

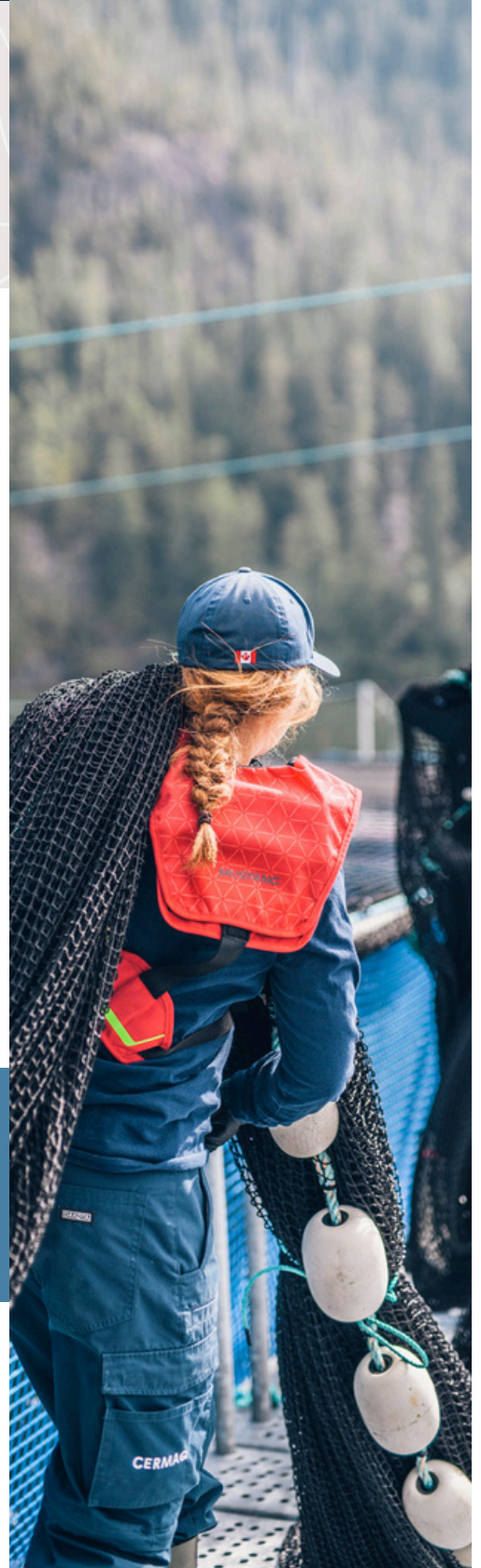
PROTECTING WILD SPECIES & MANAGING FISH ESCAPES

Canadian salmon farmers are committed to preventing their salmon from escaping containment.

PREVENTING SALMON ESCAPES

- Salmon farmers in Canada **closely monitor marine cages** for any potential breach of containment, included human error during sampling and harvesting, which could result in accidental salmon escapes. They are required to notify relevant authorities in the rare event of a confirmed or suspected escape event.
- Salmon farms are **constructed to minimize the risk of any breach of containment** and follow rigorous standards and guidelines led by provincial and federal governments. Safeguards include the use of synthetic polymer netting that is resistant to long-term degradation, and mooring systems that are designed to hold the farm properly in the harshest weather¹.
- **Escapes have been reduced significantly** thanks to highly skilled farmers and containment technologies that meet high government and third-party standards.

Minimizing the interactions that farm-raised salmon have with the surrounding environment is one of the ways to avoid potential interactions with wild salmon and the ecosystem.



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DISEASE FREE FISH

- Farmers vaccinate farm-raised salmon against several diseases that commonly affect both farmed and wild salmon.
- A 2008 analysis found that escaped salmon had **not introduced new diseases or other pathogens** to wild fish species, concluding that diseases found in farm-raised salmon were already ubiquitous in wild populations³.



Atlantic salmon are not adept at surviving in the wild outside their historic range and are unlikely to prey on Pacific salmon or colonize their habitats

UNLIKELY TO COMPETE WITH WILD SPECIES

- Farm-raised salmon are **domestic animals**, poorly suited to a wild environment. They show poor survival due to starvation and inability to evade predators.
- Research is modeling the dispersal of escaped salmon and genetic interactions between wild and farm-raised salmon to better inform management decisions and wild salmon conservation⁴.
- Atlantic salmon are bred to reach harvest weight before reaching sexual maturity. They are **genetically distinct** from wild salmon like Pacific salmon and are **extremely unlikely to interbreed** with them even if sexually mature.

MINIMAL RISK

British Columbia's salmon farms **pose "minimal" risk of spreading viruses and bacteria** to wild salmon, according to a risk assessment (2017-2020) by Canada's Department of Fisheries and Oceans⁵.

- This includes minimal risk from naturally occurring viruses like Infectious Hematopoietic Necrosis and Piscine Orthoreovirus, and bacteria such as *Aeromonas salmonicida* and *Piscirickettsia salmonis*.

1. https://bcsalmonfarmers.ca/wp-content/uploads/2019/12/BCSFA_Tech_Document_web.pdf

2. <https://afspubs.onlinelibrary.wiley.com/doi/full/10.1080/03632415.2014.966818> and <https://open.canada.ca/data/en/dataset/691dd994-4911-433d-b3b6-00349ba9f24e>

3. <https://www.tandfonline.com/doi/full/10.1080/23308249.2021.1980767>

4. https://www.researchgate.net/publication/337761759_Model-based_evaluation_of_the_genetic_impacts_of_farm-escaped_Atlantic_salmon_on_wild_populations

5. <https://www.dfo-mpo.gc.ca/cohen/iles-discovery-islands-eng.html>