

## Escaped farmed salmon impacts

Farmed salmon typically show lower genetic variability than wild salmon. This means that, when captive salmon escape and breed with wild salmon, the gene pool is changed and diluted, potentially compromising the genetic integrity of the wild salmon population and its genetic adaptation to localised habitats. The impact of farmed fish will depend upon a number of factors, including genetic origin, rearing conditions, the condition of the wild population, and the number, timing, magnitude and frequency of escapes.

In the ten years to 2013 over 2 million farmed fish, overwhelmingly of Norwegian origin, were reported as escaped from Scottish salmon farms. It is generally accepted that many (usually small) escapes go unreported.

A study by Scotland's Fisheries Trusts, funded by the Scottish Government, looked for Norwegian genes in wild salmonid populations in the "aquaculture zone" of the west coast of Scotland. Across all sites, 369 out of 1472 (25.1%) individuals were identified as hybrids; this is significantly higher than that seen for the east coast "wild" baseline, where there is no marine aquaculture. The data – which was reviewed by Marine Scotland Science, the Scottish Government's fisheries scientists – showed that over one quarter of west coast wild salmon are in fact Norwegian hybrids. (*See RAFTS (2013) Report on Genetic Tool Development for Distinguishing Farmed vs. Wild Fish in Scotland, February 2013*)

We have highlighted concerns regarding introgression in the Langavat SAC (the Grimersta system in west Lewis) in the May 2016 complaint to the European Commission.

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