

Kilmackilloge Harbour

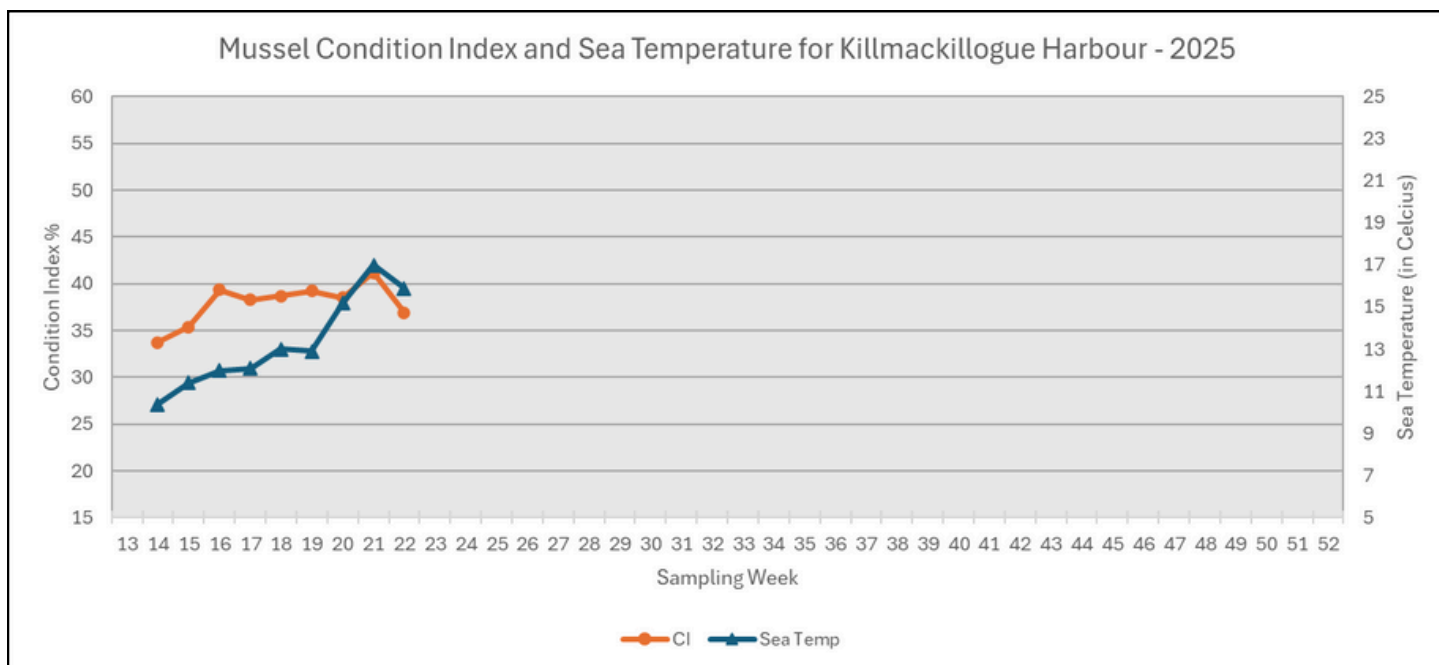
Southwest Mussel Larvae sampling

3rd June 2025

Week 22 (26/05/2025 to 1/06/2025)

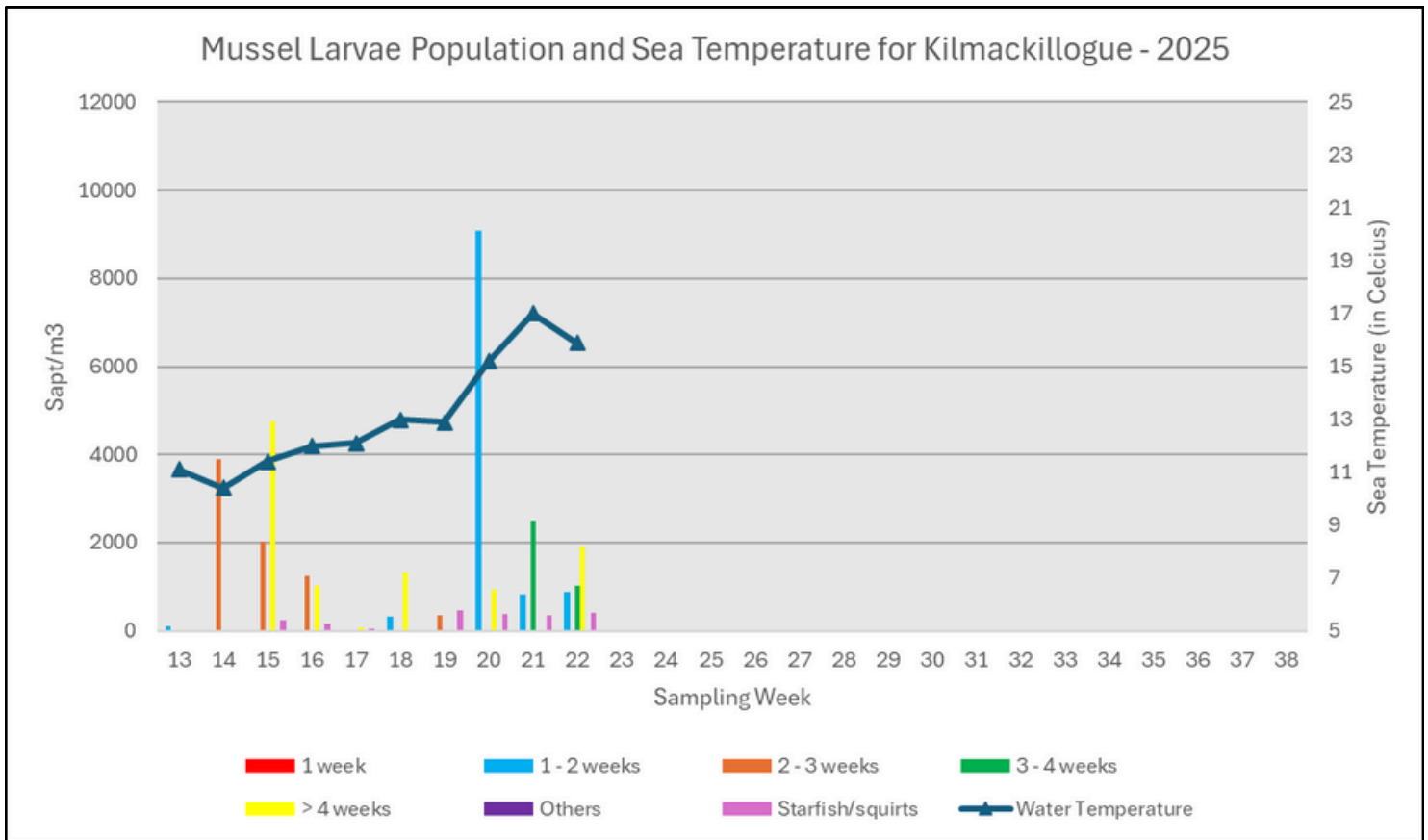


Condition Index (CI) for Kilmackilloge Harbour



Larvae population evolution for Kilmackilloge Harbour

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, 3 to 4 weeks old, over 4 weeks old and others (younger or older).



Commentary

The Condition Index (CI) decreased by 4.3% in Week 22 (down to 36.9%). The sea temperature decreased slightly to 15.9°C (-1.1°C). **The CI reduction could indicate a partial spawning event. However, the larvae population observed in the sample did not confirm this.**

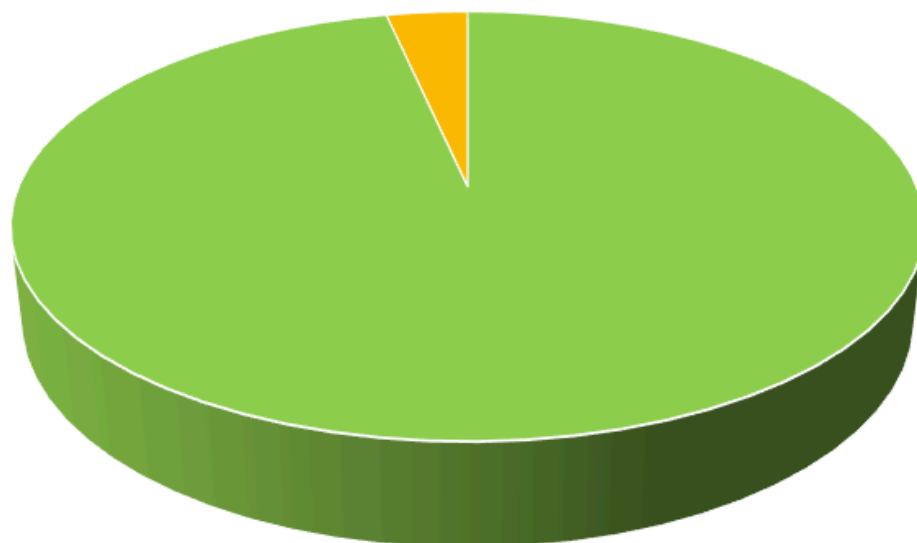
The larvae concentration increased from the previous week (up to 3,828 spat/m³). The distribution through the age class was as following: 35% of 5 to 6 weeks old, 35% of 3 to 5 weeks old and 30% of 1 to 3 weeks old. **This age class distribution fits the pattern observed since Week 20 (number of larvae reducing weekly with an increase of age class). This could indicate that spat settlement is currently taking place.**

There was a slight increase in the number of sea squirt larvae (up to 406 ind./m³). The sample also presented high levels of copepods and Chaetoceros sp.

Considering concentration of sea squirt larvae, their development cycle (settlement between 36 hours and 4 days) and the potential spat settlement, significant fouling on collection ropes could be expected.



Phytoplankton Distribution



■ Known ■ Potential ■ Dinoflagellate

The phytoplankton concentration increased again to 15,160 cells/litre, dominated by known food source species at 97% and by dinoflagellate representing 3%.

