MUSSEL CONDITION INDEX AND LARVAE MONITORING

Weekly Bulletin

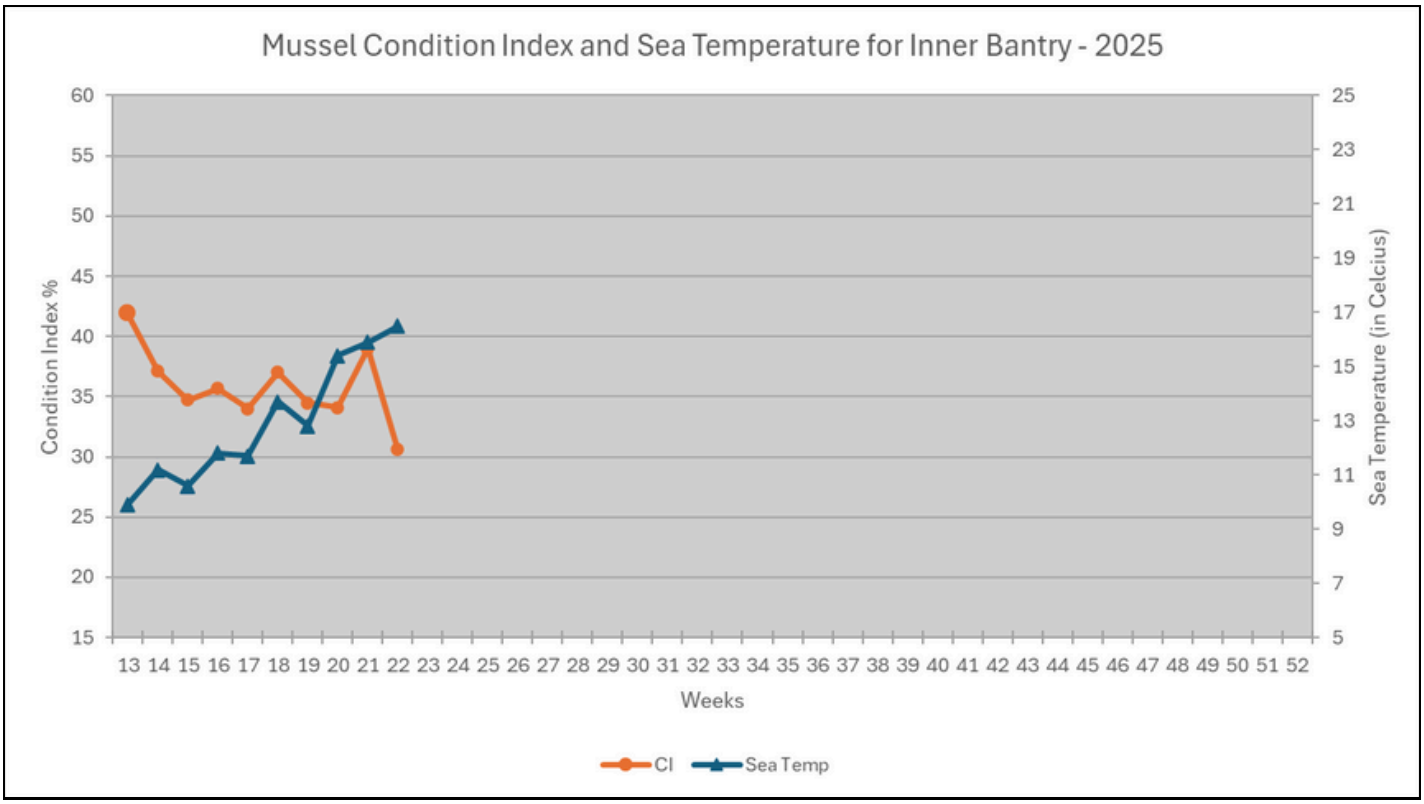
# Bantry Bay (North South and NorthChapel)


## Southwest Mussel Larvae sampling

## 3rd June 2025

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

## Condition Index (CI) for Inner Bantry

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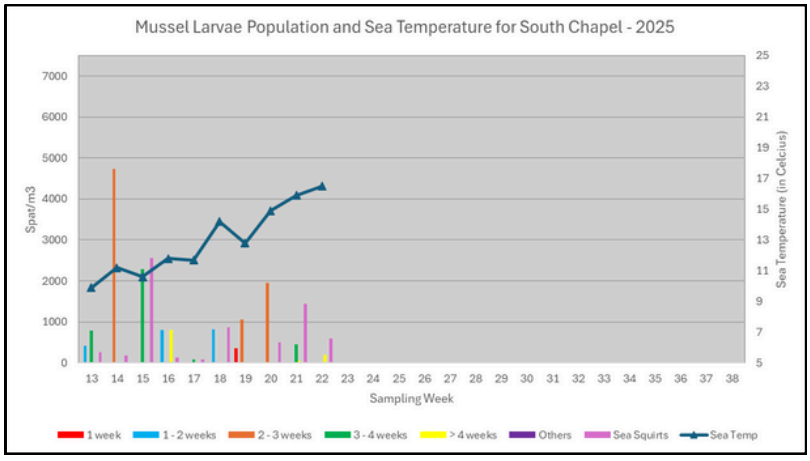
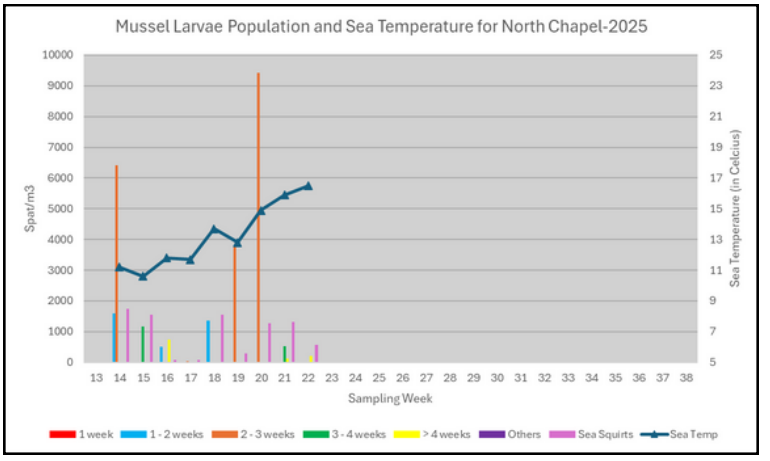
# Larvae population evolution for Bantry (South and North Chapel)

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 decreased significantly by 8.4 % during Week 2 (from 39% to 30.6%). The sea temperature only increased by 0.6°c from last week to 16.5°c. **This sharp decrease of the CI could indicate a major spawning event.** Although, the related larvae samples did not present high levels of eggs or early larvae.

**Larvae Population:**

- South Chapel: The sample presented a small number of larvae comprised between 4 and 6 weeks old (195 spat/$m^3$).

- North Chapel: As per the South Chapel sampling station, the sample for North Chapel presented low numbers (196 spat/$m^3$) of older larvae (4 to 6 weeks old).

**The evolution of larvae concentration for Week 22 appears to corroborate with the pattern observed since Week 19 (number of larvae reducing weekly with an increase of age class), which would imply a potential spat settlement in the last two weeks.**

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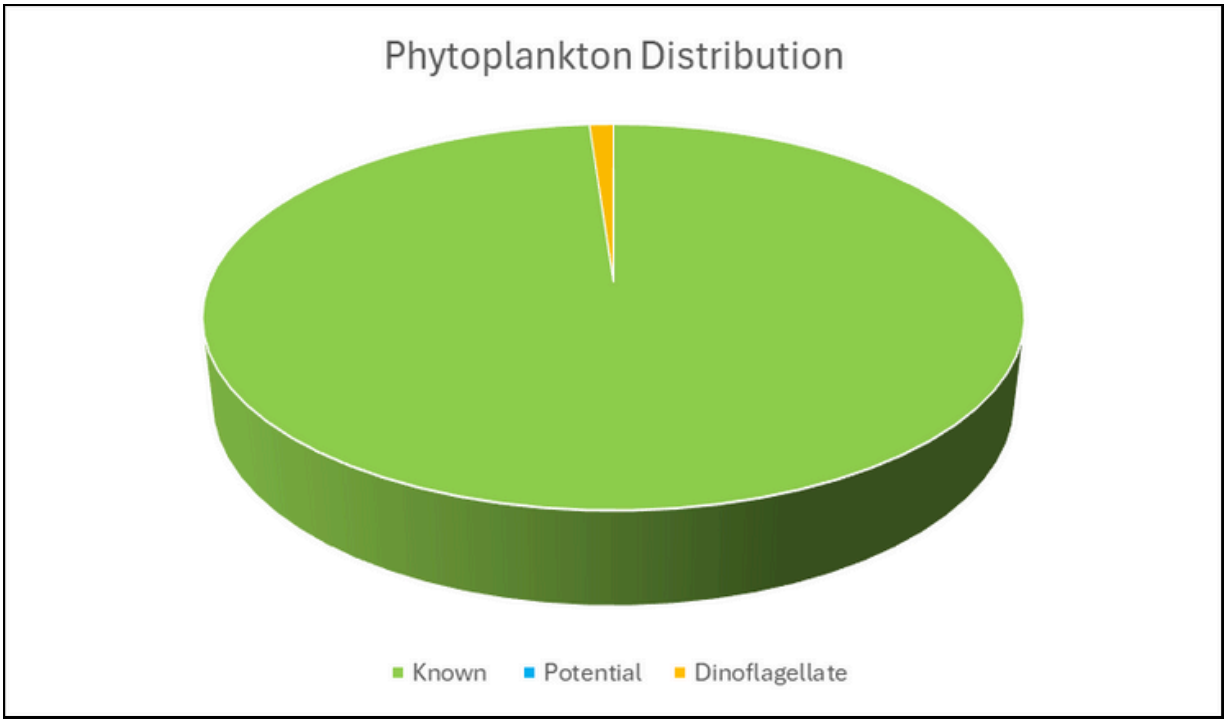
**Sample details:**

- South Chapel: The concentration of sea squirt has reduced by more than 50% from the previous week to 604 individual/$m^3$. The sample also presented moderate to high concentrations of copepods, sea matting and crabs. Rhizosolenia sp. were present at low levels.

- North Chapel: As per the other sampling site in Bantry, sea squirt levels also dropped by more than 50% to 561 ind./$m^3$. Rhizosolenia sp. and copepods were present in low to moderate concentrations.

**The significant decrease of sea squirt larvae numbers indicates that those larvae have settled (the sea squirt larvae cycle can last between 36 hours to 4 days). This could implicate significant fouling of the spat collectors in the coming weeks.**

The phytoplankton sample for Week 22 increased to 31,070 cells/litre composed mainly of known food source species (99%) and a small quantity of dinoflagellate (1%).

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