Sea lice monitoring report for Torridon river estuary, 17th June 2025

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

Sea trout data (see page 3 for other fish)

Location:		**Torridon river estuary**																	
Date:		17-Jun-25		**Time:**	14:00		High tide	12:30											
***Counts:**		Peter Cunningham																	
Team:		11 assistants including NS volunteers																	
Weather:		overcast, breezy, warm																	
River		medium - after heavy overnight rain																	
Other notes:		4 sweeps of channel after high tide																	
		1 fish caught on each sweep; all processed together																	

									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	17-Jun-25	Sweep Net	est	ST	380	525	0.96	0	10	0	0	**10**	0.019	2	0	N	Y	Y	male. Has had lot of lice recently
2	Torridon	17-Jun-25	Sweep Net	est	ST	272	218	1.08	0	0	0	0	**0**	0.000	0	0	N	Y	Y	Estuarine. Has had lice. Acanthoc.
3	Torridon	17-Jun-25	Sweep Net	est	T	135	23	0.93	0	0	0	0	**0**	0.000	0	0	N	Y	Y	brown trout parr
4	Torridon	17-Jun-25	Sweep Net	est	T	105	NR	#VALUE!	0	0	0	0	**0**	#VALUE!	0	0	N	Y	Y	
					Averag	**223.00**	**255.33**	**#VALUE!**	**0.00**	**2.50**	**0.00**	**0.00**	**2.50**	**#VALUE!**	**0.50**	**0.00**				

total lice	10
number of fish	4
number infested	1
prevalence	25%
total lice	10
abundance	2.50
intensity	10.00
fish with >0.3 lice / g	1
fish with >0.3 lice / g	25%

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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	0.019	>0.3	100%	0	3	0.00	0.00	
2	No	0.000	0.2-0.3	50%	0		0.00	0.00	
3	No	0.000	0.1-0.2	20%	0		0.00	0.00	
4	No	#VALUE!	<0.1	0%	3		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.

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

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

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Other fish in sample

No.	Location	Date	Method	Riv/Est/Beach	Fish	length (mm)	weight (g)
5	Torridon	17-Jun-25	Sweep Net	est	Flounde	235	
6	Torridon	17-Jun-25	Sweep Net	est	Flounde	115	
7	Torridon	17-Jun-25	Sweep Net	est	3 sp stb	74	

Team photo

Acknowledgements

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Thank you and NTS Torridon estate, Ben Damph estate, Marine Directorate, Nature Scot Beinn Eighe NNR for permissions and support and to all the helpers

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

Sea trout 380mm, Torridon river estuary, 17th June 2025. Note dorsal fin damage.

Sea trout 272mm, Torridon river estuary, 17th June 2025. Note estuarine colouration.