Closed containment best for wild, farmed salmon

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I would like to respond to the May 19 opinion piece "Salmon farming facts" by Pamela Parker, executive director of the Atlantic Canada Fish Farmers Association.

Ms. Parker's statement that "For every kilogram of feed a farmed salmon eats, it gains almost a kilogram of weight" is misleading. While caged salmon may convert the feed at nearly a 1:1 ratio, that feed is "dry" pellets, not whole wet fish. It takes more than a kilogram of whole wet fish to make a kilogram of dry food pellets.

Ms. Parker also stated, "Wild salmon runs are not affected by the location of a salmon farm." The report by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) noted that "growth of the Canadian aquaculture industry has coincided with severe decline in wild populations in the nearby rivers in the Bay of Fundy."

COSEWIC also found that "In North America, farm-origin salmon have been reported in 87 per cent of the rivers investigated within 300 kilometres of aquaculture sites." Salmon farming, which began in the late 1970s in the Bay of Fundy, was identified as a key threat to the Bay's wild Atlantic salmon populations that are now designated as endangered, having plummetted from 40,000 a year in the 1980s to fewer than 200 in 2011.

The Magaguadavic River, which is in the centre of New Brunswick's aquaculture industry, is the North American index river for monitoring impacts of farmed salmon on wild Atlantic salmon. Farmed escapees entering the river have outnumbered annual wild Atlantic returns in all but two of the last 20 years. In the 1980s, the annual run averaged 800 wild salmon. By 1992, the run was reduced to 293 and by 2010, despite an active restoration program, to 12. Recent research by Bourret, O'Reilly, Carr, Berg and Bernatches found that interbreeding between wild and farmed salmon has weakened the gene pool of the Magaguadavic River wild population, reducing its ability to survive in the wild.

In 2008, Dalhousie University researchers Jennifer Ford and Ransom Myers confirmed that, globally, there is a much steeper decline in numbers of wild salmon living in rivers adjacent to the salmon farming industry, for some populations by as much as 50 per cent.

The Atlantic Salmon Federation and other non-governmental organizations have repeatedly asked both the government and the aquaculture industry for copies of their science, supposedly showing that open-net pen aquaculture poses no risks to wild salmon stocks and the environment. So far, we have seen nothing. If the industry has science to back up its claims, now would be a good time to produce it.

ASF has partnered with The Conservation Fund Freshwater Institute of West Virginia on growing out Atlantic salmon in land-based, closed-containment, freshwater facilities with near 100 per cent water recirculation and waste containment and without disease or parasites. Taste testers indicate that the product is superior. We would be more than happy to work with the aquaculture industry on transitioning to closed containment. More information on the project can be found at <u>www.asf.ca</u>.

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