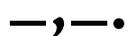


Chick and Duckling Killing: Achieving an EU-Wide Prohibition

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The European Institute
for Animal Law & Policy

ACHIEVING BETTER TREATMENT FOR ANIMALS

L214.

- 1 Natalie Noble, What the Poultry Sector is 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-male-chick-culling> (last visited October 30th 2024).
- 2 European Commission, "Slaughter and Stunning," https://food.ec.europa.eu/animals/animal-welfare/eu-animal-welfare-legislation/slaughter-stunning_en (last visited October 30th 2024).
- 3 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-foie-gras-farmers-accused-again-277606.html?amp=1> (last visited October 30th 2024).
- 4 Projeto de Lei, PL 783/2024, available online: <https://www.camara.leg.br/proposicoesWeb/fichadetramitacao?idProposicao=2421303> (in Portuguese).
- 5 Business standard, Unilever working to end the culling of male chicks, October 4 2024, https://www.business-standard.com/article/companies/unilever-working-to-end-the-culling-of-male-chicks-114100400651_1.html (last visited November 1st 2024).

6.5 billion day-old male chicks are killed worldwide every year,¹ including 330 million in the EU.² It is estimated that tens of millions of day-old female ducklings are also killed in foie gras production, mainly in the EU.³ 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, producers would need to force-feed female ducks even beyond levels to which the males are subjected, in order to justify raising female ducks from an economic standpoint. Several European and non-European hatcheries have implemented *in ovo* sexing techniques in their hatcheries to avoid the incubation of male chicks. There are several types of these *in ovo* sexing technologies, with some well established, and others being rapidly developed with public research funds.

Therefore, a viable alternative exists 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, allowing the selection of viable eggs before the animals hatch.

Considering the cruelty of chick culling, four EU countries – France, Germany, starting in 2026, Italy – recently prohibited this practice and required the use of alternatives. Additionally, Brazil, the world's 5th largest egg producer, is set to adopt a federal ban on the killing of male chicks.⁴ Other countries, such as the US, India, Japan, Australia, and Israel, are also making significant advances to prevent the culling of male chicks.⁵ The EU Legislature is studying the possibility of imposing an EU-wide ban on the killing of day-old chicks and ducklings.

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1. The Practice of Systematically Killing Chicks and Ducklings

- ⁶ For a video of the mechanical grinding of chicks online (graphic content), see <https://www.l214.com/enquetes/2015/broye-petit-ou-gave-plus-tard/> and <https://www.l214.com/enquetes/2022/couvoir-caringa-broyage-poussins/>.
- ⁷ 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/1fGOnNoW1GmJKQkrpezW370CccgC-DyrP/view>
- ⁸ Email correspondence with the European Commission's Directorate General for Agriculture and Rural Development, available on request.
- ⁹ EFSA Panel on Animal Health and Welfare (AHAW), *Killing for Purposes Other than Slaughter: Poultry*, EFSA Journal (2019), available online: <https://efsa.onlinelibrary.wiley.com/doi/full/10.2903/j.efsa.2019.5850>
- ¹⁰ Bjørnstad, S., Austdal, L. P. E., et al. (2015). Cracking the Egg: Potential of the Developing Chicken as a Model System for Nonclinical Safety Studies of Pharmaceuticals. *Journal of Pharmacology and Experimental Therapeutics*, 355(3), 386–396. <https://doi.org/10.1124/jpet.115.227025>; Aleksandrowicz, E., & Herr, I. (2015). Ethical euthanasia and short-term anesthesia of the chick embryo. *ALTEX*, 32(2), 143–147. <https://doi.org/10.14573/altex.1410031>; Kollmansperger, S., Anders, M., et al. (2023). Nociception in Chicken Embryos, Part II: Embryonal Development of Electroencephalic Neuronal Activity In Ovo as a Prerequisite for Nociception. *Animals*, 13(18), 2839. <https://doi.org/10.3390/ani13182839>

1.1. A Cruel Killing Method

EU law allows two methods for the killing of day-old male chicks and female ducklings: maceration (most commonly called “grinding” or “shredding”)⁶ and asphyxiation with carbon dioxide.⁷ There are no official numbers detailing the use of these methods in hatchery facilities, as the EU does not collect detailed data on hatcheries.⁸

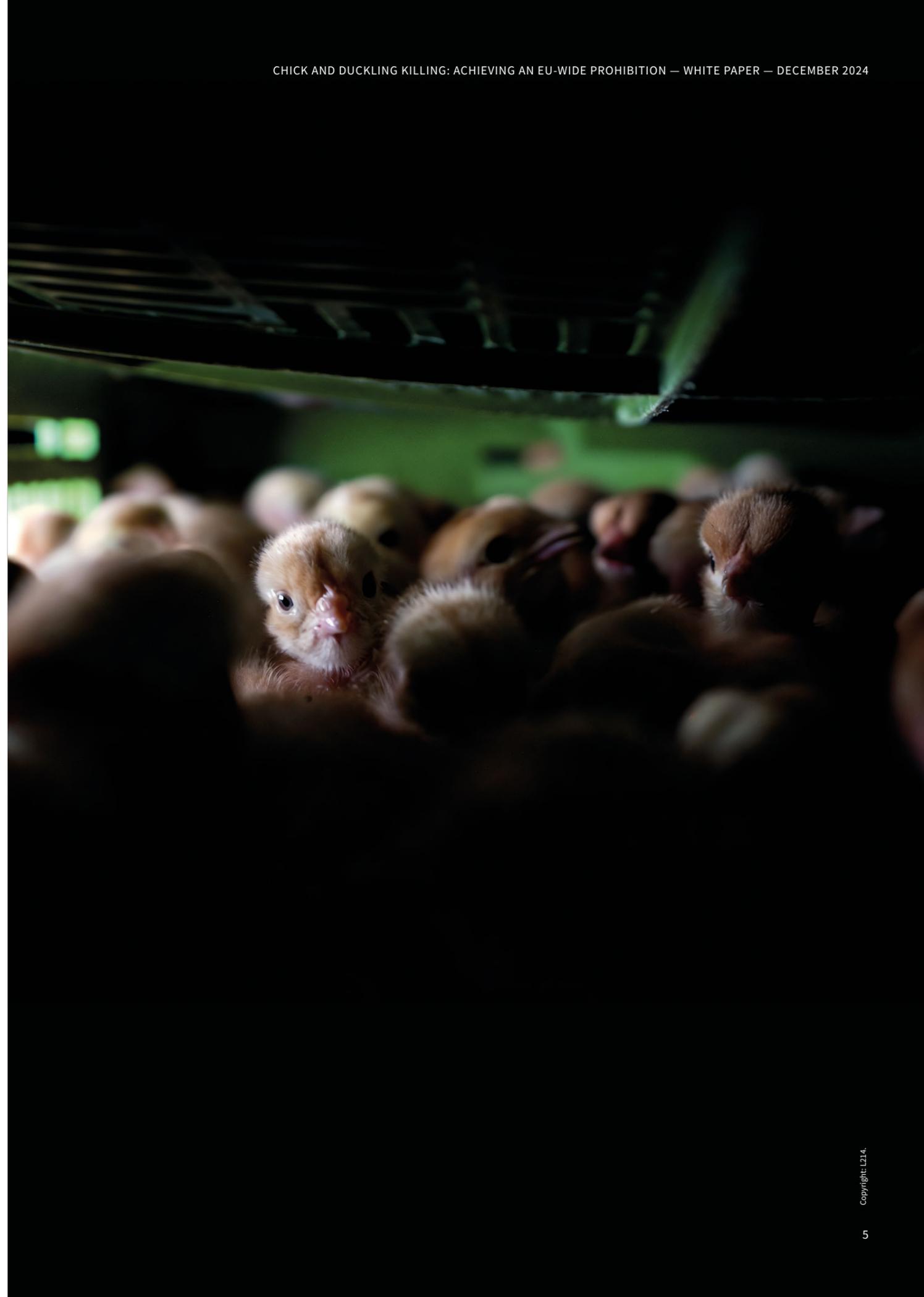
In a scientific opinion published in 2019, the European Food Safety Authority (EFSA) found that maceration was not effective in ensuring chicks a quick and painless death due to the slow rotation of blades or rollers, the overloading of machinery, or the use of rollers that have been set too wide.⁹ EFSA scientists report that such risks could cause chicks to remain conscious and generate suffering, pain, distress, and fear in them.

1.2. The Pain Perception of the Embryo

Chicks and ducklings may still be able to feel pain at an embryonic stage, so the issue of pain is relevant when killing chicks prior to their hatching. Researchers have investigated the exact point at which chick embryos begin to feel pain, although they have not reached a firm consensus. Animal scientists indicate that chick embryos are unable to feel pain before the 7th day of incubation, with latest scientific data suggesting that day 13 is the earliest stage where embryos may be able to process pain.¹⁰



Day old chicks thrown into a grinder.



11 Article 22, Regulation 178/2002 of the European Parliament and of the Council of 28 January 2002 Laying Down the General Principles and Requirements of Food Law, Establishing the European Food Safety Authority and Laying Down Procedures in Matters of Food Policy, OJ L 31/12 (2002).

12 As per the Treaty on the Functioning of the European Union, Annex I; and Article 2, Regulation 178/2002, O.J. L 31/7 (2002).

13 Article 22(5)(b), Regulation 178/2002, OJ L 31/13 (2002).

14 Article 29, Regulation 178/2002, OJ L 31/16 (2002).

15 Article 28, Regulation 178/2002, OJ L 31/15 (2002).

16 Article 23(a), Regulation 178/2002, OJ L 31/13 (2002).

17 European Commission, EU Market Situation for Eggs, Expert Group for Architectural Markets, October 2024, available for download online: https://agriculture.ec.europa.eu/farming/animal-products/eggs_en.

18 Animal Equality, In-Ovo Sexing: An Alternative to Culling Day-Old Male Chicks, 5 (2021), available online: <https://drive.google.com/file/d/1fGOnNoW1GmJKQkrpsezW370CccgC-DyrP/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).

19 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/1v5Vx9LHUVd3X-q4pnb8wHgbY-PYREiAcg/view>

20 Mark Porter and Ana Pouvreau, “Torture in a Can:” French Foie Gras Farmers Failing to Improve Appalling Conditions, October 17th 2014, *Newsweek*, <https://bit.ly/3Z0v5qR> (last visited May 19th 2022).

21 European Commission, Eurostat Data Browser “Hatcheries – hens Annual Data,” available online: https://ec.europa.eu/eurostat/databrowser/view/apro_ec_strpoul/default/table.

The European Food Safety Authority

What is EFSA?

The European Food Safety Authority (EFSA) was created in 2002 and is one of the 37 EU agencies. Its mission is to advise the EU Legislature on matters related to feed and food safety by providing scientific expertise to contribute to a “high level of protection of human life and health.”¹¹

Mandate on Farmed Animals

EFSA’s mandate extends to farm animals insofar as farm animals are considered food products and thus can pose food safety risks.¹² However, EFSA’s mandate also includes, as a secondary mission, “the provision of scientific opinions on other matters [than food and feed safety risks] relating to animal health and welfare [...]”¹³

Scientific Opinions on the Welfare of Farmed Animals

EFSA has produced opinions at the request of the Commission, the European Parliament, and Member States.¹⁴ Since its creation in 2002, EFSA has published more than 50 scientific opinions on the welfare of farmed animals. Each opinion is produced by a Scientific Panel, coordinated by a Scientific Committee.¹⁵ EFSA’s advisory work also relies on national animal welfare reference centers. EFSA is held to a standard of the “best possible science.”¹⁶

1.3. Key Numbers

1.3.1. MALE CHICKS IN EGG PRODUCTION

The EU is the top exporter of eggs globally. Between January and May 2024, the EU egg export trade generated close to €330 million, with France, Germany, and Spain as the top producers among EU Member States.¹⁷ It is estimated that 330 million day-old chicks are killed every year in the EU.¹⁸ All 27 EU Member States have egg-laying hens hatcheries on their territory,¹⁹ suggesting that every EU Member State might practice the selective culling of day-old chicks.

1.3.2. 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.²⁰ The European Commission does not differentiate between animal species when collecting data on hatcheries for poultry other than egg-laying hens,²¹ so there is no official data on the number of hatcheries used for foie gras production in EU Member States.

2. Alternatives to the Systematic Killing of Chicks and Ducklings

There are three types of alternatives to the killing of chicks and ducklings: the rearing of both sexes of commercial lines, the rearing of dual-purpose chicken lines, or using *in ovo* sexing technologies. So far, the use of alternatives to chick culling is becoming common in the egg industry. A growing number of countries, both with and without legislation (e.g., Norway or USA), are adopting these alternatives. Rearing both sexes of commercial lines or dual-purpose chickens is considered non-efficient, carrying higher costs, and therefore might only be viable for niche markets. At the same time, the foie gras industry has yet to provide information regarding the transition away from female duckling killing.

2.1. Raising of Both Sexes of Commercial Lines or Dual-Purpose Breeds

Rearing both sexes of commercial lines (for chicks and ducklings) or dual-purpose chicken breeds aims to add economic value to lower-yield sexes and breeds by raising both sexes within the same breed.²² Unlike *in ovo* sexing technologies, the use of dual-purpose breeds or raising male sibling chicks does not involve the destruction of embryos. Rather, embryos complete their development to be raised for their meat/liver.

Rearing both sexes of commercial lines is less fitting to industrial egg and foie gras production given the heavy specialization of these industries – *i.e.* the hyper-specialization of the industry does not allow for production diversification. Production costs for eggs increase in this scenario of raising both sexes because the cost of raising males is not entirely offset by the sale of their meat.²³ Similarly, female ducklings are less efficient for fattening due to smaller liver yields and higher feed requirements, which makes their raising less economically viable.²⁴

Furthermore, dual-purpose breeds lead to lower production levels in egg-laying hens as well, as dual-purpose breeds “cannot achieve the production performances of specialized hybrids.”²⁵

22 Krautwald-Junghanns, M. E., Cramer, K., Fischer, B., Förster, A., Galli, R., Kremer, F., ... & Bartels, T. (2018). Current approaches to avoid the culling of day-old male chicks in the layer industry, with special reference to spectroscopic methods. *Poultry science*, 97(3), 749-757. <https://doi.org/10.3382/ps/pex389>;

23 Giersberg, M. F., & Kemper, N. (2018). Rearing male layer chickens: A German perspective. *Agriculture*, 8(11), 176. <https://doi.org/10.3390/agriculture8110176>

24 Chapuis, H., Lagüe, M., Bonfont, C. M., David, I., Bernadet, M. D., Hazard, A., & Gilbert, H. (2024). Genetic parameters of feeding behaviour traits in ducks bred for foie gras production. *animal*, 18(8), 101234. <https://doi.org/10.1016/j.animal.2024.101234>

25 *Ibid.*

26 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/> (last visited Oct 31st 2024).

27 Corion, M., Santos, S., De Ketelaere, B., Spasic, D., Hertog, M., & Lammertyn, J. (2023). Trends in *in ovo* sexing technologies: insights and interpretation from papers and patents. *Journal of Animal Science and Biotechnology*, 14(1), 102. <https://doi.org/10.1186/s40104-023-00898-1>

28 Bundesministerium für Ernährung und Landwirtschaft, Durchbruch: Gemeinsam Küentöten 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).

29 Toby Sterling, Reuters, Dutch ag-tech firm aiming to stop male chick culling gets \$43 mln, November 2 2023, bit.ly/3Z2hwY9 (last visited November 1st 2024).

31 European Investment Bank, May 4, 2023, <https://bit.ly/4hVZ7op> (last visited Oct 31st 2024).

32 Federal Ministry of Education and Research, April 17, 2024, <https://bit.ly/3OjowL5> (last visited Oct 31st 2024).

33 Foundation for Food and Agriculture Research, Nov 22, 2019, <https://foundationfar.org/news/ffar-and-open-philanthropy-announce-six-egg-tech-prize-winners/> (last visited Oct 31st 2024).

34 Canadian Agri-Food Automation and Intelligence Network, Sept 10, 2024, <https://caain.ca/news-and-events/matrixspec-advances-its-poultry-industry-technology/> (last visited Oct 31st 2024).

35 Horizon 2020, Nov 11, 2022, <https://cordis.europa.eu/project/id/873460/reporting> (last visited Oct 31st 2024).

36 Kollmansperger, S., Anders, M., et al. (2023). Nociception in Chicken Embryos, Part II: Embryonal Development of Electroencephalic Neuronal Activity In Ovo as a Prerequisite for Nociception. *Animals*, 13(18), 2839. <https://doi.org/10.3390/ani13182839>

37 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/https://doi.org/10.1071/AN16785>

38 Cinnamon, Y., & Ben-Tal Cohen, E. (2019). WO2019058376A1. Retrieved from <https://worldwide.espacenet.com/patent/search?q=pn%3DWO2019058376A1>

39 Regulation 1830/2003 Concerning the Traceability and Labelling of Genetically Modified Organisms and the Traceability of Food and Feed Products Produced from Genetically Modified Organisms, O.J. L 2003 268/ 24–28.

40 The Poultry Site, US Poultry Industry Manual - Broilers: breeding flocks, Aug 12, 2022, <https://www.thepoultrysite.com/articles/fad-broilers-breeding-flocks> (last visited Oct 31st 2024)

2.2. In Ovo Sexing

2.2.1. DEFINITION

In ovo sexing is an umbrella term for the technology that determines the sex of embryos typically for the purpose of selectively destroying eggs from the unwanted sex at the incubation stage. *In ovo* sexing aims to prevent male chicks and female ducklings from hatching.²⁶ Within *in ovo* sexing, only animals deemed useful for the industry complete hatching.

2.2.2. 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 imaging detection), the outcome (e.g.: sexing or selective breeding), the testing period, and the use of optical or non-optical techniques.²⁷

While some methods are still under development, the use of others is expanding in the EU, demonstrating a high level of maturity and benefiting from public funding. Notable examples include Respeggt (German Ministry of Agriculture)²⁸, In Ovo²⁹ (European Innovation Council³⁰ and European Investment Bank³¹), Omega (European Innovation Council)³², Orbem (FFAR)³³ Matrixspec’s Hypereye Canadian Agri-Food Automation and Intelligence Network,³⁴ and eggXYt (European Union’s Horizon 2020 research and innovation program)³⁵.

Contentious issues when it comes to *in ovo* sexing include:

- The **testing period of invasive methods**, as animal scientists establish that chick embryos are not able to feel pain before the 7th day of incubation but can experience suffering after the 13th day of incubation.³⁶
- **Technologies based on gene editing techniques:** Gene editing techniques consist of editing the genes of breeding egg-laying hens so that only male embryos express a fluorescent gene.³⁷ Fluorescent eggs would then indicate to producers which eggs are 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.³⁸ Gene editing in the food industry is strictly regulated in the EU.³⁹ Consequently, the use of gene editing sexing technologies in the egg and foie gras industry is unlikely to be authorized in the EU. Gene editing also shows issues related to possible infringement upon the animals’ bodily integrity and the high costs of maintaining a line of chickens with modified genomes.⁴⁰

- The **accuracy and throughput of the techniques** are higher than 98% (which is the same accuracy as a sexing expert at hatch) and can process more than 20,000 eggs per hour to avoid affecting the output of the hatcheries.⁴¹ Nevertheless, most technologies can achieve satisfactory accuracy, depending on the incubation day of the embryo. Most *in ovo* sexing companies can now install as many devices as necessary to achieve and follow the necessary throughput using a pay-per-test system.⁴²
- Technology must enable the differentiation of sex into **all colors and types of eggs**. Most current technology can be applied to white and brown eggs, covering all the existing types of eggs in the market.

Six technologies are currently authorized and used in EU egg production, with a 20% market penetration.⁴³ The following table presents an overview of these technologies. Spectroscopic detection, a type of *in ovo* sexing technology, is also used in foie gras production, with examples such as Nectra/Orvia or Grimaud Frères.⁴⁴ Here, the sex is determined on the 9th day, based on eye color differences (i.e., red for females and black for males). Figure 1 shows a distribution of the hatcheries using *in ovo* sexing technologies; 26 hatcheries are in Europe, while 2 are in the USA.

41 Corion, M., Santos, S., et al. (2023). Trends in *in ovo* sexing technologies: insights and interpretation from papers and patents. *Journal of Animal Science and Biotechnology*, 14(1), 102. <https://doi.org/10.1186/s40104-023-00898-1>

42 Based on personal communication with industry representatives from *in ovo* sexing companies.

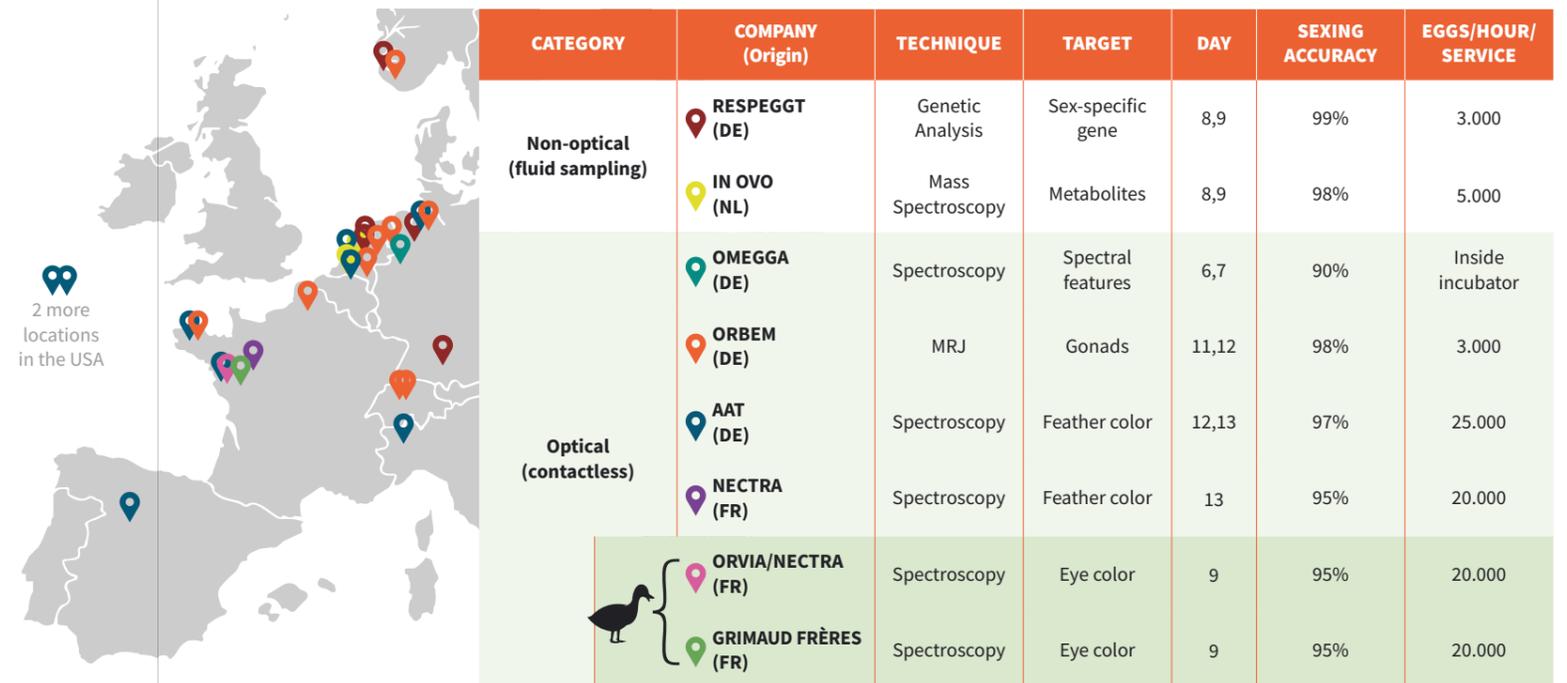
43 Innovative Animal Ag, In-Ovo Sexing Quarterly Roundup: Q3 2024, Oct 2, 2024, <https://www.innovateanimalag.org/blog/in-ovo-sexing-quarterly-roundup-q3-2024> (last visited Oct 31st 2024).

44 Réhault-Godbert (2024). Sexual dimorphism during incubation and development of ovosexing methods https://ppilow.eu/wp-content/uploads/2024/08/invited_review_EPC_SRG_21062024.pdf.

45 Corion, M., Santos, S., et al. (2023). Trends in *in ovo* sexing technologies: insights and interpretation from papers and patents. *Journal of Animal Science and Biotechnology*, 14(1), 102. <https://doi.org/10.1186/s40104-023-00898-1>

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COMMERCIALY APPLIED IN OVO SEXING TECHNOLOGIES IN 2025



Distribution of the commercially applied *in ovo* sexing technologies in 2025. Sources: Adapted and updated from research work,⁴⁵ as well as email correspondence, press releases, and the websites of Nectra, Orvia, and Grimaud Frères.⁴⁶

IN OVO SEXING TECHNOLOGIES AVAILABLE IN THE EU

NAME	TYPE OF TECHNOLOGY	OUTCOME	TESTING PERIOD	PHYSICAL SAMPLE/OPTICAL	NO. HATCHERIES	STATUS
Agri Advanced Technologies	Spectroscopy	Sexing	12-13th day of incubation	Optical	9	Commercialized ⁴⁷
In Ovo	Mass spectrometry	Sexing	8-9 th day of incubation	Liquid sample	2	Commercialized ⁴⁸
Respeggt	Genetic analysis	Sexing	8-9 th day of incubation	Liquid sample	5	Commercialized ⁴⁹
Orbem	Magnetic resonance imaging	Sexing	11-12 th day of incubation	Optical	9	Commercialized ⁵⁰
Omegga	Spectroscopy	Sexing	6-7 th day of incubation	Optical	1	Commercialized ⁵¹
Nectra	Spectroscopy	Sexing	13th day of incubation	Optical	1	Commercialized ⁵²
Nectra/Orvia	Spectroscopy	Sexing	9 th day of incubation (ducklings)	Optical	1	Commercialized ⁵²
Grimaud Frères	Spectroscopy	Sexing	9 th day of incubation (ducklings)	Optical	1	Commercialized ⁵³
SOOS	Ultrasound	Selective breeding	During incubation	N/A	-	In development ⁵⁴ (Last update 2023)

⁴⁷ Agri Advanced Technologies, In ovo sex determination, 2022, <https://www.agri-at.com/en/products/in-ovo-sex-determination> (Last visited Dec Oct 31st 2024)

⁴⁸ In Ovo, Our Ella solution, 2022, <https://inovo.nl/ella/> (Last visited Oct 31st 2024)

⁴⁹ Respeggt, 2024, <https://www.respeggt.com/> (Last visited Oct 31st 2024).

⁵⁰ Orbem, 2024, <https://orbem.ai/> (Last visited Oct 31st 2024).

⁵¹ Omegga, 2024, <https://omegga.com/> (Last visited Oct 31st 2024).

⁵² Far Eastern Agriculture, NECTRA experts in hatchery and laboratory automation, Jul 19, 2019, <https://bit.ly/3Zf5a00> (Last visited Oct 31st 2024).

⁵³ Grimaud Frères, Grimaud Frères committed to the duck industry with its in-ovo sexing technology!, Sept 19, 2024, <https://bit.ly/49335bx> (Last visited Oct 31st 2024).

⁵⁴ SOOS, 2024, <https://www.soos.org.il/news-and-media/> (Last visited Oct 31st 2024); ISRAEL21c, Gender-bender chicks to improve the chicken industry, Jul 18, 2023, <https://www.israel21c.org/gender-bender-chicks-to-improve-the-chicken-industry/> (Last visited Oct 31st 2024).

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- **Chick and Duckling Killing: Achieving an EU-Wide Prohibition, (2023), available online: <https://bit.ly/3YfLuL>**

IN OVO SEXING TECHNOLOGIES NOT YET AVAILABLE IN THE EU

NAME	TYPE OF TECHNOLOGY	OUTCOME	TESTING PERIOD	INVASIVENESS	STATUS
CSIRO	Gene-editing	Sexing	Day of laying	Non-invasive	In development (Last update 2021) ⁵⁵
EggXYt	Gene-editing	Sexing	Day of laying	Non-invasive	In development (Last update Jul 2024) ⁵⁶
Matrixspec's Hypereye	Spectroscopic detection	Sexing	Day of laying	Non-invasive	In development (Last update Sept 2024) ⁵⁷
Poultry by Huminn	Gene-editing	Sexing	During early incubation	N/A	In development (Last update Jul 2023) ⁵⁸
Sensit	VOC analysis	Sexing	10 th day of incubation	Non-invasive	In development (Last update May 2022) ⁵⁹

⁵⁵ 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 Oct 31st 2024)

⁵⁶ EggXYt, 2022 <https://www.eggxyt.com/> (Last visited Oct 31st 2024); 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)

⁵⁷ QCNA, Two smart farm initiatives being developed in Quebec, June 29th 2022, <https://caain.ca/news-and-events/matrixspec-advances-its-poultry-industry-technology/> (Last visited Dec 30th 2022); Canadian Agri-Food Automation and Intelligence Network, MatrixSpec Advances its Poultry Industry Technology, Sept 10 2024, <https://caain.ca/news-and-events/matrixspec-advances-its-poultry-industry-technology/> (Last visited Oct 31st 2024).

⁵⁸ Huminn Poultry, Solving the need for mass sorting and culling day-old male chicks, <https://www.bbc.com/news/science-environment-63937438> (Last visited Oct 31st 2024); BBC, Gene-edited hens may end cull of billions of chicks, December 13th 2022, <https://www.bbc.com/news/science-environment-63937438> (Last visited Oct 31st 2024); ISRAEL21c, Gender-bender chicks to improve the chicken industry, Jul 18, 2023, <https://www.israel21c.org/gender-bender-chicks-to-improve-the-chicken-industry/> (Last visited Oct 31st 2024).

⁵⁹ Borras, Eva, et al. "Active sampling of volatile chemicals for non-invasive classification of chicken eggs by sex early in incubation." PLoS one 18.5 (2023): e0285726. <https://doi.org/10.1371/journal.pone.0285726/>; SensitVentures, 2024, <https://sensit.ventures/> (Last visited Oct 31st 2024).

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⁶⁰ Vencomatic Group, Ter Heerdt installs Genus Focus for in-ovo sexing in the Netherlands, May 2 2024, <https://bit.ly/4eBasaA> (Last visited November 1st 2024).

⁶¹ Hendrix Genetics, Vepymo opts for In Ovo's Ella[®] egg sexing technology, April 25 2023, <https://layinghens.hendrix-genetics.com/en/news/vepymo-opts-for-in-ovos-ella-egg-sexing-technology/> (last visited November 1st 2024)

⁶² Steinsland & Co, May 10th 2023, First hatchery in Scandinavia, Steinsland & Co, installs respeggt system for in-ovo sexing in Norway, <https://bit.ly/3ANbLp3> (last visited November 1st 2024); Orbem, Genus Focus: Contactless In-Ovo Sexing Arrives in Norway, July 4 2024, <https://medium.com/@Orbem/genus-focus-first-in-ovo-sexing-solution-in-norway-373340fed374> (last visited November 1st 2024).

⁶³ Kipster, Kipster Challenges Industry Norms in U.S. by Committing to In-Ovo Sexing Technology to End Culling of Male Chicks, May 29 2024, <https://kipster.farm/in-ovo-sexing-technology/> (last visited November 1st 2024).

⁶⁴ Giersberg, Mona Franziska, and Nicole Kemper. "Rearing male layer chickens: A German perspective." *MDPI Agriculture* 8.11 (2018): 176. <https://doi.org/10.3390/agriculture8110176>

⁶⁵ Vencomatic Group. "Vencomatic Group and Orbem: Genus Focus for in-ovo sexing installation at Pluriton." YouTube, uploaded by Vencomatic Group, September 23 2024, <https://www.youtube.com/watch?v=kYdWSi68C2c> (last visited November 1st 2024).

⁶⁶ Europe 1 avec AFP, Le broyage des poussins mâles interdit, un délai d'adaptation accordé à la filière, Europe 1, February 6th 2022, bit.ly/3ZeCHHw (last visited May 20th 2022) (in French).

⁶⁷ Natalie Noble, What the Poultry Sector is 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-male-chick-culling> (last visited May 20th 2022); Le Monde avec AFP, Le broyage des poussins mâles désormais interdit dans la filière des poules pondeuses, February 6th 2022, <https://bit.ly/4f10yFp> (last visited May 20th 2022) (in French).

2.2.3. IMPLEMENTATION OPPORTUNITIES

Due to the recent prohibition on chick killing in France, Austria, and Germany, egg producers in these three countries have implemented *in ovo* sexing technologies. Some producers in countries that do not yet ban chick killing have followed the same trend (*e.g.*, Ter Heerdt from Netherlands⁶⁰, Vepymo from Belgium⁶¹, Steinsland & Co from Norway⁶² and Kipster from USA⁶³), because of animal welfare benefits in egg production and a possible reduction in incubation costs.

• Production Costs

Increases in production costs are due to the purchase and use (including maintenance, training) of *in ovo* sexing technologies and the loss of value of eggs due to inaccurate results. These costs are partly offset by the sale of surplus eggs to other sectors, such as the animal food industry or research industry.⁶⁴ Furthermore, the *in ovo* sexing companies currently provide a pay-per-test system whereby machines are installed in the hatcheries, and companies pay a fee per egg tested. Since most systems are almost fully automated, there is no need for specialized workers to operate the devices.⁶⁵

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.⁶⁶

• Public Funding

Governments in the EU (France, Germany, and the Netherlands) and outside of the EU (the US or Japan) have supported the transition away from chick killing with the use of *in ovo* sexing. For instance, the German and Dutch governments have subsidized research and development of *in ovo* sexing technologies, which has resulted, among other outcomes, in Respeggt's *in ovo* sexing technology. Governments have also granted subsidies to producers. For instance, the French government granted between 10 to 15 million euro to hatcheries to accelerate the implementation of the prohibition on chick killing, which was passed in 2022, using funds from the EU Recovery Plan.⁶⁷

• Consumers' Willingness to Pay

Polls typically show that consumers are willing to pay more for eggs that have undergone less "inhumane" production methods.⁶⁸ 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.⁶⁹

Producers and retailers also engaged in labeling *in ovo* sexed eggs to inform consumers and increase their willingness to pay for more "humane" eggs. Studies showed that consumers highly approve of independent labeling of the sexed eggs in a survey of the German population.⁷⁰ For instance, Respeggt (gene detection) and In Ovo (mass spectrometry) eggs are sold on the retail market with a "Respeggt" logo.⁷¹ Respeggt has further developed a strategy to facilitate the uptake of *in ovo* sexing systems by supporting the installation costs.⁷² Further, in the same 2020 study, a survey found that 65% of participants were aware of the male chick culling practice. Most of these respondents preferred *in ovo* sexing as a solution to chick killing, and they indicated a willingness to pay a premium price for such eggs.⁷³ Another survey which queried the Dutch population showed an awareness of the practice of around 52%, where it was concluded that *in ovo* sexing was the most accepted solution, showing a positive tendency to purchase eggs from *in ovo* sexed layers at a premium price.⁷⁴

⁶⁸ Testing the increase in retail price due to cage-free farming methods 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.

⁶⁹ Le Monde, La France veut interdire le broyage et le gavage des poussins mâles en 2022, July 18th 2021, bit.ly/3OfikPA (last visited May 22nd 2022) (in French).

⁷⁰ Reithmayer, Corrina, Oliver Mußhoff, and Michael Danne. "Alternatives to culling male chicks—the consumer perspective." *British Food Journal* 122.3 (2020): 753-765. <https://doi.org/10.1108/BFJ-05-2019-0356>

⁷¹ 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/1fGOnNoW1GmJKQkrpsezW370CccgCDyrP/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 laying hens are raised in a cage-free environment.

⁷² Respeggt.com, System Manual, August 2022, available online: https://www.respeggt.com/wp-content/uploads/2022/11/respeggt-System-Manual_6.0.pdf

⁷³ Reithmayer, Corrina, Oliver Mußhoff, and Michael Danne. "Alternatives to culling male chicks—the consumer perspective." *British Food Journal* 122.3 (2020): 753-765. <https://doi.org/10.1108/BFJ-05-2019-0356>

⁷⁴ de Haas, E. N., Oliemans, E., & van Gerwen, M. A. (2021). The need for an alternative to culling day-old male layer chicks: A survey on awareness, alternatives, and the willingness to pay for alternatives in a selected population of Dutch citizens. *Frontiers in Veterinary Science*, 8, 662197. <https://doi.org/10.3389/fvets.2021.662197>

3. Transitioning Away from the Mass Killing of Chicks and Ducklings

⁷⁵ Survey available online: <https://bit.ly/3V1Gu8I>

⁷⁶ Business standard, Unilever working to end the culling of male chicks, October 4 2024, <https://bit.ly/491JFmD> (last visited November 1st 2024); Kenny Torrela, Vox, Save the male chicks, May 1 2023, <https://www.vox.com/future-perfect/2023/5/1/23700952/egg-industry-male-chick-culling-animal-welfare>, (last visited November 1st 2024); Dyrevernaliansen, Norway: An end to killing day-old male chicks in sight, May 5 2023, <https://dyrevernaliansen.no/landbruksdyr/norway-an-end-to-killing-day-old-male-chicks-in-sight/> (last visited November 1st 2024).

⁷⁷ Animal Equality, In-Ovo Sexing: An Alternative to Culling Day-Old Male Chicks, 15 (2021), available online: <https://drive.google.com/file/d/1fGOnNoW1GmJKQkrpezW370CccgCDyrP/view>

⁷⁸ Aldi, Animal welfare is top of the agenda for ALDI Nord Germany, <https://www.aldi.pl/raport-zrownowazonego-rozwoju/2021/countries/germany.html> (last visited November 1st 2024).

⁷⁹ *Ibid.* 16. “Carrefour et Loué testent le sexage *in ovo* en vue de mettre fin à l’élimination des poussins mâles,” June 10th, 2020, <https://bit.ly/3V19aif> (last visited December 29th, 2022); Carrefour, Carrefour & Loué innovate on animal welfare in the egg sector, September 14th 2020, <https://bit.ly/3YRvrjm> (last visited November 8th 2024).

⁸⁰ “Eitjes uit een keten zonder eendagshaantjes,” Bioplanet.be <https://www.bioplanet.be/nl/verhalen/eitjes-zonder-eendagshaantjes> (last visited December 29th, 2022).

⁸¹ aviNews, Jumbo Supermarket selling “Respeggt” eggs, April 23 2024, <https://avinews.com/en/jumbo-supermarket-selling-respeggt-eggs/> (last visited November 1st 2024).

⁸² Poultry News, Analysis: Lidl’s egg power play, November 27 2023, <https://www.poultrynews.co.uk/business-politics/analysis-lidls-egg-power-play.html> (last visited November 1st 2024).

⁸³ REWE Group, No-kill eggs: REWE Group planning to increase its offering fivefold, April 7 2020, <https://www.rewe-group.com/en/press-and-media/newsroom/press-releases/no-kill-eggs-offering-increased-fivefold/> (last visited November 1st 2024).

3.1. Public Support for a Ban on Chick and Duckling Killing

A 2022 survey by YouGov for L214 revealed overwhelming public support for the adoption of a ban on chick and duckling killing.⁷⁵ For instance, 78% of respondents in Italy and 76% of respondents in Germany affirmed support for a ban on the systematic killing of chicks.

3.2. Voluntary Commitments

Given the significant societal demand to end male chick killing, producers and retailers around the globe have voluntarily committed to using alternatives to the mass killing of male chicks, primarily by resorting to *in ovo* sexing.⁷⁶ United Egg Producers, the largest egg cooperative in the US, pledged to transition away from chick killing “by 2020 or as soon as it is commercially available and economically feasible.”⁷⁷

Several large retailers have also committed to include more *in ovo* sexed eggs in their selling products. These retailers include Aldi,⁷⁸ Carrefour,⁷⁹ BioPlanet,⁸⁰ Jumbo,⁸¹ Lidl,⁸² REWE group,⁸³ and Auchan.⁸⁴ However, to date, no retailer has contractually committed to ending the systematic killing of male chicks.

⁸⁴ Auchan Retail, La politique Bien-Être Animal, September 2024, https://auchan-agit.fr/uploads/media/66f6895eca336_politique-bea-2024.pdf (last visited November 8th 2024).

3.3. The Need for a Ban in EU Law

3.3.1. LIMITATIONS OF NATIONAL LAW

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

However, some jurisdictions, such as Austria and France, have enacted exemptions from the prohibition on the killing of chicks for animal feed purposes. 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;⁸⁵ other sources indicating higher numbers.⁸⁶ An official investigation or public report on the practice is thus necessary to clarify the needs of exotic animals keepers.

Furthermore, jurisdictions that have banned the practice of chick killing can import animals from other EU Member States where the practice is still allowed. Germany, for example, imports from Belgium and Czechia.⁸⁷ The effect of national bans is therefore undermined by disparate animal welfare rules across EU Member States, making it necessary to adopt a prohibition at EU level, so that this law would apply to all 27 Member States.

3.3.2. THE EU LEGISLATIVE FRAMEWORK

The killing of male chicks and ducklings is regulated under Annex I of the Regulation 1099/2009 of 24 September 2009 on the Protection of Animals at the Time of Killing (Slaughter Regulation).⁸⁸ 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.”⁸⁹ This killing method is lawful to kill “chicks up to 72 hours and egg embryos.”⁹⁰ 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.”⁹¹
- Any listed **gas** method, including carbon dioxide at high concentration, carbon dioxide in two phases, carbon dioxide associated with inert gasses, carbon dioxide (pure source), and carbon dioxide associated with other gasses. Gas methods of killing are allowed for the killing of poultry in general.⁹²

⁸⁵ Cornelia War, « Killing chicks: A ban calls for a replacement,” June 20, 2019, Land & Forst, <https://www.landundforst.de/landwirtschaft/tier/kueken-toeten-verbot-verlangt-ersatz-554594> (last visited November 25, 2022) (in German).

⁸⁶ Nitrogas to Gas Foam, Dossier day-old Chickens: The market for culled one-day-old chicks.

⁸⁷ Alphonse Deter, “More and More Chicks Hatched Abroad – Domestic Hatcheries Are Dying,” June 30th, 2’22, TopAgrar.com, <https://bit.ly/30jBrww> (last visited October 30th, 2022).

⁸⁸ 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.

⁸⁹ Annex I, Chapter I, Council Regulation 1099/2009 of 24 September 2009 on the Protection of Animals at the Time of Killing, 2009 O.J. L 303/19.

⁹⁰ *Ibid.*

⁹¹ *Ibid.*, Chapter II, L 303/23.

⁹² *Ibid.* L 303/21 – 22.

⁹³ European Commission, “A Farm to Fork Strategy,” 10, Europa, May 2020, available online: <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:52020DC0381&from=EN>.

⁹⁴ 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-countries-to-also-ban-culling-of-male-chicks/> (last visited October 31, 2024).

⁹⁵ European Commission, Commission Staff Working Document Fitness Check of the EU Animal Welfare Legislation, SWD(2022) 329 final, p. 60, available online at https://food.ec.europa.eu/document/download/b9cc1000-c978-4895-8e9b-c2e1296adbfe_en?filename=aw_eval_revision_swd_2022-328_en.pdf.

⁹⁶ 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.

⁹⁷ 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>.

⁹⁸ 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, October 12th 2022, available online: <https://data.consilium.europa.eu/doc/document/ST-13317-2022-INIT/x/pdf>.

⁹⁹ Proposal for a Regulation of the European Parliament and of the Council on the Protection of Animals During Transport and Related Operations, Amending Council Regulation (EC) No 1255/97 and Repealing Council Regulation (EC) No 1/2005, COM(2023) 770 final.

¹⁰⁰ Proposal for a Regulation of the European Parliament and of the Council on the Welfare of Dogs and Cats and Their Traceability, COM/2023/769 final.

¹⁰¹ European Commission, Strategic Dialogue on the Future of EU Agriculture: A Shared Prospect for Farming and Food in Europe, September 2024, available online: https://agriculture.ec.europa.eu/document/download/171329ff-0f50-4fa5-946f-aea11032172e_en?filename=strategic-dialogue-report-2024_en.pdf&prefLang=fr.

3.3.3. REFORM OPPORTUNITIES AT THE EU LEVEL

• The Revision of the EU Farm Animal Welfare Legislation

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.”⁹³

This revision was expected to result in a prohibition on chick killing, given the European Commission and the Council of the EU’s statements in favor of a ban. For instance, in 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.”⁹⁴ In its evaluation of EU farm animal welfare legislation, the European Commission further 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.”⁹⁵

Individual Member States have also expressed support for a ban on chick killing in EU law. During the AgriFish Council⁹⁶ on July 15th, 2021, Austria, France, Germany, Ireland, Luxembourg, Portugal, and Spain called on the Commission to conduct an impact assessment of a ban on the killing of male chicks in the EU.⁹⁷ And 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.⁹⁸

However, in December 2023, the European Commission published only one of the four proposals for new legislation on farm animal welfare, the proposal for new regulation on the welfare of animals during transport to replace Regulation 1/2005 on the Protection of Animals During Transport.⁹⁹ In addition to this, the Commission also published a proposal for a new Regulation on the Welfare of Dogs and Cats and Their Traceability.¹⁰⁰

The revision process on the other three regulations pertaining to farm animal welfare has since stalled, and a new report published in September 2024, which was endorsed by the European Commission, recommended further delaying the revision of farm animal welfare legislation until 2026.¹⁰¹ The authors of the report did not specify a timeline, and so it is unclear whether the Commission will publish proposals for new legislative acts in 2026, or begin the pre-legislative process from the start, by producing new feasibility studies and impact assessments.

The Opinion of the Co-Legislators (Council of the EU and European Parliament)

The 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, the majority of the Member States must agree on a given reform for it to be adopted. In the case of chick and duckling killing, the context is favorable to obtain a ban on the practice in EU law, for the following reasons:

1. France and Germany, two of the most influential Member States on agri-food issues, prohibited the killing of male chicks in 2023 and 2024 respectively. As early as 2021, French Minister of Agriculture, Julien Denormandie, called for a “political vision shared by the other Member States”¹⁰²
2. Austria, France, Germany, and Italy prohibited chick killing, and many business operators in Spain have also transitioned away from killing one-day-old chicks, instead using *in ovo* sexing.
3. During the AgriFish Council¹⁰³ 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.¹⁰⁴
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.¹⁰⁵

The European Parliament

Members of the European Parliament have discussed the issue of chick and duckling killing¹⁰⁶ and addressed recurring written questions to the European Commission about it – for instance, in October 2023¹⁰⁷ and September 2024.¹⁰⁸

¹⁰² 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-countries-to-also-ban-culling-of-male-chicks/> (last visited October 31, 2024).

¹⁰³ 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.

¹⁰⁴ 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>.

¹⁰⁵ 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>.

¹⁰⁶ European Parliament, Verbatim Report of Proceedings, 11. Prohibiting chick and duckling killing in EU law (debate), 11 May 2023, https://www.europarl.europa.eu/doceo/document/CRE-9-2023-05-11-ITM-011_EN.html.

¹⁰⁷ European Parliament, Extending the Use of In-Ovo Chick Sexing Methods to All Poultry Products Sold on the EU Market, Question for Written Answer E-003166/2023 to the Commission, https://www.europarl.europa.eu/doceo/document/E-9-2023-003166_EN.html.

¹⁰⁸ European Parliament, Banning Chick Culling in the EU, Question for Written Answer E-001843/2024 to the Commission, https://www.europarl.europa.eu/doceo/document/E-10-2024-001843_EN.html.

4. Conclusion

We ask the European Commission to enact:

1. A prohibition on the systematic killing of day-old poultry animals.
2. Such a prohibition should provide no derogation, other than for cases where it has been established that no alternative was possible, to be updated based on best scientific data.
3. Such a prohibition should provide minimal transition periods.
4. Such a prohibition should specify that culling is not allowed after the 12th day of incubation, to be updated based on best scientific data.



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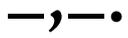
Olivier Morice is an EU public affairs officer at the French animal protection organization L214, which he joined in 2021, following ten years of activism in the animal protection movement. Olivier Morice graduated from Sciences Po Lyon (Master in Institutional Communications, 2011).

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Annex

NATIONAL LAWS PROHIBITING CHICK KILLING IN THE EU MEMBER STATES

MEMBER STATE	RULE	ENTRY INTO FORCE	LIMITATIONS	CITATION IN ORIGINAL LANGUAGE	CITATION IN ENGLISH	HYPERLINK	COMMENT
Austria	Prohibition (male chicks only)	18 July 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 days of incubation"	Tierschutzgesetz-TSch, Section 6(2).	Section 6(2), Animal Welfare Act (Austria)	https://www.ris.bka.gv.at/geltendefassung.wxe?abfrage=bundesnormen&gesetzesnummer=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).
France	Prohibition (male chicks only)	1 January 2023	Scope only includes male chicks in shell egg production (male chicks killed in the context of eggs used in egg products can be killed). Male chicks for animal food production benefit from an exemption. Destruction of non-hatched is allowed up until 15 days of incubation.	R.214-17, Code rural et la pêche maritime	R 214-17 of the Rural Code (Fr.)	https://www.legifrance.gouv.fr/codes/article_lc/LEGIARTI000028969470	Prohibition 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). <i>In ovo</i> sexing technologies benefit from a five-year non-obsolence clause.
Germany	Prohibition (male chicks only)	1 January 2022 (partial entry into force); 1 January 2024 (full entry into force)	Scope only includes male chicks.	Tierschutzgesetz, Dritter Abschnitt Töten von Tieren, 4c	Section 3 (4c), Animal Welfare Act (Ger.)	https://www.gesetze-im-internet.de/tierschg/BJNR012770972.html	Prohibition 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 6 th day of incubation.
Italy	Prohibition (male chicks only)	1 January 2027	Scope only includes male chicks. The law does not provide a cull-day threshold, nor exemptions, other than exemptions for animal health and protection purposes. A decree will likely specify these two aspects.	Articolo 18, Legge 4 agosto 2022, n. 127 e Decreto legislativo 7 dicembre 2023, n. 205 (Adeguamento della normativa nazionale alle disposizioni del Regolamento (CE) n. 1099/2009 del Consiglio, del 24 settembre 2009, relativo alla protezione degli animali durante l'abbattimento, ai sensi dell'articolo 18 della legge 4 agosto 2022, n. 127. (23G00212))	Article 18, Legge di Delegazione Europea (22G00136) (It.)	https://www.normattiva.it/uri-res/N2L?urn:nir:stato:decreto:legislativo:2023:205	The law prohibits the selective killing of male chicks by 31 December 2026 and provides exemptions for animal protection purposes only. A decree will later specify the ways in which the law should be implemented.
Luxembourg	Prohibition (male chicks only)	3 July 2018	The law prohibits elimination of animals for "exclusively economic reasons", so it applies not only to chicks, but also to other by-product animals, such as male calves. The scope is not limited, possibly because there are no hatcheries in the territory of Luxembourg anyway.	Art. 12(13), Loi du 27 juin 2018 sur la protection des animaux		https://legilux.public.lu/eli/etat/leg/loi/2018/06/27/a537/jo	Luxembourg was the first EU country to prohibit the killing of male chicks through a general prohibition of killing animals exclusively for economic reasons. The act entered into force in July 2018.
Netherlands	Revision attempt ongoing	31 December 2025				https://www.rijksoverheid.nl/documenten/kamertukken/2025/02/11/kamerbrief-aanbieden-roadmap-een-dagshaantjes	In February 2025, the Dutch government further announced a roadmap to ban chick killing by the end of 2025. The ban has yet to be codified in Dutch law.



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