Big Birds, Big Cruelty

A research report on intensive turkey farming in Australia presenting the key welfare issues surrounding the industry.

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Executive summary

Project title: *Big Birds, Big Cruelty: An investigative report into factory farmed turkeys in Australia.*

Project overview

In developed countries, more than 95% of commercial turkey production takes place in intensive production systems called factory farms. Turkeys raised in factory farms spend their entire lives (a grand total of three months) in crowded sheds with thousands of other birds. The factory farming of turkeys in Australia raises significant welfare issues and is of ongoing concern to animal advocates. For producers, profits have taken priority over animal welfare, as birds are pushed beyond their physical limits. They are housed in unhealthy and unnatural conditions that induce acute and chronic pain. On average, between three to five million turkeys are killed annually in Australia for meat. This number is rising as turkey meat is increasingly considered a healthy dietary option. The life cycle of a turkey in a factory farm is, arguably, a fast and furious three months of suffering. An extensive literature review was undertaken on factory-farmed turkeys (in Australia) as part of university studies for a Bachelor of Social and Community studies degree at the University of Canberra. This paper presents some of the key welfare issues relating to factory-farmed turkeys in Australia. Please note; Australian sources have been used in this report wherever possible. There is, however, a lack of Australian research on certain aspects of intensive turkey farming. In these cases, and where there is overseas research based on turkey factory farming conditions that are similar to those in Australia, the overseas sources have been used.¹

Project rationale

There has never been such specific or extensive research on the intensive farming of turkeys in Australia as there has been on battery hens, broiler (meat) chickens and pigs, for example. This research was needed because it serves as a starting point for further research and forms the basis for future campaigns on behalf of turkeys in factory farms. This lack of Australian-based
information or research about turkeys in factory farms has reduced awareness of, and restricted campaigns about, the issue. Given that animal rights organisations have very limited resources in comparison to farming companies, this type of material will be beneficial in assisting activists in Australia. Society is in transformation, and learning is a key process within that transformation. Education has long been a vehicle for social change.

Key findings

Factory-farmed turkeys in Australia – some key welfare issues

The literature review and ongoing research throughout the duration of the project was an integral aspect of it as this topic has never been researched extensively in Australia before. A wide array of cruelty issues was uncovered by this research. The following discussion highlights some of the key points of the report which clearly illustrate the industry’s inherent cruelty.

Confinement

- Commercially raised turkeys spend their entire lives in crowded grow-out sheds with thousands of other birds. On average, between three to five million turkeys are killed yearly in Australia for meat.
- On average, 10,000 to 14,000 turkeys are placed in a shed at once. This equates to six birds per square metre of space. Turkeys have $46\text{kg/m}^2$ of floor space which equates, on average, to an A3 sheet of paper of space each.

Mutilation

- Stress and frustration are endemic in these conditions and turkeys can resort to neurotic behaviour such as feather plucking and even cannibalism. Farmers often manage cannibalism by amputating a portion of the turkeys’ beaks (debeaking).
- The Code of Practice also allows the snood (skin drooping from the forehead), and the terminal segment of each inward-pointing toe in breeding males to be cut off.
These surgical procedures are done when the turkeys are only a few days old, without anaesthetic and with no aftercare for pain or infection. If this was done to a cat or dog it would be illegal.

**Artificial lighting**

- In the sheds, turkeys are forced to live in artificial lighting which is used to distort their normal sleeping and feeding patterns. In order for the birds to put on weight more rapidly, lighting programs increase eating times and control the ‘productivity’ of the birds. These lighting programs affect growth rate, body weight, mortality and susceptibility to metabolic diseases and/or circulatory problems.
- Birds show signs of stress when exposed to light for continuous periods, with the resultant sleep deprivation.

**A genetically altered bird**

- Today’s commercially raised turkeys have been so genetically altered that they are often barely able to walk. Both male and female turkeys are nearly twice the size of their wild counterparts.
- As a result of this genetic manipulation, turkeys suffer painful health problems such as crippled legs and feet and swollen joints. Turkeys are susceptible to heart disease and experience great difficulty in supporting their overweight bodies.
- On average, turkeys are slaughtered at 10 – 12 weeks when they are still only infants, but with unnaturally overweight distorted bodies.

**Health concerns**

- The stress of factory farm conditions weakens animals’ immune systems. Poor litter management, improper ventilation and inappropriate drinker management results in a build-up of ammonia.
- Turkeys develop burns on their legs and breasts, making them more susceptible to infection.
- Turkeys often develop wounds (due to the overcrowded conditions) which become smothered in their own waste, causing painful infections.
- Poor air quality can cause respiratory and eye diseases and contribute to reduced food intake, causing weight loss and lameness.
Thousands of lame birds and ill birds who are unable to reach food and water will invariably end up dying of starvation.

Due to these conditions high mortality rates are common in turkey factory farms (see pictures in body of report).

Artificial insemination

Male turkeys are so big, and their legs so weak, that they are unable to perform natural behaviours such as mating. Instead, artificial insemination is practised.

The male turkeys (toms) are ‘milked’. A worker restrains the turkey in a bent-over position. The worker then grabs the turkey’s penis, stroking and masturbating until the tom ejaculates.

The milked semen is collected, laced with extenders and antibiotics, and injected via syringe into the female turkey. The female turkeys are rushed along and the quality of treatment and handling deteriorates as the workers become tired, frustrated and lose concentration, causing the turkeys to suffer ever-increasing pain and trauma.

Conclusion and recommendations

In conclusion, this research reveals some key information regarding the welfare issues of factory-farmed turkeys in Australia. The industry continues to show little concern for the health and welfare of turkeys, and much more concern for productivity and profit. As a result, turkeys continue to suffer. Every aspect of a factory-farmed turkey’s life is controlled and unnatural, from the moment of conception to slaughter. Factory-farmed turkeys endure a range of stress and health problems as a result of their genetic make-up and the overcrowded environments in which they are raised. Fritz, cited in Davis, states ‘the modern bird’s (turkey’s) swollen body, distorted physical shape, and inability to mate naturally remind us not only of the cruel arbitrariness of fate, but of the sinister power of humanity’. The welfare of factory-farmed turkeys must be improved, as current methods and procedures cause and perpetuate a range of health and stress problems. There is a worrying lack of awareness (in Australia) about factory-farmed turkeys and what they endure. This project has enabled an awareness-raising campaign to be developed, for implementation in 2011.
Emerging from the literature review and based on the project findings, animal rights organisations Australia wide need to utilise this research. It will encourage others to begin their own campaigns to raise awareness (of turkeys in factory farms) in activists within animal rights organisations, as well as in the general public. It was found that factory farming of turkeys is a little-known issue that is rarely campaigned about in Australia.

The following is a list of organisations that would benefit from viewing the report:

- Animal Liberation (in every state)
- Animals Australia
- Voiceless
- Animal welfare organisations such as the RSPCA (Australia wide)
- Vegetarian and vegan societies (Australia wide)
- Consumer organisations
- Relevant media organisations
- Celebrity chefs. For example, given the increase in cooking shows such as ‘Master Chef’ this information would be useful to ensure that chefs and the public are made aware of how turkey is produced.

Therefore it is recommended that:

- Key organisations review the research to ensure that ongoing awareness-raising measures are implemented about the conditions in which factory-farmed turkeys are kept in Australia.
- Research about factory farming of turkeys in Australia is continued. This report contains some key research but it is vital to ensure that investigations continue and their scope is expanded.
- Ongoing education about animal rights (and specifically turkeys) is continued throughout Australia. There remains a lack of campaigning and educative ‘tools’ that initiate learning and empower people to take action about the plight of factory-farmed turkeys in Australia. This project lays the foundations for future campaigns.
- Ongoing networking and action occurs Australia wide to ensure that this issue is campaigned about frequently and effectively in every State and Territory, particularly prior to ‘Christmas in July’ and Christmas, when turkey is most popular.
For more information on how to help contact

- bigbirdsbigcruelty@gmail.com or visit www.bigbirdsbigcruelty.org
Acknowledgements

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Last, but not least, thank you to ‘Voiceless: The Animal Protection Institute’ which has granted funding to the project to help develop a community education campaign on raising awareness about turkeys in factory farms in Australia.
Glossary

**Ammonia**: A strong gas with a pungent smell caused by a build-up of faecal matter. In high concentrations ammonia fumes can damage eyes and cause extreme pain.

**Artificial Insemination**: Artificial insemination, or AI, is the process by which sperm milked from a male turkey is placed into the reproductive tract of a female turkey for the purpose of impregnating the female by means other than sexual intercourse.

**Artificial lighting**: Unnatural fluorescent lighting under which factory-farmed birds are raised.

**Breeder birds**: Birds genetically selected and bred purely for breeding purposes. Breeder birds are artificially inseminated to produce more birds for the poultry industry.

**Code of Practice**: Guidelines that set out minimum standards of ‘care’ for animals managed by humans. The main Codes of Practice apply to agricultural animals and allow acts that would be illegal if carried out on a companion animal, for example, confining animals for significant periods (or their entire lives) without freedom or exercise. The main code applying to factory-farmed turkeys in Australia is the ‘Model Code of Practice for the Welfare of Animals: Domestic Poultry’.

**Cruelty**: A human act that inflicts unnecessary suffering on a sentient being

**Debeaking**: A portion of a bird’s beak (the tip of the beak) is cut off, usually with electrically heated blades, without anaesthesia or pain relief.

**Factory Farming**: Raising livestock in confinement, with a high stocking density (thousands of animals in a strictly limited space). The farms operate as factories and restrict or prohibit the animals’ natural behaviours. The aim of the operation is to produce as much meat, eggs, or milk as possible, at the lowest possible cost.

**Feeders**: An automatic feeding system from which the birds eat. They are generally plastic-type bowls attached to an automatic mechanism that is programmed rise in accordance with the expected growth rate of the birds.

**Genetic Manipulation**: Breeding and selection of birds for specific purposes, for example, producing meat or offspring. Controlled breeding for profitable inherited characteristics. This breeding is manipulated by humans rather than allowed to occur naturally.
Hen: Female turkey.

Hock burn: Hock burns are marks on the limbs of factory-farmed turkeys where caked floor litter and a build-up of ammonia from the waste of other birds have burned through the skin. It is a painful condition resulting from inflammation of the skin over the leg.

Lameness: Disabled movement marked by pain and discomfort.

Poult: A young turkey, usually between 0-6 weeks old.

Sentient: Being able to experience sensations including pain and suffering. This attribute is usually ascribed to creatures with a central nervous system.

Tom: Male turkey.
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Turkeys in factory farms in Australia: the central issues

Overview

In developed countries, more than 90% of commercial turkey production takes place in intensive production systems called factory farms. Turks raised in factory farms spend their entire lives (a grand total of three months) in crowded sheds with thousands of other birds. The factory farming of turkeys in Australia raises significant welfare issues and is of ongoing concern to animal advocates. Ingham’s Enterprises Pty Ltd is the largest turkey producer in Australia, followed by Bartter which now markets Steggles. On average, between three and five million turkeys are killed annually in Australia for meat. This number is rising as turkey meat is increasingly considered a healthy dietary option. On average, Australians eat approximately 1kg of turkey per person per year, most of which is consumed during one week at Christmas. The turkeys that are grown for the meat industry are killed at an average 10 - 12 weeks of age, when they are still only infants with unnaturally overweight distorted bodies. The toms (male turkeys) can sometimes be kept up to 16 weeks of age. The life cycle of a turkey in a factory farm is, arguably, a fast and furious three months of suffering. This paper presents some of the key welfare issues relating to factory-farmed turkeys in Australia.

Confinement

On average, up to 14,000 turkeys are placed in a shed when they are only a day old. This equates to six birds per square metre of space. Turkeys have 46kg/m² of floor space, which equates, on average, to an A3-sized sheet of paper of space each. As they grow, turkeys become much bigger than chickens, resulting in extremely cramped conditions for the duration of their lives. These conditions are extremely stressful as the birds are unable to carry out any of their natural behaviours, such as spreading their wings, flying, perching, foraging, running, dust bathing and simply breathing fresh air and feeling the sun. For example, in their natural state turkeys enjoy perching above ground, but factory-farmed turkeys are unable to do so because an electrified wire runs along the feeders in the sheds, and there is nowhere else...
above ground to settle.\textsuperscript{9} If the turkeys touch the wire they receive an electric shock to prevent them from perching. Being raised in these conditions inflicts serious health and welfare problems on the birds. (See Figures 1 and 2).

\textit{Figure 1: One of the largest turkey producers in Australia (Ingham’s): A turkey factory farm in Australia – birds aged approximately nine to ten weeks old.}
Turkey poults

When turkey poults first enter the sheds the lighting is dim and the artificial heating is kept high. Turkey poults are more difficult to raise than baby chickens, for example. Turkey poults are extremely interactive and have to have another ‘figure’ to lead them. For instance, they have inadequate eye-sight for the first week or so of their lives and rely on the guidance of their mothers to move around. In factory-farmed conditions, poults are vulnerable to stress, heart attacks and starving to death because many are unable to find the food and water points without the guidance of their mothers. \(^{10}\) Mortality in young birds is also related to a condition known as ‘starve out’ which is when birds enter a state of shock and stop eating. Management...
and environmental factors such as temperature, lighting levels, and food and water quality can also contribute to early mortality if the birds stop eating and/or drinking.\textsuperscript{11} (See Figure 3 and 4).

Davis (2001) states that

\textquote{Turkeys are reared motherless on factory farms, in buildings in which the dimensions of time and space are reduced to monotonous extensions of toxic waste devoid of comfort, colors, and novelty, and which are filled with thousands of sick, dead, and dying birds stretching along a floor farther than the eye can see}\textsuperscript{12}

\textbf{Figure 3:} Turkey poults, approximately two to three weeks old being raised at a factory farm in Australia.
Figure 4: A turkey poult, approximately two weeks old from a turkey factory farm in Australia. This poult died from respiratory problems (difficulty breathing) and had a severe injury on its head.

**Mutilation**

Stress and frustration are endemic in factory-farmed conditions and turkeys can resort to neurotic behaviour such as feather plucking and even cannibalism. Farmers often manage cannibalism by cutting away a portion of the turkeys’ beaks (debeaking), using a hot blade. The Australian Poultry Code of Practice which applies to domestic and commercially raised, poultry also allows the snood (skin drooping from the forehead), and the terminal segment of each inward-pointing toe in breeding males to be cut off. These surgical procedures are carried out when the turkeys are only a few days old without anaesthetic and without follow-up treatment for pain or infection. If such procedures were carried out on a cat or dog they would be illegal. Turkeys’ beaks are delicate structures with an extensive nerve supply. They are sensitive to heat, pressure, and pain and are essential for normal drinking and eating, as well as preening.
Following beak amputation, birds observed over a 56-week period have shown signs of depression and long-term chronic pain.\(^{15}\) (See Figure 5). This pain is equivalent to that of a human amputee experiencing chronic ‘phantom limb pain’.\(^ {16}\)

![Figure 5: An ex factory-farmed turkey poult, approximately three to four weeks old from a factory farm in Australia. The poult has been debeaked and has an injured head (scab) and an injured eye.](image)

**Artificial lighting**

Factory-farmed turkeys never experience natural sunlight and darkness. They exist indoors under artificial lighting which is manipulated to distort their normal sleeping and feeding patterns, increase eating times, and control the ‘productivity’ of the birds. Such lighting programs affect growth rate, body weight, mortality and susceptibility to metabolic diseases and circulatory problems.\(^ {17}\) Inspections by animal advocates across Australia have shown that as slaughter time (at about three months of age) approaches, the birds are exposed to fluorescent light for continuous periods. This exposure causes extreme stress, as the birds experience ongoing sleep deprivation. Alternatively, subdued lighting may be used to decrease
aggression amongst the birds resulting from the ongoing stress of the crowded conditions they endure.¹⁸ These lighting regimes raise serious health and welfare concerns by contributing to lameness, skin diseases and eye disorders.¹⁹ (See Figure 6).

Figure 6: A turkey factory farm in Australia: Birds raised under continuous fluorescent lighting regimes suffer sleep deprivation and ongoing stress because they are unable to rest.
Health – susceptibility to disease, infection and injuries

Health concerns

Turkeys experience a range of health problems whilst being raised in intensively farmed conditions. The stress of these conditions weakens their immune systems and the fact that 80 per cent of the floor litter is faeces creates a number of problems. The sheds in which the turkeys are raised are not cleaned out from when the turkeys first enter as poults to when they are removed for slaughter (a period of three months). Faecal matter accumulates and inadequate litter management, improper ventilation and drinker management results in a build-up of ammonia. (See Figure 6). This build-up causes turkeys to develop extremely painful burns on their feet, legs and breasts. Turkeys suffer from these problems more than broiler chickens (chickens bred for meat) because turkeys are kept alive for longer and therefore are in contact with dirty litter for longer. The air quality can cause respiratory and eye diseases and contribute to reduced food intake causing weight loss and lameness. Constant sitting on the damp litter accelerates the incidence of leg weakness, and the lack of sunlight and fresh air facilitates the spread of bacteria and infections. The turkeys are susceptible to heart disease and experience great difficulty in supporting their overweight bodies. They suffer from painful swollen joints, obesity, crippled legs and degeneration of the hip joints and have crippled feet. The wide range of health problems turkeys experience when reared in this environment raises serious welfare concerns. (See Figures 7 and 8).

Use of antibiotics

Factory-farmed turkeys live in unnatural crowded conditions in which disease and infections are common. Antibiotics are used to treat bacterial infections. It has been reported that even ‘healthy’ turkeys are routinely given antibiotics in their feed throughout the ‘production cycle’ in order to reduce potential outbreaks of disease. Poultry producers discovered in the 1940s that feeding antibiotics to birds assisted growth, so antibiotics are used to accelerate this growth. Whilst meat-producing industries claim that antibiotic residues in meat do not harm
humans, research has indicated that antibiotics given to farmed animals can encourage antibiotic-resistant bacteria and that these bacteria can be passed onto humans via the food chain. Research indicates that the more antibiotics are used the more antibiotic resistant bacteria and viruses (in humans) will become, leading to more complications, more blood infections and higher mortality. This is of concern not only for the birds themselves but for the humans and pets who consume them. Sweden and Denmark have set a precedent by banning the use of antibiotics in commercial farming.

Figure 7: Factory-farmed turkeys in Australia living in accumulated waste resulting in a build-up of ammonia. The foreground of the picture shows sick and injured birds experiencing difficulties standing.
Figure 8: Factory-farmed turkeys in Australia suffering from feather loss and burns on their breasts.

A genetically altered bird

Factory-farmed turkeys have been genetically altered and bred to grow bigger and faster in order to meet the consumer demand for breast meat. Inducing such rapid body growth creates a number of health problems for these birds. Both male and female factory-farmed turkeys are almost twice the size of their wild counterparts. For example, a female wild turkey (hen) typically weighs approximately 4kg, while factory-farmed hens can weigh up to 8kg or more. A wild male turkey (tom) can weigh up to 9kg, whereas a factory farmed tom can weigh 17kg or more. Another study has shown that the growth rate of turkeys (to 16 weeks) has doubled. This study showed that non-factory-farmed turkeys weigh 11.5kg (at 54 weeks) whilst a commercially raised male turkey can weigh up to 27kg. In Australia, turkeys are slaughtered at approximately 10 to 12 weeks of age but the toms can sometimes be kept up to 16 weeks of age. On average, the birds gain about 1kg a week.
One report explains:

*If a 3kg (human) baby grew at the same rate that today’s (factory farmed) turkey grows, when the baby reached 18 weeks, it would weigh approximately 227 kg.*

As a result factory-farmed turkeys suffer painful health problems such as crippled legs and swollen joints. They have also been so genetically altered that a range of muscle and skeletal disorders often make them barely able to walk. Unfortunately, the breeding companies still aim to produce ever-increasing growth rates, perpetuating these serious welfare issues.

**Muscle disorders**

Factory-farmed turkeys gain so much weight during their short lives that their hearts often cannot support their huge bodies. The following table compares the weight and muscle mass of turkeys at 25 weeks:

<table>
<thead>
<tr>
<th></th>
<th>Weight</th>
<th>Breast</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional turkey</td>
<td>5.3kg</td>
<td>0.52kg</td>
</tr>
<tr>
<td>Modern turkey</td>
<td>19.22kg</td>
<td>3.04kg</td>
</tr>
</tbody>
</table>

Turkeys gain so much weight in a short amount of time that the relative weight of the heart decreases from 0.59% to 0.32% in factory-farmed turkeys. However, it stays constant in ‘traditional’ turkeys. This excessive weight gain will cause muscle growth to exceed the capacity of the heart, perpetuating poor capillary supply and muscle fibre degeneration in factory-farmed birds.

Romvari et al state that:

*The link between growth rate and susceptibility to muscle disorders becomes more and more evident. Muscle abnormalities, such as deep pectoral myopathy, have long been recognised and appear to be a consequence of the inability of the cardiovascular system to meet the oxygen demands of the rapidly growing tissues, particularly under stress.*

Intensive rearing conditions make young turkeys susceptible to dying of heart disease, as the blood vessels become clogged causing organ failure. Mortality is generally 0.5-2.0 per cent or
sometimes higher and is thought to be due to an “inadequate or inappropriate cardiac response to exercise, resulting in hypotension, vasodilation, arrhythmias, and sudden death”⁵².

Skeletal disorders

Due to factory-farmed turkeys’ rapid growth rate and distorted muscle development a variety of leg problems develop which produce lameness and pain. The increase of breast muscle on a turkey leads to a physiological weight imbalance that increases stress on bones and joints.⁵³ Due to the weight imbalance the leg position of the turkey changes. Skeletal problems such as antitrochanteric degeneration, tibial dyschondroplasia, bending, twisting and rotation of the tibia, osteochondrosis, osteomyelitis, rickets and epiphyseolysis of the femoral head are increased.⁵⁴ Inspections by animal advocates across Australia continue to show that a considerable number of factory-farmed turkeys suffer from skeletal leg disorders. Turkeys with skeletal disorders will often spend a substantial amount of time lying down, having collapsed after taking only a few steps. (See Figure 9).
Lame and injured birds

Factory-farmed conditions cause many sick and lame birds to become ill and die as a result of starvation and various injuries. Factory-farmed turkeys will often experience physical injury such as bruising and scratching as a result of birds attempting to reach the feeders while other birds are seeking rest. Inspections by animal advocates have revealed birds with injuries and significant feather loss caused by trampling (by other birds) and by being confined in severely restricted spaces. These injuries have been recorded on camera (see Figures 10 and 11). These lame or injured turkeys may starve or become dehydrated because they cannot access the automated feed and water systems in the sheds. These systems are programmed to automatically rise in accordance with the expected growth rate of the birds. For example, near the end of the growing period the feed and water system height averages out at about 76cm.
and healthy turkeys are generally able to reach this.\textsuperscript{55} However, sick or injured turkeys are unable to reach the automated feed and water systems. The feeders and drinkers are raised intentionally in order to be out of reach of weak or sick birds, who are unable to eat any more food. Unhealthy birds who are not fit for human consumption are not ‘profitable’ to keep alive.\textsuperscript{56} There are reports that ‘on farm culling’ is conducted to dispose of any weak or sick animals so they do not consume any more food.

Inspections by animal advocates across Australia have revealed many lame and injured birds, and such instances have been documented on camera. Symptoms of ill birds observed include:\textsuperscript{57}

- Diarrhoea or blood
- Neurological problems or paralysis
- Inactivity, head under wing, feathers ruffled
- Bird isolated from group
- A pale or purple comb
- Frequent shutting of eyes
- Little response when touched or pushed
- Being pecked at by other birds
- Lack of growth
- Lack of mobility and unsteadiness on legs (See Figures 9 and 10).

Evidence collected confirms a range of health and welfare problems, such as injuries and illness, among turkeys raised in this environment. Current factory farming methods and procedures magnify these problems and are unnecessary and cruel.
Figure 10: Lame birds – factory-farmed turkeys in Australia, approximately eight to nine weeks old, unable to stand or reach food and water and therefore likely to die of starvation.
Figure 11: A factory-farmed turkey in Australia with severe injuries with an open wound on the right shoulder. The legs of the bird are distorted and spread unusually wide to support the overweight body. From the state of the injuries it appears that they had been left untreated for some time.
Mortality rate

There is an ‘accepted’ mortality rate in the turkey industry because a proportion of birds raised in factory farm conditions inevitably become ill. As stated previously, sick or lame birds are not profitable for business and will either be culled or die. Many birds die in factory-farmed conditions because they are never taught to reach the food and water by a parent turkey (newly hatched factory farm turkeys are put into sheds with no parent birds to accompany them). Others die from diseases and infection due to the conditions they are raised in and as a result of growing too quickly. High humidity and sudden temperature increases can create heat stress, leading to hyperventilation, panting and death. Ingham’s Enterprises (Australia) quotes a 3-5% mortality rate for female turkeys aged between 70-80 days (which is near the end of a female’s ‘lifespan’). There is a 10-12% mortality rate for male turkeys at approximately 115-120 days (near the end of a male’s ‘lifespan’). Inspections of Australian turkey factory farms by animal advocates have documented dead carcasses left in the shed for weeks (see Figure 12). Although there is overwhelming evidence of welfare concerns relating to factory-farmed turkeys, the industry continues to show much greater concern for profits than for the welfare of the birds. Many birds end up wallowing and dying in their own waste, but their death is considered to be counter-balanced by the economic gains from factory farming methods. As long as the overall profits from factory farming exceed the losses from the death of individual birds, there is no incentive for the industry to make any changes.
Figure 12: Dead turkeys approximately eight weeks old, left to rot among their fellow birds at an Australian factory farm (Ingham’s).
The breeding and production of turkeys in Australia

Artificial Insemination

Turkeys’ lives are manipulated at every point from conception to slaughter. There are two main commercial breeds of turkey in Australia, the Nicholas White and the Hybrid. The genetic material (of these breeds) is imported from the US and Canada and the eggs are then hatched under strict quarantine conditions. The quarantine-born ‘breeder turkeys’ go on to produce more eggs. Breeder turkeys are raised in the same conditions as turkeys intended specifically for meat. However, breeder turkeys are kept in breeding facilities for close to a year, so their welfare problems are magnified. Birds are selectively bred for production traits such as fast growth and extremely large bodies. Male breeder turkeys are so big they are unable to perform natural behaviours such as mating. Instead, artificial insemination is practised. The male tom turkeys are ‘milked’. A worker pins the turkey down in a bent-over position. The worker then grabs the turkey’s penis, stroking and masturbating it until the tom ejaculates. The semen is collected, laced with extenders (a liquid to preserve fertilizing ability) and antibiotics, and then injected via syringe into the female turkey. The female turkeys are rushed along inside the hatchery and the treatment and handling deteriorate as the workers become tired and frustrated and lose concentration, causing the turkeys to suffer increased pain and trauma. The AI process is repeated once or twice a week until the breeder turkeys are slaughtered at one year of age. (See Figure 13). The AI process is undoubtedly painful and causes injury and suffering to which the industry conveniently turns a blind eye. The majority of Australian States and Territories have laws that prohibit sexual contact with animals. However, farm animals are excluded from these laws because sexual contact is an integral part of artificial insemination procedures. As previously stated, this procedure causes injury and suffering and increases the birds’ stress.

Interestingly, according to the Food and Agriculture Organisation of the United Nations, without artificial insemination performed by humans, the specific breed of turkey used in the AI process would become extinct in just one generation. The possibility of this is of great concern because it reminds us of the sinister power of humanity, which continues to exacerbate the extinction rates of other species. The problem is not only loss of the species and the reliance on
the unnaturalness of artificial insemination but the loss of the genetic diversity within species, as well as the loss of diversity of different types of ecosystems which can contribute to or hasten whole species extinction.\textsuperscript{72} Preserving the wider gene pool is important for the evolution of new species.\textsuperscript{73} Scientists have postulated that commercial breeding for specific production traits threatens both animal welfare and genetic diversity.\textsuperscript{74} An article in \textit{Science News} states that ‘Standard supermarket birds are a separate breed with a dwindling gene pool... Just 50 years ago, there were more than 200 breeds and varieties of poultry in agricultural use. Today there are less than a dozen ‘improved types’\textsuperscript{75}

\begin{figure}
\centering
\includegraphics[width=\textwidth]{image1}
\caption{Artificial Insemination in practice – quick capture and rough handling often causes injury and stress to turkeys. The same procedure takes place in Australia.}
\end{figure}
Health problems of breeder turkeys

Breeder turkeys are bred to weigh up to 30kg and have an average life span of a year\(^7^6\). This ‘increased’ life span causes ongoing stress and strain on the breeder turkeys’ grossly overweight bodies. In Australia there are turkey breeding facilities based around Bargo in New South Wales, Beresfield in New South Wales, McLaren Vale in South Australia and St. Arnaud in Victoria.\(^7^7\) (See Figure 14).

Breeder turkeys are fed severely restricted rations until sexual maturity in order to reduce problems such as excess weight gain and rapid growth which, due to their genetic make-up, would otherwise occur.\(^7^9\) During this pre-maturity period the birds spend a lot of time pecking at shed walls and fittings and drinking excessively, indicating constant hunger.\(^8^0\) Excessive weight gained after this period perpetuates hip degeneration, resulting in severe joint pain which can interfere with ‘normal’ activities such as trips to the feeders.\(^8^1\) One study found 25-50% of breeder turkeys on severely restricted diets suffer from hip degeneration.\(^8^2\) This suggests that degenerative hip disease is common in breeder turkeys and is due to their unnatural genetic make-up. Breeding turkeys are usually debeaked a second time (at approximately six months of age).\(^8^3\) The welfare of breeder birds urgently needs to be
improved, as current methods and procedures cause and perpetuate numerous health and stress problems.

**Slaughter house trip and trauma**

Another pressing welfare concern for all commercially raised turkeys is the trip to the slaughterhouse, compounded by the trauma they endure when they arrive. At the end of the growing period workers walk factory- farmed birds to the edge of the shed then herd them up a loader (conveyor belt), where workers catch the birds and pack them into crates. Thirty-two centimetres (the length of a standard ruler) is the accepted minimum height of a crate in which large birds can be transported. Turkeys are much taller than 32 cm and thus are forced to travel in extremely cramped conditions. Once the birds have been roughly and rapidly loaded into crates they are driven in a truck to the slaughterhouse. Whilst being transported turkeys are prone to injuries such as severe bruising and bleeding, amputated toes, fractures, and suffocation (due to overcrowding), as well as to high stress levels. Many turkeys die before they reach the slaughterhouse and there is an ‘accepted’ mortality rate during transport. For example, ‘dead on arrivals’ is a term commonly used to describe birds who die while being transported. One study found that when turkeys were monitored in various modes of transport up to 4.2% had severe damage, which included death, amputated toes, large bruises and significant bleeding, while up to 13.3% had damage of some kind, such as bruising. The same study found that 0.38% of birds died of acute and congestive heart failure, with death rates higher in summer, as many birds suffered from dehydration and metabolic problems. After arriving at the slaughterhouse the birds are understandably tired, thirsty, hungry and stressed. Once inside the slaughterhouse, fully conscious birds are hung by their weak and crippled legs from metal shackles on a moving rail. The turkeys then proceed through a stunning tank where the birds’ heads are put into an electrified bath of water which immobilises the birds but does not render them unconscious. Turkeys often bend their necks in order to avoid the tank and are not stunned. As turkeys are large birds their wingtips can touch the bath of water before the head, resulting in an electric shock. The Farm Animal Welfare Council, (2009) commented:

*Pre-stun shocks must be painful. Wingtips hanging below the head lead to problems in water-bath stunners, particularly when larger birds like geese and turkeys are inverted.*
The birds’ throats are then cut by a mechanical blade, and they are de-feathered in a scalding tank. The turkeys often curve their necks to avoid the blade. If the blade misses the conscious birds then proceed to the scalding tank and are boiled alive.⁹¹ The transport and slaughterhouse procedures cause an incredible amount of stress and often a brutally slow, traumatic death for all commercially raised turkeys.

**Turkeys – sentient and intelligent beings**

Many people view farm animals, and in particular poultry, as ‘objects’ or ‘machines’ with no capacity to feel pain, happiness, or other emotions. People comfortably relate to a dog or a cat as being able to feel pain and emotions such as sadness, happiness, affection and grief, but it is a different story when it comes to the animals we eat. As Hatkoff explains, farm animals display sentience which means ‘being aware of oneself, one’s surroundings, one’s bodily sensations, and of the emotions corresponding to that awareness.’⁹² It means having an awareness of other non-humans and humans. Research shows that farm animals have a wide range of feelings, including loyalty, sadness, joy, and fear.⁹³ There is a popular belief that turkeys are ‘stupid feeling-less beings’. However, the nervous system of turkeys is similar to that of mammals, so they suffer physical pain, just as humans, cats and dogs do. Turkeys also experience similar emotional states to humans, including fear, anxiety, frustration, boredom, pleasure and enjoyment. A number of scientific studies have been conducted on turkeys and their emotional and psychological lives. Dr Ian Dunken (a poultry specialist) argues that turkeys possess marked intelligence and have complex social relationships and both visual and vocal means of communicating with each other.⁹⁴ Turkeys have been observed to display an overwhelming amount of concern and emotion for an injured or dying fellow bird. Karen Davis, from United Poultry Concerns has carried out a number of studies on turkeys. She explains that when a factory-farmed turkey has a convulsive heart attack, it can cause other birds around it to die, and argues that this indicates a strong sensibility in these birds.⁹⁵
Conclusion

In conclusion, this research identifies and presents some key information regarding the welfare issues of factory-farmed turkeys in Australia. The industry continues to show little concern for the health and welfare of turkeys, but much more concern for productivity and profit. As a result, these sentient and sensitive animals live in a state of constant suffering. Every aspect of a factory-farmed turkey’s life is controlled and unnatural, from the moment of conception to slaughter. Factory-farmed turkeys endure a range of stress and health problems as a result of their genetic make-up and the overcrowded environments in which they are raised. Fritz, cited in Davis, states ‘the modern bird’s (turkey’s) swollen body, distorted physical shape, and inability to mate naturally remind us not only of the cruel arbitrariness of fate, but of the sinister power of humanity’.\(^\text{96}\) The welfare of factory-farmed turkeys must urgently be improved, as current methods and procedures cause and perpetuate a range of health and stress problems. The life cycle of a turkey in a factory farm is a fast and furious three months of misery and suffering. This industrial-scale cruelty does our society, and the institutions and organisations that condone it, no credit at all.
References

1 For a complete list of references relating to the executive summary, refer to the Endnotes below.


6 DAFF, above n 5.

7 Australian Chicken Meat Federation, personal communication, 2010.


9 Personal communication, 2010.


13 Australian Poultry Code of Practice, above n 8, p.19.


15 Viva, above n 10.

16 Viva, from Research at the AFRC Institute of Animal Physiology and Genetics Research, Edinburgh, above n 10.


Viva, above n 10

Ingham Enterprises, personal communication, 2010.

Ingham Enterprises, personal communication, 2010.


Sayre, above n 20, p. 78

Royal Society for the Prevention of Cruelty to Animals, above n 4

Royal Society for the Prevention of Cruelty to Animals, above n 4

Sayre, above n 20, p. 78

Sayre, above n 20, p. 78

Sayre, above n 20, p. 78

Joint expert Advisory Committee on Antibiotic Resistance (JETACAR) 1999, cited in Voiceless, above n 17, p.12

Sayre, above n 20, p. 79

Royal Society for the Prevention of Cruelty to Animals, above n 4


Farm Sanctuary Report, above n 35, p. 3


Big Birds, Big Cruelty Report: An investigation into factory farmed turkeys in Australia

40 DAFF, above n 5

41 McErlane, above n 38, p.10.

42 McErlane, above n 38, p.10.

43 Farm Sanctuary Report, above n 35, p.1

44 Royal Society for the Prevention of Cruelty to Animals, above n 4

45 Farm Sanctuary Report, above n 35, p.2


49 Mills, Mitchell & Mahon, above n 47

50 Romvari, Petrazi, Suto, Szabo, Andrassy, Garamvilgyi, Horn, above n 48


52 Ibid


54 Ibid


58 Gregory, N, Grandin, T, above no 24

59 Saif, Y, above n 11


61 MacKenzie, above n 60

Lara Drew: 2010
62 Farm Sanctuary Report, above n 35, p. 3
63 Farm Sanctuary Report, above n 35, p. 3
64 DAFF, above n 5
65 Powell, above n 2, p. 3.
66 Powell, above n 2, p. 3.
69 Ibid
70 DAFF, above n 5
73 Ecology Resources, above n 72
74 Farm Sanctuary Report, above n 35, p.5
75 Farm Sanctuary Report, above n 35, p.5
76 DAFF, above n 5
77 DAFF, above n 5
78 DAFF, above n 5
79 AL SA, above n 39
81 Gregory, Grandin, above n 24
82 Hocking, Maxwell, Bernard, above n 80
83 United Poultry Concerns, above n 14

85 Royal Society For The Prevention of Cruelty To Animals, above n 4


88 Prescott, Berry, Haslam, Tinker, above n 87

89 Royal Society For the Prevention of Cruelty To Animals, above n 4


93 Ibid

94 Stop Animal Cruelty DVD, above n 56

95 Davis, above n 12

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