

The effect of salinity and temperature on the cardiac activity of *Carcinus maenas*, the european green crab (2006)

The European green crab, *Carcinus maenas*, is an intertidal species which is found in a wide range of climates due to its high tolerance to changes in abiotic factors such as temperature and salinity. The experiment I conducted investigated how salinity, temperature and their interaction affects the cardiac activity of green crabs to further knowledge on the topic and to gain insight into their use as a biomarker. To measure heart rate I employed a rather simple method of sanding the carapace of the specimen creating a “window” so I was able to see the pericardial membrane and count the heart rate through direct observation. The results showed that temperature affected the heart rate linearly and also when tested outside ambient conditions acclimation occurred at a much slower rate. Although temperature affected the crab’s ability to maintain its normal heart rate this species could still be considered a good specimen for use as a biomarker.

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