

Marine Farming Association - January Monthly Update - for Industry Advisory Group

On January 20th we implemented our first experimental mussel deployment! With the help from Aroma, we placed down 3, 3m² plots of mussels in 5 locations throughout the inner Pelorus Sound, a total of 15 plots and 4 tonnes of mussels.

On the first day we went out to each location and dropped ground lines that indicated where the Aroma crew should drop the mussels down. We also dropped down GoPros on metal stands to record current fish biodiversity at each location. Then we met at our Grant Bay location and a few of us were lucky enough to be interviewed by 1News and they created a news story to provide outreach for our project. Here is the link to the story:

<https://www.tvnz.co.nz/one-news/new-zealand/new-project-aims-turn-around-marlborough-sounds-mussel-industry-v1>

After the interview we geared up and went scuba diving at our Grant Bay site. We marked out the three treatment sites and the three control sites with rebar and labelled them with cow tags. Then we took 5 mussels from each bag to test the condition upon deployment. Next we cut open the bags to put the mussels into their 3m² plots using our orange PVC pipe plot as a size guide (Figure 1).

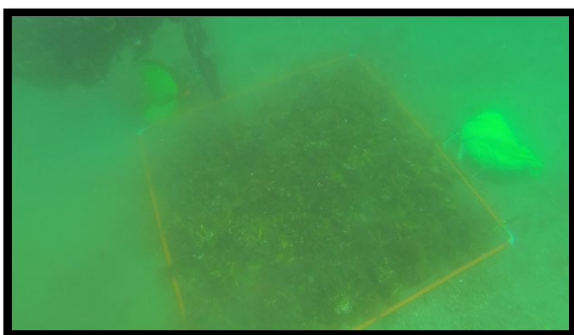


Figure 1: One of the 3m² mussel plots that we put at our Skiddaw site.



Figure 2: Closeup photo of the mussels at our Skiddaw site.

We repeated this process at all 5 locations over two days. I personally felt the most rewarding moment was when we were at our last site, which was our Skiddaw location, where the water current allowed for better visibility and I was able to get a clear closeup of the mussels (Figure2). When this happened, I could see that the mussels were slightly open, which meant that they were already filter feeding, and sorting themselves into clumps only moments after deployment. It made all the work and preparation worthwhile to see that the mussels were settling into their new home.

In the last week of February, we will monitor how the mussels have responded to the environmental changes and perform a one-month survival check. We are very excited to see the results that these ecosystem engineers will have on their new environments.

I hope you guys had a great break over the holidays and as always, if you have any comments or feedback on this month's progress, please feel free to email me at egol669@aucklanduni.ac.nz.

Thank you for all your help and your time with this project. 😊 Emilee Benjamin

Photos from January 2020



Emilee being interviewed by One News!



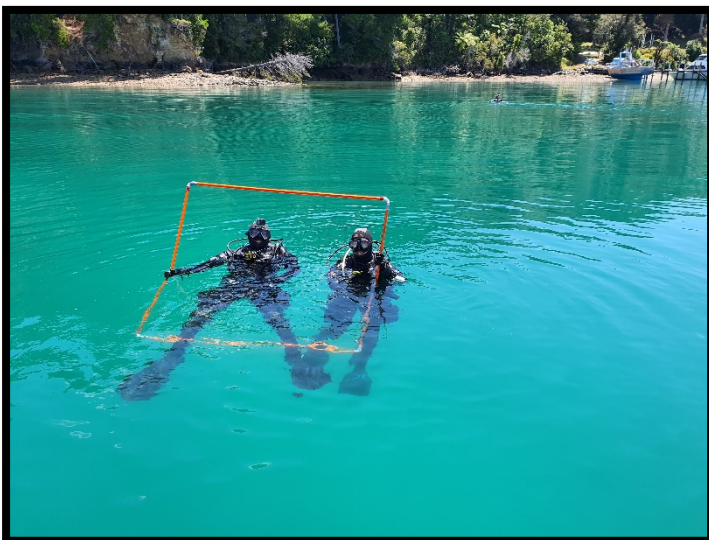
Sean grabbing a bite before jumping in the water.



Vaughan Ellis and Aroma's crew deploying the bags of mussels.



11-arm star fish that were collected during the Maori Bay North deployment. They were measured and relocated.



Jon Stead and Megan Carter from NIWA geared up and ready to deploy the mussels at our Te Mara East site.



Sean and Emilee relaxing on the way back to Havelock after the successful first deployment.