An overall increase in global temperatures has contributed to significant climate change on Earth.

Mammalian evolution have been cited as driven by global climate change.[[1]](#footnote-1) The publicized decline of *Eumoetopias jubatus* (Stellar sea lion) along the Pacific coast has been speculated to be caused by various human demands placed on the environment contributing to climate change and ultimately affecting the diet of *Eumoetopias jubatus*.[[2]](#footnote-2)

My objective is to compare refined data sets for Pacific benthic foraminiferal oxygen isotope ratios to species richness, body mass distributions and geographic range of dispersion for *Eumoetopias jubatus*.

I hypothesize that the species richness and geographic range of distribution for *Eumoetopias jubatus* will exhibit a decline alongside benthic foraminiferal isotopic ratios over the span of two centuries.

1. Alroy, John, Paul L. Koch, and James C. Zachos. "Global climate change and North American mammalian evolution." *Paleobiology* 26.sp4 (2000): 259-288. [http://www.bioone.org/doi/abs/10.1666/0094-8373%282000%2926[259:GCCANA]2.0.CO;2](http://www.bioone.org/doi/abs/10.1666/0094-8373%282000%2926%5b259:GCCANA%5d2.0.CO;2) [↑](#footnote-ref-1)
2. “Pity the copepod.” *The Economist.* The Economist Newspaper Limited, 16 June 2012. <http://www.economist.com/node/21556804> [↑](#footnote-ref-2)