

COMPASSION IN WORLD FARMING

2023 EU AQUACULTURE INVESTIGATION SUMMARY



COMPASSION
in world farming 



© CIWF

Investigator: "Recurring problems were observed in all visited and documented places: the caught fish were stored with little or no water in crowded barrels or containers, they were destined to a slow death through asphyxiation."

COMPASSION IN WORLD FARMING

EXECUTIVE SUMMARY

Up to 1.2 billion fish are farmed in the European Union (EU) each year, but they have very little protection from EU animal welfare laws. Sadly, the lack of effective legal protection for farmed fish allows poor welfare practices to be prevalent. This year, independent investigators commissioned by Compassion in World Farming visited four trout farms in Poland. Inhumane slaughter, stressful handling practices and poor rearing conditions were documented. This level of suffering is not an isolated case. In recent years, numerous investigations have revealed the immense suffering endured by fish of a range of species, farmed across different Member States. It's time to rethink fish and give these sentient animals the protection they deserve.

Background

Aquaculture now provides over 50% of the fish we consume, and global demand is increasing¹. However, fish welfare is often very poor during rearing and transport, and inhumane slaughter practices are widespread for both farmed^{2,3} and wild-caught fish⁴. Fish are sentient animals, demonstrated by research⁵⁻⁸ and acknowledged by legislation in the European Union (EU)⁹. However, farmed fish are commonly reared in intensive systems where they are subject to stressful handling procedures, exposed to poor water conditions, and confined to barren environments. The majority are killed without pre-stunning or by methods that are intended to stun but prove ineffective. This represents a major animal welfare concern.

In 2020, the European Commission committed, through its Farm to Fork strategy, to "[r]evise 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" (pg. 10)¹⁰. For the Commission to achieve this important progress for animals in the EU, it is crucial that fish are no longer excluded from the legislation¹¹⁻¹³ designed to protect farmed animal welfare.

Up to 1.2 billion fish of a variety of species, are farmed across the EU annually¹⁴. However, for each of these fish their protection in European law is limited. For example, in the Council Regulation on the protection of animals at the time of killing, protection for fish is limited to the principle that they "shall be spared any avoidable pain, distress or suffering during their killing and related operations" (European Union, 2009, p. 9)¹¹. Fish are specifically excluded from the rest of the detailed requirements laid out in the Regulation.

Farmed fish welfare legislation is lagging in the EU, allowing widespread practices that lead to poor welfare. To understand the serious consequences of this legal omission for farmed fish, in the summer of 2023 Compassion in World Farming commissioned an undercover investigation into rainbow trout farms in Poland, finding significant welfare issues during rearing and slaughter.

© CIWF



© CIWF

COMPASSION IN WORLD FARMING

TROUT FARMING IN THE EU

Highest numbers

Trout are the fish farmed in the highest numbers and highest overall value in the EU. In 2020, the EU produced 184,840 tonnes of trout (mostly rainbow trout) - 17% of the total volume of aquaculture production, with a value of 3.67 billion euros (18% of the total)¹⁵.

Farmed intensively throughout the EU

The top trout producing member states are France, Italy, Denmark and Poland, but they are farmed in most EU countries¹⁵. Production systems seen in this investigation are common throughout the EU; trout are farmed intensively in sea and brackish water with flow-through systems consisting of earthen ponds and concrete raceways or cages; freshwater systems include ponds, cages and recirculating systems¹⁵.

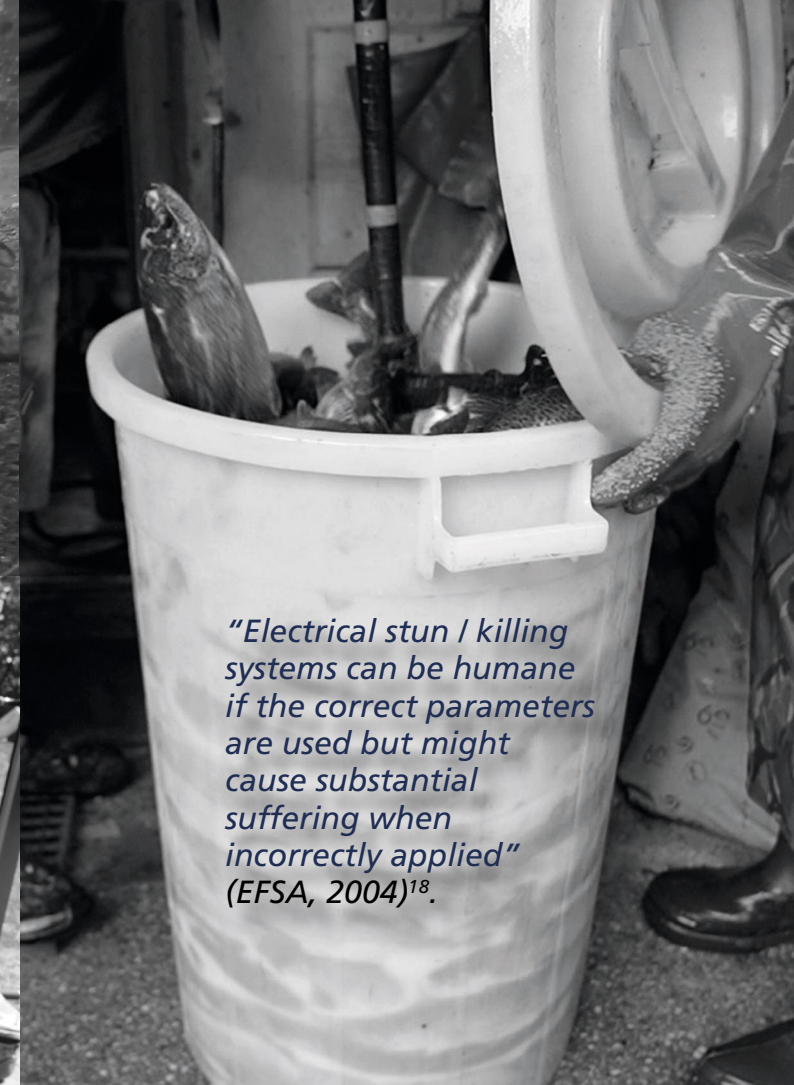
Eaten by EU consumers

An estimated 86% of the trout consumed in the EU in 2020 was produced internally and the majority (98.37%) of trout consumed in the EU is farmed rather than wild-caught¹⁵.

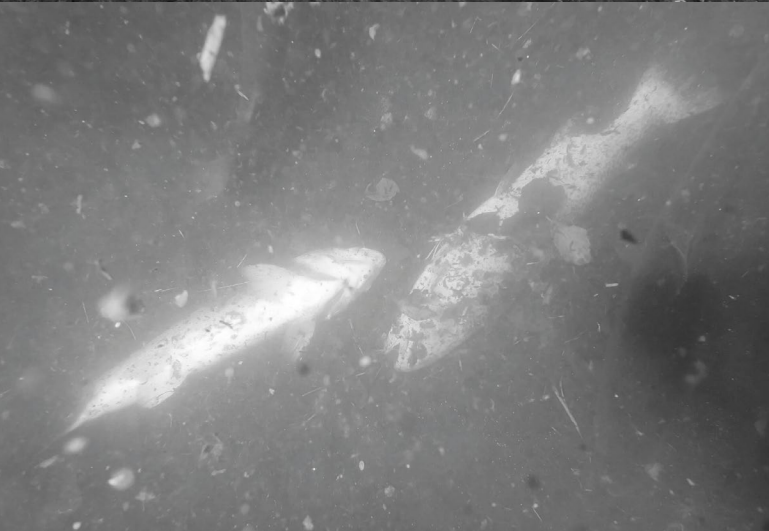


"The most preferable way is to handle fish without taking them out of the water...If fish have to be taken out of the water for handling, this shall be done in the shortest time possible and all equipment in direct contact with fish should be moistened" (Council of Europe, 2005)¹⁷.

© CIWF



"Electrical stun / killing systems can be humane if the correct parameters are used but might cause substantial suffering when incorrectly applied" (EFSA, 2004)¹⁸.



COMPASSION IN WORLD FARMING

INVESTIGATION FINDINGS

Visit ciwf.org/EU-fish-Welfare to watch our investigation video

An experienced investigation team was sent to document typical farming practices on a range of trout farms in Poland. The team visited four farms, viewing different stages of the rearing process; hatchery, fry rearing, fattening tanks, slaughter and processing facilities. Fish produced in these farms were sold to wholesale (supermarkets and restaurants) and retail customers from Poland and Czechia. Some fish were slaughtered on site, others were transported live to the customer.

Welfare issues during rearing:

- Dirty water fouled with faeces, uneaten feed, and other debris.
- Fish with fungal infections.
- Sick fish left to die in the tanks.
- Dead fish floating at the surface or at the bottom of the tank.
- Fin erosion, or some missing fins.
- Abrasions on the snout and body.
- Eye damage.
- High stocking densities.
- Barren environments.

Stressful handling procedures:

- Severe crowding – high intensity crowds that result in stressed fish splashing at the surface.
- Prolonged periods of fish being netted and sorted in buckets without any water.
- Live transportation of fish in large buckets without water, where fish are piled on top of each other and suffer from crushing and suffocation.
- Live transportation in box with no water and loaded in the boot of a van as sold to customer.
- Live transportation in plastic carrier bag (with no water) as sold to customer.

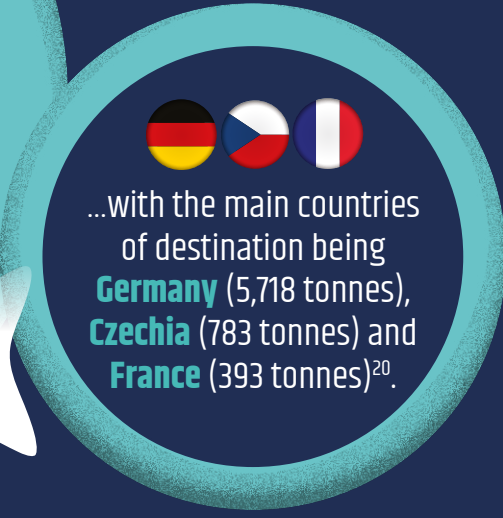
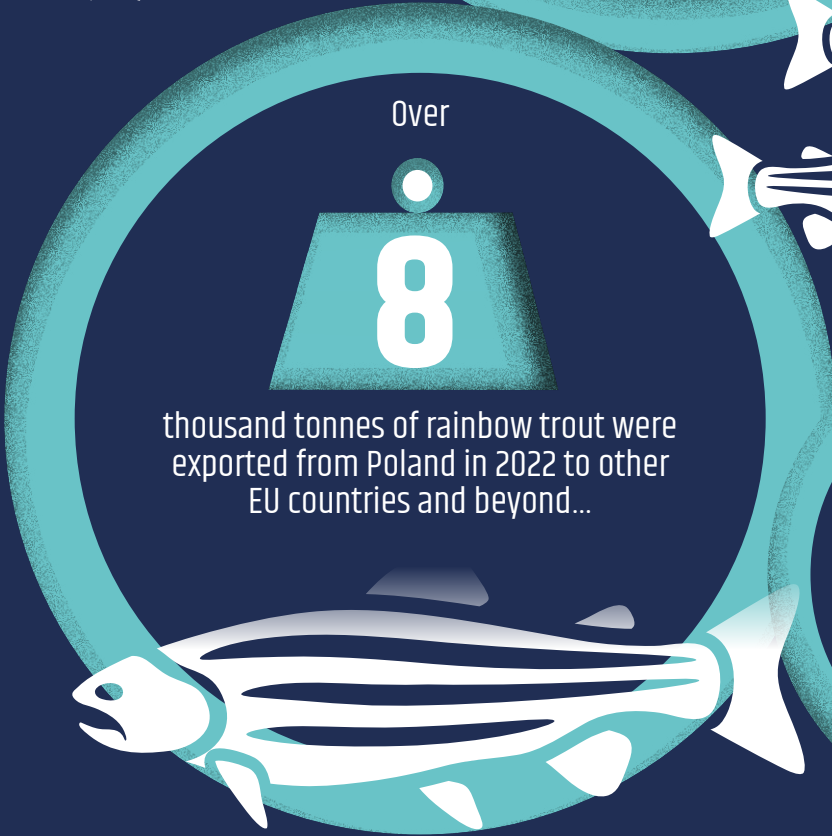
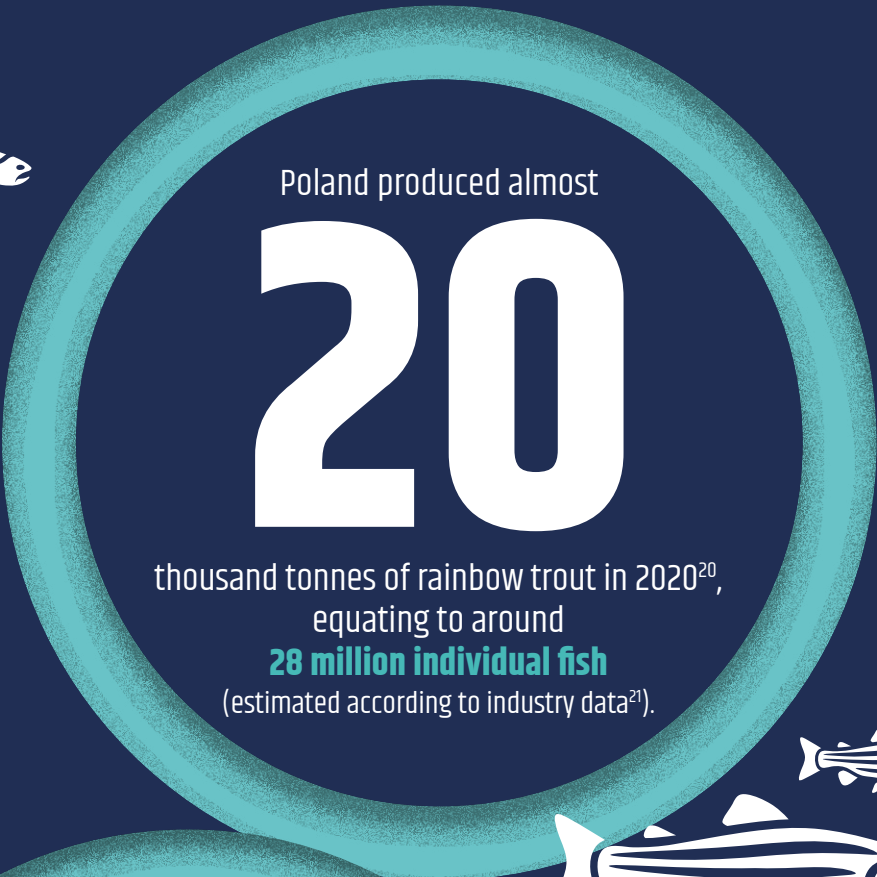
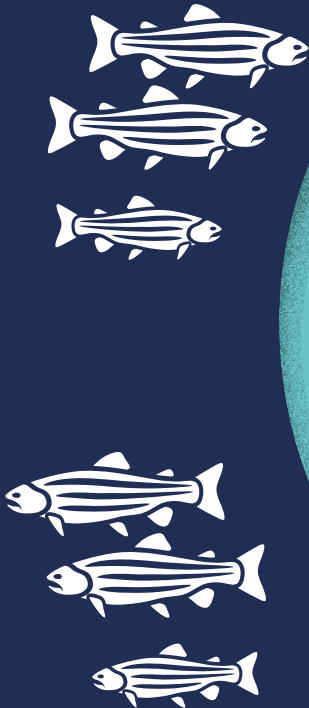
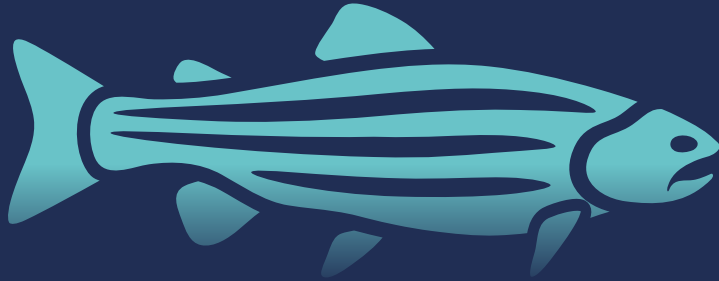
Slaughter:

- Ineffective electrical devices being used to attempt to stun fish.
 - Instead of stunning fish, these crude devices cause painful electric shocks.
 - They were used for long periods, repeatedly and in an ad hoc manner.
- Body movement during and directly after the shocks shows they are not effective in stunning, instead causing pain and discomfort for fish.
- Painful and stressful procedures being carried out on live fish without prior effective stunning, such as:
 - removing the eyeballs with a spoon
 - gutting the fish with a knife
 - leaving fish to suffocate out of water for over 20 minutes.

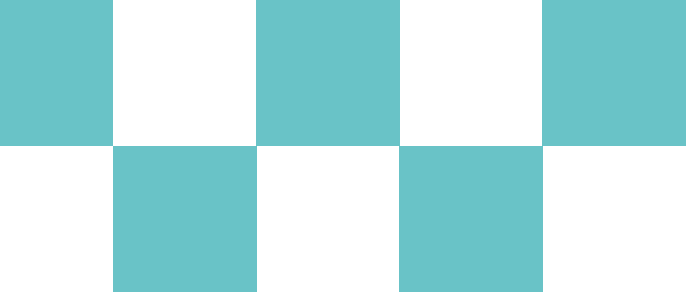
ALL PICTURES © CIWF

KEY DATA

Trout produced in Poland are farmed in intensive systems¹⁹.



© CIWF



Investigator: "Both the workers as well as the owners treated the animals as objects. No biosecurity measures were observed when documenting the main ponds".

EU FISH FARMING

The shocking findings of our polish trout investigation are not happening in isolation. Previous investigations by Compassion in World Farming and other groups including L214 and Essere Animali have revealed similar findings. Unfortunately, the majority of fish farmed in the EU are killed using inhumane methods and do not have their welfare well protected during rearing and handling.

The most commonly farmed fish species are rainbow trout, gilthead sea bream, European seabass, common carp, and Atlantic salmon. A 2017 study commissioned by the European Commission to assess the welfare of these species during transport and slaughter found that the vast majority, of the millions of fish farmed, are slaughtered inhumanely¹⁶. The study used the World Organisation for Animal Health (WOAH) recommendations for killing fish²² as a benchmark for humane methods and concluded that these recommendations are largely not being met¹⁶.

Detailed welfare legislation could protect fish

European Union law requires that fish "shall be spared any avoidable pain, distress or suffering during their killing and related operations" (European Union, 2009, p. 9). As stated in WOAH's

Aquatic Animal Health Code, there are slaughter systems for fish that can be humane when applied properly, with technical parameters suitable for the species.

Systems which can be humane include electrical and percussive stunning followed, where necessary, with a suitable killing method²². Species specific parameters are required to ensure that stunning, whether by percussive blow or electrical current, is effective. Further, the WOAH standards describe methods that should not be used for killing of conscious fish, such as chilling with ice in holding water, carbon dioxide (CO2) in holding water, salt or ammonia baths; asphyxiation by removal from water; exsanguination without stunning.²²

Additionally, the scientific opinions published by the European Food Safety Authority (EFSA) in 2009, describe the poor welfare caused by inhumane slaughter methods and make recommendations for alternative methods and requirements for better practices to be developed²³⁻²⁸.

There are better, more humane methods available to slaughter these species. For trout, percussive or electrical stunning followed by a separate kill method can be humane when properly carried out, and this is already used commercially in some countries. For example, the UK RSPCA Assured scheme requires these methods for trout²⁹.



© CIWF

© CIWF



"In all cases, it should be mandatory that a stunning / killing step is incorporated before exsanguinations or any processing of fish commences e.g. gutting, desliming, etc" (EFSA, 2004)¹⁸.

COMPASSION IN WORLD FARMING

POLICY RECOMMENDATIONS

1 Introduce species-specific legislative requirements for rearing, transport and slaughter, to protect aquatic animals farmed in the EU, with parallel requirements for imported seafood – driving up standards for countries outside the EU and ensuring a level playing field.

2 Fund and support research into humane rearing, transport, and slaughter of farmed fish. Deliver the promised EU Reference Centre dedicated to the welfare of farmed fish, facilitating collaboration between expert stakeholders across EU member states to develop better practices, provide training courses, disseminate scientific findings, and facilitate enforcement of legislation.

3 Facilitate research into any new species proposed for aquaculture before commercial farming commences. Require that industry first establishes that animal welfare needs can be met in captivity (e.g. behavioural needs can be met, humane slaughter is available, etc.) and that no negative environmental costs are associated. Some species may be unsuitable and subsequently should not be farmed.

4 Fund and support initiatives that aim to reduce the consumption of carnivorous fish that are inherently unsustainable and encourage a switch towards aquatic products lower in the food chain (e.g. higher welfare herbivorous fish, bivalves, seaweed) and plant-based seafood alternatives.

5 Fund and support innovations that aim to increase animal welfare alongside efficiency in systems, and novel alternative feeds that can replace human-edible resources (e.g. microbial proteins and oils) or produce food without welfare issues (e.g. cell-based fish).

CONCLUSION

Our ground-breaking investigation into trout farms in Poland has revealed fish suffering and dying by cruel and prolonged slaughter practices. Without clear and specific legislation to protect fish, billions of fish could continue to suffer in the years to come.

Including farmed fish in the revision of the EU's animal welfare legislation is a crucial opportunity to protect billions of sentient animals.

References

¹FAO. The State of World Fisheries and Aquaculture. Preprint at <https://doi.org/10.4060/ca9229en> (2020).

²Mood, A., Lara, E., Boyland, N. K. & Brooke, P. Estimating global numbers of farmed fishes killed for food annually from 1990 to 2019. *Animal Welfare* 32, (2023).

³Lines, J. A. & Spence, J. Humane harvesting and slaughter of farmed fish. *Rev. sci. tech. Off. int. Epiz* (2014).

⁴Metcalfe, J. D. Welfare in wild-capture marine fisheries. *J Fish Biol* 75, 2855–2861 (2009).

⁵Braithwaite, V. A. *Do fish feel pain?* (Oxford University Press, 2010).

⁶Sneddon, L. U., Braithwaite, V. A. & Gentle, M. J. Do fishes have nociceptors? Evidence for the evolution of a vertebrate sensory system. *Proceedings of the Royal Society B: Biological Sciences* 270, 1115–1121 (2003).

⁷Chandroo, K. P., Duncan, I. J. H. & Moccia, R. D. Can fish suffer?: Perspectives on sentience, pain, fear and stress. *Appl Anim Behav Sci* 86, 225–250 (2004).

⁸Broom, D. M. *Sentience and animal welfare.* (CABI, 2014).

⁹European Union. Consolidated version of The Treaty on the Functioning of the European Union. *Official Journal of the European Union* 47–390 (2012).

¹⁰European Union. Farm to Fork Strategy. https://food.ec.europa.eu/system/files/2020-05/f2f_action-plan_2020_strategy-info_en.pdf (2020).

¹¹European Union. COUNCIL REGULATION (EC) No 1099/2009 of 24 September 2009 on the protection of animals at the time of killing. *Official Journal of the European Union* 1–30 (2009).

¹²European Union. COUNCIL REGULATION (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives

64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97. *Official Journal of the European Union* (2005).

¹³European Union. COUNCIL DIRECTIVE 98/58/EC of 20 July 1998 concerning the protection of animals kept for farming purposes. *Official Journal of the European Communities* 1–7 (1998).

¹⁴Mood, A. & Brooke, P. Numbers of farmed fish slaughtered each year. Fishcount <http://fishcount.org.uk/fish-count-estimates-2/numbers-of-farmed-fish-slaughtered-each-year> (2019).

¹⁵European Market Observatory for Fisheries and Aquaculture Products (EUMOFA). *The EU Fish Market 2022 Edition.* (2022).

¹⁶IBF, VetEffect, Wageningen University & (SANTE), R. C. for the E. C. D. H. and F. S. Welfare of farmed fish: Common practices during transport and at slaughter. Preprint at (2017).

¹⁷Council of Europe. STANDING COMMITTEE OF THE EUROPEAN CONVENTION FOR THE PROTECTION OF ANIMALS KEPT FOR FARMING PURPOSES (T-AP) RECOMMENDATION CONCERNING FARMED FISH adopted by the Standing Committee on 5 December 2005. (Council of Europe, 2005).

¹⁸EFSA. Opinion of the Scientific Panel on Animal Health and Welfare on a request from the Commission related to welfare aspects of the main systems of stunning and killing the main commercial species of animals. Assessment 1–25 (2004) doi:10.2903/j.efsa.2004.122.

¹⁹European Market Observatory for Fisheries and Aquaculture Products. Case Study: Fresh Portion Trout in Poland. (2017) doi:10.2771/933684.

²⁰European Market Observatory for Fisheries and Aquaculture Products. EUMOFA dataset. <https://www.eumofa.eu/data>.

²¹Federation of European Aquaculture Producers (FEAP). *European Aquaculture Production Report*

2014–2020. www.eumofa.eu (2021).

²²WOAH. *Aquatic Animal Health Code.* (2014).

²³EFSA. Scientific Opinion of the Panel on Animal Health and Welfare on a request from the European Commission on Species-specific welfare aspects of the main systems of stunning and killing of farmed carp. *The EFSA Journal* 1013, 1–37 (2009).

²⁴EFSA. Scientific Opinion of the Panel on Animal Health and Welfare on a request from the European Commission on welfare aspect of the main systems of stunning and killing of farmed eel (*Anguilla anguilla*). *The EFSA Journal* 1014, 1–42 (2009).

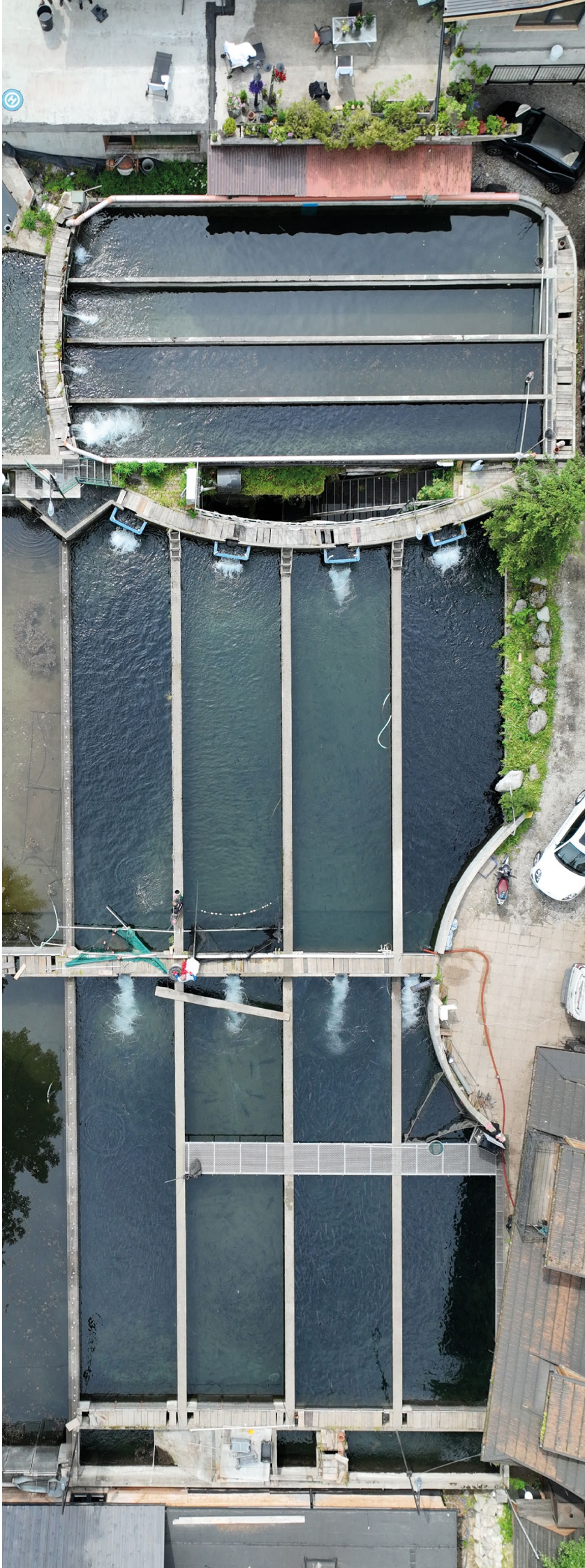
²⁵EFSA. Scientific Opinion of the Panel on Animal Health and Welfare on a request from the European Commission on Species-specific welfare aspects of the main systems of stunning and killing of farmed rainbow trout. *The EFSA Journal* 1013, 1–55 (2009).

²⁶EFSA. Scientific Opinion of the Panel on Animal Health and Welfare on a request from the European Commission on the species-specific welfare aspects of the main systems of stunning and killing of farmed tuna. *The EFSA Journal* 1013, 1–55 (2009).

²⁷EFSA. Scientific Opinion of the Panel on Animal Health and Welfare on a request from the European Commission on welfare aspect of the main systems of stunning and killing of farmed turbot. *The EFSA Journal* 1073, 1–34 (2009).

²⁸EFSA. Scientific Opinion of the Panel on Animal Health and Welfare on a request from the European Commission on welfare aspect of the main systems of stunning and killing of farmed Atlantic salmon. *The EFSA Journal* 1–77 (2009).

²⁹Royal Society for the Prevention of Cruelty to Animals (RSPCA). *RSPCA Welfare Standards for Farmed Rainbow Trout.* <https://science.rspca.org.uk/sciencegroup/farmanimals/standards/trout> (2020).



COMPASSION IN WORLD
FARMING INTERNATIONAL

River Court, Mill Lane,
Godalming,
Surrey, GU7 1EZ, UK

EMAIL: supporters@ciwf.org
WEB: ciwf.org
TEL: +44 (0)1483 521 953

Compassion in World Farming International is a registered charity in England and Wales, registered charity number 1095050; and a company limited by guarantee in England and a company number 04590804.

© CIWF