

Bantry Bay (South and North Chapel)

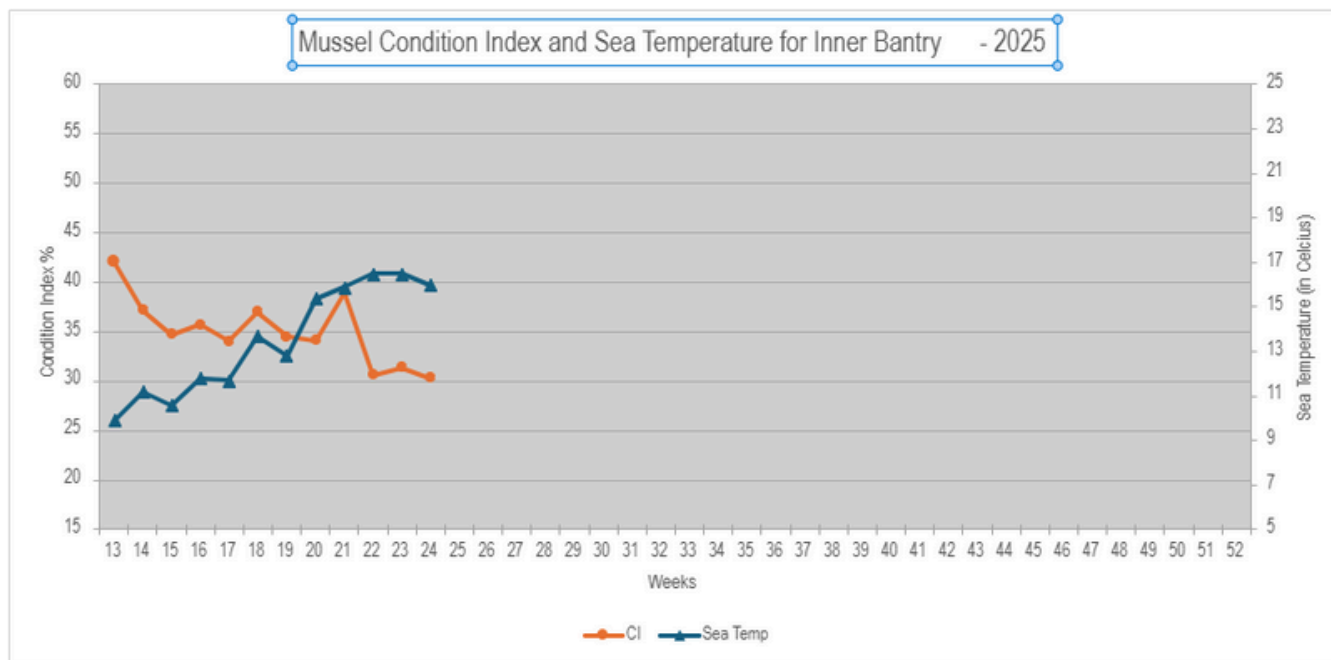
Southwest Mussel Larvae sampling

17th June 2025

Week 24 (8/06/2025 to 15/06/2025)

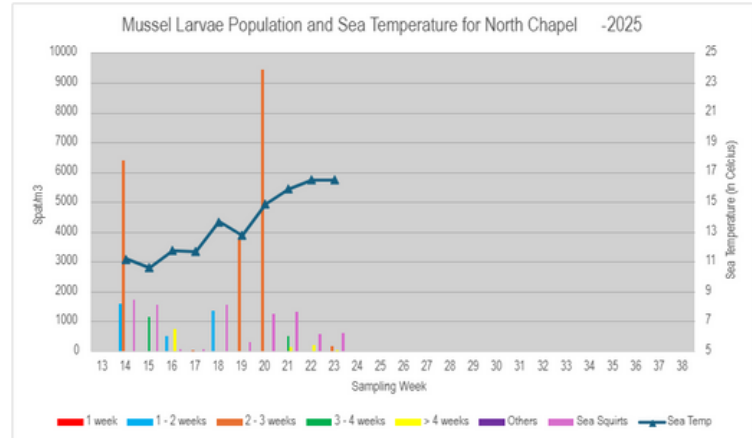
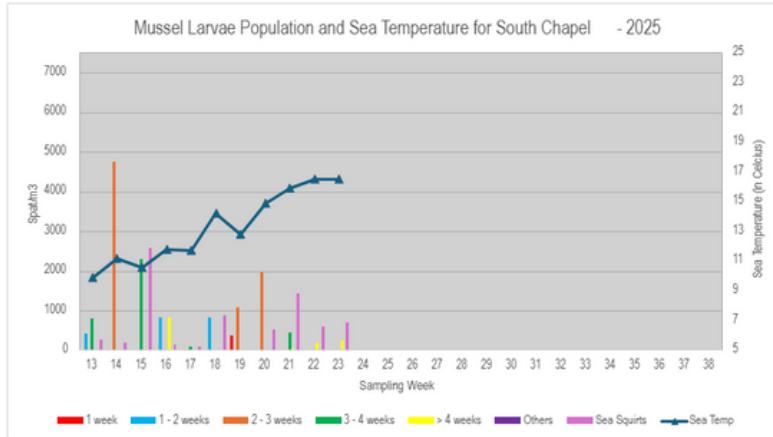


Condition Index (CI) for Inner Bantry



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 was stable in Week 24 30.3% (Week 23 31.4 %). The sea temperature was consistent at 16.1°C. **This consistent CI could indicate a previous spawning event.**

Larvae Population:

- South Chapel: The sample presented a larvae 1-3 weeks old (2327 spat/m³).
- North Chapel: The sample for North Chapel presented a high number (4071 spat/m³). 85% was 1-3 weeks old, 15% were 5-6 weeks.

The evolution of larvae concentration for Week 24 appears to show a small number of 5-6 week old larvae present in samples. This along with a stable CI may mean a mussel larvae settlement has occurred.



Sample details:

South Chapel: The concentration of sea squirt has now increased to 1798 individual/m³ from previous weeks of 702, 604 and 1442 individual/m³). The sample also presented *C.fusus* and *Rhizosolenia* dominant,.

- North Chapel: Sea squirt levels increased slightly from 561 to 615 /m³. Moderate Phyto biomass - *Rhizosolenia*/*Ceratium* sp. dominant. Copepods high. Low levels second bivalve species.

The Phytoplankton sample showed a huge increase in known mussel food species. Less non-food species like Dinoflagellate species were found.

The phytoplankton sample for Week 24 increased to a very high level of 3,429,800 cells/litre. 99% composed of known food source species, a huge reversal from the previous week.

