

Bantry Bay (North South and NorthChapel)

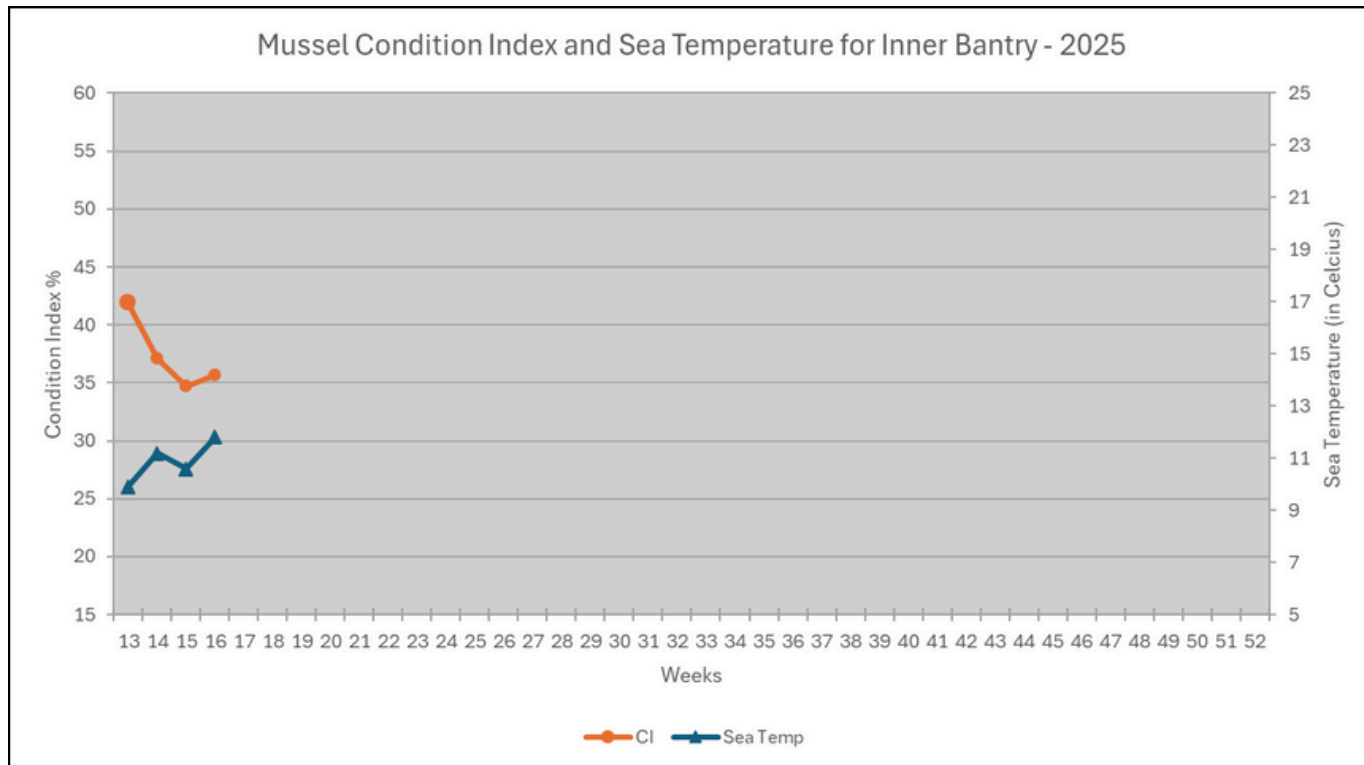
Southwest Mussel Larvae sampling

17th April 2025

Week 16 (14/04/2025 to
20/04/2025)

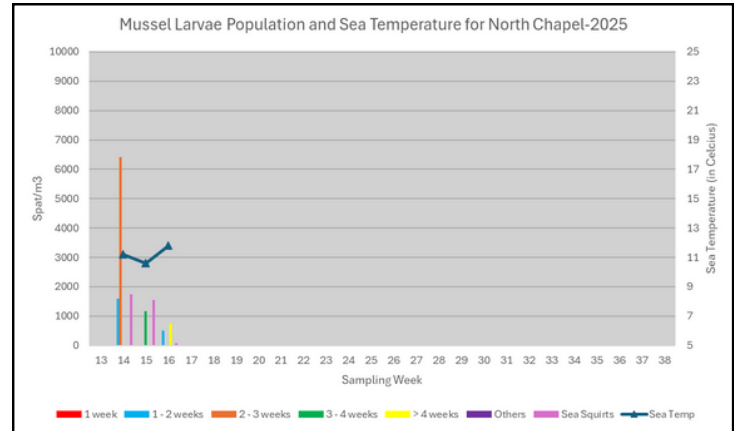
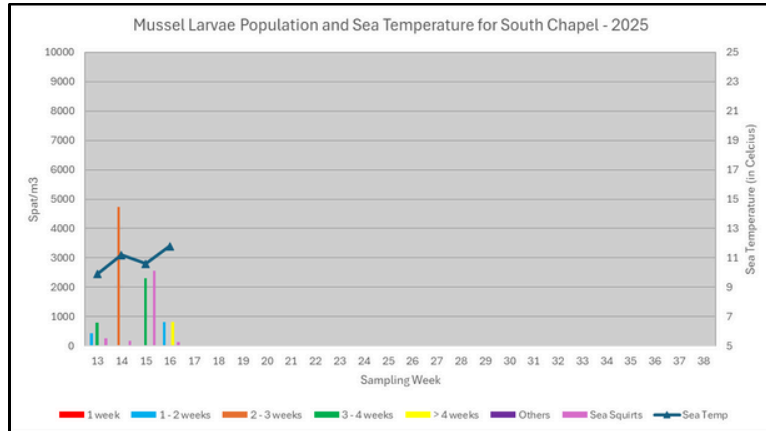


Condition Index (CI) for Inner Bantry



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 is slowly increasing again by 1% (from 34.7% to 35.7%), indicating some reconditioning after a **possible spawning** between Week 13 and Week 15. The sea temperature is up by 1.2°C (from 10.6°C to 11.8°C) from last week.

Larvae Population:

- South Chapel: Results from the sample indicate moderate concentrations of two distinct populations: younger larvae of 1 to 2 weeks old (810 spat/m³) and an older category of 4 to 5 weeks old (811 spat/m³). This is a sharp decrease in older larvae in comparison with the previous week (2297 spat/m³ of 3 to 4 weeks old).
- North Chapel: This sample presents the same profile as the one collected in South Chapel, with 1 to 2 weeks old larvae (498 spat/m³) and 4 to 5 weeks old larvae (747 spat/m³). This is again a sharp decrease in the older larvae category.

Considering the profile observed in the graphs above, we can see a trend between Week 14 and Week 16, indicating a **possible primary settlement**. From high levels of 2 to 3 weeks old larvae in Week 14, to lower quantities of 3 to 4 weeks old larvae in Week 15, to even lower numbers of 4 to 5 weeks old larvae in Week 16.



Sample details:

- South Chapel: There was a moderate level of sea squirt in the sample (133 individuals/m³). The concentration of Phaeocystis remains high (probable low-level bloom). Levels of sea matting and crabs were low, while the copepods concentration was high. The overall level of phytoplankton was low, with Ceratium fusus and Protoperidinium dominating.
- North Chapel: The sea squirt concentration was low in the sample (69 individual l/m³). The concentration Phaeocystis remains high, but the bloom levels are also decreasing. The copepods level was moderate, as for sea matting. The sample presented low levels of other phytoplankton, with Ceratium fusus and mixed Protoperidinium low concentration.

The phytoplankton level in Bantry has dropped significantly from Week 15: from 223,520 cells/litre to 32,720 cells per litre.

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

