



RESEARCH PAPER

Status Report on the Ban of Day-Old Male Chick Culling by Country

**Germany, France, USA, Switzerland, Italy, The
Netherlands, Austria, the EU, Israel and the UK**

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ABSTRACT

This research report provides a comprehensive overview of the current status and developments regarding the ban on day-old male chick culling and the introduction and implementation of Egg Sexing Technologies (ESTs) across the following countries: Germany, France, the United States, Switzerland, Italy, The Netherlands, Austria, the European Union, Israel, and the United Kingdom. The report delves into the ethical, technological, legislative, political and societal aspects of this issue, highlighting the varying approaches and stages of implementation in different regions.

In Germany and France, pioneering efforts have led to the implementation of bans on day-old male chick culling, with significant investment in egg sexing technology (EST) and alternative methods like "brother-layer fattening." The United States, while showing intent, has not yet found a universally adopted alternative, continuing with traditional methods like maceration and carbon dioxide asphyxiation. Switzerland has banned chick shredding but allows culling with CO₂, reflecting ongoing advocacy for humane practices. Italy, driven by campaigns from organisations like Animal Equality, is set to ban chick culling by 2026, focusing on developing EST. The Netherlands presents a case of active societal debate and research without concrete legislative action so far. Austria has introduced the "brother layers" concept and is exploring more humane alternatives to culling, awaiting further evidence on EST. Israel, despite significant activism and the emergence of EST companies, has not yet commercialised these technologies. The UK faces ethical and staffing challenges in the egg industry, with ongoing discussions about adopting EST.

The European Union, as a unified member state representation, is considering a region-wide regulation as part of its new animal welfare legislation, influenced by member country actions.

This report explores a global movement towards more ethical practices in the poultry industry, influenced by technological innovations (such as Egg Sexing technologies), ethical considerations, consumer awareness, and legislative actions. It highlights the complexity and multifaceted nature of addressing animal welfare issues in the egg production industry.

Note: Any UK Government source within this report will be from the previous Conservative Government.

OBJECTIVES

Objective 1: Determine what “outlawed” is defined as with regard to chick culling in the countries researched.

Objective 2: Determine the status of these laws in the researched country/state.

1. When did the laws go through, and when will they be effective?
2. Who passed them (political party, NGO, government, company, etc.)?
3. What do they entail?

Objective 3: Campaigns.

1. WHAT led to these legislative changes?
2. WHO led these campaigns?
3. HOW did they succeed if they did?

GERMANY

Summary

- In 2019, the Federal Statistical Office reported that there were approximately 45 million male chicks hatched in Germany's layer industry. [1]
- Male chicks in Germany were mostly culled by gassing in 80% CO₂ but some chicks were macerated. [2]
- Germany was the first country to ban the culling of day-old male chicks. [2]
- On 13th January 2020, Germany created a coalition with France to seek a Europe wide ban on chick culling. They hoped to create a level trading field in Europe and reduce cheaper imports from low animal welfare production systems. [3] Day-old male chick culling was outlawed in Germany on 1st January 2022. [2]
- Existing research on chicks' ability to feel pain led to a draft law outlawing the destruction of eggs from egg sex tech by day seven of their incubation period. This was to take place from 1st January 2024. [1]
- Further research commissioned by the Federal Ministry of Food and Agriculture (BMEL) revealed that pain in the growing chick embryo could not be ruled out from day thirteen of incubation. [4]
- The draft law banning the destruction of eggs from day seven of incubation was amended in August 2023, to state that it could happen up to day twelve of the egg's incubation. It came into effect on 1st January 2024. [2]

In-Depth

In September 2013, the Federal State of North Rhine-Westphalia was the first to take steps to protect day-old male hatchery chicks. By the Autumn of 2013, their hatcheries were prohibited from culling chicks, as it was considered a violation of animal welfare. This was not an easy victory, and led to significant litigation with eleven hatcheries suing. [5]

A further "blockade" by the Federal Minister of Agriculture, Christian Schmidt, delayed its success. Johannes Rammel, the Minister for Climate Protection, Environment, Agriculture, Nature Conservation and Consumer Protection for the State of North Rhine-Westphalia, and a member of the Green Party, kept the issue on the agenda by stating that "animals are not waste products that should only be killed to maximise profits." [5]

By 13th June 2019, the issue was taken to the Federal Administrative Court in Leipzig, who decided that killing male chicks for economic reasons was no longer acceptable according to

Germany's Animal Welfare Act. In Section 1, Sentence 2, the Act states that, as a fellow creature, humankind should be protecting their "life and well-being." [1]

On 20th May 2021, the decision to prohibit the practice of culling day-old male chicks was made by the German Bundestag. [6] From 18th June 2021, the Animal Protection Act was updated to include a ban on killing chicks. The law finally came into effect on 1st January 2022. However, with egg sexing technology predicted to soon be commercially available, chick culling was allowed as a temporary transitional measure. [1]

Between 2008 and December 2023, The Federal Ministry of Food and Agriculture invested €8.8 million on in-ovo technologies to determine the sex of a hatching egg. Alternative solutions, which include the brothers of layer hens for meat production and dual-purpose breeds, received €14.6 million in funding over the same time-frame. [2]

In March 2017, SELEGGT GmbH was founded. This was a collaboration of three partners that led to the technological innovation which enabled the sexing of chicken embryos before they hatch: [7]

1. Rewe Group: This major German retail group played a significant role supporting the project financially, and was instrumental in bringing the technology to market. Rewe's involvement was based on its commitment to animal welfare and sustainable business practices. [8]
2. University of Leipzig. Researchers from the University of Leipzig were fundamental in the work behind this endocrinological gender identification in fertilised eggs. [9]
3. HatchTech Group: This is a Dutch company founded in 1986, which specialises in research and technology to help the food industry. It was fundamental in helping develop the Seleggt process in a hatchery setting. [10]

Respeggt technology is used around the ninth day of incubation on fertilised eggs. A fine laser beam creates a 0.3mm hole in the egg and a drop of liquid is extracted, leaving the inner part of the egg unaffected. The DNA is analysed using the polymerase chain reaction method, to determine whether the egg contains a male or female foetus. The hole is then sealed with beeswax. [11]

Respeggt technology analyses approximately 35 million female chicks annually, with over 99% accuracy. This technology can determine the gender of one egg per second per set, and is suitable for both brown and white eggs. The machinery is also modular - making it possible to fit into any sized hatchery. [11]

As this technology advanced, so did concerns about the welfare of developing foetuses and their ability to feel pain. Albeit outdated, existing research stated that pain could not be

excluded from day seven of the twenty-one day incubation period. This would have serious implications for Respeggt. [1]

Consequently, a Federal Government Draft Law was passed on 17th March 2021, forbidding egg sexing technology that led to the destruction of male eggs before day seven of their incubation. This was to come into effect on 1st January 2024. [1]

The German Federal Ministry of Food and Agriculture (BMEL) commissioned a study to detect the specific period at which chicken embryos develop the capacity to experience aversive sensory pain; providing evidence to allow the safe destruction of incubated male eggs without causing pain. [2]

Aversive sensory pain can be understood as the unpleasant and uncomfortable feeling we experience when our body detects potential harm or injury. It is the way that our body signals to us that something is wrong or harmful. This type of pain is characterised by a strong discomfort or distressing sensation, which serves as a protective mechanism to alert us to potential danger.

Pain sensation was determined by examining the electrical activity in the brains of the embryos, their heart rate, blood pressure, and movement. The results concluded that, from the thirteenth incubation day onwards, neuronal activity of the brain was measurable using an electroencephalogram (EEG). The EEG is a medical test used to measure the electrical activity of the brain. This enables the potential transmission of stimuli, or aversive sensations such as pain. [12] and [13]

As a direct consequence of this research, the Draft Law forbidding the destruction of fertilised male eggs beyond day seven of incubation was amended - it is now allowed up to and including day twelve of incubation. [14]

One significant problem which Germany faced was the differences in the laws between the UK and the countries of the EU. The majority still allow chick culling from low animal welfare production methods, so while German legislation prohibits the culling of day-old male chicks within the country's borders, it did not impose any further restrictions. [15] This meant that eggs, products containing eggs, female chicks, and pullets, could be imported into Germany from these systems - bypassing and weakening the effects of their new law.

In 2016, Germany imported 43% of EU egg exports, making them the largest importer of eggs within the EU. [16] This meant that a large proportion of eggs consumed in Germany came from systems that still continued to kill one-day old male chicks. It therefore became a priority to create a level playing field.

To do this, both Germany and France worked together on banning male chick culling across the EU. On 13th January 2020, the German and French and Agriculture Ministers met at a seminar to 'formalise a bilateral partnership,' to bring about the end of male chick culling in the layer industry. They brought together stakeholders from the poultry industry, researchers,

and technology institutes. A further Franco-German seminar was held on 16th July 2021 to assess the progress of this new alliance. [3]

Germany and France also presented a paper to the Agriculture and Fisheries Council meeting on the 17th and 18th of October 2022, on behalf of themselves and Austria, Belgium, Cyprus, Finland, Ireland, Luxembourg and Portugal. In particular, they were asking for an impact assessment of an EU-wide ban on killing chicks. The European Commission stated that they would “consider such a ban.” [17]

Further momentum towards a Europe-wide ban was seen in January 2023, with an event entitled “Prohibiting chick and duckling killing in EU Law” by The European Institute for Animal Law and Policy. [18] Despite all this, there has yet to be a Europe-wide ban on chick culling.

German farmers also used an alternative to “no-shredding” called “brother-layer fattening.” This is where the brothers of female chickens used for egg laying are reared for meat production. [19]

With meat-producing (broiler) chickens, it can take 35 days for them to reach 2kg, but “brother-layer fattened” chicks can take 60-126 days to reach between 1.3-1.5kg. The significantly longer fattening period and associated high feed costs, alongside the ecological impact, make this a niche solution to male chick culling. [19]

Timeline

[2008]

From 2008-2023, the Federal Ministry of Food and Agriculture invested €8.8 million on in-ovo technologies to determine the sex of a hatching egg between 2008 and December 2023. [2]

From 2008-2023, brothers of layers hens and dual-purpose breeds received €14.6 million in funding. [2]

[2013]

In September 2013, the Federal State of North Rhine-Westphalia took steps to protect day-old male hatchery chicks. By the Autumn of 2013, their hatcheries were prohibited from culling chicks as it was considered a violation of animal welfare. [5]

[2016]

In August 2016, Johannes Remmel kept the issue on the agenda by stating that “animals are not waste products that should only be killed to maximise profits.” [5]

[2017]

The Rewe Group, researchers from the University of Leipzig and HatchTech, the Dutch technology company, collaborated in 2017 to create SELEGGT GmbH. [7]

[2019]

By 13th June 2019, the Federal Administrative Court in Leipzig ruled that killing male chicks for economic reasons was no longer acceptable, in accordance with Germany’s Animal Welfare Act. [1]

[2020]

On 13th January 2020, the German and French and Agriculture Ministers met at a seminar to ‘formalise a bilateral partnership’ to bring about the end of male chick culling in the layer industry across Europe. [3]

[2021]

Federal Government Draft Law was passed on 17th March 2021 forbidding the destruction of male eggs from egg sex tech before day seven of their incubation. This was to come into effect on 1st January 2024. [1]

On 20th May 2021, the German Bundestag prohibited the practice of culling day-old male chicks. [6]

The Animal Protection Act was updated on 18th June 2021 to include a ban on killing chicks. It came into effect on 1st January 2022. [1]

A further Franco-German seminar was held on 16th July 2021 to assess the progress of their alliance. [3]

[2022]

From 1st January 2022, the culling of male chicks in Germany was banned. [2]

The Federal Ministry of Food and Agriculture (BMEL) commissioned a study on pain sensation in developing chick foetuses, to understand at what day the EST could safely terminate the incubation process to avoid causing any pain to the foetuses. [2]

Germany and France presented a paper to the Agriculture and Fisheries Council meeting on the 17th and 18th of October 2022, asking for an impact assessment on an EU-wide ban on killing chicks. [17]

[2023]

The research into in-ovo pain perception found that pain could not be dismissed from day thirteen of incubation, as opposed to from day seven of incubation. [2]

In August 2023, the Draft Law was amended to state that the termination of incubated eggs would not be allowed from day thirteen onwards. [14]

[2024]

From 1st January 2024, male eggs must be destroyed by day twelve of their incubation process, to avoid pain to the growing foetus. See Agenda Item 21. [2]

What does this mean?

- Incubation

- o A fertilised egg takes 21 days to develop and hatch into a chick. An incubator will provide optimum heat, light and moisture conditions for the egg to hatch. The incubation day refers to a point in time within the 21 days it takes for an egg to hatch into a chick - e.g. incubation day twelve.

- German Law

- o German law requires farmers operating within Germany to find alternatives to killing recently hatched male chicks.
- o From 1st January 2024 onwards, German Law originally prohibited the killing of male chicken embryos up to incubation day seven, but it was changed to day twelve.
- o The change in German law was due to earlier research which indicated that chicken embryos might be capable of transmitting pain from incubation day seven onwards. [2]

- Pain Perception versus Nociception

- o Nociception and pain perception are two distinct processes. Nociception refers to the body's ability to detect and transmit signals in response to potential harm. However, these signals may not necessarily be painful. It involves specialised sensory nerve endings called nociceptors, which respond to various types of stimulation, such as heat, pressure, or chemicals.
- o Nociceptors send signals to the brain, indicating the presence of potential tissue damage or injury. On the other hand, pain perception is the brain's interpretation and conscious experience of those signals.

- o Pain perception goes beyond the mere detection and transmission of nociceptive signals. It encompasses how we interpret and respond to pain, including its intensity, location, quality, and the emotional and cognitive aspects associated with it.
- o In summary, nociception is the body's ability to detect and transmit signals in response to potential harm, while pain perception is the brain's interpretation and conscious experience of those signals. [20]

Implications

1. There were concerns that these new higher animal welfare standards would result in higher costs for egg producers, and that these, in turn, would be passed onto the consumer.
2. As of May 2024, Respeggt eggs are cheaper than free-range eggs at the Rewe supermarket chain in Germany. Six Respeggt eggs cost €1.89 compared to six free-range eggs that cost €2.39. Ten Respeggt eggs cost €2.59 compared to ten free-range eggs that cost €3.09. [21]

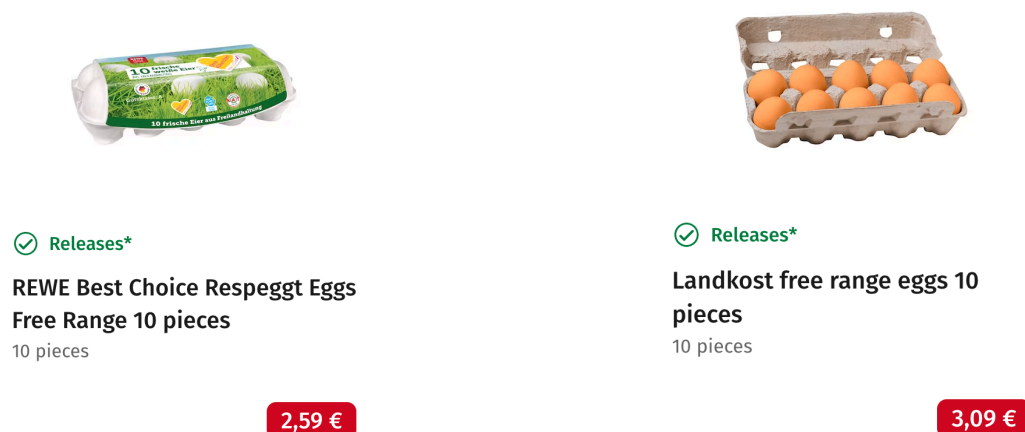


Figure 1: the price of Respeggt eggs at Rewe [21a]

Figure 2: the price of free-range eggs at Rewe [21b]

3. The EU has not passed a law banning the practice of male chick culling. This has put German egg producers at a competitive disadvantage. To overcome this disadvantage, German farmers could move their operations abroad to save money and then import eggs, chicks, or hens into Germany. This means that imported eggs, egg products, chicks, or hens could come from lower animal welfare farming systems that involve chick culling.

Industry-Offered Alternatives to Egg Sex Tech

1. From the Federal Minister of Food and Agriculture, Julia Klöckner, to the Central Association of the German Poultry Industry, there has been an urgent call for consumers and the food retail sector ‘to rely exclusively on production chains without killing chicks, even for finished products’ and for a labelling system to support these no-kill options in products that contain hidden eggs. [22]
2. The Federal Ministry of Food and Agriculture (BMEL) says that one alternative is “to hatch male chicks of the layer breeds and market them alive (brother roosters)” [2]

However, there are generally concerns about the sustainability of this system with the prolonged nature of rearing male layers for meat. The brother of female layers takes 126 days to reach 2kg, compared to broiler chickens which take just 33 days to reach 2kg. [23]

Companies like Kipster, a Dutch firm, use chickens to produce eggs in a higher welfare system. Instead of culling the day-old chicks, Kipster rears the brothers of their laying hens in “friendly homes before being sent to a slaughterhouse after 15-17 weeks.” [24]

Alongside this, their cartons are certified Carbon Neutral by climatepartner.com. As of 2022, they claim that their feed is “close to 43% lower in carbon than conventional chicken feed.” [24]

3. Laying hens can co-finance the breeding of male chickens by increasing the eggs’ cost by a few cents. This assumes that no cull eggs could be sold for a few more cents than ordinary eggs and therefore help fund the rearing of the brother layers.
4. Dual-use chickens:

The resurgence of the dual-use chicken has been suggested as an industry offered solution. Historically, chicken breeds were dual-purpose, meaning that all female hens were used for egg laying and cockerels would be reared for meat.

Since then, breeds have become specialised for either egg production or meat. Germany’s Federal Ministry of Food and Agriculture state these dual-use breeds could “represent a breeding balance between laying and fattening performance.” [1]

Interesting

1. In 2019, the Federal Statistical Office reported that there were around 45 million male chicks hatched in Germany. [1]
2. Germany was the first country to ban chick culling in 2022. [6]
3. Fertilised chicken eggs typically take twenty-one days to hatch. [2]
4. The day-old hatchlings are either shredded, or gassed using carbon dioxide. [25]
5. Article 4 of the 2009 EU directive regulates how the shredding and gassing of chicks are to be carried out: the chaff cutter is not allowed to be overloaded, and the chicks are not allowed to be older than 72 hours when killed. [25]
6. However we can already see, through our industry connections, that in general, European consumers are less likely to favour lower quality broiler layer chicken meat. As a result of this, developing countries in Africa are likely to receive these lower quality meats.

Food for Thought by the VH EST Team

Many view Germany's ban on chick culling as a significant step forward in animal welfare, applauding them for taking the lead in ending the cruel practice of "chick shredding." It is impressive to see politicians leading this fight, instead of waiting to see what everyone else does. It is clear that treating animals with more compassion and respect is a moral imperative.

However, others have a different perspective. They argue that the ban on chick culling has its drawbacks, particularly from an economic standpoint. In 2016, Münster's Higher Administrative Court justified the killing of male chicks for economic reasons. They contended that egg sexing technology was expensive, and would lead to higher egg prices that could affect the competitiveness of the German egg industry.

The lack of unity across Europe on this issue meant that imported poultry products into Germany were cheaper putting them at a competitive disadvantage. This incentivised consumers towards the imported (cheaper) products. Of course, while all new technologies are expensive, they become cheaper over time with manufacturing advances, competition and economies of scale.

Others believe that male chick culling could provide leverage to raise the welfare of egg laying hens, or even prevent it from happening altogether. While male chicks are part of the egg laying industry, we believe that they deserve individual attention in order to solve them effectively; a "one step at a time" mentality.

Furthermore, there is concern about the disparity between German and EU laws regarding chick shredding. While Germany has taken a proactive stance against the practice, the EU

still allows it. This has created a complex situation where many one-day-old male chicks are still being culled, either because German hatcheries import female chickens from other countries or relocate their operations abroad. Some argue that this incongruity between German and EU laws needs to be addressed at the EU level to ensure a more consistent approach to animal welfare.

In response to these challenges, some German farmers have started implementing "brother-layer fattening" as an alternative. This approach involves raising day-old male chicks for suboptimal meat, which is mostly sold to African markets since it is not consumed within the EU. Supporters of this approach see it as a practical way to minimise waste, and provides a use for male chicks that would otherwise be culled.

The outlawing of day-old male chick culling in Germany has sparked a range of opinions, with some emphasising the moral importance of ending the practice, while others raise economic concerns and point out the discrepancies between German and EU laws.

It appears that the banning of day old male chick culling in Germany was addressed solely by political parties. Although there were mentions of activists complaining, there was no obvious evidence that we could find that their contribution or any campaigns played a part in the bill being proposed and accepted.

The adoption of alternative practices like "brother-layer fattening" adds another layer of complexity to the ongoing debate surrounding this issue. While touted as a solution to the culling of day-old male chicks, in our eyes, its inefficiency makes this a niche product and simply postpones chick culling whilst being raised in potentially sub-optimal living conditions.

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FRANCE

Summary

- A French animal welfare organisation called L214 raised awareness of male chick culling.
- The French and German governments worked together with researchers and technology institutes to find solutions to chick culling.
- With the large majority of France's layer hens being brown, the most suitable choice of EST was a hyperspectral technology which determines differences in male and female feather colour in the egg.
- Funding and laws to protect the farmers interests have ensured a relatively smooth transition.

In-Depth

In 2014, the animal welfare organisation L214 raised awareness of the 50 million male chicks annually being culled in France at one day old. With Euractiv publishing L214's finds of male chicks being "crushed alive or thrown into rubbish bins" [1], this topic was not going away; particularly as it provided evidence that contradicted EU Regulations 'On the Protection of Animals at the Time of Killing.' [2]

By 13th November 2019, reporting shifted to official channels with the European Food Safety Authority (EFSA) publishing a Scientific Opinion entitled 'Killing for Purposes other than Slaughter; Poultry.' They identified the following problems: "Slow rotation of blades or rollers", 'Overloading' and 'Rollers set too wide', which can cause the following welfare consequences to the birds: 'Not dead', 'Consciousness', 'Distress', 'Pain' and 'Fear'" [3].

Whilst macerating chicks has led to widespread public disturbance, an article in the journal Animals reveals France's alternative method of culling by gas is also far from humane. This research revealed that chicks take two minutes to die at a 90% concentration of carbon dioxide with head shaking, vocalisation, muscle twitching, convulsions, wing flapping, and leg paddling all being noted before death. [4]

By 13th January 2020, the French and German Agriculture Ministers met at a seminar to 'formalise a bilateral partnership' to bring about the end of male chick culling in the layer industry. They brought together stakeholders from the poultry industry, researchers and technology institutes. This was an important step towards change.

A further Franco-German seminar was held on 16th July 2021 to assess the progress of this new alliance. [5] The Minister of Agriculture and Food Sovereignty, Julien Denormandie,

reconfirmed France and Germany's commitment to ending the culling of day-old male chicks in layer hens. [6]

After consultation with relevant stakeholders, Decree No: 2022-137 was published on 5th February 2022 in the Official Journal of the French Republic. This provided the legislation needed to prohibit the killing of chicks belonging to the *Gallus gallus* species intended for egg production. It also highlighted the transition timetable for hatcheries. This stipulated that they must provide proof that materials had been ordered by 1st March 2022 and that work had begun by 1st June 2022. The deadline for effective operation of EST equipment was 31st December 2022. [7]

While no specific technology was mandated, this deadline ensured that action was carried out swiftly. The French Government chose what the creators called "a transitional technology." [8] This came in the form of a hyperspectral measurement machine named Cheggy, which was developed in December 2019 [9] by a German company called Agri Advanced Technologies GmbH (AAT). By the Spring of 2020, their hatchery in Brittany, France was supplying "Hy-Line Brown" EST chicks. [10]

Cheggy can detect feather colour within the eggs of brown-layer hens. It differentiates the brown feathers of developing male embryos from the white feathers of developing female embryos, with acceptable accuracy on day thirteen of incubation. According to AAT, as more than 90% of France's layer hens are brown, this offered a comprehensive solution. [10]

This hyperspectral measurement technology is a fully automated, non-invasive technology that can assess more than 20,000 eggs per hour with an accuracy of over 95%, without using environmentally damaging chemicals. It is also quoted as being "the most cost-effective process on the market" [10]. With Cheggy introduced at Hy-Line and Lohmann, it was estimated that 30-40 million brown layer eggs would be sexed and ready for sale at the end of 2022. [11]

Cheggy is used in conjunction with "Stunny," a device that deploys a two-second 110V electrical pulse to anaesthetise developing chicks within the egg. This causes "the cessation of reactions compatible with possible sensitivity in 99.3% of the embryos examined" [12].

On 3rd September 2020, France published their post COVID-19 economic recovery plan which was named the France Relance plan. [13] It invested €10.5 million from it to help hatcheries implement this new egg sex technology [5] during their transition period. The government also worked with the National Committee for the Promotion of Eggs 'to identify and deploy technical and financial solutions' [14].

The EGAlim 2 Law played an important role as it enabled stakeholders to come together and ensure a fair distribution of the inevitable cost rise associated with the ban on male chick culling. [5] This law was adopted on 18th October 2021 to balance commercial relationships within the agriculture and food sectors and allow a more transparent and fair system. [15]

Despite better preparation, the French government faces similar problems to Germany. Without a uniform EU law, both eggs and laying hens can be imported from countries that allow the killing of day-old male chicks. France and Germany have therefore worked towards banning male chick culling across the EU citing consumer expectations and animal welfare.

They presented a paper to the Agriculture and Fisheries Council meeting on the 17th and 18th of October 2022, on behalf of themselves and Austria, Belgium, Cyprus, Finland, Ireland, Luxembourg and Portugal. In particular, asking for an impact assessment of an EU-wide ban on killing chicks. The European Commission stated that they would “consider such a ban.” [16]

It is important to note that there are also exceptions to the law banning the culling of day-old male chicks in certain scenarios. These include chicks intended for scientific research, regulated animal diseases, non-viable hatchery chicks, animals in severe pain or suffering with no alternative solutions, in-ovo sexing errors and the animal feed industry. [7]

Only eggs from white hen breeds that cannot be sexed using the hyperspectral technology will be reserved for feeding animals. To make this possible, disposal by maceration remains prohibited so that reptiles and birds of prey can consume them. According to the National Committee for the Promotion of Eggs, this represents 15% of France’s layer hens. [17]

Ovosexing is considered France’s main solution. Keeping laying hens’ brothers for meat is less popular due to the negative environmental impact of extended rearing times. However, the development of “dual-strains” chickens, where females can be used as layers and males reared in the meat sector, is seen as a “medium and long-term solution.” [17]

Timeline

[2014]

Animal welfare organisation L214 raised awareness of male chick culling. [1]

[2019]

The European Food Safety Authority’s (EFSA) coverage of chick welfare during maceration brought this issue into official channels. [3]

Chegg, the hyperspectral machine that has dominated egg sexing in France, was developed by Agri Advanced Technologies GmbH (AAT). [8]

[2020-2022]

The French and German government worked together with stakeholders to determine the best solutions to ending chick culling. [5]

[2020]

France sets out a post-Covid economic recovery plan on 3rd September 2020 called France Relance, and sets aside €10.5 million to help hatcheries implement their new egg sex tech.

A hatchery in Brittany, France was supplying the first “Hy-Line Brown” chicks using Cheggy. [12]

[2021]

The EGAim 2 Law was adopted on 18th October 2021 and played an important role in ensuring a fair distribution of the inevitable cost rise associated with the ban on male chick culling. [5]

[2022]

Decree No: 2022-137, outlining the ban on chick culling, was published on 5th February 2022 in the Official Journal of the French Republic.

Hatcheries to provide proof that materials for new systems were placed no later than 1st March 2022. [9]

Hatcheries to provide proof that work had been initiated no later than 1st June 2022. [9]

Hatchery deadline for the installation and effective operation of equipment no later than 31st December 2022. [9]

France and Germany presented a paper to the Agriculture and Fisheries Council meeting on 17th and 18th of October 2022 on behalf of themselves and Austria, Belgium, Cyprus, Finland, Ireland, Luxembourg and Portugal to seek an impact assessment for an EU-wide ban on killing chicks. [8]

It was estimated that Cheggy could determine the sex of 30-40 million brown layer eggs by the end of 2022. [14]

Interesting

1. The egg laying industry kills the brothers of egg laying hens regardless of whether they are from battery cage, enriched cage, organic or free-range hen systems.
2. Every year, almost 330 million male chicks are killed at one day old in hatcheries in the EU. [19]
3. Every year, 50 million male chicks are crushed/macerated in France at one day old. [6]
4. According to Council Regulation (EC) No. 1099/2009, maceration can only be carried out on chicks up to 72 hours after hatching. [3]
5. Carrefour is the first retailer to commit to using in-ovo sexing on a large scale. [11]
6. AAT is working to determine the sex of fertilised eggs before the seventh day of incubation. [10]
7. Schaffelaarbos processes eggs into high-quality Dried Egg Proteins for pet food, animal feed and aquaculture. [18]

Food for Thought by the VH EST Team

Comparison: Chicken Culling Policies in Germany and France

When it comes to the adoption of new technologies, Germany has expressed concerns regarding the pace of adoption. In contrast, the French Government has taken a proactive stance, emphasising that all producers should have at least placed orders for the necessary technologies by 2022, if not already have them in operation.

France has also allocated financial support to assist hatcheries in acquiring these technologies, a measure we did not find in Germany's approach. Furthermore, France has implemented a support system to alleviate long-term operational costs associated with these changes. This proactive approach by France is commendable and demonstrates a strong commitment to implementing the ban effectively.

Additionally, despite France and Germany collaborating on this issue, France has appeared more vocal in its efforts to persuade the European Commission and address EU-wide concerns. In contrast, we have not found records of similar efforts from Germany. This proactive engagement by France in advocating for change at the EU level is noteworthy.

However, despite the ban being in progress, both countries still have areas where their plans fall short. While France's financial support and regulatory framework incentivise producers to remain in the country, they may not be sufficient to address all challenges effectively. As discussed in the German section, one of the major concerns is that, unless the ban is universally supported across the entire European Union, it risks being undermined by

imports from EU producers who continue to engage in day-old male chick culling, often resulting in cheaper products. Moreover, French and German producers may choose to relocate their operations abroad to avoid rising costs following the ban and then export products back to their home countries at lower prices, causing domestic hatcheries to incur losses—a cyclical challenge.

France has taken steps to address these issues and has urged the EU to consider them. However, the exact details and progress of these efforts remain unclear. The term "support" also lacks a precise definition in this context. It is possible that these concerns and requests are being raised at the EU commission level, which could lead to discussions and potential changes in regulations. However, it is important to note that any substantial changes would likely take several years to navigate through the Commission. Therefore, involving other EU member countries in advocating for these changes may expedite the process. This cooperative approach may be what France means by seeking "support" and can potentially accelerate progress toward a more humane approach to chick culling across the European Union.

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UNITED STATES

Summary

Around 260 million male chicks are killed annually in the United States. [1] Due to this staggering figure, in 2006, the American Veterinary Medical Association (AMVA) executive board proposed a policy change recommended by the Animal Welfare Committee on killing unwanted chicks, poults, and pipped eggs. [2]

The United Egg Producers (UEP) are a lobbying organisation that represents 90% of egg producers in the United States. [3] In 2016, the UEP board committed to the ending of male chick culling by 2020.

The UEP failed to meet this deadline. In 2021, they released an updated statement saying they have been unable to find “a method that meets the food safety, ethical standards and scalable solutions needed for the United States.” [3]

However, they also stated that finding technologies to end male chick culling “is a priority and is the right thing to do.” While they continue to work with chick suppliers and business partners, there has been no announcement since 2021. [3]

Timeline

[2005-2006]

The AMVA (American Veterinary Medical Association) Executive Board proposed a policy change recommended by the Animal Welfare Committee on the killing of unwanted chicks, poults, and pipped eggs. [2]

The policy states that “unwanted chicks, poults, and pipped eggs should be killed by an acceptable humane method, such as the use of a commercially designed macerator that results in instantaneous death. Smothering unwanted chicks or poults in bags or containers is not acceptable. Pips, unwanted chicks, or poults should be killed prior to disposal. A pipped egg, or pip, is one where the chick or poult has not been successful in escaping the eggshell during the hatching process.’ [2] In this case smothering refers to the specific behaviour of chickens whereby hens pile on top of each other causing deaths of chickens at the bottom of the pile. [4]

[2014]

The animal welfare organisation, Farm Forward, identified a unique opportunity to apply pressure on Unilever, a multinational corporation. This led to the first-of-its-kind victory for male breeding chicks within the egg industry. In June, Farm Forward released a short video to educate viewers about the practice of maceration; specifically targeting Unilever's Hellmann's mayonnaise, which uses hundreds of millions of eggs each year in the US alone. [6]

After the video went viral, Farm Forward offered to place a moratorium on our campaign if Unilever:

- 1) agreed that the routine practice of macerating day-old chicks did not conform to their animal welfare policy;
- 2) committed to investing in identifying and implementing an alternative to the practice;
- 3) and pledged to explore egg-free alternatives for their products. [6]

[2016]

United Egg Producers announced a goal of being able by 2020 to determine the sex of the developing chick long before hatching, so male eggs can be destroyed. [3]

[2020]

United Egg Producers failed to reach their goal although they remain "hopeful a breakthrough is on the horizon." [3]

[2021]

In March, the United Egg Producers put out an updated statement saying it was still looking for "an ethical, economically feasible alternative to the practice of male chick culling at hatcheries." It added, "we believe this goal is achievable with time and research," but did not offer a new timeline for the goal or elaborate on what issues still had to be worked out. [3]

[Status Quo]

AMVA's "Euthanasia" methods today include cervical dislocation, maceration, and asphyxiation by carbon dioxide. [7]

Interesting

- In the United States, around 260 million male chicks are killed each year. [1]
- The United Egg Producers, who represent 90% of egg production, have been leading the charge for a more ethical approach to the problem of male chick culling. [3]
- “UEP also engaged with The Foundation for Food and Agriculture Research (FFAR) in advancing the organisation’s Egg-Tech Prize, which would provide up to \$6 million to researchers developing technologies that can accurately and quickly determine the sex of layer chick eggs before they hatch.” [3]

Food for Thought by the VH EST Team

Although the US took a brave leap to adopt Egg Sex Technology, they have failed to do it in practice. Considering that the goal for 2020 was announced in 2016, and that other countries have developed EST solutions, it seems surprising that the US have failed to implement any form of solution.

New technology is always expensive, but becomes cheaper over time. We feel that some egg producers are putting their foot on the brake of change in an attempt to avoid the initial financial outlay.

Despite other countries having or starting to make policies to stop the maceration and change the way chicks are killed, the US is showing no signs of significant policy change. Is this what has slowed down the EST progression?

In other countries there are vegan societies that work with the EST campaigns – are there any in America? Animal Equality is now concentrating on the US to change their industry to EST (note: information on this can be found in the “interesting” section of the Italy report). The organisation has a petition going to try and make EST a discussion in Congress.

What happens in the EU? Would this affect the USA? Will the US be hit by the Brussels effect? Are they too far away to be affected by the laws and policies made by the EU? Do they trade enough outside of the US in the egg market to be affected?

We look forward to the United Egg Producers reopening the discourse on this topic - but, until that happens, there are more questions than answers for the United States and their progress towards a world without chick culling.

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SWITZERLAND

Summary

On 23rd April 2018, the Vegan Society of Switzerland submitted a petition to the Swiss Parliament to ban the culling of chicks. Despite being rejected by the government, it set in motion a catalyst of events. [1]

The Swiss Parliament consequently made a decision on 21st March 2019 to ban the shredding of chicks [2], as the practice was not considered consistent with their Animal Welfare Law. [3]

However, it is important to note that the practice of gassing male chicks in Switzerland, resulting in the annual demise of around 3.5 million animals, still remains legal. [11] This method of culling takes 2-3 minutes compared to shredding; which, when carried out properly, is instantaneous. Gassing was the primary method employed, with maceration being a seldom-used practice. [5]

The Green Party of Switzerland later submitted a motion to ban male chick culling (by any method) on 17th June 2021 stating that gassing does not ensure a "humane" death.

This request was once again rejected by the Federal Council - their reasoning being that Switzerland was "too small...to finance its own research." [4] Until a commercially-viable EST was in place elsewhere, it would not be appropriate to issue a ban in Switzerland. [4]

Meanwhile, Bio Swiss (the main organisation of organic agriculture in Switzerland), announced on 17th November 2021 that their farms will no longer be allowed to gas male chicks by 2026. Furthermore, they will also ban in-ovo technologies to determine the sex of the eggs as they want to stay true to their organic principles. [6]

Timeline

[2018]

On 23rd April 2018, the Vegan Society Switzerland submitted a petition to the Swiss Parliament entitled "Chicks are not a Waste Product." [12]

The petition aimed to ban the culling of day-old male chicks within the egg industry as it directly contradicted the protection of their dignity and welfare. The petition was signed by 2,092 people. [1]

[2019]

The Commission for Science, Education and Culture of the National Council met on 31st January 2019 to discuss the Swiss Vegan Society's petition to ban the culling of male laying-hen chicks. In view of promising EST research abroad, the Commission saw no need for legal action and voted against the petition, 17 votes to 0 with 4 abstentions. The petition was ultimately rejected. [1]

However, the Commission noted that they were against the shredding of living male chicks, [1] stating that "if the speed of the knives is poorly adjusted, it happens that only the feet of chicks are cut off, but they survive the shredding." They therefore felt that killing chicks in this way was a violation of Switzerland's Animal Protection Act. [3]

The Commission for Science, Education and Culture therefore requested that the Federal Council ban the shredding of live chicks by amending Article 178a, paragraph 3 of the Animal Welfare Law. [3] On 27th February 2019, the Federal Council proposed the adoption of this motion. [3]

There was a vote of 13 to 7 and 1 abstention in favour of banning live chick shredding. [1]

On 21st March 2019, The National Council accepted the motion "without a countermotion," and it became illegal to shred live chicks. [2]

In September 2019, Ruedi Noser from the liberal FDP party brought up the issue of the ban of male chick shredding. He mentioned that an explicit ban would make sense in order to focus attention on early sex determination in the egg. Moreover, Parliament decided that shredding a live animal was not in accordance with Article 1 of the Animal Protection Act. [5]

[2021]

On the 17th June 2021 the Swiss Green Party submitted a request to the Federal Council to ban the killing of day-old male chicks from the hen laying industry. The ban in Germany was used as the basis for this application. [4]

On 25th August 2021, the application was rejected by the Federal Council. They wrote that "alternative methods to determine the sex of the chicks already in the egg... are welcomed in Switzerland. However, they have not yet been introduced for widespread use in practice". [4]

The Federal Council also felt that to ensure the success of an EST, it must meet several criteria: sex determination must happen early on; it must not damage animal well-being; and needs to be practical on a large scale. [4]

[From 2026]

From 2026, BioSuisse delegates decided that no more male chicks will be killed. Instead they will use dual breed hens and male chicks will be fattened for meat. Solutions involving EST will be banned. President Urs Brändli feels this is “organic through and through”, as “organic farming is based on natural cycles.” [6]

They are aware that the lower laying performance of dual-purpose chickens will have an impact on the price. Austria was used as a role model because the organic egg sector has already dispensed with the killing of male chicks since 2015. [6]

Interesting

- Switzerland is among the leading countries championing high standards of animal welfare, according to an index produced by the NGO World Animal Protection [7], although male chick culling is not included in this index.
- Around 3.5 million male chicks are gassed to death annually in Switzerland [11] and this will continue until the Government feels there is a commercially available EST. [4]
- Approximately 700,000 of the gassed male chicks are sold to zoos and other captive carnivores as food. [11]
- BioSuisse is the umbrella organisation for all organic farmers and associations in Switzerland.
- According to BioSuisse, organic eggs account for 19.8% of total Swiss egg production in 2022. This corresponds to a decrease of around 3% compared to the previous year. [8]
- BioSuisse states there are approximately 600,000 hens on organic farms in Switzerland, and they lay 224 million eggs a year. [8]
- Approximately 600,000 male chicks are gassed each year in the organic sector. This will be halved by the Autumn of 2024. [8]
- BioSuisse plans to end chick culling by the 1st January 2026 but interestingly have also banned the use of EST. Instead, BioSuisse will embrace dual breeds and cockerel fattening solutions. [6]
- A paper entitled ‘Swiss consumers’ willingness to pay and attitudes regarding dual-purpose poultry and eggs’ showed an interesting insight into public awareness in Switzerland. The “results from a survey conducted among 402 consumers at eight Swiss supermarkets revealed that the practice of chick culling was largely unknown (75% of respondents).” [9]

- Ruedi Noser stated that chick shredding was “only used for a small proportion of chicks” at the time of the ban. However, the Swiss Government felt a ban was still important as it helped focus attention on egg sex tech solutions. [5]
- The GalloSuisse association, who market Swiss eggs and represent Swiss egg producers, endorse the ban on chick shredding. They also back Egg Sex Tech as they believe it is an “ethically justifiable and sustainable” alternative. [10]
- The President of GalloSuisse regards brood rooster fattening and dual-purpose chicken as “ecologically disadvantageous.” He states that in order to maintain product safety and animal welfare, it is important that hatching eggs come from Swiss parents and are hatched in Switzerland. [10]
- The non-organic sector in Switzerland planned to have completely switched over to egg sex tech by the end of 2023 but this has not happened yet. [11]
- At the time, they suggested that EST was in its early stages of development, requiring an additional two years for full refinement. If this transition were to occur immediately, the hens (or initially, their eggs) would need to be imported from abroad. [11]

Food for Thought by the VH EST Team

The Vegan Society played a vital role in the advancement of chick well-being in Switzerland. On the surface, while both the Vegan Society’s petition and the Green Party’s motion failed to achieve a full ban on chick culling, they raised awareness of this unacceptable farming practice in the political consciousness, and edged action towards its abandonment. Both played a vital role in achieving this, despite their political rejection.

Switzerland’s Government seems to have dug their heels in on this issue; initially citing upcoming technology abroad as a reason not to ban chick culling, and then citing a lack of available EST as the reason not to ban chick culling. The banning of chick shredding by the Government was only decreed once the industry had already made the switch.

We feel that it is worth questioning whether chick maceration is worse than chick gassing. Both chick maceration and chick gassing can fail to kill the chicks. However, if done properly, maceration is an instant kill, but gassing will take 2-3 minutes. Despite these figures, we do feel that Switzerland’s decision to make chick maceration illegal was sensible. It drew the debate away from questioning “how do we kill chicks” and towards “how can we avoid killing chicks.”

Looking ahead to 2026, the decision to prohibit gas use for male chick disposal and the increasing use of in-ovo sex determination technologies is promising, but it is clear to see the male chick shredding issue in Switzerland is a complex matter that involves ethical considerations, practical challenges, and evolving policies.

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ITALY

Summary

The Italian egg laying industry kills approximately 25-40 million male chicks every year. [1] Animal Equality Italy led a 2 year campaign to get chick culling banned and started a petition that saw over 100,000 signatures. [2] As part of their campaign, they submitted the initiative to ban the massacre of male chicks in Italy in 2021.

A proposal was submitted to the Government in December 2021 and by June 2022, the Italian Senate approved the Amendment. The ban was finally passed by the Italian Chamber of Deputies in a landslide victory of 346 votes against 10, with 19 abstentions. [1] The law will come into force in late 2026.

Timeline

[2020]

Animal Equality Italy's campaign launched a petition, which has been signed by more than 100,000 citizens, asking the Italian Government and egg industry to stop the practice of male chicks culling. [2]

[2021]

As part of the campaign, Animal Equality submitted the initiative to ban the massacre of male chicks in Italy. This amendment is included in the European Delegation Law 2021. The new law includes a timeframe for companies to comply by updating their working procedures and technologies. This will allow for the introduction and development of technologies that identify the sex of a chick in an egg before hatching. [2]

Animal Equality Italy presented an amendment in June to the Senate which was approved on August 3rd by an absolute majority (346 votes in favour, 10 against, and 19 abstentions). [1]

Animal Equality worked alongside Deputy Francesca Galizia, with the support of many political forces, to submit this proposal in December. [3]

On the 16th of December, Italy's Chamber of Deputies approved a law to ban male chick culling in Italy by the end of 2026. [3]

Even before the law was passed the trade association Assoavi and Coop, committed to introducing in ovo sex technologies that identify the sex of the chick before it is born. [4]

[2022]

On the 2nd of August, the Italian Chamber of Deputies approved an end to the slaughter of male chicks. This law will come into play by late 2026. [2]

Alice Trombetta, the Executive Director of Animal Equality Italy stated: “This is very important news for animals in Italy and is truly historic. We are very happy that Parliament has finally approved this amendment that regulates one of the most controversial aspects of the egg production industry. Animals are sentient beings that can no longer just be considered industrial waste. The selective killing of male chicks that takes place every day will no longer be considered the norm, and institutions must now commit to this fundamental path for the progress of our country and animals, supporting and accelerating the progressive implementation of technologies capable of putting an end to this systematic cruel slaughter.” [2]

Deputy Francesca Galizia stated that: “For this work, I want to thank the organisation Animal Equality, who has been fighting this battle for years, I want to thank the trade associations Assonavi and Unitalia, LAV who gave a contribution, and COOP for embracing this proposal.” [1]

[2026]

Male chicks are typically slaughtered within the first 24 hours after birth by maceration (shredding/grinding) or suffocation, without the use of stunning techniques. From 2026 this cruelty will no longer be possible in Italy. [2]

Interesting

In Italy, between 25 to 40 million male chicks are killed this way every year. [1] The Organisation, Animal Equality has a US based office as well which is concentrating on the U.S market whereby 260 million male chicks are killed in the egg industry there every year. They also launched a petition with 145,914 signatures as of 21st June 2024. [5]

Animal Equality History

Animal Equality is a non-profit organisation and has many different locations in Italy, the UK, Germany, Spain, Mexico, Brazil, and India. Animal Equality works strategically in four distinct areas to ensure progress for animals: Legal advocacy, corporate outreach, education, and investigation. [6]

As an international animal protection organisation, they work to end cruelty to farm animals. Animal Equality's vision is a world in which all animals are respected and protected. [6]

Food for Thought by the VH EST Team

It is interesting that the organisation, Animal Equality, made change by making the public aware of how the egg industry worked. If more countries did this, would the public be happy with the continuation of maceration and gassing? Do the public not get to have a say in how their products are produced?

How could more activism work to get the public involved in being made more aware of how companies work, and how it isn't best for animal welfare?

The amendment they presented included the European Delegation Law 2021. Does this mean this could be applied in other countries to create change in how all egg industries work in the EU? Creating a reason for them to up their technologies? – Is this down from the Brussel effect?

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NETHERLANDS

Summary

It seems that the Dutch egg industry holds an exceptional position in the European egg trade but is also the only country in the European Union where the downside of the egg sector, the practice of killing day-old male chicks, is a recurrent subject of societal debate [1].

Since 2020, there have been repeated efforts to implement legal provisions at the political level. To date, however, there are still no concrete draft laws or dates on which a ban should be installed. [2]

The Netherlands produces no-kill eggs for Germany, in order to be able to trade with the law implemented there. They are using EST to sell eggs in their own country as well, but with no law implemented, the choice whether or not to use EST remains up to the discretion of the individual farms and companies.

Timeline

[2014]

A covenant was signed by various politicians and agricultural organisations, “committing to researching an alternative to chick culling” [9] and its application in all hatcheries across the Netherlands. Until this is completed, the egg industry is required to “work on a plan of action to reduce the number of day-old chicks killed by 2026,” and to determine the “potential consequences... [such as] market impacts, fair pricing, and sustainable rearing methods” [9]. The covenant also dictated that stopping the killing of these chicks entirely was “the most desirable end situation” [9]. Progress towards these objectives is set to be reevaluated in 2026.

[2020]

In February 2020, several Dutch animal rights organisations sent letters to Prime Minister Mark Rutte and the Parliamentary Commission on Agriculture; urging them to follow the examples given by Germany and France, and phase out all chick culling including gassing in the Netherlands by the end of 2021 [3]. The Ministry of Agriculture cautiously responded that “a political solution is being explored,” and that the Agriculture Minister would soon provide more information [2]. Towards the end of March 2020, the supermarket chain Jumbo started to sell EST eggs in cooperation with Respeggt [4].

[2021]

In June 2021, the Dutch House of Representatives announced that they want to ban the killing of male day-old chicks. The majority of the House of Representatives supported the motion, which was written and submitted by MPs Sandra Beckerman (SP) and Leonie Vestering (PvdD) on 15th June. It stated, "[Parliament], noting that about 40 million male chicks are killed in the Netherlands annually because they have no economic value; considering that this is unnecessary because there are alternatives; considering that France and Germany are already introducing a ban; pronounces that the killing of male chicks should be prohibited." [5]. Furthermore, Minister Schouten wrote that, according to the poultry sector, fattening laying hens is an interim solution for killing day-old chicks until techniques for sex determination in the egg have been developed in such a way, and can be applied on a large scale [6]. One of the initiators, Sandra Beckerman, started an online petition to "sustain" the pressure to turn the rhetoric into action [6].

[2022]

The Dutch speciality egg producer Kipster recently revealed that they are ending the habit of male chicks culling by introducing the brother-fattening concept. Moreover, they focused on producing carbon-neutral eggs. Nancy Roulston, Senior Director of Corporate Policy and Animal Science (ASPCA), stated that "the conventional egg industry has justified everything from immobilising hens in cages to destroying millions of newborn chicks as the cost of doing business... Kipster's welfare-centred approach to egg production shows that suffering is not an inevitability when businesses marry compassion with innovation. The ASPCA hopes that food companies recognize the incredible opportunity Kipster offers to improve animal welfare in their supply chains." [7].

Interesting

It seems that some significant research has been carried out in the Netherlands regarding male chick culling. Hass et al. (2021) carried out a study focusing on awareness and willingness to pay for alternatives in a selected Dutch focus group, with the result being that the majority of participants were willing to pay more than twice the prices for eggs without male chicks culling. Moreover, the respondents identified that the most important factors when buying poultry meat or eggs without male chick culling were food safety, animal friendliness (welfare), and the environment. The price of the eggs was found to be the least important factor [8].

Furthermore, an article published in 2018, with the title "A Public Survey on Handling Male Chicks in the Dutch Egg Sector," analysed the different strategies for dealing with the ethical dilemma of killing day-old chicks: EST; and keeping them alive to be raised for meat

production. The analysis resulted in an ethical framework based on the two main approaches in bioethics: a consequentialist approach and a deontological approach. This ethical framework was used to develop an online survey administered to ascertain Dutch public opinion about these alternative approaches. [1] The results showed that 55% of the Dutch population is aware of the issue of killing day-old male chicks, with about 30% thinking that this is a good solution. Almost 50% of respondents would like to stop this practice or find other solutions. In terms of alternative options, respondents are divided. Neither dual-purpose use for male chicken nor in ovo technologies are fully accepted, and no preference could be seen. However, the survey does provide insight into the motives that are important for people's choice: food safety, and good treatment of animals [1].

Food for Thought by the VH EST Team

The team finds it very interesting that the Netherlands is a pioneer in terms of EST technologies, and has a large egg industry that is also producing eggs for the German market. Nevertheless, it seems that they are taking a very long time to come up with a concrete bill that is either a result of accurate research and market analysis, or a form of willingness for change. We would love to see more concrete action in the Netherlands.

Is the Minister referring to fattening the male laying hens instead of killing them? Is it more expensive to fatten the male laying hens over time, instead of just using EST? Would there be a market for it?

It is interesting that the price of the eggs seems not to be an issue, with customers willing to pay extra for EST eggs - yet, the Netherlands seem to still be behind other countries in establishing EST progress.

Moreover, we are seeing the emergence of alternatives. The chicks can be in-ovo sexed after ten days of incubation, or else only breeds whose cocks can simply be fattened should be used, so that they do not have to be killed without purpose.

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AUSTRIA

Summary

Austria has not made much progress towards advancing EST, or adopting a more compassionate attitude regarding the culling of male chicks. The organic egg industry has “refrained from killing chicks since 2015.” [1] In the other egg-rearing sectors, chick culling is handled differently depending on the producer; either by carbon dioxide gassing, or shredding. [2] Despite the awareness in the organic sector, there seems to be no progression since 2017 towards the phasing out of male chick culling as a whole.

Austria appears to support the idea of banning the killing of male chicks, but is awaiting scientific evidence regarding alternative methods aimed at reducing the culling of day-old male chicks before discussing any law changes. These alternatives encompass techniques such as: in-ovo sexing; the utilisation of dual-purpose chicken breeds for both egg and meat production; and the rearing of male chicks from laying breeds [3].

While there is currently no legal prohibition in place, Austria has already enacted legislation which restricts the culling of day-old male chicks, or permits it only under specific conditions. As of January 1 2022, Austria has prohibited the destruction of viable chicks, but it remains permissible to cull chicks intended for animal feed. There are plans to introduce a similar ban to the one in Germany - which prohibits the culling of day-old male chicks, and enforces the use of egg sex technology - by the year 2026. [4]

A comprehensive prohibition of chick culling might result in hatcheries relocating to different nations; ultimately transferring the issue to foreign lands where the animals could face worse living conditions and be culled [5]. The potential impact of such a prohibition on systematic chick killing on the feeding of captive exotic animals remains uncertain. Some sources suggest that exotic animal keepers use only a small quantity of deceased chicks, while others indicate a higher demand [6].

During the AgriFish Council meeting on July 15, 2021, Austria urged the European Commission to conduct an impact assessment regarding the banning of male chick culling in the European Union [6].

It is important to note that the culling of chicks for use as animal feed is still allowed. Each year, approximately 16 million chicks are sold in Austria to zoos, animal parks, and raptor parks. Exhibited animals residing in nearby zoo facilities and rescue centres - such as snakes, coatis, owls, and eagles - rely on young male chicks to maintain a well-rounded diet [5]. About half of these chicks are imported frozen from other countries, including Germany, the Netherlands, Spain, Italy, and Eastern Europe. This is primarily due to Austria's lack of the necessary logistics and cooling technology for snap freezing the chicks. [7]

According to data from the Land schafft Leben association, Austria currently has three hatcheries supplying over 1,200 laying hen farmers across the country. These hatcheries produce approximately 18 million chicks for laying production, with roughly 9 million of them being males [4].

Timeline

[2014]

"At the end of 2014, Eiermacher GmbH made the fundamental decision that its member companies should in future only be supplied with their own organic laying hen chicks. Herds with organic parents were built up. At the same time, they switched to dual-purpose animals and raised male chicks. The rooster chicks are fattened in organic stables with a green run. The maintenance period is eight to ten weeks, depending on weight gain." [8]

[2015]

The "Austrian organic egg industry has stopped killing chicks since 2015." [1]

[2016]

"Organic poultry farming already agreed in 2016 to raise male laying chickens. These make up 11 percent of the 9.4 million chicks of layer breeds that are born in Austria every year. However, the sustainability and economic viability of this rearing must be questioned." [5]

"The underlying project "The Rooster, the Hen and the Egg", which was initiated by Eiermacher GmbH and submitted for the Animal Welfare Prize, means that in the future only organic eggs from organic laying hens will be available in Austrian food retailers (LEH)., whose brothers were raised." [8]

"End of killing male chicks in organic laying hen production." [8]

[2017]

"Statistically speaking, every Austrian eats around 235 eggs throughout the year. A total of around six million laying hens - around 600,000 of them, i.e. 10 percent organic laying hens - lay around 1.6 billion eggs per year in Austria." [9]

"Organic industry solution enables male chicks to survive" [9]

"Until recently, in Austria one had to accept that a male chick would be killed for every laying chick in the hatchery, even in the organic sector. The organic industry solution means the end of this practice in organic laying hen production in Austria. For this purpose, a switch

was made to so-called dual-purpose breeds - good laying performance of the hens while the male animals were also suitable for fattening. The young roosters in the organic sector are now raised until they are around ten weeks old and then used as soup roosters or in cuts in food retail or in meat production." [9]

[2022]

In April 2022, the ban on the unnecessary killing of male chickens was introduced in Austria. This means that no more chicks end up in the rendering plant, but killing male chicks as food for zoos and falconaires is still allowed. [10].

"As of 1 January 2022, it is no longer permitted to destroy viable chicks in Austria." [7] This is due to the Three Pillar Scheme that states "As soon as the appropriate technical framework conditions are in place, early gender recognition should be used. This is one of the three pillars that the domestic poultry industry has agreed on as part of an industry solution. The other two pillars state that male chicks must be raised or fed. Since 2022, according to this "three pillar strategy", no chicks can be killed without a reason." [5]

"It is still permitted to cull chicks to be used as animal feed. Every year, approximately 16 million chicks are sold in Austria to zoos, animal parks, and raptor parks, with so far approximately half of them being imported frozen from abroad, specifically from Germany, the Netherlands, Spain, Italy, and Eastern Europe. The reason for this is that Austria does not yet have the required logistics and cooling technology – the animals are snap frozen." [7]

"Prohibition (male chicks only, with exemption for animal feed purposes)" July 18 2022 is when this rule will be put into force. "Scope only includes male chicks and excludes male chicks used as feed in zoos or for birds of prey. Destruction of non-hatched [eggs] is allowed up until day 14 of incubation." [6] "The prohibition was adopted in July 2022 through a law amending the Animal Welfare Act." [6]

"Nationally, there have been a lot of victories so far for male chicks in particular. Germany, France and Austria already banned their systematic killing last year - in some instances, following the tireless work of our members and several other NGOs to put the issue in the political spotlight. However, millions of male chicks and female ducklings across Europe are still vulnerable, and EU-wide legislation is therefore required to end the cruelty of this type of culling once and for all." [11]

[2023]

"Anyone who values both the highest quality and the highest animal welfare standards chooses organic eggs from Austria," emphasises Bio Austria chairwoman Barbara Riegler. In this country, an industry solution in the organic sector ensures that all male chicks are allowed to live and are not killed after they hatch. The implementation of this project,

initiated by Eiermacher GmbH in 2014 and implemented together with the organic industry, represents a milestone in the area of animal protection.” [12]

Interesting

“Animals such as snakes, coatis, owls or eagles in local zoos and animal shelters depend on chicken chicks for a species-appropriate and balanced diet. In the future, day-old chicks are to be fed to such animals instead of being disposed of. This is advantageous in terms of the domestic circular economy, because only half of the demand for feed chicks in Austria is currently covered by domestic chicks. The rest is imported, although more than 1.5 million chicks end up in carcass recycling every year.” [5]

“In a broad alliance between the Austrian poultry industry and domestic zoos and birds of prey organisations as well as the coalition parties, an industry agreement was recently reached in an industry agreement on a "three-pillar model" for phasing out the useless killing of male laying chicks. According to this, from January 1, 2022, no more previously viable chicks may be handed over to carcass recycling facilities. Only feeder chicks that can be proven to be required by Austrian zoos and bird of prey stations may be delivered to these facilities in a quality-assured manner. At the same time, the industry supports the rearing of male laying chicks in the premium programmes of laying hen husbandry and observes the technical development and practical maturity of methods of early detection of sex in hatching eggs that start as early as possible after the start of incubation.” [13]

Food for Thought by the VH EST Team

Austria's decision to ban the culling of day-old male chicks is a notable leap forward in animal welfare. The ban reflects the ethical concerns surrounding this practice, which has long been criticised for its cruelty. Despite this, there are still questions about the logistics and practical implications of the ban as male chick continue to make significant strides towards a supposedly “more compassionate” poultry industry. Verify Humanity does not support the meat industry, and does not agree that this is a compassionate solution to end chick culling.

One of the essential aspects of Austria's approach is its emphasis on finding alternative methods to chick culling. The country recognises that simply banning the practice is not enough; viable alternatives must be in place to ensure the well-being of male chicks. By awaiting scientific evidence and exploring alternatives like in-ovo sexing and dual-purpose

chicken breeds, Austria is setting an example for other nations to follow. The commitment to science-based solutions is a crucial aspect of this change in policy.

It is important to acknowledge the challenges and uncertainties that Austria faces in implementing this ban. The logistics of managing male chicks and the potential impact on the poultry industry are complex issues. However, these challenges should not deter us from pursuing a more humane approach. Austria's proactive stance in addressing these challenges is commendable, and it should inspire continued efforts to find practical solutions.

Despite this, Austria's decision to ban chick culling positions the country as a leader in animal welfare. This move sends a compelling message to the global community that the ethical treatment of animals is a top priority. It also encourages other nations to reevaluate their practices and consider similar bans.

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EUROPEAN UNION

Summary

The debate about the unethical practice of shredding day-old male chicks has been fuelled in Europe since a ban was installed in France and Germany. A new European regulation against this practice could have been part of the new animal welfare legislation, which was meant to come into force in 2023. Though, disappointingly, at the end of 2023, nothing has been actioned (In relation to animal welfare at the time of killing - this including day-old male chicks). With the elections for the EU commission in June 2024, it has left the EU commission in a limbo, as the new commission will not be starting until October 2024. This, sadly, will mean nothing will be achieved in relation to the culling of day-old male chick in 2024. [7] [8]

At present, Food Safety Commissioner Stella Kyriakides has already expressed her criticism about male chick culling. Also, animal rights organisations Europe-wide try to raise awareness and encourage Europeans to act. [2]

18 European animal advocacy organisations have created a coalition to stand behind the ban (including an organisation from the UK: Compassion in World Farming - CiWF). [3]

Timeline

[2020]

The European Commission stated that, “the animal welfare legislation, including on animal transport and the slaughter of animals, to align it with the latest scientific evidence, broaden its scope, make it easier to enforce and ultimately ensure a higher level of animal welfare.” [1]

[2021]

The French Minister for Agriculture, Julien Denormandie, and Germany called on EU countries to follow their lead and ban male chick culling [2].

In October, European Food Safety Commissioner, Stella Kyriakides, during a meeting with EU-wide agriculture ministers regarding male chicks culling, said, “I want to propose to phase out this practice.” Moreover, she described it as a “disturbing phenomenon,” hinting that such a proposal could be part of the current EU-wide animal welfare legislation overhaul [2].

These comments came in response to a note tabled by France and Germany supported by seven European countries (Austria, Finland, Portugal, Cyprus, Belgium, Luxembourg, and Ireland) [2].

[2022]

As already described in detail (in the chapters on Germany and France), the ban on the controversial practice of male chick culling came into force in Germany and France at the beginning of 2022.

Furthermore, in 2022, 18 European animal rights organisations including Freedom and Respect for Every Earthling, GAIA Voice of the Voiceless, Éthique & Animaux, REV.institute, Animal Equity, Obraz, CAAI the Voice of the Voiceless, Hellenic Animal Welfare Federation, Compassion in world farming, Loomus Loomade Nimel, Eurogroup for Animals, Tierschutz Austria, Animal Society, Humane Society International, Animal Friends Croatia, VGT and International Organization for Animal Protection started a coalition campaign with the title “Stop Grinding and Gassing in EU.” These organisations saw the chance for a significant change because of the ongoing revision of the EU animal welfare legislation [3].

The idea behind the campaign is to call on people to contact the responsible minister of the respective country and express their own interest in implementing a ban. The contact details are available on their website.

Another approach of the campaign was to send an open letter to the EU Agri ministers, with a call to stop this practice. In June 2022, they wrote an open letter to the Members of the Agriculture and Fisheries Council [4].

At the moment, DG Santé (European Commission’s Directorate General for Health and Food Safety) is working and exploring the revision of Regulation 1099/2009 (“Slaughter Regulation”), which deals with the Protection of Animals at the Time of Killing [5].

[2023 - 2025]

The revision of EU legislation on farm animal welfare, which started in 2021, is planned to take place from 2023 to 2025. Therefore, the EU Commission is also preparing to what extent European economics is impacted by the instalment of a ban and what alternatives (EST, brother layer concept) are ethical and economically reasonable. [6]

We were hoping a new European regulation against this practice could have been part of the new animal welfare legislation, which was meant to come into force in 2023. But as 2024 starts, nothing has been actioned in relation to the culling of day-old-male chicks. With the elections of the EU Commission happening, it sadly means nothing will be considered until

October 2024 the earliest, which leaves little hope of anything being done in relation to animal welfare on a whole in 2024, leaving the work on chick culling ongoing. [7] [8]

Interesting

In the European Union, around 40 million female ducklings and 330 million male chicks are killed every year, according to Animal Equality. This is because male chicks are considered useless in the egg industry. Conversely, female ducklings are inadequate in foie gras production because their liver is not considered to be as ‘tasty’ as the male duck ones. [4]

Food for Thought by the VH EST Team

The European Union, with its vast economic market and commitment to high regulatory standards, wields immense influence globally.

This is where the EU/ Brussels Effect come into play:

- *EU Effect: Policies adopted within the EU often set global standards, especially in areas of trade, commerce, environmental and social standards. By shaping animal welfare regulations in the EU, we inherently influence practices in countries worldwide, elevating animal welfare standards globally, including UK, US, India, Africa, China, Vietnam, etc.*
- *Brussels Effect: The EU's regulatory framework serves as a model that many other nations aspire to emulate. Advocacy efforts in Brussels ripple across borders, inspiring change and raising the bar for animal welfare globally.*

Examples of the Brussels Effect to animal welfare in past:

- *Banning battery cages for hens - other countries followed suit around the world adopting similar practices to align with EU*
- *Regulating animal transport*
- *Restriction to cosmetic testing*
- *Import restrictions on animal welfare standards*

Norway, Switzerland, and certain countries in South America and Africa have already adjusted their regulations to align with EU standards, including those related to animal welfare, in order to facilitate trade with the EU. Verify Humanity would like to know, should the EU take up EST, whether or not other non-European countries would follow suit.

Would it cause any kind of ripple effect, and potentially impact the EU economy as international trade laws may be affected, if they did not? With the EU Commission having

their vote, and therefore most likely unable to make any new movements until October 2024, will the new EU commission continue with this proposal? Since EFA will continue to lobby, will the new commission feel obliged to continue?

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ISRAEL

Summary

In recent years, a growing number of Israelis have moved toward a vegetarian or vegan diet, and are choosing cruelty-free lives. Numerous media outlets have now dubbed Israel as being the “Vegan Nation”. According to LIVEKINDLY, around 5% of the population is estimated to be vegan - almost double the amount documented in 2010. [1]

At present, no legislation currently exists for male chick culling in Israel. However, there appears to be growing awareness surrounding the issue as indicated by organised activism, emerging technologies, and vegetarian and vegan appointees within the Israeli government and military.

Within Israel, there are now four new egg sexing technologies being developed. They were founded in the years 2015 (LIVEgg), 2016 (EggXYt), 2017 (SOOS) and 2022 (Volcani Centre/Huminn). However, all remain in the research and development stage, so none are commercially available at this time.

Israel's EST History

2015 - LIVEgg is an Israeli-based company founded in 2015. LIVEgg uses a non-invasive monitoring and prediction (POMP) technology for its already operational CrystalEgg technology and its ChickMale Saver technology. According to LIVEgg.co.il, CrystalEgg is currently on the market and is able to provide real time data on the health and well-being of the egg embryo, by using sensors to analyse physiological conditions of embryo and the environmental conditions in the incubator. There are future plans to link CrystalEgg with the incubator to create one autonomous system. Also powered by POMP is ChickMale Saver. This is currently still in the development stage, and will use algorithms and machine learning for in-ovo sex determination. This technology is said to have a 95% accuracy rate, but there is no date for when it will become commercially available. [2]

2016 - EggXYt is an Israeli company associated with Tel Aviv University, founded in 2016. Its CRISPR technology is non-invasive and uses a gene-editing technique to modify chickens' sex chromosomes, so that their sons carry a marker gene which makes male eggs glow under fluorescent light. This is detected by scanning the fertilised eggs *before* incubation, using ultraviolet light. In the dark, the male egg glows yellow and the female remains dark. It claims to have a 100% accuracy rate and does not affect hatching rate. The company was founded in 2016 and was expected to be commercially available in 2022, but that has yet to happen. [3]

2017 - SOOS is an AI-guided incubation system founded in 2017. [4] It uses a patented combination of temperature, humidity, CO₂, and sonic vibrations to affect the genetic expression of the reproductive system in genetic male layer embryos and can turn male layers into functional female layers capable of laying eggs. This technology must be used between days 0 – 16, and increases female hatchlings by 40% to make a 90% female hatching rate when operating optimally. SOOS is still at the early research and development stage, so is not yet commercially available. [5]

2022 - Volcani Center/Huminn - In 2022, a team at the Israeli Agricultural Research Organisation Volcani Center utilised gene editing techniques to engineer hens that exclusively lay eggs that hatch into female chicks. These modified hens are nearly indistinguishable from the conventional egg-laying breed commonly used in agriculture, as confirmed by Huminn, the American-Israeli firm collaborating with the Volcani Center. Researchers emphasise that this innovation represents the most viable approach to substantially reduce the global practice of mass culling of male chicks. [6]

Yuval Cinnamon, the leader of the research team and an embryologist at the Volcani Center, noted that technologies attempting to discern the gender of embryos within eggs are often unreliable. The Volcani Center, situated in the suburbs of Tel Aviv, developed this technique after seven years of collaborative research with Huminn, a science and technology company which specialises in sustainable and commercially viable food production methods. The technology involves genetically modifying egg-laying hens so that male embryos do not progress and hatch after fertilisation, while female embryos develop naturally without genetic alterations and hatch normally. Aside from the benefits to animal welfare, this breakthrough could yield substantial cost savings for poultry producers by reducing the space, energy, and expenses associated with operating incubators. This, in turn, has a significant positive impact on the climate. [6]

Timeline

[2013]

Tal Gilboa established Israel's Animal Liberation Front (ALF) in 2013. [1]

[2015]

In 2015, ALF created civil disobedience when they stormed Ramat HaKovesh, an egg hatchery in Israel, and organised a sit-in to protest the culling of male chicks. [8]

LIVEgg is an Israeli-based company founded in 2015. LIVEgg uses a non-invasive monitoring and prediction (POMP) technology for its already operational CrystalEgg technology and its ChickMale Saver technology. [2]

[2016]

EggXYt was founded. Its non-invasive CRISPR technology uses a gene-editing technique to modify the sex chromosomes of chickens, so that their male offspring carry a marker gene that makes male eggs glow under fluorescent light. [3]

[2017]

On 9th September 2017, Tel Aviv in Israel hosted the world's largest animal rights rally. The World Guinness Book of Records lists between 20,000 - 30,000 people in attendance. [9]

SOOS Technology was founded in 2017 [4]. It is a non-invasive AI technology that manipulates environmental factors to control the sex of eggs. [5]

[2019]

In January 2019, the Military appointed Lieutenant General Aviv Kochavi Israel's first ever vegetarian Chief of Staff. [1]

Tal Gilboa joins the Likud political party and is appointed by Prime Minister Netanyahu to act as advisor on animal rights issues. [10]

[2022]

Also Scientists at the Israeli Agricultural Research Organisation called the Volcani Centre have created chickens that only lay female chicks using gene editing. They partnered with an American-Israeli firm called Huminn. [6]

Interesting

It is interesting that male chick culling has not yet been outlawed in Israel, despite its large Jewish population and their beliefs. In the Jewish Chronicle article "We can't eat eggs from mistreated chickens", writer Ariel Abel discusses the contradictions between Judaism and eggs consumed from hatcheries that kill male chicks. Abel recognises that eating healthy eggs is essential to Jewish law (halacha), but eggs consumed via the dismemberment of male chicks should not be considered kosher. He goes on to explain that "values that underpin the Torah" specify that no animal should be killed before they are a week old. [7]

Food for Thought by the VH EST Team

In our opinion, Tal Gilboa's founding of the Israeli Animal Liberation Front (ALF) in 2013 marked a significant turning point for animal rights activism in Israel. This was underscored by the impressive turnout of 20,000 - 30,000 people at an animal rights march shortly thereafter in 2017.

One noteworthy instance of ALF's commitment to animal rights was seen in 2015 when they conducted a daring sit-in at Ramat HaKovesh, an Israeli egg hatchery. This act of civil disobedience was a direct response to the culling of male chicks, and it demonstrated ALF's unwavering dedication to challenging practices that they deemed ethically questionable.

Shifting our focus to technological advancements in the industry, LIVEgg, founded in 2015, has been making strides in animal welfare through its innovative use of non-invasive monitoring and prediction (POMP) technology.

CrystalEgg, one of their flagship technologies, is already on the market. It offers real-time data on the health and well-being of egg embryos, thanks to sensors that analyse physiological conditions and environmental factors within the incubator. The potential to integrate CrystalEgg with the incubator to create a comprehensive, autonomous system shows the promise of technology in enhancing animal welfare.

Another player in this field is Soos Tech, an Israeli company founded in 2017. Their non-invasive AI technology takes an innovative approach by manipulating environmental factors to control the sex of eggs.

Soos Tech AI incubation controls temperature, humidity, CO₂, and sonic vibrations to influence the genetic expression of genetic male layer embryos into functional female layers capable of laying eggs. This pioneering technology, still in the early research and development stage, has the potential to significantly increase female hatchlings, with the goal of achieving a 90% female hatchling rate under optimal conditions.

Such technological advancements from companies like LIVEgg and Soos Tech signifies a positive shift toward a more humane and compassionate approach to animal welfare in Israel. These efforts underscore the evolving landscape of animal rights and the potential for positive change in the industry.

Lastly, in 2019, the military-appointed Israel's first-ever vegetarian Chief of Staff, Aviv Kochavi and Tal Gilboa joined the Likud political party and was appointed by Prime Minister Benjamin Netanyahu to act as an advisor on animal rights issues.

The involvement of high-ranking officials and political parties in animal rights advocacy can significantly boost the movement. It raises the profile of animal well-being as a key policy issue, potentially resulting in stronger legislative measures to protect animals.

Tal Gilboa's appointment could encourage global networks of animal rights organisations to collaborate with political leaders to achieve potentially meaningful change.

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UNITED KINGDOM

Summary

Every year in Great Britain, approximately 40-45 million day-old male chicks from layer hens are killed in the egg industry [1]. Since 2010, animal welfare organisations and media outlets have attempted to raise awareness of this topic among the general population.

By 2014, a survey by the British Poultry Council revealed that there was a 26% vacancy rate amongst Vent Chick Sexers, with jobs remaining empty for as long as five years. In 2014, only one Vent Chick Sexer was recruited. [2] Vent Chick Sexers are workers who determine the sex of day-old chicks into male and female groups. Females go on to lay eggs for hatcheries and males are killed within 72 hours of hatching. Vent Chick Sexers are trained for up to three years, taking up to a further five years to become skilled. They are expected to assess 800-1,200 chicks every hour for 12-hour shifts, with a 98% accuracy rate. [2]

With no viable alternatives to Vent Chick Sexers, The British Poultry Council stated that these chronic staff shortages were “creating serious economic risks” within the industry. [2] By 2015, the British Poultry Council, the National Farmers Union, and employers, were asking the Government to put Vent Chick Sexers onto the UK’s Shortage Occupation List. [2]

However, egg sexing technology finally offered a solution to these staffing problems - and, with countries like Germany, France, and Italy having banned the culling of day-old male chicks, it created some momentum towards change within the UK.

Piggots Poultry Breeders is a family-run poultry supplier based in Bedfordshire. Richard Piggot believes that they are the first suppliers of in-ovo chicks in the UK, “initially via Respeggt and then later via our usual hatchery supplier in France, which uses the Orbem system.” He states that “the welfare benefits would be immense,” but has concerns that “it [will not] happen anytime soon in the UK.” [3]

Piggot believes that “the British Egg Industry Council (BEIC) is unsupportive of in-ovo technologies for a number of reasons. Firstly, the [technology] is still quite new, and they are waiting to “learn from other people’s mistake[s]” but again [it is] down to cost and [efficiency].” Piggot feels that the industry will not take the plunge unless “they are forced to by the Government.” [3]

Silvin Faulstich, Head of IT and Processes at Respeggt, confirms that hatcheries are also “concerned about the additional cost that using in-ovo sexing technology would imply.” However, he believes that this “is not true anymore, as cost for in-ovo sexing has been decreasing drastically in the past months.” [4]

Faulstich states that while "hatcheries [do not] see any need to move ahead, as there is no demand from producers and/or retail," they are also concerned about what will happen when that change does happen. Once "free of chick culling" products appear on the supermarket shelves, it will "wake up" consumers to the knowledge that other products do cull chicks. [4]

Faulstich points out that "most industry members in the UK consider chick culling not as an issue" because "the UK apparently is [a] net importer of dead day-old chicks to feed reptiles, birds of prey and zoos. Therefore, these male chicks are not killed without a reason." However, Faulstich also states that "most of the species should not even have dead chicks as [a] feed source." [4]

By 2021, there was some political momentum within the UK. Dr Lisa Cameron from the Scottish National Party submitted a written question to the Secretary of State for Environment, Food and Rural Affairs. She asked "whether he has made an assessment of the potential merits of the French and German Government's decision to end the killing of day-old male chicks in the egg production sector; whether the Government plans to bring forward similar legislative proposals; and if he will make a statement." [5]

Victoria Prentis of the Conservative Party responded by highlighting the need for dead chicks to feed captive reptiles and raptors. While she acknowledged the progress in France and Germany, there was an emphasis on the scale not being sufficient. However, it was clear that they would be assessing these systems in the near future. [5] Consequently, DEFRA asked the Animal Welfare Committee (AWC) to research alternatives to the culling of day-old male chicks in the layer industry, newly-hatched turkey poults and newly-hatched ducklings. [1]

The conclusions of the report were enlightening, and noted that "the lives of all chicks and turkey poults have intrinsic value," and that the routine culling of them was "highly problematic" from an ethical viewpoint. They ultimately recommended that routine culling should be made "illegal as soon as reliable, accurate methods for sexing eggs prior to hatch are available to be implemented in [Great British] hatcheries." [1]

The report recommendations also addressed issues that Germany had encountered. It suggested that importing eggs, female chicks, and turkey poults from systems where culling is allowed should also be made illegal - and that if dead chicks are imported, they must have been killed using systems equally as humane as those in Great Britain. [1]

The report also examined the wider problem and offered sensible solutions to enable a smooth transition. 'Future welfare labelling' systems should reflect routine culling, financial support should be given to hatcheries transitioning to egg sexing technology, and there should be research into the development of replacement food sources to newly hatched chicks. [1]

However, it is worth noting that the ‘Opinion on Chick Culling Alternatives’ report was dated August 2023, and despite being released on 28th November 2023 by the Welsh Government, [1] it took the UK Government a further 3.5 months to publish it on 12th March 2024. [6]

We sent four emails this year asking for the Government’s response to the AWC’s report, but have not been given one. The final email saw a quick response, informing us that they had entered a pre-election phase where Parliament is dissolved and “in line with the Civil Service Code and Ministerial Code, the Department will not initiate any new activity.” [7]

Timeline

[2010]

Media outlets such as the Mail Online began raising awareness of male chick culling. [8]

[2015]

The UK egg industry found it difficult to hire UK or EU people to work as Vent Chick Sexers and asked the Government to put this job onto the Shortage Occupation List. [2]

[2021]

A written question by Dr Lisa Cameron of the Scottish National Party asked if the UK Government had considered solutions to male chick culling. [5]

While chick culling was not mentioned in the Government’s Action Plan for Animals, it was clear they had plans to “revolutionise the treatment of animals in the UK” and respect animals as “sentient beings.” [9]

[2022]

DEFRA informed us on 20th February 2023 that they had commissioned the Animal Welfare Committee, an independent advisory board to the Government, to undertake research into the alternatives to the culling of male layer chicks in 2022. [10]

[2023]

The Welsh Government posted the Animal Welfare Committee’s report entitled ‘Opinion on Alternatives to the Culling of Newly Hatched Chicks in the Egg and Poultry Industry’ on 28th November 2023. The AWC recommended that routine culling of chicks should be made “illegal as soon as reliable, accurate methods for sexing eggs prior to hatch are available to be implemented in GB hatcheries.” [1]

[2024]

The UK Government posted the AWC’s report on the 12th March 2024. [6]

There are no solid plans on when exactly the AWC's recommendations may be introduced, if at all, and the Government has entered a pre-election phase when no new work is undertaken.

Interesting

- In Great Britain, around 40-45 million day-old male chicks from layer hens are killed every year. [1]
- Approximately 10% of fertilised eggs that are incubated do not hatch. [1]
- Approximately 70% of culled male chicks in Great Britain are sold to two large wholesalers who, in turn, sell them on as animal feed. [1]
- From these two large wholesalers, 60% feed captive raptors, 30% go to zoos, and 5% feed pet reptiles. [1]
- The 30% not sent to the two large wholesalers “are sold directly by hatcheries to regional customers.” [1]
- Dead chicks are significantly cheaper than other captive carnivore food sources. For example, chicks cost £2/kg, rats cost £36/kg, and mice cost £44/kg. [1]
- Dietary supplements need to be fed to some captive raptors, as chicks do not fulfil the nutritional calcium-phosphorous requirements. [1]
- GB imports 30% of its dead male chicks used as captive animal feed. [1]
- DEFRA is a department of His Majesty's Government whose mission is to “restore and enhance the environment for the next generation, leaving it in a better state than we found it.” Broadly, their aim is to “make our air purer, our water cleaner, our land greener and our food more sustainable.” [11]
- The British Egg Industry Council (BEIC) was founded in 1986, to represent the egg industry within the UK and oversee matters like hatching, rearing, breeding, production and marketing. Their prime objective is to “act as a voice for its members, representing their interests and expressing their concerns in discussions with the Government, the European Commission, European Parliament and other important bodies.” [12]
- The BEIC is composed of eleven industry trade associations: the British Egg Association; British Egg Products Association; British Free Range Egg; National Egg Marketing Association Ltd; Northern Ireland Poultry Federation; Pullet Hatcheries Association; Pullet Rearers' Association; Scottish Egg Producers Retailers Association; Ulster Farmers Union; National Farmers Union; National Farmers Union (Scotland); and Laying Hen Welfare Forum. The whole organisation is funded by voluntary levies. [13]

Food for Thought by the VH EST Team

Job Shortage - *We believe that the chronic shortage of Vent Chick Sexers is an indication that people do not want to do this job, despite it being well paid. Replacing Vent Chick Sexers with EST would remove significant uncertainty within the production line, and help align the industry more with UK animal loving values. It would also help remove the growing animal rights backlash that the egg industry faces.*

BEIC - *It seems surprising that the BEIC has not embraced EST like other countries. It is an inevitable solution to the problem of culling male chicks - being considered progressive and listening to the social requirements of their consumer would be beneficial. Maintaining the status quo in this way will continue to reflect badly on them.*

The RSPCA – *While the RSPCA seem aware of the research being done on EST, they seem unaware that it is being used commercially in multiple countries. They do not seem to be pushing to end this obvious cruelty to animals, and are instead just waiting to see what happens.*

DEFRA wants to revolutionise the treatment of animals in the UK by respecting them as sentient beings. While we were thrilled to see the report which they commissioned from the Animal Welfare Committee, we are sad to see that the Government has not embraced its findings - and, with an upcoming election on 4th July 2024, this may have to become somebody else's solution.

Overall, the VH team wonders why these organisations are waiting and not acting...

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