

PLANET FOOD

December 2001

TURKEYS

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A long time ago, my mother was given a turkey by her brother. His wife had found that the two turkeys she kept were attacking visitors. But she didn't want to kill them. My mother told us that it was no problem killing him if he didn't have a name. My sister promptly called him Thomas. And he was very friendly, perhaps because it was no longer competing with his mate. He would come into our kitchen and strut around the place as if he owned it. My mother did kill him and served him up for Easter lunch. But my sister had become fond of him and wouldn't join the feast.



More recently my sister-in-law kept turkeys. She says they were completely free-range. So much so that they frequently had to be brought back from the local cricket pitch, where they liked to wander. She also got very fond of her turkeys saying they were 'as sweet as bunnies' and much more endearing than chickens, which made it rather sad when the time came to eat them.

In America, where turkeys apparently originate, it is traditional to serve them at Thanksgiving. But the UK is alone in making it a Christmas tradition, with about 10 million turkeys sold for the seasonal market. This month I'm going to look at when turkeys got to Britain, how fresh turkeys can be sold by supermarkets, the problems associated with intensively reared birds, why white turkeys are more common than coloured ones and the growing interest in pure breed turkeys.

TALKING TURKEY

The Aztecs discovered turkeys, domesticated them and realised they were good to eat. Turkey eating then spread through the Americas. And in the 1500s a William Strickland brought back the 'strange looking birds' to England, via Spain. As one of the early explorers he had landed in North America with Sebastian Cabot and was introduced to turkeys by the native Indians.



Both the Aztecs and the Indians used turkeys for their feathers as much as their meat. Indian head-dresses used feathers from eagles mixed with turkey feathers, but as eagles have become protected, these head dresses are now exclusively made from turkey feathers. Pure breed turkey breeders in the UK have found that there is still a demand for the feathers from native American Indian hobbyist dancers!

The turkey almost became the emblem for the United States – it is a very splendid bird – but it was decided that the bald eagle was a bit more macho. And turkeys became special by being served at Thanksgiving.

In the UK turkeys were domesticated from the start but were initially in short supply. In 1541 Archbishop Cranmer prohibited turkey being served in excess of one turkey cock on state occasions - the females were too precious as they were needed for breeding. Three years later the turkey had become the Christmas dish for farmers. And in 1573 a Thomas Tusser included turkey as 'Christmas fayre' in his book entitled '*500 points of good husbandry*'. Gradually the reputation of the bird spread. George II was a great enthusiast, introducing a flock of 3,000 birds in the Royal Park at Richmond, as a source of food for his table.

During the 2nd World War American soldiers fed well on turkey and ice-cream. Many British soldiers felt this was far superior to their 'Mac Conokie stew' – a tinned stew they heated up on their tank engines. They were keen to visit American lines and share the turkey!

Nowadays it is still possible to go on wild turkey shoots in America, although this is very tightly regulated. At one stage wild turkeys were nearly wiped out but conservation measures taken to protect them for shooting parties, may have contributed to their numbers increasing in recent years.

The first turkeys brought back to this country are thought to be the origins of the *Norfolk Black*, which can still be found here. Although there are fewer turkey breeds than chickens, they have been hybridised, most significantly to increase their breast meat and to get pure white birds.

Even commercial breeders, however, are keen to maintain the pure breeds. **The Roslin Institute** has been carrying out research comparing commercial breeds with pure breed Nebraskan turkeys. One thing they discovered was that commercial turkeys actually had the same amount and weight of feathers as pure breed birds but they looked less-well feathered because they are larger – generally between two to three times bigger. They also found that birds with a large body weight had a tendency to produce more double yolks, which do not result in twins, but rather makes the eggs unusable for incubation.

Although there is a lot of information that research could reveal, funding has dried up from both government and business. The Roslin Institute found that they no longer needed their Nebraskan turkeys. Luckily Janice Houghton-Wallace from the **Turkey Club UK** discovered this and has taken over the management of the birds passing them on to members in the hope that they can increase numbers.

The Turkey Club UK aims to give the turkey a higher profile in its own right because, Janice says, it is a very majestic bird. They are keen to preserve the pure breed turkeys and offer advice and assistance to anyone wishing to keep turkeys. Pure breeds are kept as exhibition birds, as well as for eating. Apparently the eggs are delicious too. Although Janice does feel that there are some environmental issues concerning large intensively reared turkeys, her attention is more focused on the pure breeds. But she does point out that if people did not buy the cheap meat, it would not be available.

When I first contacted Janice, she was rounding up her turkeys for the night. Talking to her later, she explained the need to get them inside before they flew into the trees to roost for the night. The birds have not had their wings clipped and are good flyers, but they would still be vulnerable to prowling foxes. She then went on to tell me about the history of turkeys and how keen she is to promote pure breed birds. Anyone interested in rearing them should contact the Turkey Club UK.

SELLING TURKEY

In 1960 there were 63,000 butcher shops and now there are only 9,000. As the supermarkets grew, the butchers shops declined.

Selling fresh turkeys for Christmas was one area where traditional butcher's shops had a real advantage over supermarkets. Although butchers shops do still sell fresh turkeys, Len Goodman from the **Turkey Exchange** says that it is a dwindling market. At the beginning of the 1980's, the supermarkets moved in on turkeys, essentially because of improvements in food technology and processing.

It became possible to keep turkeys for up to 4 weeks by 'gas flushing' the bird. The idea is that you put the turkey in a bag with carbon dioxide, and this stops the bugs growing. Vacuum pressing doesn't work because the turkey would lose its shape.

Supermarkets also promoted a faster growing turkey breed, which made it cheaper to produce. With cheap, long-lasting birds available through the supermarkets, traditional butchers shops predominantly lost out in the turkey sales war. But, if you want a free range, local bird that has been dry-plucked (see turkey breeders), your local butcher – if you have one – will be more likely to offer it than your local supermarket. The Turkey Exchange can provide you with details of farm fresh turkey producers around the country and you can get one through mail order as well as farm gate sales.

INTENSIVE TURKEY FARMING

Many people don't realise that many turkeys sold in Britain are reared just like broiler chickens, says Leah Garces, from **Compassion in World Farming**. She says that intensively reared turkeys live in dimly lit windowless sheds, a few with as many as 25,000 other birds. And as they grow bigger they have little space between them.

The turkey industry on the other hand argue that the sheds where 80% of commercial turkeys are reared are well ventilated. And that 20% are reared in large pole barns, which are open sided and therefore naturally ventilated and naturally lit.

Compassion in World Farming are concerned that rearing turkeys in over-crowded conditions escalates the problem of pecking. But Peter Bradnock from the **British Poultry Council** says that pecking is actually more of a problem for birds kept under natural light. He says the dim artificial light used in indoor sheds actually makes the birds more docile. Apparently turkeys start pecking at about 7 days old, through curiosity at new feather growth, and the specks of blood this produces encourages further pecking. But the aggressive pecking is predominantly an issue of aggression between males when they start to mature sexually.

Most commercially reared birds in outdoor systems will have their beaks trimmed (Leah Garces refers to this as de-beaking) to stop them damaging other birds. Under the organic system, this is not permitted.

Another concern of Compassion in World Farming is that over-crowding and poor environmental conditions can make the turkeys more vulnerable to disease. This in turn leads to a greater requirement for antibiotics. Peter Bradnock denies this. He says that many diseases are actually more common in birds that are exposed to outside conditions. He even points out that in Germany there is legislation to keep birds indoors during the migratory season for wild birds, to stop them passing on diseases.

One of the main turkey diseases is Turkey rhinotracheitis or TRT, as it is more commonly called. Most intensively reared birds are vaccinated against the disease and antibiotics are only used if they get a secondary infection. When antibiotics are administered, it is apparently necessary to treat the whole flock, as it would be almost impossible to identify an individual bird with the disease before it had either died or spread the infection to other birds in the flock.

Antibiotics growth promoters are also given to many intensively reared birds to make them grow faster by improving food digestion. This practise is declining because the public do not like it. Most supermarkets in the UK now request that antibiotic growth promoters are not used.

Another area of debate relates to intensively reared birds having a weakness in their legs. On the one hand it is thought that rapidly growing birds are more prone to weakness in their legs and lameness. On the other hand it was suggested that leg weakness is more to do with nutrition and the management of the birds than anything else.

Leah Garces thinks that turkeys are wonderful animals – sociable and curious. She says that when she went to visit an organic farm, where the turkeys were given more freedom to express their natural behaviour, they were jumping around and being very friendly. They are also maternal in nature and are very protective of their young.

WE LOVE TURKEYS

Interview with Michael and Ann Moorhouse from Cefn Goleu Organic Turkeys in Wales

"We have some (turkeys) who are at the skinhead or teenage stage and have become very boisterous. But we enjoy them hugely"

Michael and Ann Moorhouse are real turkey enthusiasts. They moved to Cefn Goleu, which means 'ridge of light', just over four years ago. Although they had kept some turkeys before, the move meant they had more space and they decided to try and collect as many pure breeds as possible.

This has not been so easy but they've got eight breeds to date and are amongst the top pure breed turkey specialists in the country.

Michael told me about some of the breeds they stock. The Pied, Crollwitzer or Royal Palm is believed to be the same bird. It is a very striking black and white bird. Then there are the pale chestnut Buffs, and the Bourbon Reds, which are a deep mahogany chestnut colour with white wings and tails, as well as black lacing at the tips of their feathers. If you look at the Blacks in sunshine, they have a beautiful green sheen on their feathers, whilst the Nebraskans are white with a cinnamon fleck – very pretty but very rare and difficult to breed. The Moorhouses were delighted to get some Nebraskans from the Roslin Insitute (see [Talking Turkeys](#) section).

The Moorhouses also rear birds for eating. They say they were keen to convert to organic because it assures high quality. And they are registered with the **Soil Association**. At Cefn Goleu, they buy their Christmas turkeys as day-old poults and immediately put them under a warm lamp, to replace the mother's warmth. Ann says they are adorable and generally arrive bouncing up and down and very keen for their first meal. When they are old enough they go outside every day.

The heavy breasted birds apparently do grow quite a lot faster than the high-breasted pure breeds. But the Moorhouses do sell some pure breed turkeys for eating. Ann says they have a slightly more gamey flavour and less breast meat. The rare breeds are around all year – the Moorhouses sell them as eggs ready for incubating, as poults and as adult birds. Although the farm is not open to the public, appointments can be arranged.

Although Ann is clearly very fond of the turkeys, she says that she did not have a problem crossing the divide and eating them. But when the turkeys are alive, they get some very special treatment. One particularly unusual requirement is protecting the female during mating. Apparently the males have a tendency to prolonged mating sessions, when they are 'treading' the females with their claws and potentially ripping the flesh. The Moorhouses managed to get an antique leather 'turkey saddle' from Janice Houghton-Wallace, at the **Turkey Club UK**, to protect the female birds. They then got a local saddler to copy it.

The Moorhouses point out that people are often surprised at how friendly the turkeys are. One photographer came to their farm rather worried that she would not be able to get a close-up shot. The lady found that the problem was quite the reverse – the turkeys gathered round, intensely curious and inquisitive about what she was doing. Ann says that you either love turkeys or you hate them. Clearly she and Michael love them.

TASTY TURKEYS

Interview with Paul Kelly from Kelly Turkey Farm,

"We bought all the commercial bronze turkeys in the country and made our own breed"

The Kelly Turkey Farm was founded in 1971, by Paul's father, Derek Kelly. Back in those days they reared a small traditional white turkey, essentially sold through butchers outlets. And most other turkey producers were doing the same thing.

When the supermarkets started selling a faster growing breed, Kelly's switched to bronze turkeys, which had predominated in the 1950s. In 1983 they bought up all the bronze in the country and made their own bronze breed. Bronze turkeys have black feathers and are not generally so popular with the public because any remaining feather stubs, left after plucking, are more noticeable. White feather stubs against white flesh are camouflaged.

Kelly's turkeys have the *Kellybronze*' brand, which guarantees they are the traditional bronze breed and that they have been hand plucked and hung before being sold. Most other turkey breeders use the water technique, for plucking. The dead turkey is plunged into hot water, to warm up the feathers on the skin and loosen them. The feathers are then mechanically removed by rubber fingers. The problem with this method is that it removes the epidermis – top layer of skin – which makes the bird more prone to spoilage from bacteria and therefore reduces shelf life. After dry plucking, Kelly's can hang their birds for up to two weeks, which gives the meat better flavour and texture.

“We have bred our birds for their eating quality and flavour rather than cost of production” says Paul. “Our birds grow at about half the rate of a normal commercial turkey”. Kelly’s turkeys take between 22 and 25 weeks to grow as opposed to between 10 and 14 weeks for the faster growing breeds. And Paul thinks that the greater maturity means greater flavour.

The only difference between the organic and the non-organic turkeys on Kelly’s Farm is the feed. They are still given cereal, soya, peas and beans, but organically grown, which costs twice as much. Most of the 20% organic turkeys, Paul has are registered with the Soil Association, but some are registered with **Organic Farmers and Growers**. Paul says that a lot needs to be done to tidy up organic legislation so that it means the same thing, regardless of the certification body.

Kelly’s Farm has a hatchery and specialises in producing breeding stock – most organic turkeys use breeds from the Kelly hatchery. Eggs are produced between May and July. Hatching is between June and August and in November things start getting busy for Thanksgiving, then Christmas.

Like anything that is better quality, Kelly’s turkeys cost more. Up to two and half times the price of an intensively reared bird. Perhaps a price that more people are prepared to pay, knowing what they are getting, and particularly since most of us only buy turkeys once a year.

TURKEY CONTACTS

BRITISH POULTRY COUNCIL, which includes the **BRITISH TURKEY FEDERATION**

Tel: 020 7202 4760 Trade association for commercial turkey producers.

CEFN GOLEU ORGANIC TURKEYS,

Cefn Goleu, Pont Robert, Meifod, Powys SY22 6JN

Tel: 01938 500128

Rear pure breed turkeys for exhibition and eating, as well as free-range organic turkeys for Christmas. They are registered by the Soil Association.

COMPASSION IN WORLD FARMING

01730 264 208

www.ciwf.co.uk

Campaign for improvements in animal welfare on farms.

KELLY TURKEY FARM LTD

01245 223581 / 01245 400 221

www.kelly-turkeys.com

Big producer of free-range *Kelly Bronze* turkeys, with some organic and they sell by mail order for Christmas.

ROSLIN INSTITUTE

0131 527 4478

ORGANIC FARMERS AND GROWERS

01743 440512

SOIL ASSOCIATION

0117 929 0661

www.soilassociation.org

Regulatory body which sets high organic standards for turkey rearing.

TURKEY CLUB UK

01223 262484

www.turkeyclubuk.mainpage.net

Aim to conserve and promote all pure breeds of turkey, as well as encourage and advise anyone wishing to keep turkeys.

TURKEY EXCHANGE

01621 815740

Run by Len Goodman, this organisation can provide contact details of farm fresh turkeys, including free-range and organic ones, around the country.