MUSSEL CONDITION INDEX AND LARVAE MONITORING

Weekly Bulletin

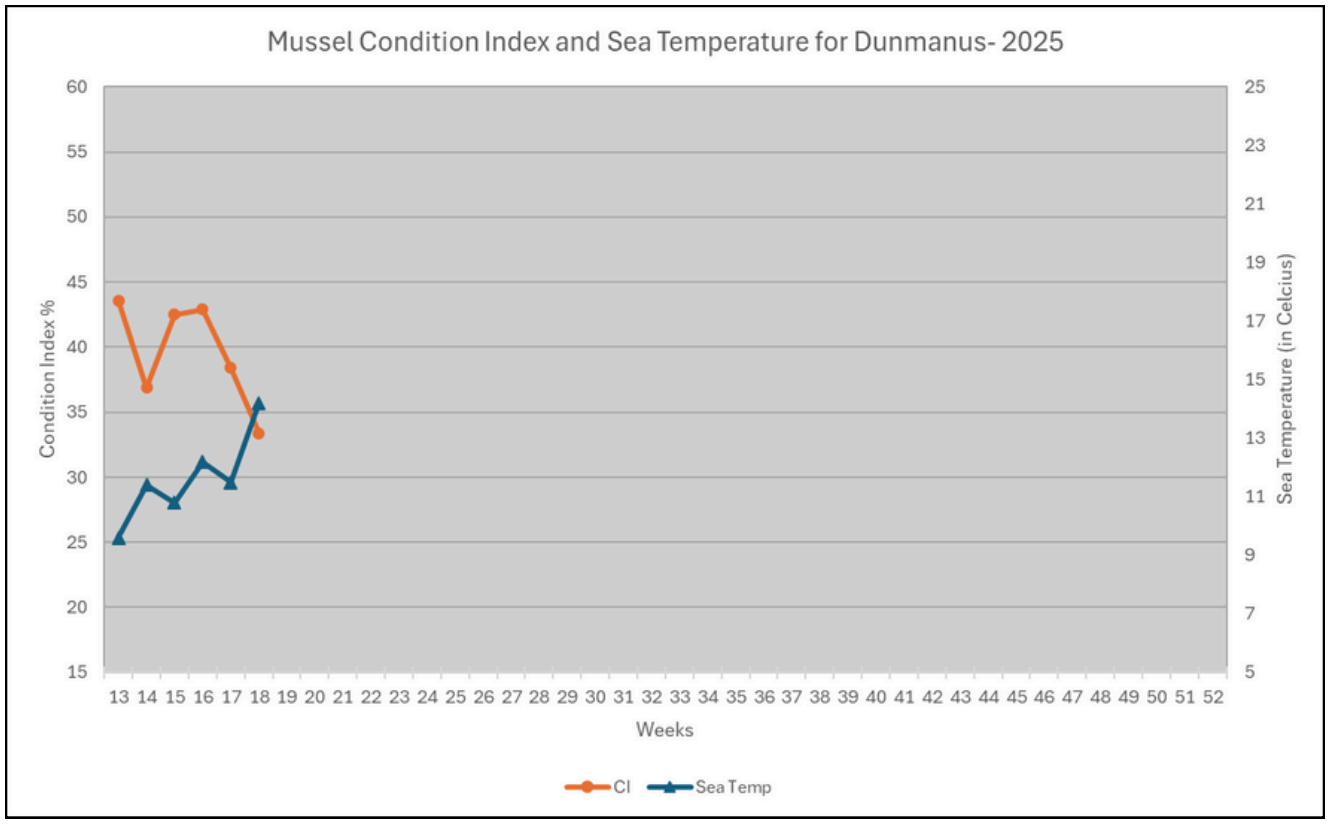
Dunmanus Bay

Southwest Mussel Larvae sampling

2nd May 2025

Week 18 (28/04/2025 to 04/05/2025)

Condition Index (CI) for Dunmanus Bay



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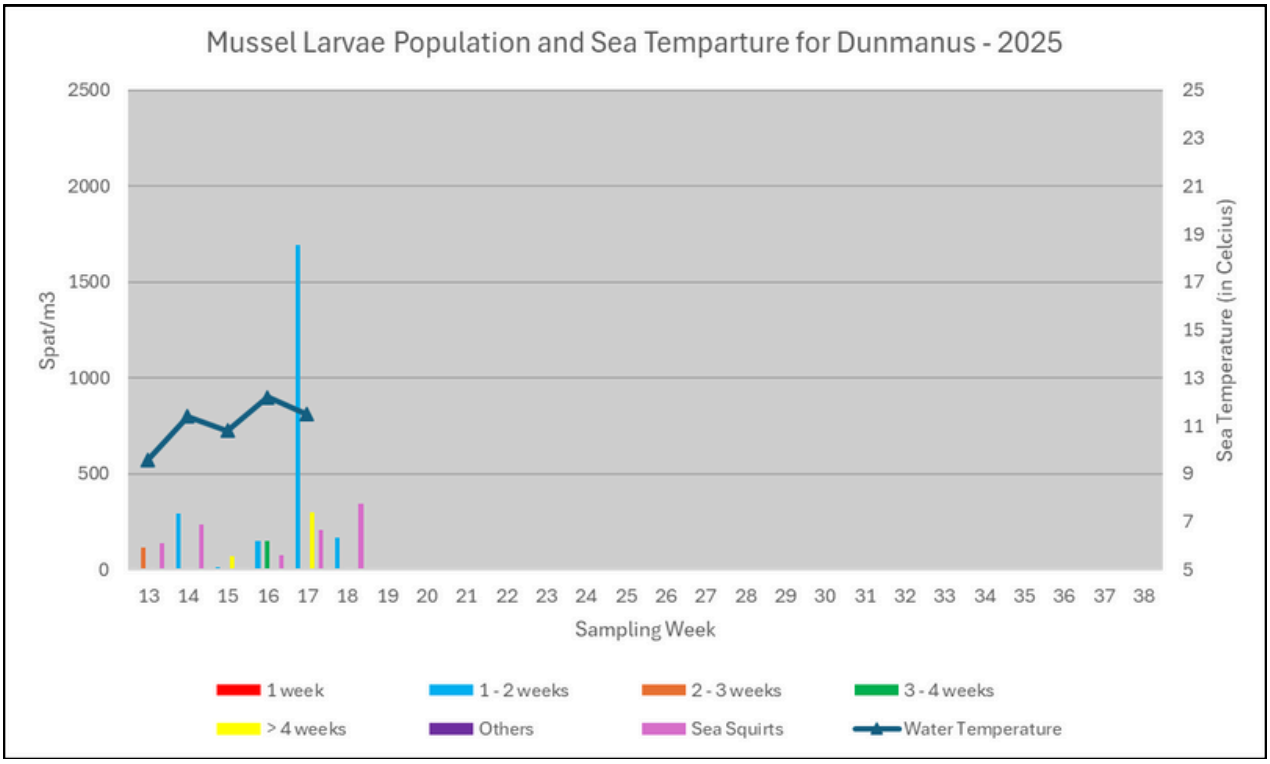
Larvae population evolution in Dunmanus Bay

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 Dunmanus has significantly decreased from the previous week (down by 5% to 33.4%). Meanwhile, the sea temperature has significantly increased by 2.7 ^{C} to 14.2 ^{C}. The CI in Dunmanus Bay has dropped by 9.5% in the last 2 weeks while the sea temperature increased by 2 ^{C}. From previous experiments carried out on the southeast coast from 2015 to 2019, **the combination of a significant drop in the CI and the sharp increase in water temperature has been synonymous with major spawning events**.

A relatively low number of larvae were observed in the sample in comparison with the Week 17 peak (from 1989 spat/m^3 to 168 spat/m^3 of 1 to 2 weeks old). It is worth noting that no other larvae age category was observed in the sample.

The concentration of sea squirts has increased again from the previous week to 344 individuals/ m^3. The number of copepods was very high.

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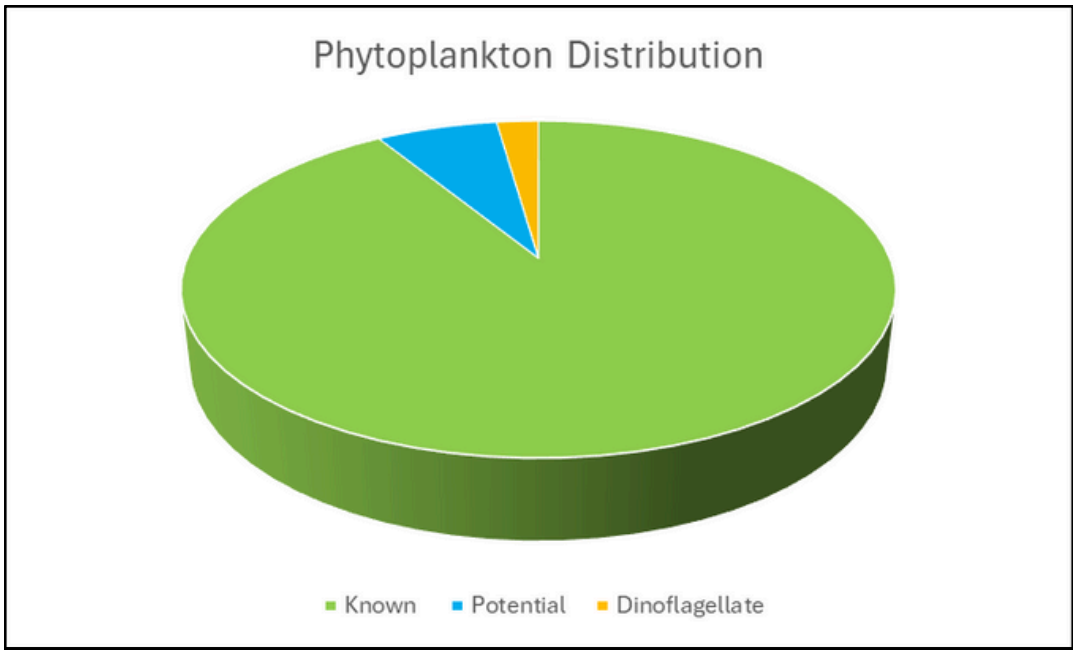

The phytoplankton concentration has significantly increased from the previous week to 266,000 cells/litre, dominated by known food source species for larvae (91% of the species observed in the sample). A low bloom of diatoms was observed dominated by P.n. delicatissima group. Rhizosolenia sp. was in moderate concentration. The Phaeocystis level was low.

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