Peter Cunningham (WRFT Biologist) 15 July 2025 <u>info@wrft.org.uk</u>

## Sea trout data

Location:		Boor Bay																		
Date:		24-Jun-25		Time:	6pm															
*Counts:		Peter Cuni	ningham																	
Team:		6 helpers																		
Weather	:	overcast, I	ight variabl	e breeze -	on shore															
		freshwate	r in bay afte	er much rai	n in previo	us two day	/S													
Other no	tes:	5 sweeps ι	up onto bea	ch to high	tide at abo	ut 7.30pm														
		one sea tro	out caught o	on fifth sw	еер															
		photos on	Chloe's can	nera																
									Caligus	L	epeophthe	irus salmon	is							
No.	Location	Date	Method	Riv/Est/B each	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	Boor	24-Jun-25	Sweep Net	est	Sea trout	185	60	0.95	0	3	3	0	6	0.100	0	1	N	Y	У	thin
					Averages	185.00	60.00	0.95	0.00	3.00	3.00	0.00	6.00	0.10	0.00	1.00				
											total lice		6							
											number of fish		1							
											number ir		1							
											prevalence		100%							
											total lice		6							
											abundanc	e	6.00							
											intensity		6.00							
												0.3 lice / g	0							
												>0.3 lice / g	0%							

Peter Cunningham (WRFT Biologist) 15 July 2025 <a href="mailto:info@wrft.org.uk">info@wrft.org.uk</a>

Summary

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)

Sea trout 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	0.100	>0.3	100%	0	1	0.00	0.00	
			0.2-0.3	50%	0		0.00	0.00	
			0.1-0.2	20%	1		100.00	20.00	
			<0.1	0%	0		0.00	0.00	20.00

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	pergi	ish weigh	t, 20% for	lice infection	ns betwee	n 0.05 and	0.01 lice p	er g fish we	eight, and	finally 0%	if the salm	on lice infe	tion is <0.0	01 lice g fish	weight.							
														colour coc	le								
Taranger,	G. L.,	Karlser	, Ø., Banı	ister, R. J.	, Glover, K.	A., Husa,V.	, Karlsbakk	, E., Kvam	me, B. O., E	Boxaspen,	K. K., Bjørr	n, P. A., Fin	stad, B.,		100% sea lic	e related r	nortality or	early retur	n to fresh	water			
Madhun,	A. S., I	Mortor	, H. C., an	d Sva°sano	d, T. (2014) i	Risk assessr	nent of the	environn	nental impa	act of Norv	wegian Atl	antic salmo	n farming.		>50% to 99%	sea lice r	elated mort	ality or ear	ly return t	o freshwat	er		
- ICES Journal of Marine Science, doi: 10.1093/icesjms/fsu132.																							
<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																							

Peter Cunningham (WRFT Biologist) 15 July 2025 <a href="mailto:info@wrft.org.uk">info@wrft.org.uk</a>

Photos: all ©WRFT unless otherwise indicated. All fish in photos were lightly sedated for inspection then returned to the sea after recovery.

other fish							
No.	Location	Date	Method	Riv/Est/B each	Fish	length (mm)	
3	Boor	24-Jun-25	Sweep Net	est	Pollack	185	Black spot score 4
4	Boor	24-Jun-25	Sweep Net	est	Pollack	190	
5	Boor	24-Jun-25	Sweep Net	est	Pollack	185	
6	Boor	24-Jun-25	Sweep Net	est	Ckwg Wr	120	
7	Boor	24-Jun-25	Sweep Net	est	Ckwg Wr	110	
8	Boor	24-Jun-25	Sweep Net	est	Ckwg Wr	110	
9	Boor	24-Jun-25	Sweep Net	est	Ckwg Wr	130	
10	Boor	24-Jun-25	Sweep Net	est	Ckwg Wr	120	
11	Boor	24-Jun-25	Sweep Net	est	Ckwg Wr	118	
12	Boor	24-Jun-25	Sweep Net	est	Ckwg Wr	120	
13	Boor	24-Jun-25	Sweep Net	est	Gldsi Wr	120	
14	Boor	24-Jun-25	Sweep Net	est	Seascorp	133	no barbel
15	Boor	24-Jun-25	Sweep Net	est	Seascorp	108	with barbel

## Acknowledgements

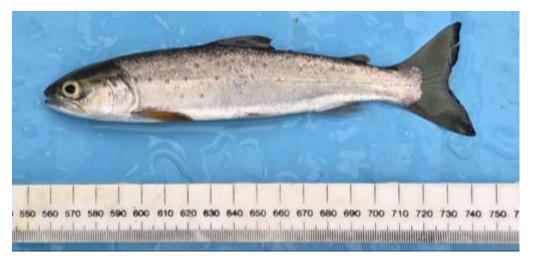
Monitoring to inform SEPA Sea Lice Regulation Framework

Thank you to Fisheries Management Scotland for helping with the tender for this contract, and to Inveran and Inverasdale estate for support

Peter Cunningham (WRFT Biologist) 15 July 2025 <a href="mailto:info@wrft.org.uk">info@wrft.org.uk</a>

Photos: all ©WRFT unless otherwise indicated. All fish in photos were lightly sedated for inspection then returned to the sea after recovery.

ST185mm Boor Bay 24<sup>th</sup> June 2025. 3 chalimus and copepod lice; 3 preadult and adult lice.



Corkwing wrasse and goldsinny wrasse

