

Roaringwater Bay

Southwest Mussel Larvae sampling

15th September 2025

Week 37 (8/09/2025 to 14/09/2025)

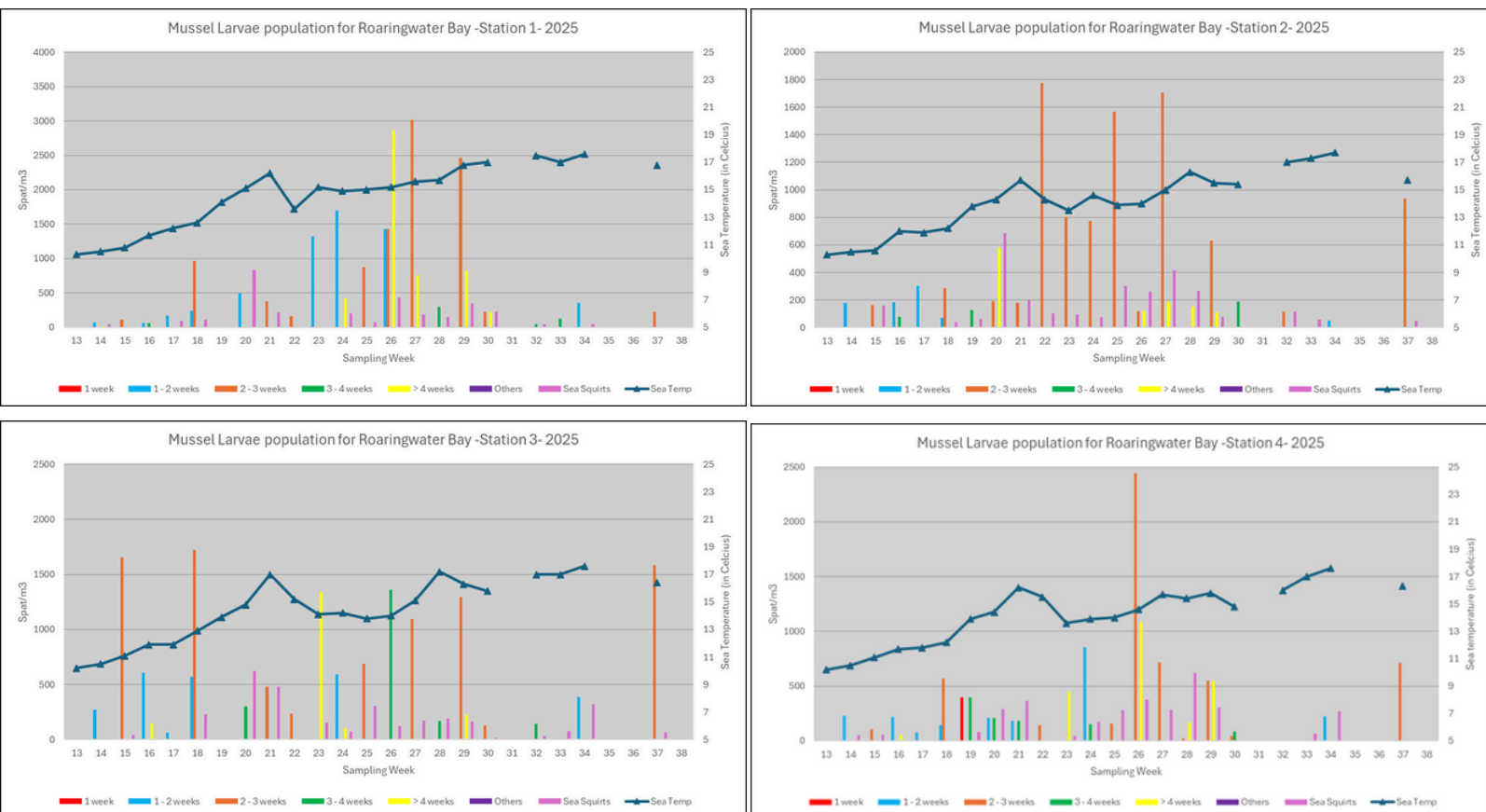


Condition Index (CI) for Roaringwater Bay

There was no condition index sample collected in the past three weeks due to adverse weather conditions. The Aquatroll deployed in the bay indicate that the sea temperature is dropping slowly (Sea temperatures recorded for Week 37: max:16.7°C, min:14.7°C).

Larvae population evolution in Roaringwater Bay (4 stations)

For each sample, mussel larvae are classed by age: 1 week old, 1 to 2 weeks old, 2 to 3 weeks old, 3 to 4 weeks old, over 4 weeks old and others (younger or older).



Commentary

Due to adverse weather conditions, no samples could be collected on Week 35 and 36.

The overall larvae population in Roaringwater Bay significantly increased on Week 37: up to 2749 spat/m³ (total across the 4 stations). Stations 2 and 3 presented the highest concentration of larvae, followed by Station 4. A smaller quantity was observed at Station 1. The larvae observed in all the samples were between 2 to 4 weeks old, which could suggest some potential settlement in the coming 2 weeks.

Sea temperature is decreasing significantly again across the 4 stations (from Week 34).

- Station 1: -0.8°C at 16.8°C
- Station 2: -2°C at 15.7°C
- Station 3: -1.2°C at 16.4°C
- Station 4: -1.3°C at 16.3°C



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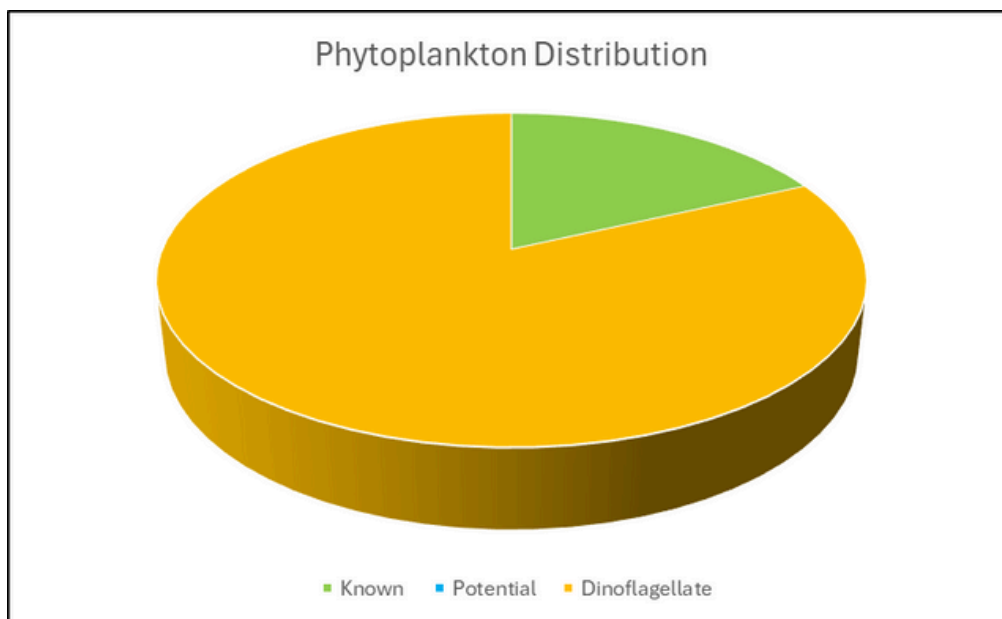


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Further observations from analysis:

- Station 1: No sea squirts were found in the sample. The sample presented very low levels of copepods. The phytoplankton biomass was low with low dominance of Rhizosolenia and Chaetoceros sp.
- Station 2: The concentration sea squirt in the sample was 48 ind./m³. The sample presented low concentrations of copepods, tubeworms, starfish and a second species bivalve. The phytoplankton biomass in the sample was moderate and dominated by Thalassiosira, Chaetoceros and Rhizosolenia.
- Station 3: The concentration sea squirt in the sample was 70 ind./m³. The phytoplankton biomass in the sample was moderate and dominated by Rhizosolenia and Chaetoceros sp. mix.
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- Station 4: No sea squirts were found in the sample. The sample presented low levels of copepods and a second bivalve species. The phytoplankton biomass in the sample was moderate and dominated by Coscinodiscus, Rhizosolenia and Chaetoceros sp. mix.

The phytoplankton sample presented a moderate concentration of 8,640 cells /litre dominated by dinoflagellate (82%) and some known food species (18%)



Summary Tables

Condition Index for the last 5 weeks

SAMPLING WEEK	CONDITION INDEX %	WATER TEMPERATURE (°C)	CI VARIATION	SEA TEMPERATURE VARIATION
WEEK 33	41.1	17	+1	+0.1
WEEK 34	36.3	17.6	-4.8	+0.6
WEEK 35				
WEEK 36				
WEEK 37				

Larvae population distribution for the 4 sampling Stations:

Week 35	Spat/m3	Larvae Stage	Sea Temperature	Sea Squirts/m3
Roaringwater Bay 1	226	2 to 4 weeks	16.8	0
Roaringwater Bay 2	938	2 to 4 weeks	15.7	48
Roaringwater Bay 3	1585	2 to 4 weeks	16.4	70
Roaringwater Bay 4	711	2 to 4 weeks	16.3	0

