

A Lifetime: living and dying on a fur farm



Over two years, from 2014 to 2016, ADI recorded operations at a fur farm in Poland, documenting the life experiences of foxes farmed for their fur. The animals live in cramped, barren wire mesh cages with no space to run or explore and nothing to occupy the interest of these intelligent, inquisitive and highly active animals. Some of the cages were similar to the size of a travel crate that one might use to temporarily transport a dog. However, these foxes remain in the cages for the whole of their short lives. Due to the extreme confinement, living inside an exposed wire mesh box, the animals suffer both psychological and physical damage. Water is provided in a tin can attached to the side of the cages and food is dumped on a tray attached to the outside of the cage for foxes to eat through the mesh. The cages are raised off the ground to allow the animals' faeces and urine to fall beneath, where they are left to pile up.

Contrast these stark conditions to their diverse natural environment and diet. Naturally shy and secretive animals, foxes have large territories and live in dens below ground in open country. They eat a wide range of foods including small mammals, fish, birds' eggs, insects, grass, berries and other fruits¹.

Foxes come from the same family as domestic dogs and behave in similar ways; Borys, Eryk and Aleska are intelligent, emotional and affectionate. Born in a nesting box attached to their bare wire cage, their mother nursed and cared for them during their first weeks of life before she was removed, leaving the siblings to fend for themselves. The trio remained in the cage as they grew, their fur changing to white over the summer, in readiness for the winter.

In the wild, Arctic foxes like Borys, Eryk and Aleska are nomadic, travelling many miles each day over the ice², their fur protecting them from the cold.

Instead of a lifetime of family life and experiences, at less than 7 months of age Boris and then Eryk were removed from their cage by the farmer and killed. As he approached the cage the family became agitated, having seen others killed; they retreated to the far end of the cage, but there was nowhere to hide. Held by their tails, upside down, the young foxes struggled as they were hung up by a back leg and electrocuted. Their frightened sister Aleska could only watch on, as her terrified brothers were killed in front of her. Left alone in the cage, she would be used to produce next year's babies for the trade.



Arctic foxes Borys, Eryk and Aleska were born in a cage and bred for vanity



Aleska can only look on as her brothers, Borys and Eryk, are killed. They were less than 7 months old.



Another fox with distinct markings was observed; she had white fur with dark patches around her eyes and lived as a young cub with her siblings, but was then separated from her family. This young female was isolated from other foxes in a series of different cages, some less than a square metre. For an animal needing a large, rich and challenging wild territory, such excessive confinement is torture. At one year old the fox gave birth to two cubs, from whom she was later separated, a mesh partition dividing the cage.



A female fox separated from her family and kept alone in a small cage

The following incidents highlight the generally poor conditions, deprivation and lack of welfare on the farm:

- An escaped fox wandered around the farm; two men were seen chasing the fox, each holding a short plank of wood like a club, with another man carrying a net. As the fleeing animal evaded capture, their deformed feet, the result of living on wire mesh, can clearly be seen.
- The cages in which the animals are forced to live are unstable, bowing under the weight of their inhabitants, the foxes' feet protruding through the gaps in the mesh.
- Young foxes attempt to engage in play, but their behaviour is restricted by the confines of the cage.



An escaped fox wanders around the farm, evading capture

ADI's previous investigations have uncovered similar conditions, with incidents of deficits in animal care including untreated infection or disease in animals' eyes, noses and ears, open wounds, loss of tails, malformed limbs and dilapidated cages. Footage clearly showed animals suffering terribly as a result of the environment in a number of fur farms³.



Tiny fox feet protrude through the cage floor

The rich social and emotional lives of foxes in the wild is about as far removed as you can get from the lives these animals have on a factory fur farm. In the wild young foxes live in family groups⁴ with female relatives sometimes helping to raise cubs⁵. Arctic foxes dig complex burrow systems or shelter and breeding, with young animals playing in the safety of their family group⁶. Foxes are affectionate, social animals who communicate with one another in complex ways by scent marking and a variety of vocalisations like barks, whines, howls and yelps^{7 8}.

Naturally inquisitive, young foxes love to play and investigate their natural surroundings. These behaviours are denied the animals on factory fur farms, the constant deprivation having a devastating impact on their psychological and physical health, resulting in a lifetime of chronic suffering.

Psychological health

The severely restricted space and barren environment of the fur farm, with nothing of interest and no opportunity to perform normal behaviours, results in abnormal, repetitive movements such as circling, pacing and chewing. These abnormal or stereotypic behaviours indicate that the animal is suffering and cannot cope with their environment^{9 10 11}. results in abnormal, behaviours indicate that the animal is.

Foxes can also display exaggerated fear responses, fur biting¹² and tail biting¹³, with some mothers even killing their babies. During our observations foxes without tails were housed alone in much smaller cages, their loss of appendage likely a result of chewing caused by stress, either by themselves or other foxes. Animals were also seen chewing and pawing at the cage mesh, displaying a desire to both escape and perform instinctive digging and gnawing behaviours.



A fox without a tail housed alone in a small cage

On mink fur farms, animals live in tiny cages alongside thousands of other individuals, causing chronic aggression and biting¹⁴. Mink have several nest sites in the wild, and territories of up to 4km in size¹⁵. Fur chewing is typically the only abnormal behaviour reported by the fur industry because it has a direct impact upon fur production, although it is not the only one displayed. Chinchillas, for example, also display back flipping and bar chewing^{16,17}.



Despite their captivity and breeding, foxes retain all of their wild instincts and needs and are shy and fearful of humans



The semi aquatic mammal mink is denied access to water when farmed for their fur

Foxes have been farmed for their fur since around the beginning of the 20th century however they remain wild animals whose wild nature has not been modified through breeding by humans. They retain all of their wild instincts and needs. Shy and fearful of humans, their mental and emotional suffering is intensified by the extreme confinement of the farming environment.

In contrast to the facts, and to justify their use, the fur industry purports that foxes are domesticated, but this is not the case; indeed selective breeding to make foxes tamer and docile, more dog-like, results in changes to their fur^{18,19} that are not consistent with what the industry demands²⁰. Such animals are not used commercially, resulting in the farmed foxes experiencing a fear of humans which is a major and very common welfare problem.

While the fur industry suggest that farmed foxes do not need to dig because they have no need to make a nest or bury food like wild foxes²¹, studies show that captive foxes have a strong desire to perform these innate behaviours²².

Another claim is that the semi aquatic mammal mink does not miss having water in which to swim if they have never had it²³. An independent study however has shown that mink consider access to a water pool the most valuable resource, even showing signs of physiological stress, similar to that displayed when deprived of food, when access is prevented²⁴.

Even fully domesticated species such as rabbits, also farmed for their fur, have the desire to carry out naturally wild activities, with their range of behaviours highly influenced by their wild ancestry. On fur farms, the small, wire floored cages which animals live in for their entire life, provide no opportunity to run, dig, hunt or play; torture for animals with innate behavioural needs.

Physical health



In poor physical condition, the flimsy flooring of her cage made it difficult for this mother to walk



This fox was filmed on multiple occasions with a bad eye that was swollen with pus and left untreated

Excessive confinement and selective breeding on fur farms cause animals physical health problems. To create bigger pelts foxes have been selectively bred and fed high fat diets, causing their size to almost double in the last 20-30 years. Leg weakness, strain on joints and early abnormal bone growth are also common²⁵. This increase in size causes obesity, leading to difficulty in moving and diarrhoea²⁶.

During our observations, breeding foxes were in a particularly poor physical condition, having experienced one or more breeding cycles. One breeding mother had a saggy belly and thin appearance, the noticeably flimsy flooring of her cage making it difficult for her to walk.

A life stood on a floor of wire mesh resulted in foot problems for many of the foxes who had overgrown claws and bent feet. Instead of standing on the tips of their toes, as foxes usually do, they were bearing weight on the whole foot. The size of the holes in the mesh may cause the animals to walk in this atypical way, to make moving around the cage more comfortable. A study of caged foxes found that bending of the front feet occurs more often on a mesh floor than on earth and smaller cages cause more animals to have bent feet²⁷. A study of caged foxes found that bending of the front feet occurs more often on a mesh floor than on earth and smaller cages cause more animals to have bent feet.

One fox was filmed on multiple occasions with a bad eye, weeping and swollen with pus, its condition deteriorating until it appeared the fox could no longer open the eye, indicating the eye had not been treated.

Killing

Electrocution is a common killing method for foxes, as well as raccoon dogs, and restraint devices like neck tongs and snout clips are commonly used. Animals are killed by heart attack and loss of brain function²⁸.

Foxes observed by ADI were dragged from their cages by their tails, the struggling animals hung up by a rope tied around the back foot and from a hook. Two prods were used to send an electrical current through their bodies, one placed either on the animal's foot pad or inserted into their rectum, with the other put into the mouth. A number of foxes were observed watching their terrified family members and neighbours die. Some foxes could be heard screaming or yelping when the electric prod went into their mouths, but they did not fully bite down, the farmer having to make additional attempts.

The fur industry claims that killing animals for fur is humane, with Fur Europe stating *"...that many people lack information on this matter and often believe that cruel killing practices are used, which is very far from the truth..."*, and *"In practice, animals are euthanized by either gas (CO2) or electricity, thus avoiding unnecessary pain and stopping heart function quickly."*

ADI observations reveal the reality. While the farmer killed another animal, ADI recorded the previous fox lying on the floor, still breathing after being electrocuted by prods applied to the foot and mouth. The farmer had to hang the fox up a second time and use anal and mouth electrocution to kill the animal.

A study by Agrifood Research Finland on this "traditional" method of killing, suggests that *"electrical stunning produces an immediate and irreversible state of unconsciousness and therefore is a humane way of euthanasia of farmed foxes"*²⁹. The European Commission also states that *"Foxes and raccoon-dogs are commonly electrocuted by an apparatus with two electrodes, one being inserted in the rectum while the other is applied to the mouth. It is believed to induce unconsciousness immediately if the apparatus is used properly"*.

One fox observed by ADI regained consciousness after being electrocuted and tried to escape. After electrocution, the fox is seen writhing on a trolley alongside other dead foxes, as the farmer continues killing other animals, watched by those in a cage behind him. The farmer notices the movement and the fox jumps off the trolley and scrambles away, only to be re-caught and hung up for electrocution once more. As the farmer grabs the fox by the scruff of the neck, the frightened animal knows what is about to happen and desperately tries to avoid biting the electrical probe. The farmer hits the animal on the face with the prod, trying to force the fox's mouth open and eventually the animal is killed.



The farmer drags each fox out of their cage by the tail to be killed



Foxes are killed on the farm in full view of family members and neighbours



A fox jumps off the trolley and scrambles away after regaining consciousness after electrocution



The farmer hits the fox in the face with the electrical prod, force their mouth open

The website “the Truth about Fur”, created by a coalition from the fur industry in America and Canada, states that “Electrocution is used in poultry, it’s used in pigs, it’s used in foxes, and the training and the testing has shown that 100% of the animals are dead within 10 seconds”³⁰. The ordeal for the animals observed clearly lasted longer than 10 seconds. During another killing, a conscious fox was left hanging by their back foot, struggling for nearly two minutes while the farmer answered his phone.

Mink farmed for fur are gassed in a “killing box” with 30-50 other individuals. It takes around 1 minute for them to become unconscious, with some dying from suffocation due to the number of animals in the box. Other methods to kill animals farmed for their fur include injection with chemicals and, for chinchillas, neck breaking³¹. Mink farmed for fur are gassed in a “killing box” with 30-50 other individuals. It takes around 1 minute for them to become unconscious, with some dying from suffocation due to the number of animals in the box. Other methods to kill animals farmed for their fur include injection with chemicals and, for chinchillas, neck breaking.



Gassed in a ‘killing box’ it can take mink around a minute to become unconscious

Fur products

The majority of the public is against the wearing of fur on ethical grounds. Opinion polls have found that 57% of people in the US are against fur farming³², as are the majority of citizens polled across Europe³³. For example, 74% are opposed to fur in the UK³⁴ and 66% in Poland³⁵.

Fur is used to make whole products, such as coats and hats, but also increasingly to adorn clothing, such as fur trim on coat hoods or bobbles on hats³⁶, as well as accessories such as fur pom poms on handbags or keyrings. With the rise in global temperatures, trends for short coats with trim, or boleros and vests, are increasing³⁷. It takes up to 35 foxes to make a fur coat³⁸, but most will be killed for trinkets and trim^{39 40}.



Shockingly, a number of investigations have been carried out in the UK which reveal that items sold in high street stores labelled as synthetic fur were actually real fur⁴¹, even when publicly claiming their stores were fur free⁴². This included fur from rabbits, raccoon dogs, mink and cats⁴³. Despite almost half of consumers polled stating that they use price as an indicator of whether an item is real fur, such items are not necessarily expensive⁴⁴ and with real fur often not labelled, it can be very difficult for consumers to make an informed choice.



Fur products can be very cheap, and often priced the same, or less than⁴⁵ faux fur, especially if bought in bulk. For example, readymade trims and accessories can cost as little as 1c (1p) for a rabbit fur pom pom, \$1.50 (£1.16) for a whole pelt, less than \$5 (£3.85) for a fox fur scarf and a square metre of fox fur trim starting from 80 cents (62p).

The Industry

Worldwide, 85% of animals used for fur are farmed in factory conditions⁴⁶ with the remaining 15% trapped in the wild, caught in indiscriminate snares or traps. A whole host of animals are killed for their fur including mink, foxes, rabbits, sables, chinchillas, beavers, lynx, seals, raccoons, coyotes, muskrats, wolves, otters, cats and dogs. Some of the most common species of animals farmed for their fur are mink and fox, as well as chinchilla and raccoon dog⁴⁷.

- **Globally** over 110 million animals are killed on fur farms each year⁴⁸ while over 16 million animals are trapped in the wild for their fur⁴⁹.
- Killed for their fur each year: more than 15 million foxes⁵⁰; 75 million mink; over 14 million raccoon dogs in Europe⁵¹ and China⁵²; almost 200,000 chinchilla in Europe⁵³.



How they live on the fur farm....



...and where they belong

- **Europe** is one of the major producers of fur, contributing to nearly half of the global total, with over 5,000 fur farms, killing nearly 46 million animals a year⁵⁴.
- **Denmark and Poland** are the highest producing countries across Europe, killing over 25 million animals between them per year⁵⁵ and the number is increasing⁵⁶.
- **Poland** produces over 8.6 million pelts per year with annual exports of fur products worth around €3 million⁵⁷. Over 95% of fur skins produced in Poland are exported⁵⁸.
- The **US** is one of the largest importers of Polish furs, directly importing around 5% of their furs⁵⁹. The US has around 275 mink farms producing 4.4 million pelts a year⁶⁰.
- The **US and Canada** produce over 4.3 million pelts from wild-trapped animals⁶¹.
- **China** kills around 87 million mink, foxes and raccoon dogs for the fur trade⁶².

In 2011 the global fur industry was estimated to be worth \$15 billion⁶³ (£11 billion). Europe-wide exports value over €994 million, with Italy, Greece, France, Germany and the UK reporting the highest export value⁶⁴. Despite a ban on fur farms, the UK is one of the largest exporters of fur in Europe, exporting over €25 million pounds worth of garments per year⁶⁵. The UK imported over £4.5 million worth of fur skins, and clothing items from China in 2016⁶⁶.

Poland is one of Europe's largest producers of fur, producing over 8.6 million pelts per year, 50,000 of these from foxes; annual exports of fur garments/products are around €3 million⁶⁷. The country produces more than 11% of Europe's fur production value and over 95% of fur skins produced in Poland are exported⁶⁸.

Fur regulations and welfare accreditation

Regulations for the protection of farmed animals in the EU sets out requirements for the prevention of illness, injury and poor health, appropriate feeding, watering and housing as well as provisions to satisfy the animal's natural behavioural needs⁶⁹. Poland's Ministry of Agriculture & Rural Development regulations provide for fox and raccoon dog cages to be a mere 50 x 60 x 90 cm, while the space for mink is even smaller, 45 x 30 x 70 cm⁷⁰.

The fur industry has set up an accreditation and labelling scheme called WelFur in an attempt to reassure consumers about the welfare of animals farmed for their fur⁷¹ however this cannot protect welfare nor prevent the suffering of animals farmed for their fur for a number of reasons:

- Animals remain in small, barren wire cages, devoid of interest, which restricts their ability to exercise and perform natural behaviours such as running, swimming and climbing. This leads to the development of abnormal behaviours such as fur chewing and tail biting, which indicates the animal is not coping with the environment and is therefore suffering.
- The scheme receives part funding from the fur industry⁷², creating a conflict of interest and bias.
- The WelFur scheme does not provide standards of welfare or guidance on the handling and killing of fur animals⁷³, which commonly involves restraint using tong-like devices around the neck or body and death by electrocution or gassing. Importantly, as ADI observations show, animals can suffer mishandling and cruelty during killing⁷⁴.
- Assessments made using the WelFur fox protocol do not consistently pick up on foot deformities (as a result of obesity) as an indicator of poor welfare, identified as the most common problem in fur farms investigated⁷⁵.



Animals live in small, barren wire cages, devoid of interest



Foot deformities are an indicator of poor welfare and a common problem on fur farms

- Only a sample of animals are inspected⁷⁶ during assessments of whole farms, which have potentially thousands of animals.
- Many physical health problems experienced by animals farmed for fur may not be visually obvious during inspections. For example breeding mink for larger body size to create bigger pelts can cause reproductive problems, metabolic disorders, and DNA damage⁷⁷, as well as psychological health problems due to the restrictive conditions⁷⁸.

Given the poor level of welfare and space provided within the guidelines of the WelFur programme, it is difficult to see how it can have any meaningful impact on the life experience of animals farmed for fur. It is clear that the pressure to retain unhealthy, intense farming methods to aid increased production and improved profitability hopelessly compromises any animal protection measures.

In this industry, regulation and certification has and continues to fail the animals. Previous ADI investigations of fur farms in Europe have provided evidence of the failure of official fur farming regulations and certification regimes. One investigation exposing horrific conditions and animal suffering in government-certified fur farms in Finland prompted inspections by the Finnish Fur Breeders' Association (STKL) and the Finnish Food Safety Authority (EVIRA) with some farms losing their certification status⁸⁰.



Horrific conditions and animals suffering were exposed by ADI on Finnish farm farms

Conclusions/recommendations

Animals farmed for their fur are denied their most natural behaviours and live in bare wire mesh cages until their deaths. In comparison to the richness of the natural lives of these emotional, intelligent animals, the chronic deprivation and extreme confinement causes animals to suffer both psychological and physical damage. With nothing of interest to occupy these inquisitive and highly active animals, they literally go insane with boredom.

Unable to protect them from this inherently cruel industry, regulation and certification is failing these animals. Despite fur industry claims that methods of killing are quick and humane, the reality is a different story. Animals in fur farms are electrocuted and gassed to death in their millions; some animals are not killed outright causing prolonged suffering.

The reduction of sentient animals to a mere product, bred and killed purely for vanity, is unethical. It is time to change. The majority of the public is against the wearing of fur, but the cheap cost of real fur and lack of labelling can dupe and confuse consumers. The only way to stop the suffering is through prohibitive legislation and for designers and retailers to remove themselves from this cruel trade; this is especially important in countries where fur farming has been banned, like the UK, but which still import, export and sells fur products.



**Fur is never humane.
When you buy fur you buy cruelty.**



5 Fur Farming Facts

1. Animals farmed for their fur suffer a life of mental and physical pain caused by cramped, inadequate housing and a cruel, merciless death – intelligent, feeling beings like family dogs and cats, treated like a product.
 2. Despite fur industry claims methods of killing are quick, the evidence is clear that these animals are terrified as they face a cruel death – intelligent, feeling beings, capable of suffering, killed for an unnecessary product.
 3. Over 15 million foxes are killed for their fur in a year, usually used for trinkets, trims and accessories. Up to 35 foxes are used to make a fur coat.
 4. The majority of people are against the wearing of real fur (74% in the UK, 57% in the US) but the cheap cost and lack of labelling can dupe and confuse consumers into thinking fur products are fake.
 5. Fur is never humane. When you buy fur you buy cruelty – the animals die for vanity.
-

References

- ¹ Scientific Committee on Animal Health and Animal Welfare. (2001). *The welfare of animals kept for fur production*. European Commission.
- ² Nimon, A. J., & Broom, D. M. (2001). *The welfare of farmed foxes *Vulpes Vulpes* and *Alopex la Gopus* in relation to housing and management: A review*. *Animal Welfare*, 10(3), 223-248.
https://www.researchgate.net/publication/233551019_The_Welfare_of_Farmed_Foxes_Vulpes_Vulpes_and_Alopex_la_Gopus_in_Relation_to_Housing_and_Management_A_Review
- ³ Animal Defenders International. (2010). *Bloody harvest – the real cost of fur*. [ad-international.org](https://www.ad-international.org/admin/downloads/adi_a7f852df6c87d061a4e6b28c70536ade.pdf). https://www.ad-international.org/admin/downloads/adi_a7f852df6c87d061a4e6b28c70536ade.pdf
- ⁴ Nimon, A. J., & Broom, D. M. (2001). *The welfare of farmed foxes *Vulpes Vulpes* and *Alopex la Gopus* in relation to housing and management: A review*. *Animal Welfare*, 10(3), 223-248.
https://www.researchgate.net/publication/233551019_The_Welfare_of_Farmed_Foxes_Vulpes_Vulpes_and_Alopex_la_Gopus_in_Relation_to_Housing_and_Management_A_Review
- ⁵ Macdonald, D. (2002). *The New Encyclopedia of Mammals*. Oxford: Oxford University Press.
- ⁶ Burnie, D. (eds). (2001). *Animal – the definitive visual guide to the world’s wildlife*. London: Dorling Kindersley Limited.
- ⁷ Arnold, J. (n.d.). *Communication in red foxes (*Vulpes vulpes*): the code of scent marks*. University of Bristol: Mammal Research Unit.
<http://www.bio.bris.ac.uk/research/mammal/foxscent.html>
- ⁸ Newton-Fisher, N., Harris, S., White, P. & Jones, G. (1993). *Structure and function of red fox *Vulpes vulpes* vocalisations*. *Bioacoustics*, 5(1-2), 1-31. https://www.researchgate.net/profile/Nicholas_Newton-Fisher/publication/233424797_Structure_and_Function_of_Red_Fox_Vulpes_Vulpes_Vocalisations/links/02e7e51ee662631238000000.pdf
- ⁹ Stur, B. (2017). *EU mink, fox farms to be certified*. *New Europe*. <https://www.neweurope.eu/article/eu-mink-fox-farms-certified/>
- ¹⁰ Mason, G., Clubb, R., Latham, N., & Vickery, S. (2007). *Why and how should we use environmental enrichment to tackle stereotypic behaviour?* *Applied Animal Behaviour Science*, 102(3), 163-188. <http://www.sciencedirect.com/science/article/pii/S0168159106001900>
- ¹¹ Mason, G. (2005). *Abnormal Repetitive Behaviour in captive animals*. University of Guelph: *Stereotypic Animal Behaviour Fundamentals and Applications to Welfare*. <http://www.aps.uoquelpk.ca/~amason/StereotypicAnimalBehaviour/library.shtml>
- ¹² Scientific Committee on Animal Health and Animal Welfare. (2001). *The welfare of animals kept for fur production*. European Commission. https://ec.europa.eu/food/sites/food/files/safety/docs/sci-com_scah_out67_en.pdf
- ¹³ Korhonen, H. T., Niemelä, P. & Jauhiainen, L. (2001). *Effect of space and floor material on the behaviour of farmed blue foxes*. *Canadian Journal of Animal Science*, 81(2), 189-197. <http://www.nrcresearchpress.com/doi/pdf/10.4141/A00-093>
- ¹⁴ Hansen, S. W., Møller, S. H. & Damgaard, B. M. (2014). *Bite marks in mink—induced experimentally and as reflection of aggressive encounters between mink*. *Applied Animal Behaviour Science*, 158, 76-85. [http://www.appliedanimalbehaviour.com/article/S0168-1591\(14\)00165-8/fulltext](http://www.appliedanimalbehaviour.com/article/S0168-1591(14)00165-8/fulltext)
- ¹⁵ Mason, G. J., Cooper, J. & Clarebrough, C. (2001). *Frustrations of fur-farmed mink*. *Nature*, 410(6824), 35. https://atrium.lib.uoquelpk.ca/xmlui/bitstream/handle/10214/4702/Mason_et_al_2001.pdf?sequence=1
- ¹⁶ Franchi, V., Aleuy, O. A., & Tadich, T. A. (2016). *Fur chewing and other abnormal repetitive behaviors in chinchillas (*Chinchilla lanigera*), under commercial fur-farming conditions*. *Journal of Veterinary Behavior: Clinical Applications and Research*, 11, 60-64. <http://www.sciencedirect.com/science/article/pii/S1558787815001598>
- ¹⁷ Svendsen, P. M., Palme, R., & Malmkvist, J. (2013). *Novelty exploration, baseline cortisol level and fur-chewing in farm mink with different intensities of stereotypic behaviour*. *Applied animal behaviour science*, 147(1), 172-178. <http://www.sciencedirect.com/science/article/pii/S0168159113001561>
- ¹⁸ Jones, L. (2016). *A Soviet scientist created the only tame foxes in the world*. *BBC Earth*. <http://www.bbc.co.uk/earth/story/20160912-a-soviet-scientist-created-the-only-tame-foxes-in-the-world>
- ¹⁹ Trut, L., Oskina, I. & Kharlamova, A. (2009). *Animal evolution during domestication: the domesticated fox as a model*. *Bioessays*, 31(3), 349-360. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2763232/>
- ²⁰ Picket, H. & Harris, S. (2015). *The case against fur factory farming: A scientific review of animal welfare standards and 'WelFur'. Respect for Animals*. <http://www.furfreealliance.com/wp-content/uploads/2015/11/Case-against-fur-farming.pdf>
- ²¹ Fur Europe. (2015). *WelFur – science-based animal welfare assessment* [video content]. [fureurope.eu](http://www.fureurope.eu/video/welfur-science-based-animal-welfare-assessment/). <http://www.fureurope.eu/video/welfur-science-based-animal-welfare-assessment/>
- ²² Koistinen, T., Korhonen, H. T., Hämäläinen, E. & Mononen, J. (2016). *Blue foxes' (*Vulpes lagopus*) motivation to gain access and interact with various resources*. *Applied Animal Behaviour Science*, 176, 105-111. <http://www.sciencedirect.com/science/article/pii/S0168159116000150>
- ²³ Fur Europe. (2015). *To swim or not to swim: An interpretation of farmed mink's motivation for a water bath*. [fureurope.eu](http://www.fureurope.eu/publications/to-swim-or-not-to-swim-an-interpretation-of-farmed-minks-motivation-for-a-water-bath/). <http://www.fureurope.eu/publications/to-swim-or-not-to-swim-an-interpretation-of-farmed-minks-motivation-for-a-water-bath/>
- ²⁴ Mason, G. J., Cooper, J. & Clarebrough, C. (2001). *Frustrations of fur-farmed mink*. *Nature*, 410(6824), 35. https://atrium.lib.uoquelpk.ca/xmlui/bitstream/handle/10214/4702/Mason_et_al_2001.pdf?sequence=1
- ²⁵ Korhonen, H. T., Eskeli, P., Lappi, T., Huuki, H. & Sepponen, J. (2014). *Effects of feeding intensity and Ca: P ratio on foot welfare in blue foxes (*Vulpes lagopus*)*. *Open Journal of Animal Sciences*, 4, 153-164. <http://jukuri.luke.fi/bitstream/handle/10024/484248/effects.pdf?sequence=1>
- ²⁶ Ahola, L.K., Huuki, H., Hovland, A.L., Koistinen, T. & Mononen, J. (2012) *WelFur – foxes: the inter-observer reliability of the WelFur health measures, and the prevalence of health disorders on fox farms during the growth period*, pp 441-447 in: Larson, P.F., Møller, S.H., Clausen, T., Hammer, A.S., Låssen, T.M., Nielsen, V.H. & Tauson, A.H. (eds.) *Proceedings of the Xth International Scientific Congress in fur animal production*. Wageningen, Netherlands: Wageningen Academic Publishers.
- ²⁷ Korhonen, H., Jauhiainen, L., Niemelä, P., Harri, M. & Sauna-aho, R. (2001). *Physiological and behavioural responses in blue foxes (*Alopex lagopus*): comparisons between space quantity and floor material*. *Animal Science*, 72(2), 375-387.
- ²⁸ Scientific Committee on Animal Health and Animal Welfare. (2001). *The welfare of animals kept for fur production*. European Commission. https://ec.europa.eu/food/sites/food/files/safety/docs/sci-com_scah_out67_en.pdf
- ²⁹ Korhonen, H.T., Cizinauskas, S. & Viitmaa, R. (2009). *Evaluation of the traditional way of euthanasia of farmed foxes from an animal welfare point of view*. *Annals of Animal Science*, 9, 73-87.
- ³⁰ MacHattie, D. (n.d.). *Questions about the fur trade? How are farmed foxes killed?* *The Truth About Fur*. <http://www.truthaboutfur.com/en/how-are-farmed-foxes-killed>

- ³¹ Scientific Committee on Animal Health and Animal Welfare. (2001). The welfare of animals kept for fur production. European Commission. https://ec.europa.eu/food/sites/food/files/safety/docs/sci-com_scah_out67_en.pdf
- ³² Jones, J.M. (2017). Americans hold record liberal views on most moral issues. Gallup News. http://www.gallup.com/poll/210542/americans-hold-record-liberal-views-moral-issues.aspx?q_source=2017+poll+animals&q_medium=search&q_campaign=titles
- ³³ Fur Free Alliance. (2014). Opinion poll overview of European citizens against fur farming: European citizens against fur farming. <http://www.furfreealliance.com/wp-content/uploads/2016/10/Opinion-poll-overview-of-European-citizens-against-fur-farming.pdf>
- ³⁴ Four Paws. (2014). FOUR PAWS exposé: At Burberry, quality fur is all fluff. [four-paws.org.uk](http://www.four-paws.org.uk) <http://www.four-paws.org.uk/news-press/news/four-paws-expose-at-burberry-quality-fur-is-all-fluff/>
- ³⁵ Fur Free Alliance. (n.d.). Public opinion. <http://www.furfreealliance.com/public-opinion/>
- ³⁶ Douglas, J. (2016). Will welfare checks improve conditions on fur farms? BBC News. <http://www.bbc.co.uk/news/business-37679652>
- ³⁷ Hong Kong Economy Research HKTDC. (2017). Fur industry in Hong Kong. HKTDC Research. <http://hong-kong-economy-research.hktdc.com/business-news/article/Hong-Kong-Industry-Profiles/Fur-Industry-in-Hong-Kong/hkip/en/1/1X000000/1X00403X.htm>
- ³⁸ Marc Kaufman Furs. (n.d.). How many foxes does it take to make a coat? Answers.com. http://www.answers.com/Q/How_many_foxes_does_it_take_to_make_a_coat
- ³⁹ UKF. (n.d.). Business. <http://www.ukf.com.hk/html/business.php>
- ⁴⁰ eBay. (2010). How to recognize quality fur and leather buying guide. <http://www.ebay.co.uk/qds/How-To-Recognize-Quality-Fur-And-Leather-Buying-Guide-/10000000018813518/g.html>
- ⁴¹ Look North. (2017). The BBC finds some items being sold as fake fur on market stalls in our region are actually real: FAKE OR REAL. BBC One. <http://www.bbc.co.uk/programmes/p056gddc>
- ⁴² ITV News. (2016). Could your faux fur actually be real? ITV Report. <http://www.itv.com/news/2016-12-16/could-your-faux-fur-actually-be-real/>
- ⁴³ Hajibagheri, S. (2017). Real animal fur sold as fake on British high street. Sky News. <http://news.sky.com/story/real-animal-fur-sold-as-fake-on-british-high-street-10832370>
- ⁴⁴ Humane Society International: United Kingdom. (2015). Exposed: real fur sold as fake on British high-street. http://www.hsi.org/world/united_kingdom/news/releases/2015/11/real_fur_as_fake_uk_112515.html
- ⁴⁵ Jackson, M. (2016). Faux fur or real - do you know what you're wearing? BBC News. <http://www.bbc.co.uk/news/uk-38302019>
- ⁴⁶ Business of Fur. (nd). Industry information: fur info. <http://www.businessoffur.com/fur-info/industry-information/>
- ⁴⁷ Fur Europe. (2017). Fur industry by country. <http://www.fureurope.eu/fur-information-center/fur-industry-by-country/>
- ⁴⁸ Fur Europe. (2017). World fur trade is booming despite china slowdown. <http://www.fureurope.eu/news/world-fur-trade-is-booming-despite-china-slowdown/>
- ⁴⁹ Business of Fur. (nd). Industry information: fur info. <http://www.businessoffur.com/fur-info/industry-information/>
- ⁵⁰ Fur Europe. (2017). World fur trade is booming despite china slowdown. <http://www.fureurope.eu/news/world-fur-trade-is-booming-despite-china-slowdown/>
- ⁵¹ Fur Europe. (2016). 2015 Annual report. <http://www.fureurope.eu/wp-content/uploads/2015/02/FE-Annual-Report-2015-Single-Pages.pdf>
- ⁵² Humane Society International: United Kingdom. (n.d.). The fur trade. http://www.hsi.org/world/united_kingdom/work/fur/facts/fur-trade-facts.html?referrer=https://www.google.co.uk/
- ⁵³ Fur Europe. (2017). Fur industry by country. <http://www.fureurope.eu/fur-information-center/fur-industry-by-country/>
- ⁵⁴ Fur Europe. (2016). 2015 Annual report. <http://www.fureurope.eu/wp-content/uploads/2015/02/FE-Annual-Report-2015-Single-Pages.pdf>
- ⁵⁵ Fur Europe. (2017). Fur industry by country. <http://www.fureurope.eu/fur-information-center/fur-industry-by-country/>
- ⁵⁶ PwC. (2014). Wpływ ekonomiczny branży hodowli zwierząt futerkowych na gospodarkę Polski. https://www.pwc.pl/pl/publikacje/assets/wplyw_ekonomiczny_branzy_hodowcow_zwierzat_futerkowych_na_gospodarke_polski_2014.pdf
- ⁵⁷ Fur Europe. (2017). Fur industry by country. <http://www.fureurope.eu/fur-information-center/fur-industry-by-country/>
- ⁵⁸ PwC. (2014). Wpływ ekonomiczny branży hodowli zwierząt futerkowych na gospodarkę Polski. https://www.pwc.pl/pl/publikacje/assets/wplyw_ekonomiczny_branzy_hodowcow_zwierzat_futerkowych_na_gospodarke_polski_2014.pdf
- ⁵⁹ PwC. (2014). Wpływ ekonomiczny branży hodowli zwierząt futerkowych na gospodarkę Polski. https://www.pwc.pl/pl/publikacje/assets/wplyw_ekonomiczny_branzy_hodowcow_zwierzat_futerkowych_na_gospodarke_polski_2014.pdf
- ⁶⁰ Fur Commission USA. (2017). Facts & figures about farmed fur. <http://furcommission.com/>
- ⁶¹ Fur Europe. (2017). World fur trade is booming despite china slowdown. <http://www.fureurope.eu/news/world-fur-trade-is-booming-despite-china-slowdown/>
- ⁶² China AG. (2015). China's fur industry shows sluggish growth in 2015. <http://www.chinaag.org/2015/12/20/chinas-fur-industry-shows-sluggish-growth-in-2015/>
- ⁶³ Humane Research Council. (2013). Public attitudes toward fur. https://faunalytics.org/wp-content/uploads/2015/05/Fundamentals_Fur.pdf
- ⁶⁴ Fur Europe. (2016). 2015 Annual report. <http://www.fureurope.eu/wp-content/uploads/2015/02/FE-Annual-Report-2015-Single-Pages.pdf>
- ⁶⁵ Fur Europe. (2017). Fur Industry by Country. <http://www.fureurope.eu/fur-information-center/fur-industry-by-country/>
- ⁶⁶ HM Revenue & Customs. (2017). Data by commodity code. [uktradeinfo.com](https://www.uktradeinfo.com/Statistics/BuildYourOwnTables/Pages/Table.aspx). <https://www.uktradeinfo.com/Statistics/BuildYourOwnTables/Pages/Table.aspx>
- ⁶⁷ Fur Europe. (2017). Fur Industry by Country. <http://www.fureurope.eu/fur-information-center/fur-industry-by-country/>
- ⁶⁸ PwC. (2014). Wpływ ekonomiczny branży hodowli zwierząt futerkowych na gospodarkę Polski. https://www.pwc.pl/pl/publikacje/assets/wplyw_ekonomiczny_branzy_hodowcow_zwierzat_futerkowych_na_gospodarke_polski_2014.pdf

⁶⁹ The Council of the European Union. (1998). Council Directive 98/58/EC of 20 June 1998 concerning the protection of animals kept for farming purposes. *Official Journal of the European Communities*, L221/23. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31998L0058&from=EN>

⁷⁰ Rozporządzenie Ministra Rolnictwa i Rozwoju Wsi. (2010). sprawie minimalnych warunków utrzymywania gatunków zwierząt gospodarskich innych niż te, dla których normy ochrony zostały określone w przepisach Unii Europejskiej. *Dziennik Ustaw* Nr 116, 9604-9610. <http://isap.sejm.gov.pl/DetailsServlet?id=WDU20101160778>.

⁷¹ Fur Europe. (2017). WelFur: the bridge between responsible farming and fashion. *fureurope.eu*. <http://www.fureurope.eu/news/WelFur-the-bridge-between-responsible-farming-and-fashion/>

⁷² Fur Europe. (n.d.). WelFur: science-based animal welfare. *fureurope.eu*. <http://www.fureurope.eu/fur-policies/WelFur/>

⁷³ Picket, H. & Harris, S. (2015). The case against fur factory farming: A scientific review of animal welfare standards and 'WelFur'. *Respect for Animals*. <http://www.furfreealliance.com/wp-content/uploads/2015/11/Case-against-fur-farming.pdf>

⁷⁴ Scientific Committee on Animal Health and Animal Welfare. (2001). The welfare of animals kept for fur production. European Commission. https://ec.europa.eu/food/sites/food/files/safety/docs/sci-com_scah_out67_en.pdf

⁷⁵ Ahola, L. K., Huuki, H., Hovland, A. L., Koistinen, T. & Mononen, J. (2012). WelFur-foxes: the inter-observer reliability of the WelFur health measures, and the prevalence of health disorders on fox farms during the growth period. In *Proceedings of the Xth International Scientific Congress in fur animal production* (pp. 441-447). Wageningen: Wageningen Academic Publishers. https://link.springer.com/chapter/10.3920%2F978-90-8686-760-8_64

⁷⁶ Fur Europe. (2015). WelFur: Science-based animal welfare assessment. Brochure. http://www.fureurope.eu/wp-content/uploads/2015/06/WelFurBrochure_March_2015.pdf

⁷⁷ Boudreau, L., Benkel, B., Astatkie, T. & Rouvinen-Watt, K. (2014). Ideal body condition improves reproductive performance and influences genetic health in female mink. *Animal reproduction science*, 145(1), 86-98. <http://www.sciencedirect.com/science/article/pii/S0378432014000062>

⁷⁸ Korhonen, H. T., Niemelä, P., & Jauhiainen, L. (2001). Effect of space and floor material on the behaviour of farmed blue foxes. *Canadian Journal of Animal Science*, 81(2), 189-197. <http://www.nrcresearchpress.com/doi/pdf/10.4141/A00-093>

⁷⁹ Koistinen, T. (2009). Farmed blue foxes (*Vulpes lagopus*) need for a sand floor. Kuopio University Library. http://epublications.uef.fi/pub/urn_isbn_978-951-27-1292-2/urn_isbn_978-951-27-1292-2.pdf

⁸⁰ Animal Defenders International. (2012). Bloody harvest – the real cost of fur. Animal Defenders International. <http://www.ad-international.org/fur/go.php?id=2641&ssi=19>