MUSSEL CONDITION INDEX AND LARVAE MONITORING

Weekly Bulletin

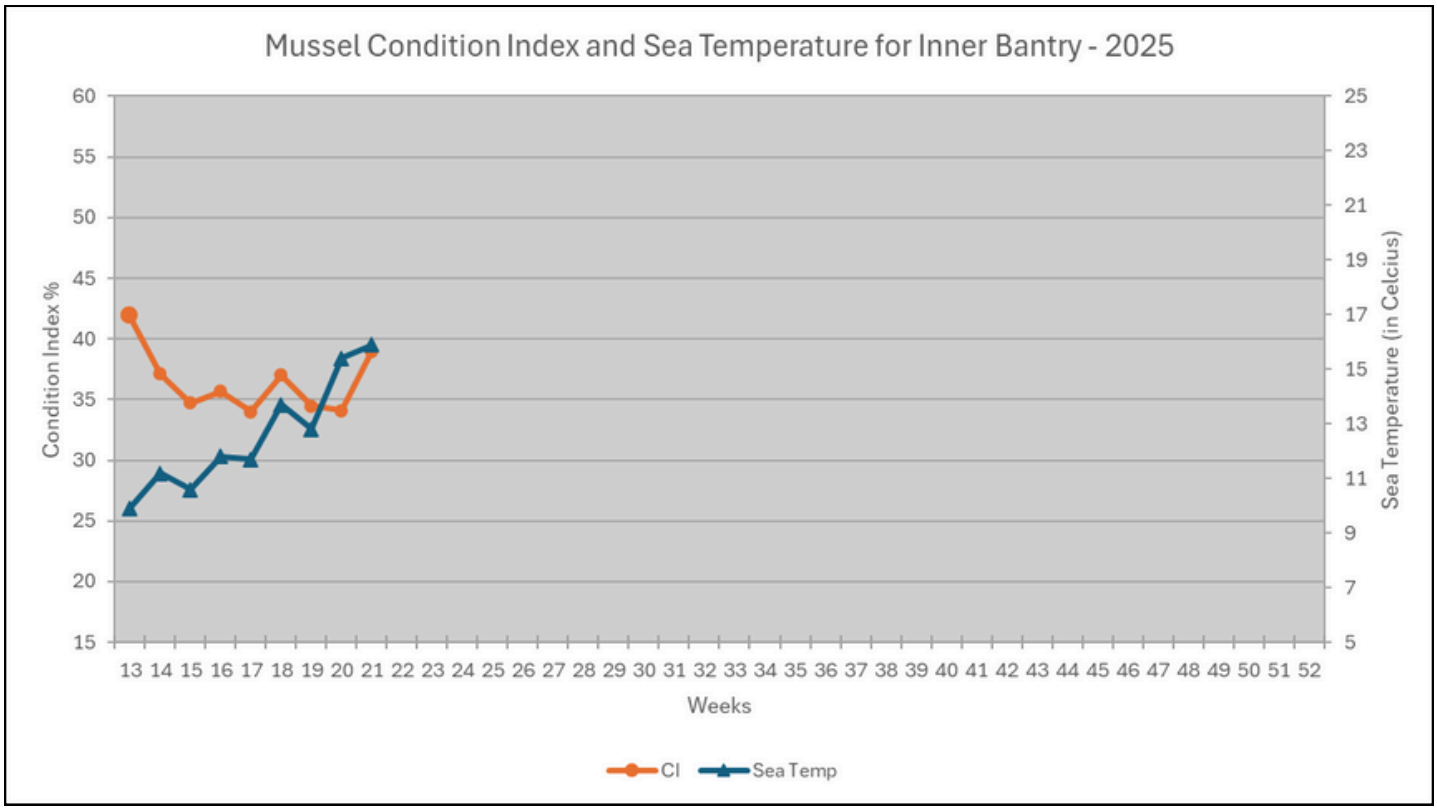
Bantry Bay (North South and NorthChapel)

Southwest Mussel Larvae sampling

26th May 2025

Week 21 (19/05/2025 to 25/05/2025)

Condition Index (CI) for Inner Bantry



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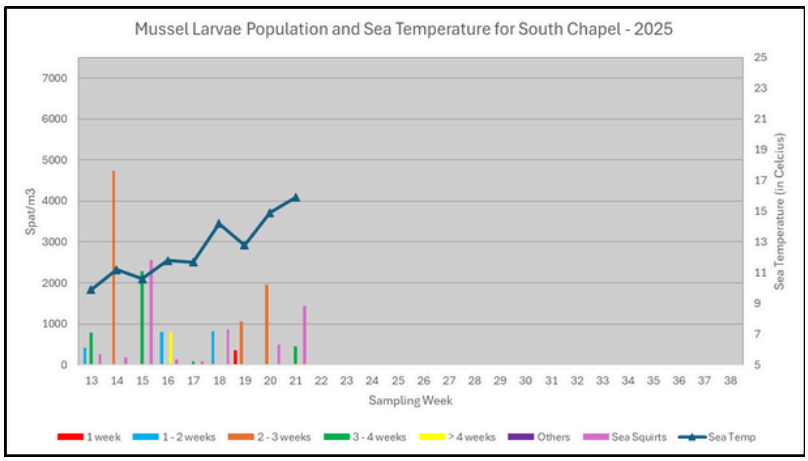
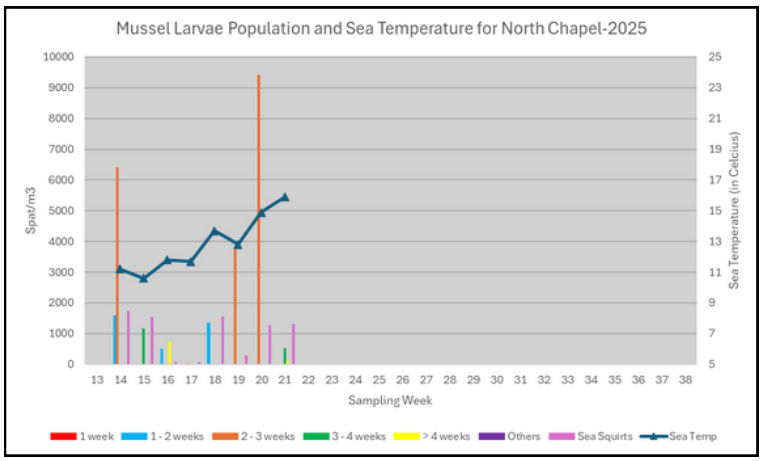
Larvae population evolution for Bantry (South and North Chapel)

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 Condition Index (CI) in Bantry increased significantly by 4.9 % during Week 21 (from 34.1% to 39%). The sea temperature only increased by 0.5°c from last week to 15.9°c.

Larvae Population:

- South Chapel: There was a significant decrease in the number of larvae at this station: down to 503 spat/m3 (90% of 3 to 5 weeks old and 10% of 5 to 6 weeks old)

- North Chapel: An even more important decrease was observed at the North Chapel sampling station: down to 647 spat/m3 (80% of 3 to 4 weeks old and 20% of 5 to 6 weeks old).

Both stations present a sharp decrease of the larvae population in comparison with Week 20. Considering the age class observed (2 to 3 weeks old on Week 19, similar class on Week 20 with great numbers and 3 to 6 weeks old for Week 21), it is possible that some settlement has occurred.

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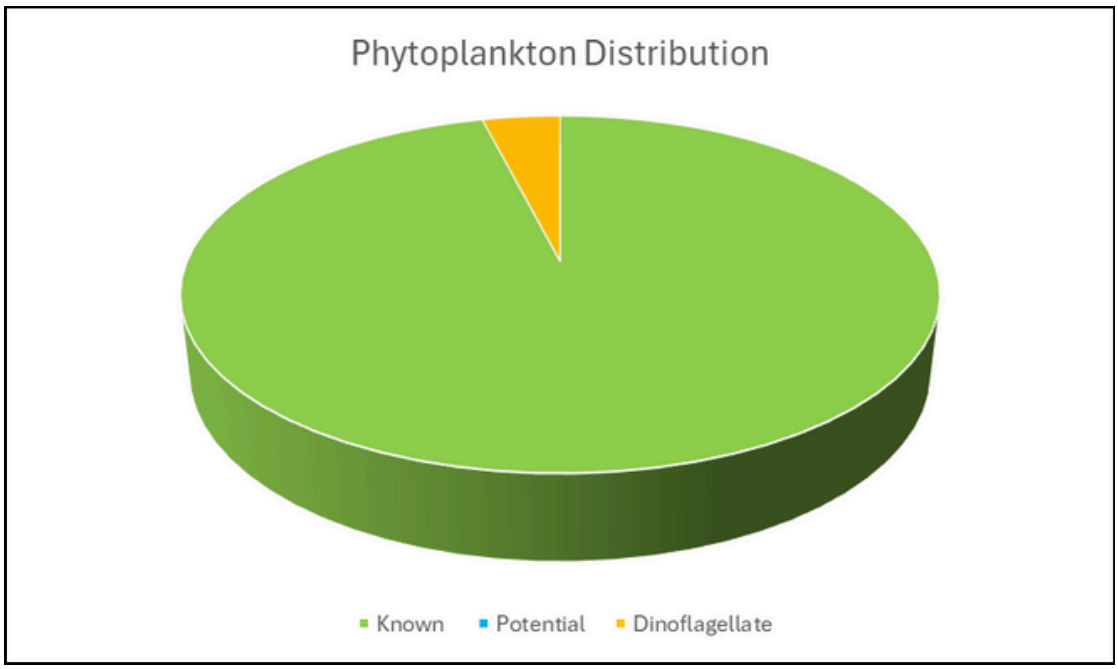
Sample details:

- South Chapel: A high concentration of sea squirt was observed in the sample (1442 ind./m^3). High levels of copepods were also present in the sample. C.fusus, L.minimus and Rhizosolenia sp. were in moderate concentrations

- North Chapel: Again, the concentration of sea squirt was very high (1324 ind./m^3). Copepods and barnacles were also in high concentration. The level of phytoplankton was moderate Ceratium fusus, L.minimus and Pseudo Nitzschia delicatissima dominant.

The peak of sea squirt larvae coincides with a potential mussel settlement; this could have a significant impact on the fouling of the collector ropes.

The phytoplankton sample for Week 21 indicated a further steep decrease of the concentration from the previous week (down to 20,240 cells/litres), composed at 96% of known food species and 4% of dinoflagellate.



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