

# Incidence of farmed Atlantic salmon in the sea fishery along the North-Norwegian coast

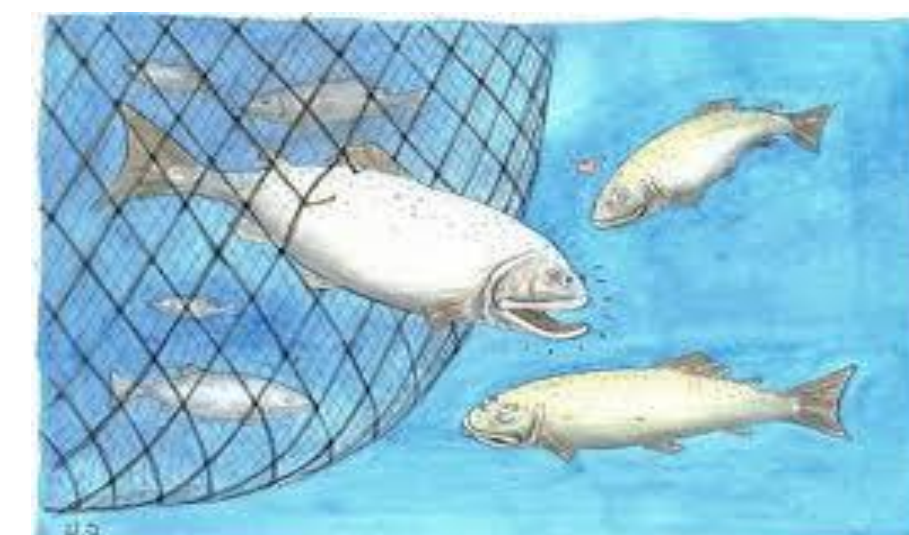


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## Aim

To quantify the incidence and marine distribution of farmed salmon along the North-Norwegian coast, based on catches from the salmon sea fishery



## Background and methods

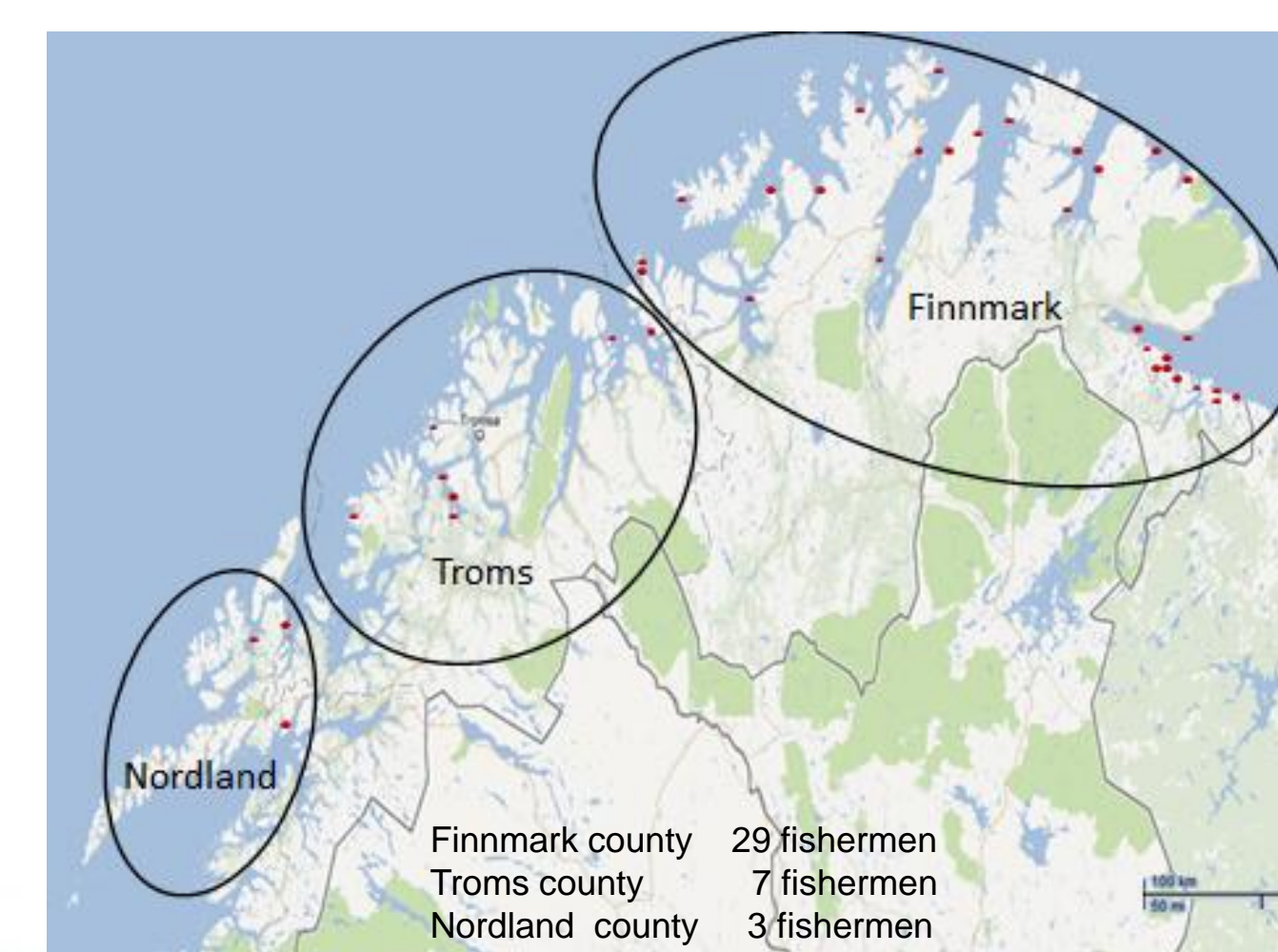
A multistock Atlantic salmon (*Salmo salar*) sea-fishery operates along the coast of North-Norway, where the average annual landings the last decades have been ca 250 tonnes, constituting more than 50 % of the total coastal landings of salmon in Norway. During the same period the farming of Atlantic salmon in Norway has increased to nearly one million tonnes. Over the last five years an average of more than 500 000 farmed salmon have been reported to escape, with potential for negative genetic impact, diseases and parasite transfer, particularly sea lice infestation. During the Kolarctic salmon project, 39 local fishermen caught 8 304 salmon along the North-Norwegian coast in 2011 (May-September). Basic biological data were recorded from all fish, the numbers of adult sea lice were counted, and scales were collected for age determination and verification of the origin of the fish.



The 39 fishermen participating in the project, caught 8 304 Atlantic salmon along the North-Norwegian coast in summer (May-September) 2011.

## Results

- Of the 8 304 salmon caught from May to September 2011, most fish were caught in July (47 %)
- A total of 1 026 farmed salmon (12.4 %) were caught, their proportion increasing from 8.8 % in May to 52.6 % in September
- The incidence of farmed fish were lowest in Finnmark (10.4 %) and highest in Nordland (27.2 %)
- The fishermen identified ca 50 % of the farmed fish (verified through scale analysis)
- The prevalence and intensity of adult sea lice were respectively 8.2 % and 86.8 % in wild salmon and 11.1 % and 87.8 % in farmed fish. The highest numbers of adult sea lice found per fish was 76 and 99 in wild and farmed fish, respectively



Number of salmon captured in 2011 (May-September), farmed fish included						
	May	June	July	August	September	Total
Nordland	4	107	133	30	2	276 (3 %)
Troms	137	834	1 171	256	13	2 411 (29 %)
Finnmark	718	1 813	2 621	461	4	5 617 (68 %)
<b>Total</b>	<b>859</b>	<b>2 754</b>	<b>3 926</b>	<b>747</b>	<b>19</b>	<b>8 304</b>

Incidence of farmed salmon (%)		
	Wild salmon	Farmed salmon
May	91.2	8.8
June	92.2	7.8
July	87.5	12.5
August	68.5	31.5
September	47.4	52.6
<b>In total</b>	<b>87.6</b>	<b>12.4</b>

## Conclusion

The incidence of farmed fish in the sea fishery was significantly higher in Nordland compared to Troms and Finnmark, and increased strongly during the season (May-September). The fishermen, although being well experienced, detected only ca 50 % of the farmed fish in their catches.