**Title:** Data presented in the paper: “Promoting self-facilitating feedback processes in coastal ecosystem engineers to increase restoration success: testing engineering measures”.

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**Figure 3A:** Average loss of mussels per week for each mussel treatment.

|  |  |
| --- | --- |
| Plot | Plot id |
| Treatment | One of the five configurations in which mussels were transplanted |
| Fence | 0= no fences, 1=fences |
| Density | 1=2.1 kg/m2, 2=4.2 kg/m2, 3= 4.2 kg/m2 on a smaller scale |
| Proportion | Average loss of mussels per week |

**Figure 3B:** Mussel coverage over time.

|  |  |
| --- | --- |
| Date | Date at which picture was taken for analysis |
| Plot | Plot id |
| Treatment | One of the five configurations in which mussels were transplanted |
| Fence | 0= no fences, 1=fences |
| Density | 1=2.1 kg/m2, 2=4.2 kg/m2, 3= 4.2 kg/m2 on a smaller scale |
| Coveragem2 | Mussel coverage (m2) |
| Areaperc | Mussel coverage (%) compared to start of the experiment |

**Figure 4B:** The slope (b), which is the decline in mussel coverage (log(y)) from compartment 1 to compartment 4 (x) for every plot (log(y)= a + bx).

|  |  |
| --- | --- |
| Date | Date at which picture was taken for analysis |
| Plot | Plot id |
| Treatment | One of the five configurations in which mussels were transplanted |
| Fence | 0= no fences, 1=fences |
| Density | 1=2.1 kg/m2, 2=4.2 kg/m2, 3= 4.2 kg/m2 on a smaller scale |
| Compartment | 1=compartment of plot furthest away from incoming waves, 4= compartment closest to incoming waves |
| Coveragem2 | Mussel coverage (m2) |
| Areaperc | Mussel coverage (%) compared to start of the experiment |

**Figure 4C:** Number of mussels per m2 within mussel patches.

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| --- | --- |
| Plot | Plot id |
| Treatment | One of the five configurations in which mussels were transplanted |
| Compartment | 1=compartment of plot furthest away from incoming waves, 4= compartment closest to incoming waves |
| Sample | Sample 1d, 3 cores were taken in every compartment |
| Fence | 0= no fences, 1=fences |
| Density | 1=2.1 kg/m2, 2=4.2 kg/m2, 3= 4.2 kg/m2 on a smaller scale |
| nrmussels | Number of mussels counted inside core sample |
| Nrm2 | Estimated number of mussels per m2 |

**Figure 5:** The percentage of mussel biomass remaining in: *closed* cages (protected against predatory crabs and washing out by waves); *half open* cages (protected against washing out but not against predatory crabs); *open* cages (not protected against predation or against washing out). Cages were placed in plots with no surrounding mussels (blue), in low density mussel plots (yellow) or in high density mussel plots (grey). Cages with different densities were grouped together as density had no significant effect on the number of surviving mussels.

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| --- | --- |
| Plot | Plot id |
| Treatment | One of the 3 configurations in which cages with mussels were placed |
| Fence | 0= no fences, 1=fences |
| Density | 2.5, 5 or 10 kg/m2 were placed inside the cages |
| Cage | Mussels were transplanted 1) in completely closed cages to provide protection against both predation and washing out due to waves, 2) in half open cages that allowed predatory crabs to enter, but prevented mussels being washed out, and 3) completely open on bare sediment |
| nrmussels | Number of mussels counted at the end of the experiment |
| wetweight | Total wet weight of the mussels at the end of the experiment |
| Survialnr | Percentage mussels that survived |
| Survivalweight | Percentage wet weight mussels compared to start of the experiment |