



The Case for Regular Inspections and Mandatory CCTV in Fish Slaughterhouses



Conservative
Animal Welfare
Foundation

animal
EQUALITY
UK

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FOREWORD

THE CONSERVATIVE ANIMAL WELFARE FOUNDATION

The UK was one of the first countries to introduce animal welfare legislation and to this day stands as one of the strongest countries for protecting farmed animal wellbeing. However, fish have typically been left out of this progress. Today, the UK farms tens of millions of fish every single year, with close to no regulation on the treatment of these animals.

The scientific community found evidence for fish sentience over two decades ago, and now this is broadly recognised by consumers. 76% of people in the UK believe the welfare of fish should be safeguarded to the same extent as other farmed animals¹. However, the current lack of legislation has created an animal welfare crisis that is as massive as it is inhumane. We know that fish suffer and it's necessary that we take action to address fish suffering at slaughter.

There is a pressing need for the UK government to provide detailed legislation and/or official guidance on the welfare of finfish and aquatic animals. We ask DEFRA and other governmental bodies to afford the same level of protection to fish as given to terrestrial farmed animals.

We believe that welfare at the time of killing is only one aspect of the necessary standards that farmed fish should be covered by an official governmental code of practice for finfish and other aquatic animals. At a time when production continues to intensify, it is more important than ever that fish welfare be seriously considered at slaughter, with mandatory CCTV in fish slaughterhouses and regular site inspections by the Animal, Plant and Health Agency.

Fish farming is the fastest-growing food sector in the world and the UK faces a unique, time sensitive opportunity to shape that growth. We believe that fish welfare should become an objective of the UK Parliament, alongside the current objectives of sustainability and utilising scientific evidence.

The recommendations set forth in this report are built on the current scientific literature on fish welfare. They are ambitious but important steps. If implemented, these improvements can provide millions of animals with proper attention during their final moments of life. They will help put the UK at the forefront of fish welfare and stimulate worldwide change.

¹ ComRes. (2018). Eurogroup for Animals/CIWF Fish Welfare Survey.



FOREWORD

ANIMAL EQUALITY

Trillions of aquatic animals are slaughtered globally each year for human consumption. In the UK, up to 77 million fish are farmed and killed each year; that's approximately 210,959 per day, 8,790 per hour.

There is an abundance of scientific evidence highlighting that farmed fish and other aquatic animals have an ability to feel joy and to feel pain. They are not mere machines.

Armed with this knowledge, it would be reasonable to expect that farmed fish have specific, meaningful protections in law, yet few countries offer them even the most basic of legal protections, including right here in the UK.

Our nation is held in high regard for our approach to animal welfare laws, having pioneered historic legislative progress in times gone by. And we have built this prestigious reputation over time - indeed, it was 200 years ago that the UK passed 'Martin's Act', a landmark 'Act to Prevent the Cruel and Improper Treatment of Cattle', marking the first piece of animal welfare legislation to be enshrined in recorded history.

However, some animals have been forgotten along the way: fish. We are falling behind our European counterparts, with Germany, Norway, the Netherlands and others having already adopted increased legal protections for fish that far surpass the UK's broad and barely-existent laws. The UK Government is failing aquatic animals, dismally.

Combined with a complete lack of regulatory oversight of farmed fish abattoirs, the billion-pound aquaculture industry is being left to monitor itself in the eyes of the law. This leaves these already vulnerable animals entirely exposed to the whims of an industry that wishes only to monetise and commodify these creatures.

Farmed land animals have specific protections at the time of killing. Frequent inspections are a requirement in UK farms and CCTV is mandatory in slaughterhouses located in England and Scotland and will also soon be in Wales. While these laws are not without issues, legislation remains critical to ensure that animal abusers are held accountable for their crimes, and that the animals currently bred and killed by the animal agriculture industry are better protected during their short lives.

Even taking the precautionary principle, aquatic animals - much like farmed land animals - must be considered sentient. There is no reasonable rationale to allow them to remain so defenceless in law.

The UK Government has made great strides for animals over recent months and decades. Now is the time to further strengthen the UK's position on the world stage, by putting in place meaningful protections for farmed fish at slaughter, requiring regular on-site inspections, and mandating CCTV in farmed fish facilities.

Interpretation

1. 'Fish' refers to all seawater and freshwater fish, whether wild or farmed;
2. 'Fish slaughterhouse' means any onshore processing site where the killing of fish to produce products for human or animal consumption takes place;
3. Given the scale and severity of their suffering, and the relevance to Animal Equality's investigative work, this particular report focuses specifically on protections for so-called 'finfish' - including teleost fish, such as salmon and trout.

FISH SENTIENCE

Trillions of fish around the world are killed every year for human consumption – so many, in fact, that the industry reports them by weight in tonnes, rather than individuals slaughtered. Where estimates do exist, it appears that the UK farms and kills up to 77 million fish each year^{1a} with Atlantic salmon, trout and other species farmed in significant numbers.

There is strong and growing recognition within the global scientific community that fish, cephalopods and decapods (hereafter referred to as ‘aquatic animals’) are able to experience pleasure and pain, in a manner which is directly comparable to cows, pigs, chickens and other farmed animals. Despite this, aquatic animals have no detailed welfare protections in place at the time of killing.

The overwhelming evidence determining that these animals experience pain and suffering is also supported in the Farm Animal Welfare Committee’s (FAWC) 2014 Opinion, where the FAWC states that ‘at least some species, including trout, have a sensory experience of pain’ as well as ‘a degree of sentience’.

Research spanning several decades has shown that teleost fish (the class to which salmon and trout belong) have long-lasting memories^{1,2,3} and show aversion to risk⁴. Fish are susceptible to optical illusions⁵ and are capable of complex processing at the level of perceptual organisation. In trials, teleost fish developed Pavlovian responses linking noise and feeding activity three times faster than rats⁶, and have shown to experience rewards and threats differently according to their interpretation of the surrounding environment⁷.

Recent literature shows more clearly than ever before that the modulation of the stress response is evolutionary conserved across vertebrates, including fish⁸. This means that fish are able to feel pain in a way that is directly homologous to terrestrial vertebrates, such as mammals. It is well established that fish have the neural substrates to feel affected states; this means that these animals can experience varying emotional, physical and psychological reactions in response to their treatment and surroundings^{9,10}.

^{1a} Broom D.M., (2010). Cognitive ability and awareness in domestic animals and decisions about obligations to animals. *Applied Animal Behaviour Science*, 126: 1–11

² Bibost A.L., Brown C. (2014). Laterality influences cognitive performance in rainbowfish *Melanotaenia duboulayi*. *Animal Cognition*, 17:1045–1051. pmid:24531906

³ Bouton, M.E., Peck, C.A. (1989). Context effects on conditioning, extinction, and reinstatement in an appetitive conditioning preparation. *Animal Learning Behaviour*, 17: 188–198

⁴ Czanyi, V. & Doka, A. (1993). Learning interactions between prey and predator fish. *Marine Behaviour and Physiology*, 23: 63–78

⁵ Agrillo, C., Petrazzini, M.E.M. & Dadda, M. (2013). Illusory patterns are fishy for fish, too. *Frontiers in Neural Circuits*, 7: 137

⁶ Bibost, A-L. & Brown, C. (2014). Laterality influences cognitive performance in rainbowfish *Melanotaenia duboulayi*. *Animal Cognition*, 17:1045–1051

⁷ <https://www.nature.com/articles/s41598-017-13173-x>

⁸ Cerqueira, M., Millot, S., Silva, T., Félix, A.S., Castanheira, M.F., Rey, S., MacKenzie, S., Oliveira, G.A., Oliveira, C.C.V., Oliveira, R.F. (2021). Stressor controllability modulates the stress response in fish. *BMC Neuroscience*

⁹ Sneddon, L.U. (2013) Do painful sensations and fear exist in fish? WBI Studies Repository

¹⁰ <https://www.nature.com/articles/s41598-017-13173-x>

Fish have an active homologue to the hypothalamic-pituitary-adrenal stress response, which releases cortisol into the blood, meaning they experience stress, and this stress affects their ability to grow and fight pathogens, making them more susceptible to disease¹¹. Fish react to painful stimuli and actively avoid predators and toxins in the water.

Studies have been carried out on cleaner wrasse (*Labroides dimidiatus*), commonly referred to as ‘cleaner fish’ as they pick and eat parasites off the scales and gills of other fish. While studies are preliminary, cleaner wrasse, approximately 60 million of whom are used each year in the salmon farming industry alone¹², have been found to outperform primates in a task designed to test optimal foraging determination¹³. Cleaner wrasse are also one of only a handful of animals proven able to identify themselves in a mirror¹⁴.

Fish are also capable of prolonged relationships with parents and of communication, displayed through behaviours like mouthbrooding. For some farmed fish, such as tilapia, persuading the parent to release their young so they can be taken away to be reared is a major challenge of the aquaculture industry.

Current aquatic animal slaughter methods across the UK would be legally unacceptable under existing slaughter standards for any other species of animal killed for human consumption in the UK. Given the overwhelming scientific consensus that fish are sentient and can suffer, it is critical that anxiety, pain, and distress are eliminated at every possible opportunity. By extending these same legal considerations to farmed aquatic animals, the UK can spare millions of animals from the most extreme and prolonged suffering at slaughter.

¹¹ Pottinger, T. (2008). The Stress Response in Fish -- Mechanisms, Effects, and Measurements in “Fish Welfare”. Branson Ed

¹² https://media.mcsuk.org/documents/Use_Of_Cleaner_Fish_in_UK_Aquaculture-_2021.pdf

¹³ Salwiczek, L.H., Prétôt, L. & Demarta, L. (2012). Adult cleaner wrasse outperform capuchin monkeys, chimpanzees and orang-utans in a complex foraging task derived from cleaner-client reef fish cooperation. PLoS One, 7.11: e49068

¹⁴ Kohda, M., Hotta, T., Takeyama, T., Awata, S., Tanaka, H., Asai, J. & Jordan A.L. (2018). Cleaner wrasse pass the mark test. What are the implications for consciousness and self-awareness testing in animals?. BioRxiv: 397067

LEGISLATIVE INCONSISTENCIES

Despite an abundance of evidence that aquatic animals are sentient, these animals receive few protections under UK law and, where they do, the protections systematically go unenforced.

The Animal Welfare Act (2006)¹⁵ does apply to farmed fish, affording them some general protection against ‘unnecessary suffering’ (s.4) and requiring farmers to ensure their ‘needs are met’ (s.9). Although this may at first appear as though UK legislation is working to protect aquatic animals, the Welfare of Farmed Animals (England) Regulations 2007¹⁶ and equivalent legislation in Scotland¹⁷, Wales¹⁸ and Northern Ireland¹⁹ provide specific obligations for those farming animals on land, yet the legislation across the UK expressly excludes fish when defining ‘farmed animal’ (reg.3).

There is no just cause for this exclusion. Having written protections in law is critical for keeping the industry accountable, an industry worth £2 billion and responsible for the slaughter of tens of millions of fish every year.

Whilst fish are included within the general protections under The Welfare of Farmed Animals at the Time of Killing (WATOK) Regulations, which means that they should be spared any avoidable pain, distress or suffering during their killing and related operations, they are not included in the definition of ‘animal’ for the purpose of the more detailed provisions in WATOK. This means there are no specific requirements as to how they should be delivered, held, stunned or killed.

However, in 2014 FAWC provided a comprehensive and science-based overview of the welfare of fish at the time of killing and stated that ‘stunning of farmed fish is necessary to remove fear, pain and distress at the time of killing.’ This opinion and the availability of stunning methods suggests that stunning is required to meet the WATOK provision, in order to reduce the fear, pain and distress that fish are likely to endure at the time of slaughter.

In addition, there are requirements for welfare inspections from retained EU law, largely under food safety law. Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, requires that the UK Government puts official controls in place to ensure compliance with welfare laws. Official controls must take place with ‘appropriate frequency’. Commission Implementing Regulation (EU) 2019/627 also lays down the specific rules for the official controls; this includes ensuring compliance with WATOK. However, it is worth noting that routine ante-mortem and post-mortem inspections are not currently required for fish – much to our concern.

¹⁵ <https://www.legislation.gov.uk/ukpga/2006/45/contents>

¹⁶ <https://www.legislation.gov.uk/uksi/2007/2078/contents/made>

¹⁷ <https://www.legislation.gov.uk/sdsi/2010/9780111010228>

¹⁸ <https://www.legislation.gov.uk/wsi/2007/3070/contents/made>

¹⁹ <https://www.legislation.gov.uk/nidsr/2012/9780337986475/contents>

ANIMAL EQUALITY'S INVESTIGATION

Despite some legal protections, it is evident that there is a serious issue with enforcement of these laws, as 1) stunning is not taking place in all cases 2) even where it is taking place, it is not being done adequately in some instances, as proven in undercover investigative footage and 3) even though they are required, inspections are not taking place to ensure compliance with the law.

In February 2021, Animal Equality released footage captured during a covert investigation into a salmon slaughterhouse operated by The Scottish Salmon Company²⁰. Despite a Baader stun-kill device being in place in the facility, our investigation revealed significant numbers of salmon showing signs of consciousness at the time of killing, as verified by world-leading aquatic animal scientists and veterinarians.

Some fish had their gills cut while still conscious, and many had to be manually clubbed to ensure adequate stunning – in one case as many as seven times. Other live fish were shown being violently thrown to the ground by workers and left to asphyxiate.

Coinciding with the release of Animal Equality's investigation, 70 world-leading aquatic animal experts, animal welfare advocates and advocacy organisations presented an open letter²¹ to representatives from the Department of the Environment, Food and Rural Affairs (Defra), as well as Ministers from each of the devolved governments in Scotland, Wales and Northern Ireland. The collective urged that specific and meaningful protections be put in place for farmed fish at the time of killing (in the form of WATOK regulation). Signatories included high-profile individuals such as Dr Jonathan Balcombe, Professor Culum Brown, Dr Becca Franks, Dr Lynne Sneddon and Dr John Webster, among others.

“[Animal Equality's] footage is alarming. A significant number of salmon are clearly conscious when their gills are cut, which could result in extreme pain for as long as seven minutes.”

- Mark Borthwick, OOCOTP Doctoral Fellow: Salmon Farming

The Scottish Salmon Company also prescribes to various non-statutory codes of practice, however these are voluntary and the extent of compliance is unclear. As evidenced in Animal Equality's investigation, and similar investigations released by other animal protection organisations, these non-mandated codes of practice are failing in their purpose.

With the current heavy reliance on opt-in certification schemes, due to lack of legal guidance, aquatic animals are being seriously let down. Given the scale of the industry and potential suffering taking place at present, legislation for aquatic animals at the time of slaughter must be made a higher priority.

²⁰ <https://animalequality.org.uk/act/scottish-salmon>

²¹ <https://animalequality.org.uk/app/uploads/2021/02/Animal-Equality-UK-Aquatic-Animals-Open-Letter.pdf>

THE NEED FOR STRONGER ENFORCEMENT

- INSPECTIONS

Despite a requirement for official welfare controls, evidence shows that there are no routine welfare checks taking place within onshore aquatic animal abattoirs at present.

Based on publicly available information, including surveillance forms; Animal Equality's direct correspondence with representatives of the Fish Health Inspectorate (FHI) of Marine Scotland Science (MSS); and responses to Freedom of Information requests submitted by animal advocacy NGO, The Humane League UK, we conclude that the primary purpose of the FHI's current audit programme is to prevent the introduction and spread of listed and emerging fish and shellfish diseases in Scotland. Ultimately, the current risk-based surveillance system is conducted with the intention of examining potential disease risks.

While important, this dismisses entirely the equally critical inspections required to determine the wellbeing and welfare of the individual animals within the aquaculture facilities and slaughterhouses. Without such audits, there is a clear and undeniable lack of regulated government examination and penalisation of legal non-compliance of existing welfare regulations. This is in direct contravention of the already minimal legal requirements that exist at present.

While we would expect that welfare-oriented inspections would be overseen by the Animal Plant and Health Agency (APHA), we understand that this happens only when legal breaches or concerns are raised to APHA by the FHI, animal advocacy organisations, or other such whistleblowers. This is merely a reactionary approach. Until Animal Equality's investigative materials and this proven lack of oversight recently came to light there were seemingly no plans in place to conduct routine welfare inspections. Based on public statements made by Scottish Government officials²², routine inspections are now a consideration, yet there remains no concrete plan in place, nor a confirmed timeline.

In addition, as is the case with farmed land animals, fish should receive ante-mortem inspections to ensure that any welfare issues are noticed, addressed and recorded. This is a critical step to ensure that the welfare of fish is held at the same level of priority as that of other farmed animals in legislation, and so that welfare issues can be addressed and followed up as required.

²² <https://www.fishfarmingexpert.com/article/salmon-slaughter-plants-to-be-inspected-after-charity-exposes-oversight-gap/>

- CCTV IN SLAUGHTERHOUSES

In 2018, the Mandatory Use of Closed Circuit Television in Slaughterhouses (England) Regulations came into effect. The equivalent Scottish regulations came into effect in 2021. These regulations require a duty to install and operate a CCTV system that provides a complete and clear image of killing and related operations in all areas of the slaughterhouse where live animals are present. This footage must be kept for 90 days, during which time it can be seized and inspected by the relevant authority.

In November 2021, the Welsh Government announced that they will also be implementing rules to introduce mandatory CCTV in farmed land animal slaughterhouses.

There is currently no equivalent requirement for fish slaughterhouses to have this same monitoring process in place.

Had investigations like Animal Equality's not taken place, it is highly unlikely that the non-compliance and severe animal suffering documented would have ever surfaced. The UK is currently relying on animal protection groups to compensate for this oversight, when it must be the responsibility of the Government to implement adequate and critical monitoring.

“Had Animal Equality not carried out an investigation into the industry, I very much doubt the suffering of these particular aquatic animals would have ever come to light. We should not be relying on non-profits to carry out what is essentially a public service – it’s the UK Government’s duty to protect the animals killed for human consumption and, currently, it is failing to carry out this basic duty of care. Specific, meaningful legislation is a critical part of the puzzle, and equally so is heightened enforcement and oversight.”

- World-renowned aquatic animal expert, Dr Lynne Sneddon, University of Gothenburg

Without close oversight from an impartial third-party, farmed fish will continue to suffer for a prolonged period of time at slaughter. Significantly enhancing legal protection and supervision in this area of animal farming must be a firm priority for a nation that is so often regarded as a leader in animal welfare.

- DETAILED REQUIREMENTS

Whilst it is arguable that stunning is already required to prevent avoidable pain, distress or suffering, the fact that there are no official detailed requirements, either in regulations or guidance, that outline what a slaughter operator's requirements are to comply with the law at the time of killing, is causing confusion and widespread unlawfulness.

If the majority of the industry has already put in place the 'latest and best technology at slaughter', as industry representatives claim²³, legislating stunning as a requirement in tandem with slaughter is a necessary and obvious next step.

Animal Equality's undercover investigation shows that even where stunning is taking place, there is still a lack of skill and precision throughout the process. Detailed requirements would go a long way to mitigate many of these issues.

²³ <https://www.fishfarmingexpert.com/article/survey-shows-public-backing-for-new-fish-slaughter-laws/>

OUR RECOMMENDATIONS

The UK Government is currently considering if detailed requirements for the killing of farmed fish are required. It has a duty of care to fish to ensure that compliance is maintained and to penalise those companies which fail to meet expected standards. This duty extends to also informing UK consumers of the realities of existing methods. The public has a right to know the conditions that animals reared for consumption have lived and were slaughtered in.

To that end, we urge the UK Government to implement the below recommendations, as a matter of urgency:

- The health and wellbeing of fish must be given the same scrutiny and concern as that of other farmed animals in law. Therefore, fish should receive species-specific, meaningful provisions in the WATOK regulations, which currently only offers protections for farmed land animals.
- Consistency measures must be put in place, where a certain rate of failure in any welfare metric triggers machinery halt, requires summoning of a vet, and provokes an official inspection of the facility by a government official / neutral third-party.
- Fish slaughterhouses, both now and in future, that exist across Scotland, England, Wales and Northern Ireland should be held to the same legal standard as farmed land animal abattoirs, and be subject to regular announced and unannounced inspections by the Animal, Plant and Health Agency, to take place no less than annually. A system of license probation and revocation ought to be implemented for non-compliance with WATOK laws.
- Animal Equality's undercover investigation, along with those released by other animal protection organisations, has revealed a desperate need for mandatory CCTV in fish slaughterhouses, with monitoring from public bodies. This must be implemented as a priority, to evidence that progress is being made to afford aquatic animals the same level of protections as other farmed animals.
- Because animal welfare is in the public interest, even when taking place in private facilities, all mortality data, inspection results, and CCTV feeds ought to be published centrally, publicly and immediately by the commissioning body.

The above recommendations simply ask that the scientific evidence be taken into account, so that fish are afforded the same level of legal protections as other farmed animals. This is a reasonable request, given that aquatic animals are thinking, feeling beings who deserve the same level of legal protections as any farmed animal on land.

CLOSING REMARKS

At present, fish are not afforded the same level of basic legal protections as farmed land animals. And, where laws do exist, they are not monitored nor enforced in accordance with the requirements.

Scientific advancements and legal recommendations, together with undercover investigative footage released by Animal Equality, demonstrates the imminent need for fish to receive the same level of legal protections as farmed land animals. Until this is implemented, fish will continue to endure prolonged suffering at the time of slaughter.

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