

Sea lice monitoring report for Applecross 13 August 2025

Peter Cunningham (WRFT Biologist) 18 Aug 2025

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Fish data

Location:	Applecross River estuary																				
Date:	13-Aug-25	Time:	07:12																		
*Counts:	Peter Cunningham																				
Team:	7 helpers																				
Weather:	overcast, still, dry. Cool (~10C)																				
River	medium low flow																				
Other notes:	1 sweep of top of sea pool just after high tide																				
	2 snorkellers to move net over stones on river bed of pool																				
	tide full in at first - about 30cm above river level; halocline																				
	released about 10 small brown trout without measuring																				

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Summary

total lice	262
number of sea trout	24
number infested	11
prevalence	46%
total lice	262
abundance	10.92
intensity	23.82
fish with >0.3 lice / g	4
fish with >0.3 lice / g	17%

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 \(researchgate.net\)](#)

	≥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	Yes	0.480	>0.3	100%	4	24	16.67	16.67	
2	No	0.032	0.2-0.3	50%	1		4.17	2.08	
3	No	0.006	0.1-0.2	20%	0		0.00	0.00	
4	No	0.000	<0.1	0%	19		79.17	0.00	18.75
5	No	0.000							
6	No	0.000							
7	No	0.000							
8	No	0.048							
9	No	0.000							
10	Yes	0.357							
11	No	0.052							
12	No	0.000							
13	No	0.000							
14	No	0.000							
15	No	0.000							
16	No	0.000							
17	Yes	0.219							
18	No	0.000							
19	Yes	0.875							
20	No	0.034							
21	Yes	0.945							
22	No	0.023							
23	No	0.000							
24	No	0.000							

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 estimated 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

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Notes:

Many of the smaller sea trout had slightly pinkish dorsal fins suggesting earlier infestation by small attached lice and subsequent loss of lice in freshwater

Thank you to Applecross Trust for permission and support. Sampling session carried out to inform Caol Mor (East of Skye) farm EMP funded by MOWI.

Photos: all ©WRFT unless otherwise indicated.

Team photo



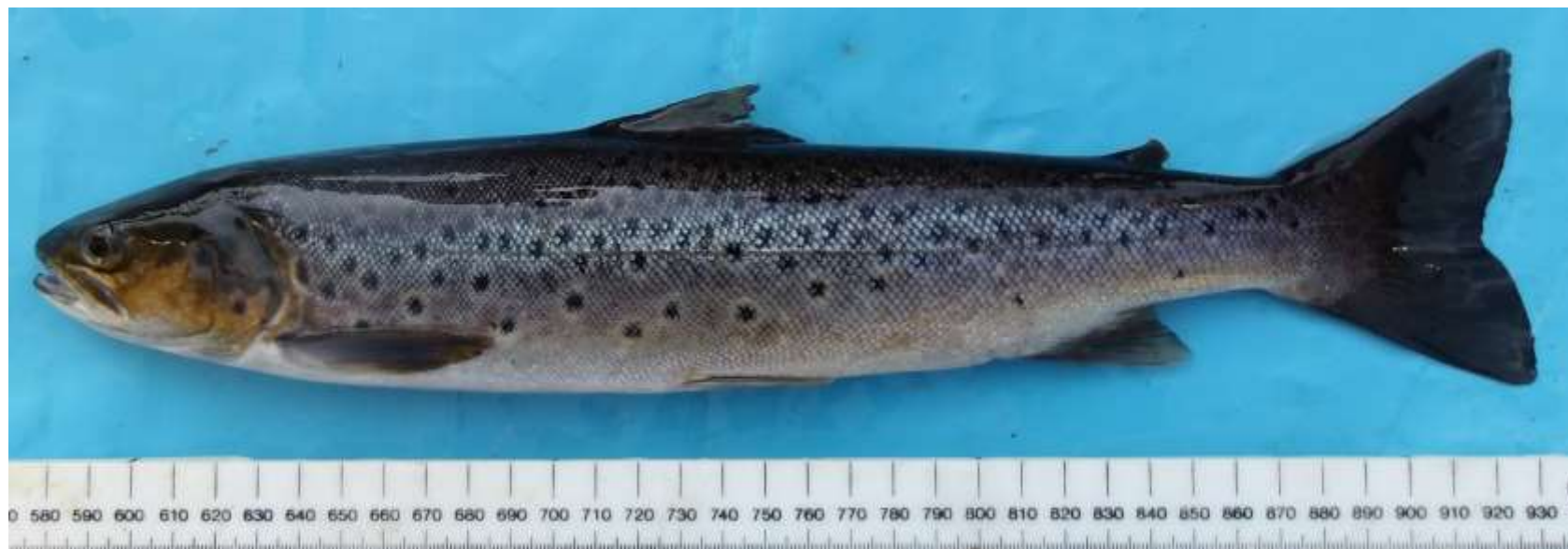
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Fish photos:

Sea trout 355mm Applecross 13 Aug 2025

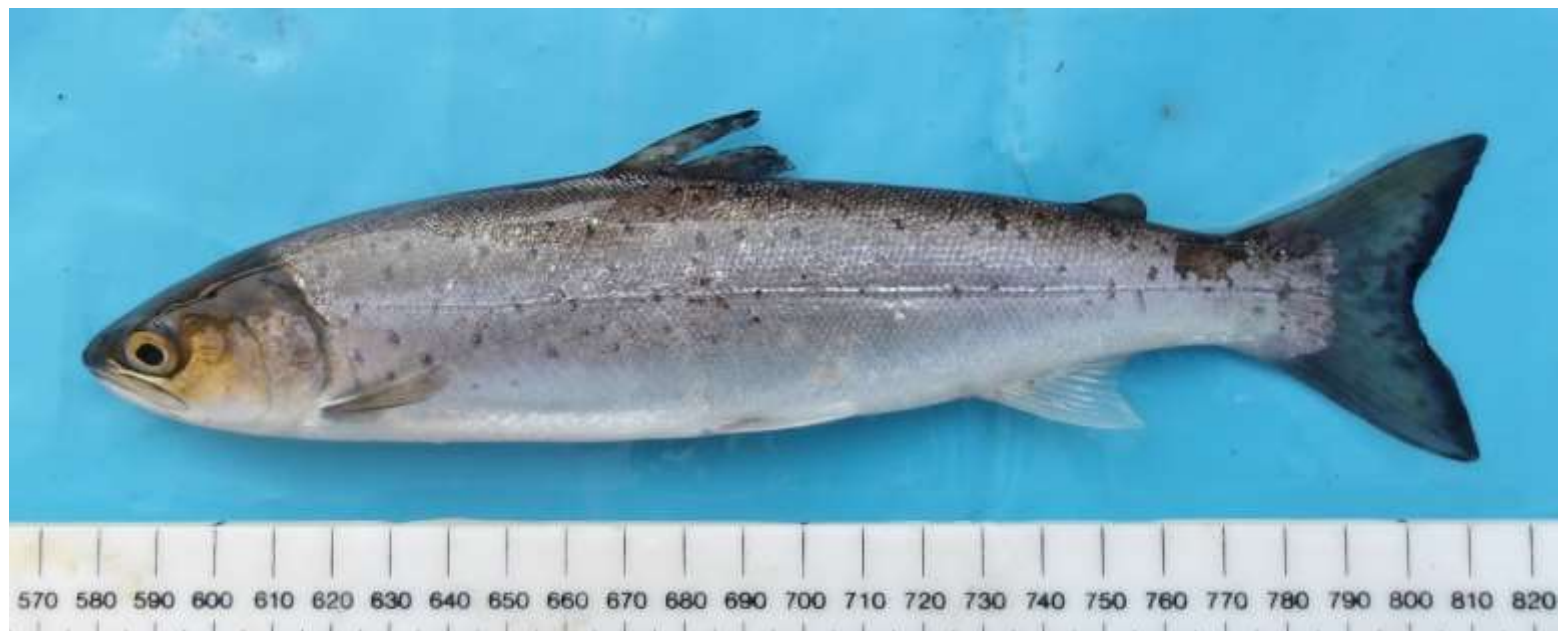


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Sea trout 242 mm Applecross, 13 Aug 2025



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Sea trout 180mm Applecross, 13 Aug 2025

