MUSSEL CONDITION INDEX AND LARVAE MONITORING

Weekly Bulletin

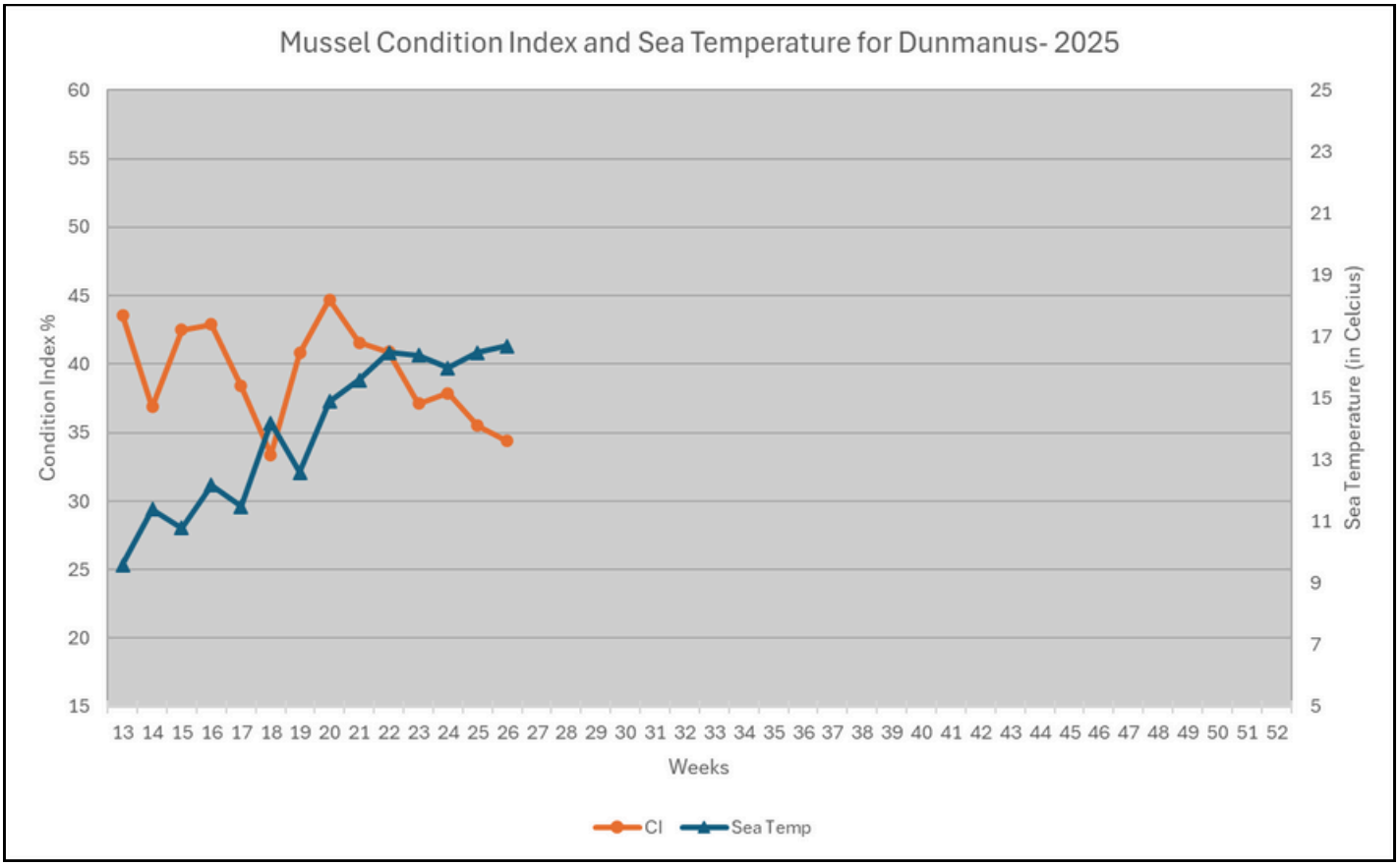
Dunmanus Bay

Southwest Mussel Larvae sampling

30th June 2025

Week 26 (23/06/2025 to 29/06/2025)

Condition Index (CI) for Dunmanus Bay



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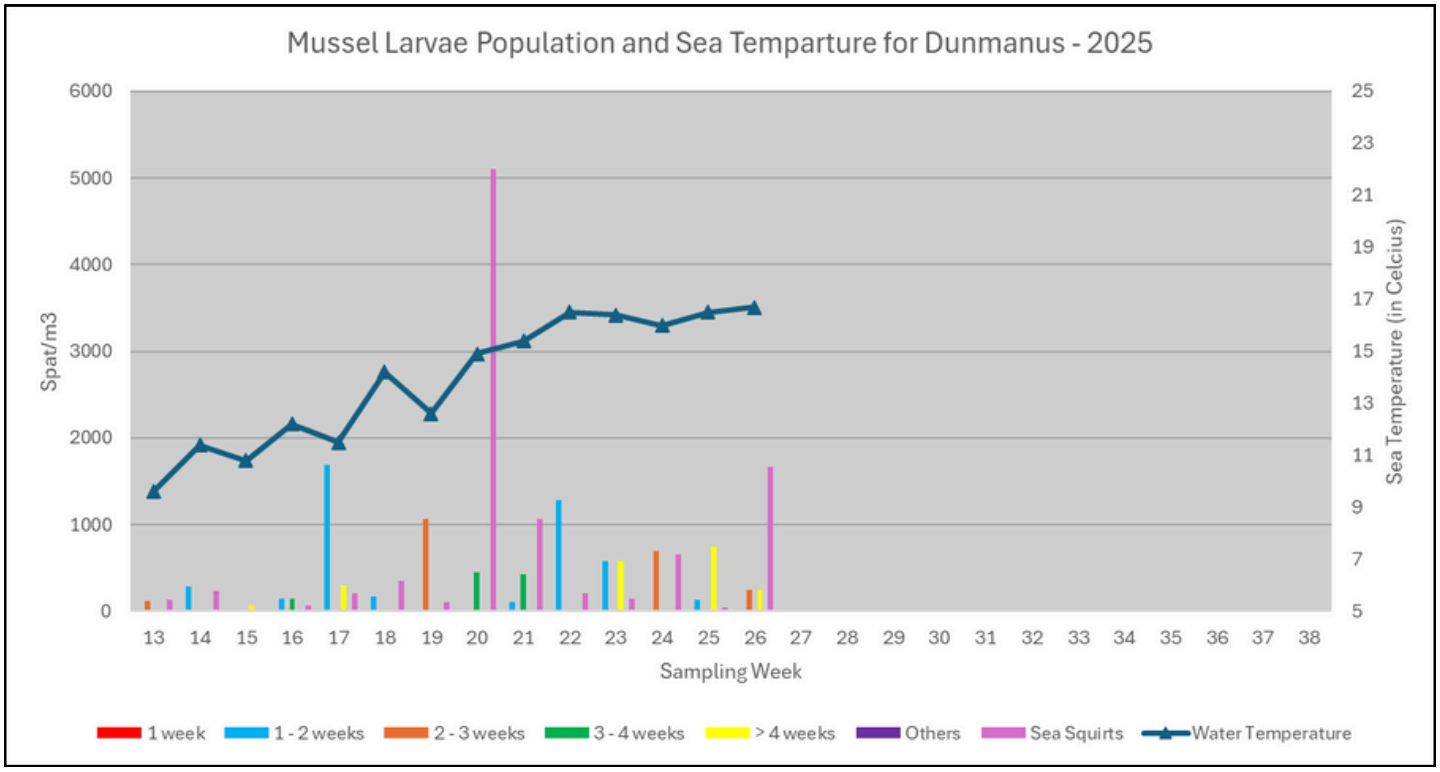
Larvae population evolution in Dunmanus Bay

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 continues to slightly decrease (-1.1 % to 34.4%). The sea temperature is still stable at 16.7°c (+0.2°c from Week 25).

The level of larvae in the sample was moderate with 501 spat/m^3 divided equally between 2 to 3 weeks old larvae and 5 to 6 weeks old.

Considering the current age class found in the sample, it is possible that further settlement of spat could occur in the next few days.

Looking at the CI pattern on the graph and the larvae population distribution, it is likely that trickle spawning is taking in Dunmanus since Week 21 (no steep drop of the CI and no major spike of larvae population with the 1 to 2 weeks old larvae dominating the population since the start of the sampling).

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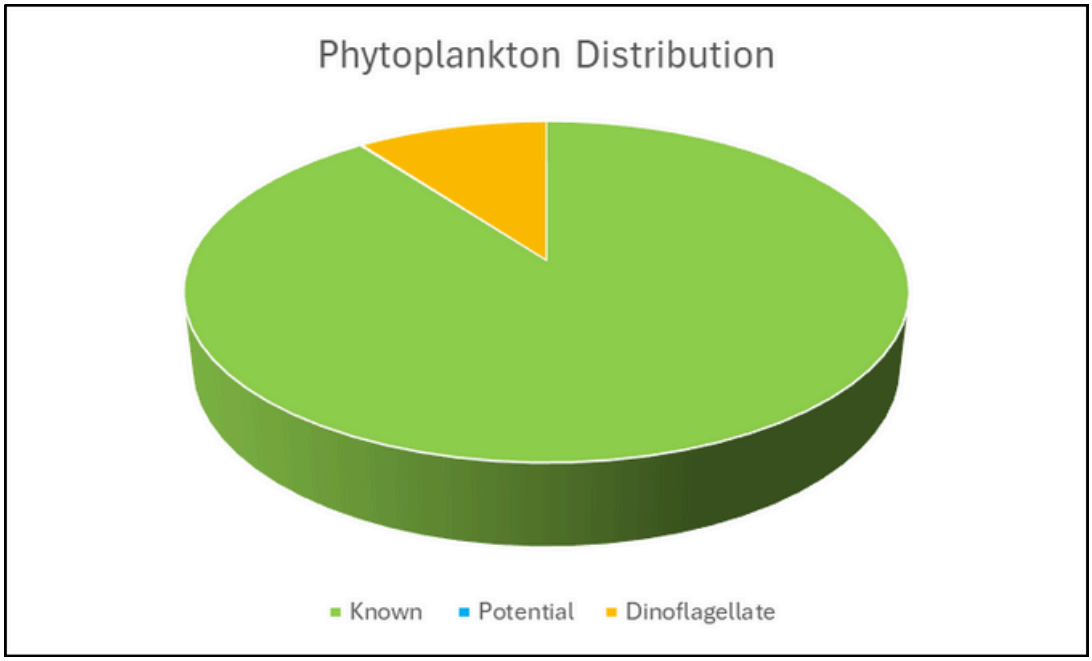
The level of sea squirt in the sample was relatively high in comparison with other sampling site with 1666 ind./m3. The levels of copepods, sea matting, tube worms, winkles and crabs were high in the sample. A second bivalve species was also present but in low concentration. The phytoplankton biomass in the sample was high, with the P.n. seriata group and Chaetoceros species being dominant.

According to those results, some significant fouling by sea squirts, sea matting and tube worms could be expected on ropes and mussels. However, the high concentration of copepods could mitigate the effects of the sea squirts.



There was a slight increase in phytoplankton (up to 71,120 cells per litre) with known food source species presented the highest concentration (90%) and dinoflagellate (10%)

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