cover on the range to encourage free-range birds outside and to make full use of the range
- a veterinary health and welfare plan to help monitor and maintain the health and welfare of the birds.

ADVOCACY WORK

The RSPCA takes every appropriate opportunity to offer advice about improving the welfare of turkeys. This may be in response to the government with regards to legislation or in consultation with the industry.

CAMPAIGNING WORK

The RSPCA's campaign work has helped to highlight the welfare of turkeys particularly during the lead up to Christmas, when more turkey is bought than at any other time of the year. The Society encourages everyone to choose turkey labelled RSPCA Assured. RSPCA Assured is the RSPCA's own higher welfare farm assurance and food labelling scheme, which inspects farms, hauliers and abattoirs to the RSPCA welfare standards for farm animals.

The welfare of turkeys

RESEARCH PROJECTS

Relevant new scientific research is always taken into consideration to help develop the RSPCA welfare standards for turkeys. In addition, trials and visits may be carried out in collaboration with particular companies and/or farms to help look into specific issues, such as transport, stocking density, range enhancement and humane killing. Such work not only helps to inform the standards, but also wider RSPCA policy.

How can you help?



If you eat or buy turkey, and are concerned about welfare, then look out for products carrying the RSPCA Assured logo. If you can't find RSPCA Assured turkey, then look for products labelled free-range or organic.

RSPCA Assured is the RSPCA's farm assurance and food labelling scheme that aims to ensure animals are reared, handled, transported and slaughtered/killed according to strict RSPCA welfare standards, developed and monitored by the RSPCA.

If more consumers insist on higher welfare products, more supermarkets will want to stock them, which will encourage more farmers, hauliers and abattoirs to improve their practices and ultimately more farm animals will benefit.

Take part in the RSPCA's campaigns for farm animals by visiting www.rspca.org.uk/campaigns/farm.

Recommended further information

- RSPCA welfare standards for turkeys
- FAWC Report on the welfare of turkeys, 1995. Available from: <http://www.fawc.org.uk/reports/turkeys/turkr007.htm>
- Council of Europe Recommendation concerning turkeys, 2001

References

1. Defra (2018) UK Poultry Slaughtering, weights and poultry meat production – monthly dataset [online]. UK: Department for Environment, Food and Rural Affairs. Available from: www.gov.uk/government/publications/poultry-and-poultry-meat-statistics [Accessed 26/02/2018].
2. British Turkey (2018) Christmas statistics and traditions [online]. UK: British Turkey. Available from: www.britishturkey.co.uk/facts-and-figures/christmas-stats-and-traditions.html [Accessed 06/06/2013].
3. Council of Europe (2001) Standing Committee of the European convention for the protection of animals kept for farming purposes – Recommendation concerning turkeys [online]. Council of Europe. Available from: www.coe.int/t/e/legal_affairs/legal_cooperation/biological_safety_and_use_of_animals/farming/Rec%20Turkeys.asp [Accessed 06/06/13].
4. Shea, M. World turkey market: an overview, *in proceedings of the 3rd Turkey Science and Production Conference*, April 22-24, 2009, Macclesfield, UK., 15-18. Cheshire, Turkeytimes.
5. The Poultry Site (2009) International Egg and Poultry Review: Turkey Production [online]. UK: The Poultry Site. Available from: www.thepoultrysite.com/poultrynews/18860/international-egg-and-poultry-review-turkey-production [Accessed 06/06/13].
6. FAOSTATS (2018) Production: Livestock Primary [online]. Rome. Food and Agriculture Organisation of the United Nations. Available from: www.fao.org/faostat/en/#data/QL [Accessed 26/02/2018].
7. Assured Food Standards (2017) Red Tractor Assurance for Farms – Turkey Standards. Version 1.0.