# Mussel Restoration Project for the Marlborough Sounds – August 2020

## July mussel sampling

Survival of the mussels that were placed on the seabed in late January was high at all five sites after five months. The highest mortality was at Grant Bay, which had a mean loss of 16% of the mussels, while all other sites were less than 5%. The higher mussel mortality at Grant Bay is likely the result of starfish predation with 140 large starfish being found there, which was more than double the number collected from all the other sites (Figure 1).

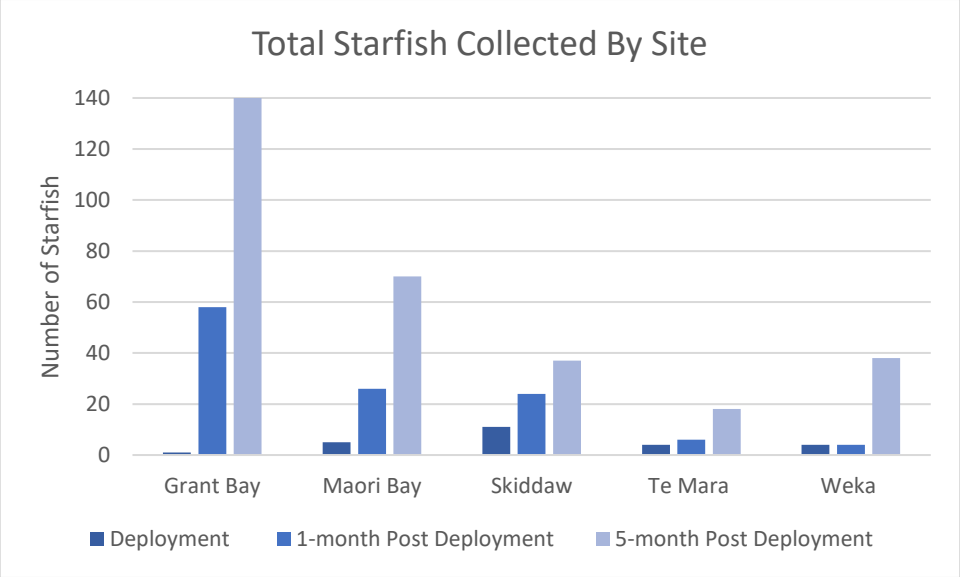


*Figure 1: The total number of starfish collected across each site at deployment, 1-month and 5-months after deployment.*

## Recycled Shell Experiment

Our next mussel experiment is now underway. In mid-August we were able to deploy recycled mussel shell in two locations in the inner Pelorus Sound. The team at Sanford sourced and deployed the recycled shell, while Aroma provided boat support and NIWA divers went down to organize the shell plots. In early October we will deploy mussels onto these shell plots and monitor them. Other studies have shown that adding recycled shell leads to higher mussel survival and recruitment, and increased biodiversity on the seafloor.

## Trevyn's looking for Interviewees

Trevyn Toone is performing interviews with long term residents of the Sounds to understand historical intertidal populations of green-lipped mussels. He would be keen to hear from you if you can help please - Trevyn at ttoo112@aucklanduni.ac.nz

If you have any questions or comments on this project, please feel free to reach out to Emilee Benjamin via email at egol669@aucklanduni.ac.nz.

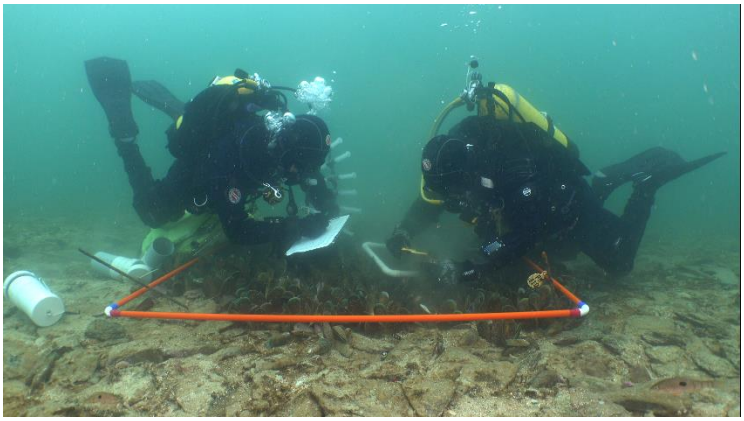

*Figure 2: NIWA divers performing a 5-month check on a restored mussel plot in Grant Bay.*

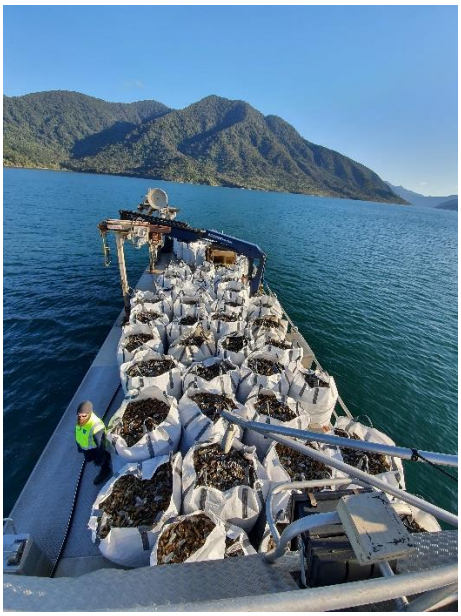

*Figure 3: Sanford's boat Lady Marie full of bags of recycled shell ready to deploy to the seabed.*

*Figure 4: Sanford's crew deploying the recycled shell at entrance to Kenepuru Sound.*