Chick and Duckling Killing: Achieving an EU-Wide Prohibition

WHITE PAPER — JANUARY 2023

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ACHIEVING BETTER TREATMENT FOR ANIMALS



ABSTRACT

Doing to Address Male Chick Culling, Farmers Weekly, March 26th 2022, https://www.fwi.co.uk/livestock/poultry/layers/ what-the-poultry-sector-is-doing-to-address-malechick-culling (last visited May 20th 2022).

2
Alternative to Culling Day-Old Male Chicks,
5 (2021), available online:
https://drive.google.com/file/d/1fGOn
NoW1GmJKQkrpsezW37oCccgCDyrP/view.

"Torture in a Can:" French Foie Gras Farmers Failing to Improve Appalling Conditions, October 17th 2014, Newsweek, https://www.newsweek.com/2014/10/24/torture-can-french-fois-gras-farmers-accused-again-277606.html?amp=1 (last visited May 19th 2022).

6.5 billion day-old male chicks are killed worldwide every year¹, including 330 million in the EU². It is estimated that another tens of million day-old female ducks are killed in foie gras production, mainly in the EU³. Day-old chicks and ducklings are killed because they have no economic value to the egg and foie gras industries: male chicks cannot lay eggs nor do they produce meat in sufficient quantity to be of economic value. Similarly, force-feeding female ducks does not produce livers of a sufficient weight and volume to be economically valuable.

Yet, alternatives exist to the mass killing of baby animals. "In ovo sexing" technologies can now detect the sex of a chicken or duck embryo before they hatch, which allows the section of viable eggs before the animals are born.

Considering the cruelty of chick culling, three EU countries, France, Germany, and Italy just recently prohibited this practice, and require the use of alternatives. The EU Legislature is also studying the possibility of imposing an EU ban on the killing of day-old chicks and ducklings.



January 2023





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1. The Practice of Systematically Killing Chicks and Ducklings

- 4 For a video of the mechanical grinding of chicks online (graphic content), see
- 5 Other jurisdictions, such as the United States of America or India, do not regulate the killing of day-old chicks, thereby allowing the burning, crushing, or downing of animals, which are prohibited under EU law.

 Source: Animal Equality, In-Ovo Sexing: An Alternative to Culling Day-Old Male Chicks, 5 (2021), available online: https://drive.google.com/file/d/ifGOnNoWigm/KQkrpsezW37oCccgCDyrP/view
- 6 Email correspondence with the European Commission's Directorate General for Agriculture and Rural Development, available on request.
- 7 Animal Equality, In-Ovo Sexing:
 An Alternative to Culling Day-Old
 Male Chicks, 5 (2021), available online:
 https://drive.google.com/file/d/1fGOnNoW1GmJKQkrpsezW370CccgCDyrP/view, citing:
 Amelie C. Buhl, Legal Aspects of the
 Prohibition on Chick Shredding in the
 German State of North Rhine-Westphalia,
 Global Journal of Animal Law (2013).
- 8 European Commission, Eurostat Data
 Browser "Hatcheries hens Annual Data,"
 available online: https://ec.europa.eu/
 eurostat/databrowser/view/apro_ec_strhen/
 default/table?lang=fr; European Commission,
 Committee for the Common Organization
 of the Agricultural Markets, EU Market
 Situation for Eggs, March 2022, available
 online: https://drive.google.com/file/d/1v5Vx9
 LHUVd3XQ4pnb8wHgbY-PYREiAcg/view
- 9 Mark Porter and Ana Pouvreau,
 "Torture in a Can:" French Foie Gras
 Farmers Failing to Improve Appalling
 Conditions, October 17th 2014, Newsweek,
 https://www.newsweek.com/2014/10/24/
 torture-can-french-fois-gras-farmers-accused-again-277606.html?amp=1
 (last visited May 19th 2022).
- 10 European Commission, Eurostat Data Browser "Hatcheries – hens Annual Data," available online: https://ec.europa.eu/eurostat/databrowser/view/apro_ec_strpoul/default/table.

1.1. Killing Method

EU law allows only two methods for the killing of day-old male chicks and female ducklings, which are maceration (most commonly called "grinding" or "shredding")⁴ and asphyxiation with carbon dioxide.⁵ There are no official numbers detailing the use of these methods in hatcheries facilities as the EU does not collect detailed data on hatcheries.⁶

1.2. Key Numbers

1.2.1. MALE CHICKS IN EGG PRODUCTION

It is estimated that 330 million day-old chicks are killed every year in the EU.7 All 27 EU Member States have egg-laying hens hatcheries on their territory,8 suggesting that every EU Member State might practice the selective culling of day-old chicks.

1.2.2. FEMALE DUCKLINGS IN FOIE GRAS PRODUCTION

It is estimated that up to 40 million female ducks are also killed in foie gras production, mainly in the EU.9 Because the European Commission does not discriminate between the different animal species when collecting data on hatcheries with poultry animals other than egg-laying hens, 10 there is no official data on the number of hatcheries for foie gras production in the EU Member States.



2. Alternatives to the Systematic Killing of Chicks and Ducklings

- 11 Poultry World, In-ovo sexing of Muscovy and Mule duck eggs, June 17, 2020, https://www.poultryworld.net/poultry/in-ovo-sexing-of-muscovy-and-mule-duck-eggs/
- 12 Bundesministerium für Enährung und Lanwirtschaft, Durchbruch: Gemeinsam Kükentöten beenden!, November 8th 2018, Press Release, https://www.bmel.de/SharedDocs/Pressemitteilungen/DE/2018/171-seleggt-methode.html
 (last visited May 19, 2022) (in German).
- 13 Bjørnstad, S., L. P. E. Austdal, B. Roald, J. C. Glover and R. E. Paulsen (2015):
 Cracking the egg: potential of the developing chicken as a model system for nonclinical safety studies of pharmaceuticals. J. Pharmacol. Exp. Ther. 355, 386-396.
 Aleksandrowicz, E., & Herr, I. (2015). Ethical euthanasia and short-term anesthesia of the chick embryo. ALTEX: Alternativen zu Tierexperimenten, 32(2), 143-147.
- 14 Doran, T. J., Morris, K. R., Wise, T. G., O'Neil, T. E., Cooper, C. A., Jenkins, K. A., & Tizard, M. L. V. (2018).
 Sex selection in layer chickens. Animal Production Science, 58(3), 476–480.
 https://doi.org/10.1071/AN16785
- 15 Cinnamon, Y., & Ben-Tal Cohen, E. (2019). WO2019058376A1. Retrieved from https://worldwide.espacenet.com/ patent/search?q=pn%3D WO2019058376A1

There are two types of alternatives to the culling of chicks and ducklings: the use of *in ovo* sexing technologies and the use of dual-purpose breeds. So far, the use of alternatives to chick culling is becoming common in the egg industry, while there is little information regarding the transition away from the culling of female ducklings in the foie gras industry.

2.1. In Ovo Sexing

2.1.1. DEFINITION

In ovo sexing is a technology that determines the sex of embryos, so as to selectively destroy eggs from the unwanted sex at the incubation stage. In ovo sexing aims at preventing male chicks and female ducks from hatching. With in ovo sexing, only animals who are deemed useful for the industry complete hatching.

2.1.2. THE DIFFERENT TYPES OF IN OVO SEXING TECHNOLOGIES

"In ovo sexing" covers a variety of technologies, which vary based on the methods (e.g.: spectroscopic, genetic, magnetic resonance imagery detection), the outcome (e.g.: sexing or selective breeding), the testing period, and the degree of invasiveness.

Most methods are currently under development, with certain companies benefitting from public funding, such as Seleggt, a joint venture which received 5 million euros in funding from the German Ministry of Agriculture.¹²

Contentious issues when it comes to in ovo sexing include:

- The **testing period of the sexing methods**, as animal scientists establish that chick embryos are not able to feel pain before the 7th day of incubation, but are able to experience suffering after the 15th day of incubation.¹³
- Technologies based on gene editing techniques: Gene editing techniques consist of editing the genes of breeding egg-laying hens so that only male embryos would express a fluorescent gene. Hourescent eggs would allow producers to sex the eggs, with fluorescent eggs carrying male embryos. Gene editing can also be accomplished by incorporating a lethal gene into male embryos so that they will stop developing when exposed to blue light.

- 16 Phelps, P., Bhutada, A., Bryan, S., Chalker, A., Ferrell, B., Neuman, S., ... Butt, T. (2003). Automated identification of male layer chicks prior to hatch. World's Poultry Science Journal, 59(1), 33-38.
- 17 "In-Ovo Sexing of Muscovy and Mule Duck Eggs," June 1^{7th}, 2021, Poultryworld.net, https://www.poultryworld.net/poultry/in-ovo-sexing-of-muscovy-and-muleduck-eggs/(last visisted December 28, 2022); "Canard, le sexage dans l'œuf dès 2021," Réussir-L'Anjou Agricole, June 24th 2020, https://www.anjou-agricole.com/canards-le-sexage-dans-loeuf-des-2021 (Last visited May 20th 2022) (in French).
- Gene editing in the food industry is regulated strictly in the EU and so the use of gene editing sexing technologies in the egg and foie gras industry would unlikely be authorized in the EU. Gene editing also poses ethical issues as such a technique is often considered to affect the animals' bodily integrity.
- The accuracy and the throughput of the techniques are desirably higher than 98.5 % (which is the same accuracy as a sexing expert at hatch) and 20,000 eggs per hour, to avoid affecting the output of the hatcheries. ¹⁶
- Four technologies are currently authorized and in use in the EU in egg production. An overview of these technologies is presented in the following table. *In ovo* sexing technologies using spectrometric detection are also being developed in the foie gras production, such as Progress Lunix.¹⁷ Here, the sex is determined on day 9 based on the eye color differences (*i.e.* red for females and black for males).

Table: In Ovo Sexing Technologies Available in the EU

NAME	TYPE OF TECHNOLOGY	OUTCOME	TESTING PERIOD	INVASIVENESS	STATUS
Available in the EU					
Agri Advanced Technologies - Cheggy-Hyperspectral Measurement Technology	Spectroscopic detection	Sexing	13 th day of incubation	Non-invasive	Commercialized ^I
In Ovo	Spectroscopic detection	Sexing	9 th day of incubation	Minimally invasive	Commercialized ^{II}
PLANTegg	Genetic detection	Sexing	8 - 9 th day of incubation	Minimally invasive	Commercialized ^{III}
Seleggt	Biomarker detection	Sexing	9 th day of incubation	Minimally invasive	Commercialized ^{IV}
Agri Advanced Technologies - Raman- Spectroscopic method	Spectroscopic detection	Sexing	4 th day of incubation	Invasive	In development (Last update Dec 2022) V,VI
Orbem Genus	Magnetic resonance imaging	Sexing	14 th day of incubation	Non-invasive	In development (Last update Mar 2022) VII, VIII
SOOS	Ultrasound	Selective breeding	During incubation	N/A	In development (Last update Nov 2022) IX, X
Not yet available in the EU					
CSIRO	Gene-editing	Sexing	Day of laying	Non-invasive	In development (Last update 2021) XI
EggXYt	Gene-editing	Sexing	Day of laying	Non-invasive	In development (Last update Sep 2022) XII,XIII
Matrixspec's Hypereye	Spectroscopic detection	Sexing	Day of laying	Non-invasive	In development (Last update Jun 2022) XIV, XV
LIVEgg's ChickMale Saver	Monitoring of sensory parameters	Sexing	During early incubation	Non-invasive	In development (Last update 2019) XVI, XVII
Poultry by Huminn	Gene-editing	Sexing	During early incubation	N/A	In development (Last update Dec 2022) XVIII, XIX
Ovabrite's TeraEgg	Spectroscopic detection	Sexing	Day of laying	Non-invasive	Ceased (Last update 2016) XX, XXI

- I Agri Advanced Technologies,
 In ovo sex determination, 2022,
 https://www.agri-at.com/en/products/in-ovo-sexdetermination (Last visited Dec 30th 2022)
- II In Ovo, Our Ella solution, 2022, https://inovo.nl/ella/ (Last visited Dec 30th 2022)
- III Plantegg, The PLANTegg process, 2022 https://www.plantegg.de/en/ (Last visited Dec 30th 2022)
- IV Seleggt, 2022, https://www.seleggt.com/ (Last visited Dec 30th 2022)
- V Preuße, G., Porstmann, V., Bartels, T., Schnabel, C., Galli, R., Koch, E., ... Steiner, G. (2022). Highly sensitive and quick in ovo sexing of domestic chicken eggs by two-wavelength fluorescence spectroscopy. Analytical and Bioanalytical Chemistry, (0123456789). https://doi.org/10.1007/s00216-022-04446-0
- VI Agri Advanced Technologies,
 The early spectroscopic method, 2022 _
 https://www.agri-at.com/en/products/in-ovo-sexdetermination/early-spectroscopic-method
 (Last visited Dec 30th 2022)
- VII Itavi, L'ovosexage en Europe : état des lieux et perspectives éthiques et techniques, March 9th 2022 https://www.itavi.asso.fr/publications/l-ovosexage-en-europe-etat-des-lieux-et-perspectives-ethiques-et-techniques
- VIII Orbem, 2022

 $\underline{\text{https://orbem.ai/genus}} \text{ (Last visited Dec 30$^{th} 2022)}$

- IX EMKA Incubators, SOOS egg sex determination

 an EMKA partner, November 30th 2022,

 https://www.emka-incubators.com/en/news/soos-egg-sexdetermination-an-emka-partner-n-33/
 (Last visited Dec 30th 2022)
- X SOOS, 2022, https://www.soos.org.il/technology/ (Last visited Dec 30th 2022)
- XI CSIRO, Sex determination techniques for the egg and poultry industries, May 5th 2021,

 https://www.csiro.au/en/research/production/
 biotechnology/chicken-sex-selection
 (Last visited Dec 30th 2022)
- XII EggXYt, 2022

https://www.eggxyt.com/ (Last visited Dec 30th 2022)

XIII European Commission, Counting your chickens before they hatch, EU research results, September 23rd 2022,

https://cordis.europa.eu/article/id/442114-counting-your-chickens-before-they-hatch (Last visited Dec 30th 2022)

XIV QCNA, Two smart farm initiatives being developed in Quebec, June 29th 2022, _
https://qcna.qc.ca/news/two-smart-farm-initiatives-being-developed-in-quebec (Last visited Dec 30th 2022)

XV MatrixSpec Solutions LinkedIn page,
Website has ceased,

https://www.linkedin.com/company/matrixspec-solutions/
(Last visited Dec 30th 2022)

XVI LIVEgg, 2022,

 $\underline{\text{https://www.livegg.com/Account/Login}}$

(Last visited Dec 30th 2022)

- XVII Cision PR Newswire, LIVEgg launches CrystalEgg, the world's first embryo monitoring system, January 23rd 2019, https://www.prnewswire.com/news-releases/livegg-launches-crystalegg-the-worlds-first-embryo-monitoring-system-300782776.html (Last visited Dec 30th 2022)
- XVIII HuminnPoultry, 2022,

 https://www.huminnpoultry.com/project-sexing/
 (Last visited Dec 30th 2022)
- XIX BBC, Gene-edited hens may end cull of billions of chicks, December 13th 2022,

 https://www.bbc.com/news/science-environment-63937438
 (Last visited Dec 30th 2022)
- $XX \qquad \text{Ovabrite LinkedIn page, Website has ceased,} \\ \frac{\text{https://www.linkedin.com/company/ovabrite-Ilc/about/}}{(\textit{Last visited Dec 30th 2022})}$
- XXI Businesswire, Vital Farms takes major step toward ending the industry-wide practice of killing male newborn chicks, October 27th 2016,

 https://www.businesswire.com/news/home/20161027005567/
 en/Vital-Farms-Takes-Major-Step-Industry-Wide-Practice
 (Last visited Dec 30th 2022)

- 18 Mona Franziska Giersberg and Nicole Kemper, Rearing Male Layer Chickens: A German Perspective, MDPI Agriculture (2018).
- 19 Europe 1 avec AFP, Le broyage des poussins males interdit, un délai d'adaptation accordé à la filière, Europe 1, February 6th 2022, https://www.europe1fr/societe/le-broyage-des-poussinsmales-interdit-un-delai-dadaptationaccorde-a-la-filiere-4092168 :-:text=Un surcoût annuel estimé par,commandé des matériels d'ovosexage.

(last visited May 20th 2022) (in French).

- 20 Animal Equality, In-Ovo Sexing:
 An Alternative to Culling
 Day-Old Male Chicks, 8 (2021),
 available online:
 https://drive.google.com/file/d/1fGOnNoW1Gm]KQkrpsezW370
 CccgCDyrP/view.
- 21 Natalie Noble, What the Poultry Sector is Doing to Address Male Chick Culling, Farmers Weekly, March 26tt 2022. https://www.fwi.co.uk/livestock/poultry/ layers/what-the-poultry-sector-isdoing-to-address-male-chick-culling (last visited May 20th 2022); Le Monde avec AFP, Le broyage des poussins males désormais interdit dans la filières des poules pondeuses, February 6th 2022, https://www.lemonde.fr/planete/ article/2022/02/06/le-broyage-despoussins-males-desormais-interditdans-la-filiere-des-poulespondeuses_6112544_3244.html (last visited May 20th 2022) (in French).
- 22 Testing the increase in retail price due to cage-free farming method in France, see Enquête CSA/CNPO 2019, showing that 85% of French consumers are willing to pay more for eggs originating from cage-free production methods.
- 23 Le Monde, La France veut interdire le broyage et le gazage des poussins mâles en 2022, July 18th 2021,
 https://www.lemonde.fr/planete/article/2021/07/18/la-france-va-interdire-le-broyage-et-le-gazagedes-poussins-males-des-2022_6088647_3244.html

2.1.3. IMPLEMENTATION OPPORTUNITIES

As a result of the recent prohibition on chick culling in France and Germany, egg producers in these two countries implemented *in ovo* sexing technologies.

· Production Costs

Increases in production costs are due to costs related to the purchase and use (maintenance, training) of *in ovo* sexing technologies, as well as the loss of value of eggs due to inaccurate results. These costs are partly compensated by the sale of surplus eggs to other sectors, such as the animal food industry or research industry.¹⁸

In France, the egg industry estimates that the implementation of *in ovo* sexing technologies will increase production costs by 64 million euros, the equivalent of 4% of the industry's gross revenue.¹⁹ Depending on the technology used, Animal Equality reports that increases in production costs are estimated to range between 0.5 to 2 cents per egg.²⁰

· Public Funding

Governments in France, Germany, and the Netherlands have supported the transition away from chick culling by way of *in ovo* sexing. For instance, the German and Dutch governments have subsidized research and development of *in ovo* sexing technologies, which resulted, among other outcomes, to Seleggt's *in ovo* sexing technology. Governments have also granted subsidies to producers. For instance, the French government granted between 10 to 15 million euros to hatcheries to accelerate the implementation of the prohibition on chick culling passed in 2022, using funds from the EU Recovery Plan.²¹

· Consumers' Willingness to Pay

Polls tend to show that consumers are willing to pay more for eggs that have undergone more humane production methods.²² In France, the Minister of Agriculture estimated that the increase in retail price for *in ovo* sexed eggs was 1 cent only per box of six eggs.²³

Producers and retailers also engaged in labeling *in ovo* sexed eggs to inform consumers and increase their willingness to pay for more humane eggs. For instance, Seleggt, PlantEgg (Gene detection) and *In Ovo* (mass spectomerty) eggs are sold on the retail market with a "Respeggt" logo.²⁴ Respeggt further developed a strategy to facilitate the uptake of *in ovo* sexing systems, by supporting the installation costs.²⁵

- 24 Animal Equality, In-Ovo Sexing: An Alternative to Culling Day-Old Male Chicks, 7 and 13 (2021), available online: https://drive.google.com/ file/d/1fGOnNoW1GmJKQkrpsezW370 CccgCDyrP/view. Please note that such a label could be considered misleading to the extent producers claim they do not engage in a practice that is otherwise prohibited under German law. Furthermore, such a label formulates a claim related to the welfare of animals when producers do not necessarily engage in best animal welfare practices at later production stages - i.e. the Seleggt label does not guarantee that surviving egg laving hens are raised in a
- 25 Respeggt.com, System Manual, August 2022, available online: https://www.respeggt.com/ wp-content/uploads/2022/11/ respeggt-System-Manual_6.o.pdf

cage-free environment.

- 26 Mona Franziska Giersberg and Nicole Kemper, Rearing Male Layer Chickens: A German Perspective, MDPI Agriculture, 2 (2018).
- 27 Ibid.
- 28 Ibid.

2.2. Dual-Purpose Breeds

2.2.1. DEFINITION

The use of dual-purpose egg-laying breeds aims to switch to raising lower-yield species and grant economic value to male animals of the same species as egg-laying hens. Unlike *in ovo* sexing technologies, the use of dual-purpose breeds does not involve the destruction of male embryos. Rather, male embryos complete their development to be raised for their meat. However, this solution is less fitting to industrial egg production, given its heavy specialization – *i.e.* the hyper-specialization of the industrial egg industry does not allow production diversification. This solution also raises a number of ethical questions, to the extent that the risk is important that male layers would be raised in conditions that will not fully meet their welfare needs.

2.2.2. IMPLEMENTATION OPPORTUNITIES

· Production Costs

Production costs for eggs are increased because the costs of raising male layers are not entirely offset by the sale of their meat.²⁶ The use of dual-purpose breeds also leads to lower production levels in egg-laying hens, as dual-purpose breeds "cannot achieve the production performances of specialized hybrids."²⁷

For these reasons, the use of dual-purpose breeds as an alternative to the culling of chicks seems to align with less cruel production methods (as opposed to intensive farming methods), where producers are more likely to use heritage breeds and consumers are used to paying a premium.

· Consumers' Willingness to Pay

Polls tend to show that consumers are willing to pay more for eggs that involve the use of dual-purpose breeds. A 2018 poll showed that 89% of German consumers are willing to pay more for eggs from farms that spare male chicks, with 52% of them willing to pay as much as an additional 6 cents per egg.²⁸

3. Transitioning Away from the Culling of Chicks and Duckling

- 29 Survey available online: https://drive.google.com/ file/d/1pNgDuFvXt-zZvhtdFEC2_ IRMugIMa2El/view?usp=sharing.
- 30 Animal Equality, In-Ovo Sexing:
 An Alternative to Culling
 Day-Old Male Chicks, 15 (2021),
 available online:
 https://drive.google.com/file/d/1fGOnNoW1GmJKQkrpsezW37oCccgCDyrP/view
- 31 Ibid. 16. "Carrefour et Loué testent le sexage in ovo en vue de mettre fin à l'élimination des poussins mâles," June 10th, 2020, ciwf.fr, https://www.agrociwf.fr/actualites/2020/02/carrefour-et-loue-testent-le-sexage-in-ovo-en-vue-de-mettre-fin-a-lelimination-despoussins-mâles (last visited December 29th, 2022).
- 32 "Eitjes uit een keten zonder eendagshaantjes," Bioplanet. be:
 https://www.bioplanet.be/nl/verhalen/eitjes-zonder-eendagshaantjes
 (last visited December 29th, 2022).
- 33 Alphonse Deter, "More and More Chicks Htached Abroad Domestic Hatcheries Are Dying," June 30th, 2'22, TopAgrar.com, https://www.topagrar.com/gefluegel/immer-mehr-kueken-im-ausland-ausgebruetet-heimische-bruetereiensterben-13139563.html (last visited January 4, 2022)
- 34 Cornelia War, « Killing chicks:

 A ban calls for a replacement,"

 June 20, 2019, Land & Forst,

 https://www.landundforst.de/
 landwirtschaft/tier/kuekentoeten-verbotverlangt-ersatz-554594

 (last visited November 25, 2022) (in German).
- 35 Nitrogas to Gas Foam, Dossier day-old Chickens: The market for culled one-day-old chicks http://nzgf.com/dossier-day-old-chickens-the-market-for-culled-one-day-old-chikcs/
 (last visited November 25, 2022)

3.1. Public Support for a Ban on Chick and duckling Culling

A 2022 survey by YouGov for L 214 evidenced overwhelming public support for the adoption of a ban on chick and duckling culling. ²⁹ For instance, 78% of respondents in Italy and 76% of respondents in Germany reported they supported a ban on the systematic killing of chicks.

3.2. Voluntary Commitments

Given the significant societal demand to end male chick culling, producers and retailers voluntarily committed to using alternatives to the killing of male chicks, primarily by resorting to *in ovo* sexing. United Egg Producers, the largest egg cooperative in the EU, pledged to transition away from chick culling "by 2020 or as soon as it is commercially available and economically feasible." In 2020, Aldi, a major German retailer, and Carrefour in France announced their intent to end male chick culling in shell egg production. Bio Planet in Belgium also commits to only source their eggs from supplies who resort to *in ovo* sexing. To this date, no company contractually committed to ending the culling of male chicks though.

3.3. Legislative Reform

3.3.1. NATIONAL LAW

Of all the 27 EU Member States, Austria, France, Germany, and Italy have passed legislation prohibiting the culling of male chicks. The Dutch Parliament further adopted a resolution calling for the adoption of a ban on chick culling.

However, jurisdictions that have banned the practice of chick culling can import animals from other EU Member States where chick culling is still allowed. Such is the case for Germany,, where egg producers import the majority of chicks from Austria, Belgium, and Czechia since the entry into force of the ban on chick killing.³³

Furthermore, some jurisdictions have enacted exemption from the prohibition on the killing of chicks for animal feed purposes, such as Austria and France. It is unclear, however, whether the prohibition on the systematic killing of chicks would significantly impact the feeding of captive exotic animals, with some sources indicating that exotic animal keepers only use a small number of dead chicks;³⁴ and others sources indicating higher numbers.³⁵

- 36 Council Regulation 1099/2009 of 24 September 2009 on the Protection of Animals at the Time of Killing, 2009 O.J. L 303/1 30.
- 37 Annex I, Chapter I, Council Regulation 1099/2009 of 24 September 2009 onthe Protection of Animals at the Time of Killing, 2009 O.J. L 303/19.
- 38 Ibid.
- 39 Ibid., Chapter II, L 303/23.
- 40 Ibid. L 303/21 22.
- 41 European Commission,
 "A Farm to Fork Strategy,"
 10,Europa, May 2020,
 available online:
 https://eur-lex.europa.eu/legalcontent/EN/TXT/HTML/?uri=
 CELEX:52020DC0381&from=EN.
- 42 Julia Daham and Magdalena
 Pistorius, Germany, France Call
 on EU Countries to Also Ban
 Culling of Male Chicks, July 21st,
 2021, Euractiv, https://www.euractiv.
 com/section/agriculture-food/news/
 germany-france-call-on-eu-countriesto-also-b an-culling-of-male-chicks/
 (last visited April 10, 2022).

3.3.2. EU LAW

The killing of male chicks and ducklings is regulated under the Annex I of the Regulation 1099/2009 of 24 September 2009 on the Protection of Animals at the Time of Killing (Slaughter Regulation).³⁶ As per the Slaughter Regulation, EU law only allows two methods for the killing of chicks:

- A mechanical method: maceration (also called "grinding" or "shredding"), defined as "immediate crushing of the entire animal."³⁷ This killing method is lawful to kill "chicks up to 72 hours and egg embryos."³⁸ The Regulation further specifies that "this method shall provide instantaneous maceration and immediate death of the animals. The apparatus shall contain rapidly rotating mechanically operated killing blades or expanded polystyrene projections. The capacity of the apparatus shall be sufficient to ensure that all animals are killed instantaneously, even if they are handled in a large number."³⁹
- Any listed gas method, including: carbon dioxide at high concentration, carbon dioxide in two phases, carbon dioxide associated with inter gases, inert gases, carbon dioxide (pure source), and carbon dioxide associated with other gases. Gas methods of killing are allowed for the killing of poultry in general.⁴⁰

3.3.3. REFORM OPPORTUNITIES AT EU LEVEL

· European Commission

In 2020, the European Commission committed to revising EU farm "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."

This revision comes as the result of the "EU Green Deal," which is the European Commission's work program for the following five years (until 2024), and which was presented on December 11, 2019, by the then newly-appointed European Commission.

- 43 European Commission, Inception Impact Assessment Revision of EU Animal Welfare Legislation, July 2021, available online:

 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12950-Animal-welfare-revision-of-EU-legislation_en.
- 44 Julia Daham and Magdalena
 Pistorius, Germany, France Call
 on EU Countries to Also Ban Culling
 of Male Chicks, July 21st,
 2021, Euractiv,
 https://www.euractiv.com/section/
 agriculture-food/news/germany-francecall-on-eu-countries-to-also-b
 an-culling-of-male-chicks/
 (last visited April 10, 2022).
- 45 The "AgriFish Council" is an official monthly meeting taking place at the Council of the EU in Brussels, Belgium, and which gathers ministers from each EU Member State to discuss agriculture and fisheries law and policy.
- 46 Council of the European Union, Information from the French and German Delegations, on behalf of the Austrian, French, German, Irish, Luxembourg, Portuguese and Spanish Delegations on the Prohibition of the Systematic Killing of Male Chicks in the Laying Hens Sector, July 5th, 2021, available online: https://data.consilium.europa.eu/doc/document/ST-10670-2021-REV-1/x/pdf.
- 47 Council of the European Union,
 EU-wide End to the Systematic
 Killing of Male Chicks, Information
 from the French and German
 Delegations on behalf of the
 Austrian, Belgian, Cyprus, Finnish,
 French, German, Irish, Luxembourg
 and Portuguese Delegations,
 available online:
 https://data.consilium.europa.eu/doc/document/ST-13317-2022-INIT/x/pdf
- 48 European Commission, Staff Working Document, "Fitness Check" of the EU Animal Welfare Legislation, p. 60 (2022)

As early as 2021, Stella Kyriakides, the EU Commissioner for Health and Food Safety, further recognized that "the killing of large numbers of day-old chicks [was], of course, an ethical issue," and announced that the EU executive would use the upcoming review of EU animal welfare rules to "look very carefully at the issue and find the best possible solution."⁴²

The European Commission's Directorate General for Health And Food Safety ("DG Santé") is currently exploring options for the revision of Regulation 1099/2009 on the Protection of Animals at the Time of Killing ("Slaughter Regulation"). Specifically, the European Commission is looking to prohibit certain slaughter methods that cause disproportionate suffering and where alternatives to such methods exist – such as chick culling, as well as CO2 stunning for pigs and water bath stunning for poultry.⁴³

· Council of the EU

The Council of the EU is composed of the heads of State of all 27 Member States of the European Union. With the European Parliament, the Council of the EU amends and adopts the legislation proposed by the European Commission. For that reason, it is essential that the majority of the Member States agree on a given reform for it to be adopted. In the case of chick and duckling culling, the context is favorable to obtain a ban on the practice in EU law, for the following reasons:

- France and Germany, two of the most influential Member States on agri-food issues, just recently prohibited the culling of male chicks. As early as 2021, French Minister of Agriculture, Julien Denormandie, called for a "political vision shared by the other Member States"⁴⁴
- 2. Austria, France, Germany, and Italy prohibited chick culling, and many business operators in Spain have also transitioned away from culling one-day-old chicks, instead using *in ovo* sexing.
- 3. During the AgriFish Council⁴⁵ on July 15th, 2021, Austria, France, Germany, Ireland, Luxembourg, Portugal, and Spain further called on the Commission to conduct the impact assessment of a ban on the killing of male chicks in the EU.⁴⁶
- 4. During the AgriFish Council on October 17 18, 2022, the French and the German delegations further insisted that the European Commission should enact an EU-wide ban on the killing of day-old chicks.⁴⁷
- 5. Lastly, the European Commission in its Legislative Assessment on EU farm animal welfare legislation, recognized that "a significant portion of society as well as numerous scientists in the field of animal ethics regard the killing of chicks as a serious ethical issue." 48

4. Our Ask

Members of the Coalition Against Chick and Duckling Killing

We are a coalition comprised of the following European organizations:

- 1. Animal Equality (Europe)
- 2. Animal Friends Croatia (Croatia)
- 3. Animal Society (Germany)
- 4. CAAl (Bulgaria)
- 5. CIWF (EU)
- 6. Dierencoalite (Netherlands)
- 7. Eurogroup for Animals (EU)
- 8. Four Paws (Austria)
- 9. FREE (Romania)
- 10. GAIA (Belgium)
- 11. Green REV Institute (Poland)
- 12. HSI (EU)
- 13. L214 (France)
- 14. Loomus (Estonia)
- 15. Nevidimi Zhivotni (Bulgaria)
- 16. OBRAZ Obránci zvířat (Czechia)
- 17. OIPA (Italy)
- 18. PFO (Greece)
- 19. The European Institute for Animal Law & Policy
- 20. Tierschutz Austria (Austria)
- 21. VGT (Austria)

We ask the European Commission, the Council of the European Union, and the European Parliament to enact the following:

PROHIBITION ON THE SYSTEMATIC KILLING
OF DAY-OLD POULTRY ANIMALS

NO DEROGATION TO SUCH A PROHIBITION, INCLUDING FOR ANIMAL FEED PURPOSES

WITH MINIMAL TRANSITION PERIODS

Annex

CHICK CULLING LEGISLATION IN EU MS (LEGISLATION MAPPING)

MEMBER STATE	RULE	ENTRY INTO FORCE	LIMITATIONS	CITATION IN ORIGINAL LANGUAGE
France	Prohibition (male chicks only, with exemption for animal feed purposes)	December 31 st , 2022	Scope only includes male chicks. Male chicks for animal food production beneft from an exemption. Destruction of non-hatched is allowed up until 15 day of incubation.	R.214-17, Code rural et la pêche maritime
Germany	Prohibition (male chicks only)	January 1st, 2022	Scope only includes male chicks.	Tierschutzgesetz, Dritter Abschnitt Töten von Tieren, 4c
Austria	Prohibition (male chicks only, with exemption for animal feed purposes)	July 18, 2022	Scope only includes male chicks and excludes male chicks used as feed in zoos or for birds of prey. Destruction of non-hatched is allowed up until 14 day of incubation	Tierschutzgesetz-TSch, Section 6(2).
Italy	Prohibition (male chicks only)	December 31 st , 2026	Scope only includes male chicks. The law does not provide a rule regarding the destruction of non-hacthed eggs nor exemptions, other than exemptions for animal health and protection purposes. A decree will likely specify these two aspects.	Articolo 18, Delega al Governo per il recepimento delle direttive europee e l'attuazione di altri atti normativi dell'Unione europea - Legge di delegazione europea 2021 (22G00136)
Netherlands	Revision attempt ongoing	N/A - The Dutch Parliament (House of Reps) voted two motions to prohibit chick culling in June 2016.	TBD	TBD

CITATION IN ENGLISH	HYPERLINK	COMMENT
R 214-17 of the Rural Code	https://www.legifrance.gouv.fr /codes/article_lc/LEGIARTI000028969470	The prohibiton was adopted on January 2022, through a regulation (Décret n° 2022-137 du 5 février 2022 relatif à l'interdiction de mise à mort des poussins des lignées de l'espèce Gallus gallus destinées à la production d'œufs de consommation et à la protection des animaux dans le cadre de leur mise à mort en dehors des établissements d'abattage). In ovo sexing technologies benefit from a five-year nonobsolescence clause.
Section 3 (4c), Animal Welfare Act (Ger.)	https://www.gesetze-im-internet.de /tierschg/BJNR012770972.html	The prohibiton was adopted on January 2022, through a regulation which prohibits the culling of one-day old chicks by 2022, and the culling of fertilized eggs passed the 6th day of incubation. Note: No derogation.
Section 6(2), Animal Welfare Act (Austria).	https://www.ris.bka.gv.at /GeltendeFassung.wxe?Abfrage= Bundesnormen&Gesetze snummer=20003541	The prohibition was adopted in July 2022 through a law amending the Animal Welfare Act (130. Bundesgesetz, mit dem das Tierschutzgesetz-TSchG und das Tiertransportgesetz geändert werden).
Article 18, Legge di Delegazione Europea (22G00136) (lt.)	https://www.normattiva.it /uri-res/N2Ls?urn:nir:stato: legge:2022-08-04;127	The law prohibits the selective killing of male chicks by December 31st, 2026 and provides exemptions for animal protection purposes only. A decree will later specify the ways in which the law should be implemented.
TBD		

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Chick and Duckling Killing: Achieving an EU-Wide Prohibition

White paper — january 2023

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