

Roaringwater Bay

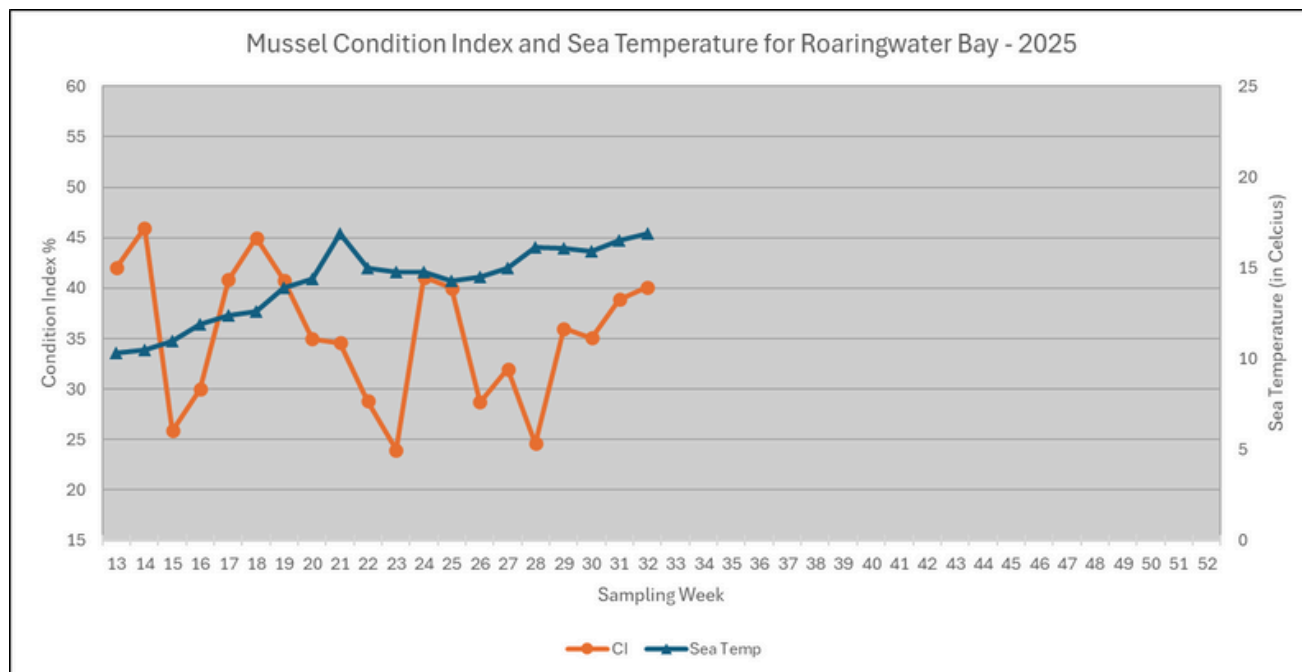
Southwest Mussel Larvae sampling

11th August 2025

Week 32 (04/08/2025 to 10/08/2025)



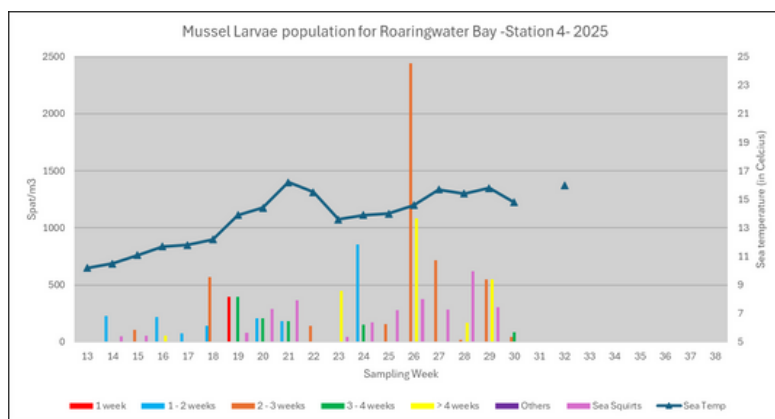
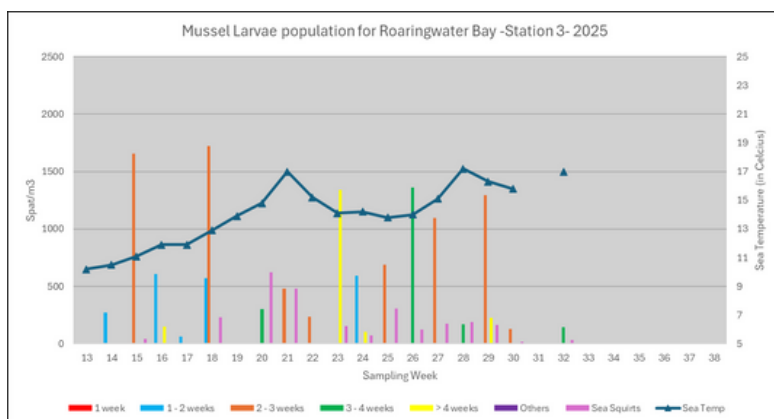
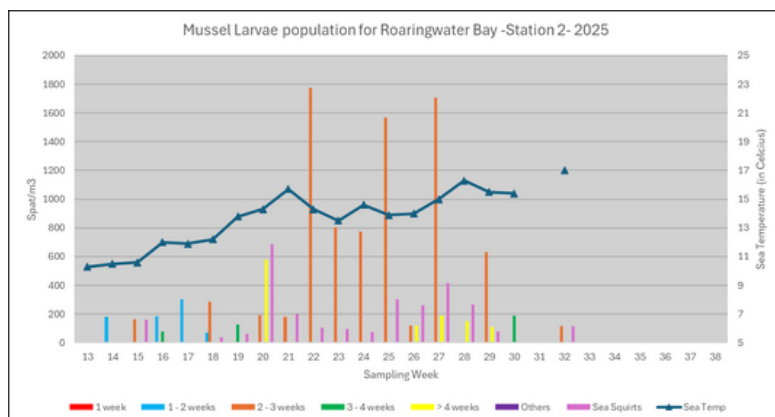
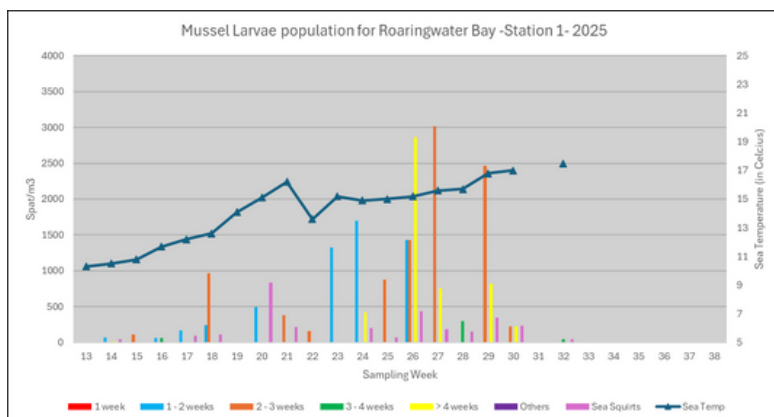
Condition Index (CI) for Roaringwater Bay



The Condition Index in Roaringwater increased on Week 32 (up by 1.2% to 40.1%), while the sea temperature increased slightly to 16.9°C (+0.4°C from the previous week). The Aquatroll deployed in the bay recorded sea temperature varying between 16.7 and 18°C during the sampling period.

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

The samples from Week 31 were not processed due to postage delays (no bulletin was produced).

The overall larvae population in Roaringwater Bay significantly decrease further on Week 32: down to 306 spat/m³ (total across the 4 stations). Station 1 presented low levels of larvae. Stations 2 and 3 had moderate to low concentrations and no larvae was found for Station 4. The larvae observed in the samples were all between 2 to 5 weeks old (2 to 4 and 3 to 5 weeks old).

Sea temperature is increasing significantly again across the 4 stations.

- Station 1: +0.5°C at 17.5°C
- Station 2: +1.6°C at 17°C
- Station 3: +1.2°C at 17°C
- Station 4: +1.2°C at 16°C



Further observations from analysis:

- Station 1: The concentration of sea squirt in the sample was low at 48 ind./m³. The sample presented low levels of copepods. The phytoplankton biomass in the sample was low with Coscinodiscus, Noctiluca and Dinophysis being dominant.
- Station 2: The concentration of sea squirt in the sample was 113 ind./m³. The levels of copepods were low in the sample. The phytoplankton biomass was moderate with Coscinodiscus, Ceratium, Noctiluca and Dinophysis being dominant.
- Station 3: The level of sea squirt in the sample was low at 32 ind./m³. Again, the copepods were low while the phytoplankton biomass was also low with Coscinodiscus, Ceratium, Noctiluca and Dinophysis moderately dominant.
- Station 4: There were no sea squirts in the sample. Copepods, tubeworm and starfish concentration were low. The phytoplankton biomass was low with Ceratium mixed sp. Coscinodiscus sp., Noctiluca and Akishiwo sanguinea (in low levels).



Summary Tables

Condition Index for the last 5 weeks

SAMPLING WEEK	CONDITION INDEX %	WATER TEMPERATURE (°C)	CI VARIATION	SEA TEMPERATURE VARIATION
WEEK 28	24.6	16.2	-7.4	+1.2
WEEK 29	36	16.2	+11.4	-0.1
WEEK 30	35.1	15.9	-0.9	-0.2
WEEK 31	38.9	16.5	+3.8	+0.6
WEEK 32	40.1	16.9	+1.2	+0.4

Larvae population distribution for the 4 sampling Stations:

Week 24	Spat/m3	Larvae Stage	Sea Temperature	Sea Squirts/m3
Roaringwater Bay 1	48	3 to 5 weeks old	17.5	48
Roaringwater Bay 2	113	2 to 4 weeks old	17	113
Roaringwater Bay 3	145	3 to 5 weeks old	17	32
Roaringwater Bay 4	0	N/A	16	0

