Sea lice monitoring report for Torridon river estuary, 31 July 2025

Peter Cunningham (WRFT Biologist) info@wrft.org.uk

Sea trout data

Location:	**Torridon river estuary**							
Date:	31-Jul-25	**Time:**	13:30	High tide				
***Counts:**	Peter Cunningham							
Team:	8 assistants							
Weather:	light west wind, overcast, cool							
River	low, had been high week before							
Other notes:	4 sweeps of channel after high neap tide, from 11:30; had break before last two sweeps							
	trout caught on sweep 1 and sweep 3							

									Caligus	***Lepeophtheirus salmonis***									
No.	**Location**	**Date**	**Method**	**Riv/Est/Beach**	**Fish**	**length (mm)**	**weight (g)**	**condition factor**	**total**	**Copepodid & Chalimus (estimate)**	**Pre-adult & adult**	**Ov. female**	**Total L. salmonis sea lice**	***estimated lice/g fish weight**	**Dorsal fin damage**	***Cryptocotyle ligua spots per cm2 of caudal fin***	**Predator damage**	**Photo**	**scale sample?**	**Comments**
1	Torridon	31-Jul-25	Sweep Net	est	ST	340	360	0.92	0	0	0	0	**0**	0.000	0.5	0	N	Y	Y	1st sweep
2	Torridon	31-Jul-25	Sweep Net	est	ST	145	23	0.75	0	0	0	0	**0**	0.000	0	0	N	Y	Y	3rd sweep
					Averages	**242.50**	**191.50**	**0.84**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.25**	**0.00**				

total lice	0
number of fish	2
number infested	0
prevalence	0%
total lice	0
abundance	0.00
intensity	#DIV/0!
fish with >0.3 lice / g	0
fish with >0.3 lice / g	0%

No.	**Location**	**Date**	**Method**	**Riv/Est/Beach**	**Fish**	**length (mm)**	**weight (g)**
3	Torridon	31-Jul-25	Sweep Net	est	3-sp stbk	75	

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Summary of sea lice infestation scores

Mortality / early returned estimates for sea trout in sample based on method from Taranger et al 2015, Risk assessment for the environmental impact of Norwegian salmon farming (PDF) Risk assessment of the environmental impact of Norwegian Atlantic salmon farming (researchgate.net)

No.	≥13 lice/fish?	Lice/g fish weight	Range	Mortality category	Number of fish in category	Total number of fish in sample	% of sample in category	projected mortality for category %	projected mortality of fish in sample %
1	No	0.000	>0.3	100%	0	2	0.00	0.00	
2	No	0.000	0.2-0.3	50%	0		0.00	0.00	
			0.1-0.2	20%	0		0.00	0.00	
			<0.1	0%	2		100.00	0.00	**0.00**

Notes:

based on the assumption that small salmonid post-smolts (<150g body weight) will suffer 100% lice-related marine mortality, or return prematurely to freshwater for sea trout in the wild if the are infected with >0.3 lice per g of fish weight.
Furthermore, the lice related marine mortality is estmated to 50%, if the infection is between 0.2 and 0.3 lice per g fish weight, 20% if the infection rate is between 0.1 and 0.2 lice per g fish weight, and finally 0% if the salmon lice infection is <0.1 g fish weight.

0.05 and 0.1 lice per g fish weight, 20% for lice infections between 0.05 and 0.01 lice per g fish weight, and finally 0% if the salmon lice infection is <0.01 lice g fish weight.

colour code

Taranger, G. L., Karlsen, Ø., Bannister, R. J., Glover, K. A., Husa,V., Karlsbakk, E., Kvamme, B. O., Boxaspen, K. K., Bjørn, P. A., Finstad, B., Madhun, A. S., Morton, H. C., and Sva˚sand, T. (2014) Risk assessment of the environmental impact of Norwegian Atlantic salmon farming. – ICES Journal of Marine Science, doi: 10.1093/icesjms/fsu132.

100% sea lice related mortality or early return to freshwater
>50% to 99% sea lice related mortality or early return to freshwater
>20% to 50% sea lice related mortality or early return to freshwater
<20% sea lice related mortality or early return to freshwater

https://www.researchgate.net/publication/266672998_Risk_assessment_of_the_environmental_impact_of_Norwegian_Atlantic_salmon_farming

Acknowledgements

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Photos: all ©WRFT unless otherwise indicated. All fish in photos were lightly sedated for inspection.

Sea trout 340mm Torridon river estuary 31st July 2025