

Bantry Bay (North South and NorthChapel)

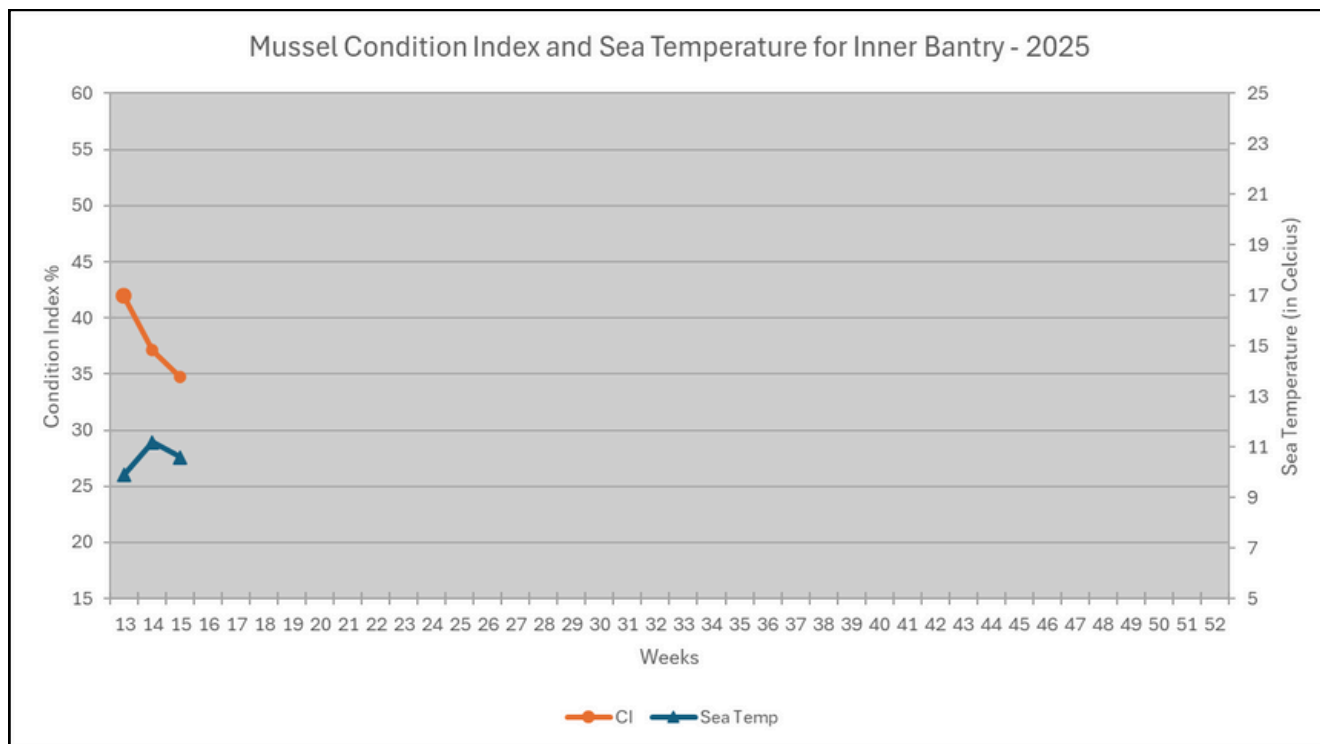
Southwest Mussel Larvae sampling

11th April 2025

Week 15 (07/04/2025 to
13/04/2025)

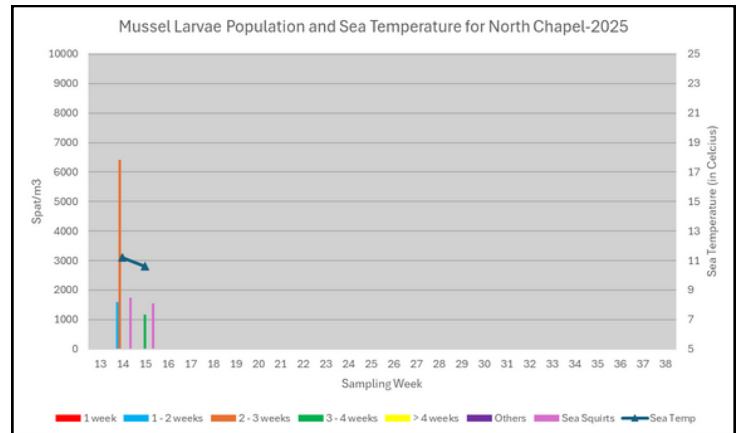
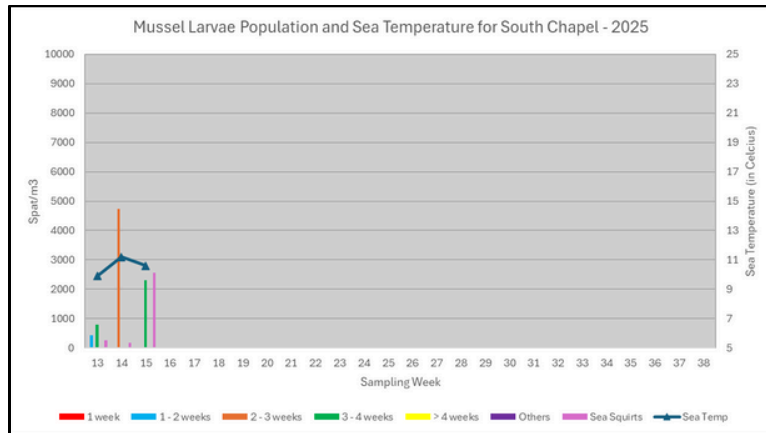


Condition Index (CI) for Inner Bantry



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 has dropped by a further 2.4% (from 37.1% to 34.7%), indicating a **possible continuous spawning** following the event between Week 13 and Week 14. The sea temperature decreased by 0.6°C (from 11.2°C to 10.6°C) over the period.

Larvae Population:

- South Chapel: The concentration of larvae has decreased from the previous week (from 4739 spat/m³ to 2297 spat/m³). However, the age class is now from 3 to 4 weeks old larvae.
- North Chapel: As for the South Chapel sampling site, the larvae concentration has decreased significantly (down to 1164 spat /m³). Larvae stage has also increased to 3 to 4 weeks old.

A **potential settlement could be expected in 2 weeks**, according to the levels observed in the samples.



Sample details (the concentrations of sea squirts are now showing in the graphs above):

- South Chapel: **There was a significant amount of sea squirts in the sample (concentration of 2561 individuals /m³). There was also indication of an excessive bloom of *Phaeocystis* sp . Low levels of copepods and barnacles were observed. There was also low additional concentration of diatoms.**
- North Chapel: **Sea squirts levels were also high at the North Chapel station with 1554 individuals /m³ . Again there are indications of a significant large bloom of *Phaeocystis* sp . Otherwise, barnacles and starfish were also present, but in low concentration. A second bivalve species was observed in the sample.**

Considering the levels of *Phaeocystis* across the sampling stations and the recent spawning, it would be advisable to limit stress levels on adult mussels.

Starting on Week 16, additional phytoplankton samples will also be collected (1 per bay). Results will also be communicated on the weekly bulletins.

