# **Developing a Corporate Policy on the Humane Slaughter of Fish**

Fish are supposed to be protected under the EU Slaughter Regulation, which requires that they be spared any avoidable pain, distress or suffering during their killing and related operations. According to the European Commission, compliance with this Regulation can be achieved by following the Guidelines of the World Organisation for Animal Health (OIE) on the stunning and killing of farmed fish<sup>1</sup> to which all Member States have signed up. A recent report by the Commission<sup>2</sup> concluded that most Member States surveyed are currently in breach of these guidelines. Many producers are using slaughter methods considered inhumane by the OIE.

All fish must be slaughtered humanely. This means that they must be effectively stunned, rendered instantaneously insensible, and remain unconsciousness until death supervenes. The methods that enable humane slaughter, and are commercially available, will differ between species and are outlined in boxes at the end of this document. When developing a slaughter policy for fish it is crucial to address all immediate handling events leading up to slaughter such as fasting, crowding and transfer to the slaughter facilities, as all have a significant impact on the welfare of fish. The following requirements should be included in a humane slaughter policy for fish:

- 1. Automated percussive and electrical stunning (followed by a suitable killing method where percussion or electrical methods do not also kill) are required (see boxes 1-3).
- 2. Inhumane slaughter methods should not be used and must phased out of the supply chain. Inhumane methods used commercially include: live chilling in ice slurry (without effective prestunning), exposure to carbon dioxide in water, asphyxiation in air, bleeding without effective pre-stunning, and the use of salt or ammonia baths (for eels)<sup>3</sup>.
- 3. Pre-slaughter fasting periods should be minimised, be laid down for each species and should never exceed 72 hours (unless required by a veterinarian for an exceptional reason).
- 4. Pre-slaughter crowding should be minimised in duration and severity, as much as possible. Fish must not be crowded for any longer than 2 hours and crowding should be carefully managed to ensure no vigorous activity is observed; only occasional fins breaking the surface of the water should be observed.
- 5. Fish should be moved to the point of slaughter via in-water pumping systems. These should be carefully designed and managed to ensure gentle movement of fish through pipes, including monitoring of injuries, such as fin injuries, with immediate action if higher levels are detected. Use of nets to move fish should be avoided.

<sup>&</sup>lt;sup>1</sup> OIE (2018) Aquatic Animal Health Code – 21<sup>st</sup> Edition <a href="https://www.woah.org/en/what-we-do/standards/codes-and-manuals/aquatic-code-online-access/">https://www.woah.org/en/what-we-do/standards/codes-and-manuals/aquatic-code-online-access/</a>

<sup>&</sup>lt;sup>2</sup> EFSA. (2017). Welfare of farmed fish: Common practices during transport and at slaughter. http://publications.europa.eu/resource/cellar/facddd32-cda6-11e7-a5d5-01aa75ed71a1.0001.01/DOC\_1

<sup>&</sup>lt;sup>3</sup>OIE (2010) CHAPTER 7.3. WELFARE ASPECTS OF STUNNING AND KILLING OF FARMED FISH FOR HUMAN CONSUMPTION - <a href="https://www.woah.org/fileadmin/Home/eng/Health\_standards/aahc/2010/chapitre\_welfare\_stunning\_killing.pdf">https://www.woah.org/fileadmin/Home/eng/Health\_standards/aahc/2010/chapitre\_welfare\_stunning\_killing.pdf</a>

6. The welfare of fish at slaughter should be monitored by signs of unconsciousness and indicators of stress.

## Specific recommendations per species

#### For Atlantic salmon:

- The use of a single method (i.e. percussive blow or electrocution) that both stuns (instantly) and kills is recommended above other methods where possible.
- Percussive or electrical stunning followed by a separate kill method (see below) is also acceptable, providing fish do not regain consciousness after stunning.
- Acceptable post-stun kill methods: are effectively performed percussion, decapitation, spiking/coring or a gill cut (following an effective percussive stun only).
- The use of carbon dioxide systems for Atlantic salmon is unacceptable and must be phased out.

For further information see Compassion's information sheet on the humane slaughter of Atlantic salmon: <a href="https://www.compassioninfoodbusiness.com/media/7434842/humane-slaughter-atlantic-salmon.pdf">https://www.compassioninfoodbusiness.com/media/7434842/humane-slaughter-atlantic-salmon.pdf</a>

### For Rainbow trout:

- The use of a single method (i.e. percussive blow or electrocution) that both stuns (instantly) and kills is recommended above other methods where possible.
- Percussive or electrical stunning followed by a separate kill method (see below) is also acceptable, providing fish do not regain consciousness after stunning.
- Acceptable post-stun kill methods: are effectively performed percussion, decapitation, spiking/coring or a gill cut (following an effective percussive stun and for large trout only).
- The use of carbon dioxide systems, live chilling in ice slurry, and leaving trout to asphyxiate in air, are unacceptable killing methods and must be phased out.

For further information see Compassion's information sheet on the humane slaughter of Rainbow trout: https://www.compassioninfoodbusiness.com/media/7434844/humane-slaughter-rainbow-trout.pdf

#### For Gilthead sea bream and European sea bass:

- The use of a single method (i.e. electrocution) that both stuns (instantly) and kills is recommended above other methods where possible.
- Electrical stunning followed by chilling in ice slurry to kill is acceptable provided that fish do not regain consciousness.
- Live chilling in ice slurry, and leaving sea bass and bream to asphyxiate in air, are unacceptable killing methods and must be phased out.

For further information see Compassion's information sheet on the humane slaughter of sea bass and sea bream: <a href="https://www.compassioninfoodbusiness.com/media/7434843/humane-slaughter-european-sea-bass-and-gilthead-sea-bream.pdf">https://www.compassioninfoodbusiness.com/media/7434843/humane-slaughter-european-sea-bass-and-gilthead-sea-bream.pdf</a>

# For Pangasius:

- The use of a single method (i.e. electrocution) that both stuns (instantly) and kills is recommended above other methods where possible, however, given the species' capacity to withstand long periods of hypoxia an electrical stun followed by decapitation, spiking/coring or gill cut is currently the most humane method for pangasius.
- Percussive stunning followed by decapitation or gill cutting is acceptable<sup>1</sup> provided that the stun is effective and lasts until death supervenes (i.e. the fish do not regain consciousness).
- Repeated ineffective percussive stunning and leaving pangasius to asphyxiate in air are unacceptable killing methods and must be phased out.

For further information see Compassion's information sheet on the humane slaughter of sea bass and sea bream: <a href="https://www.compassioninfoodbusiness.com/media/7440109/improving-welfare-of-pangasius-at-slaughter.pdf">https://www.compassioninfoodbusiness.com/media/7440109/improving-welfare-of-pangasius-at-slaughter.pdf</a>

<sup>&</sup>lt;sup>1</sup> There is currently urgent need for research in this area to ensure that the percussive stun lasts longer than bleed out time