

Attachment Strength of the Blue Mussel (*Mytilus edulis*) When Exposed to Conspecific Mortality and Green Crab (*Carcinus maenas*) Chemical Cues

This study looked at the byssus thread strength of mussels when exposed to predator (*Carcinus maenas*) and crushed conspecific chemical cues. To test this, I isolated the blue mussels from one another and exposed the mussels to a predator (the green crab, *Carcinus maenas*) as well as crushed conspecifics (to emulate conspecific death), and a combination of the two, as well as a control group of intact mussels. After a duration of 48-72 hours, the mussel byssus strength was measured using a tension gauge in Newton's. There was no significant difference found between treatment groups, but significance was found in a side study looking at seawater flow verses no flow conditions and a trend in the strength relative to duration was observed.

Advisor: Jim McKenna