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Entanglement rates of *Zalophus Californianus* in Two Rookeries along the Northern California Coast

Making up roughly 71% of the earth's surface (Obura, et al. 2012), the Oceans are vast. A once popular human discourse was that the Oceans were in fact so vast, that there was little possibility of having any negative impact on them. However, the negative impacts humans have had, and continue to have on the world's oceans is becoming increasingly apparent as more and more studies are being conducted on the subject. One well publicized consequence of human exploitation of the ocean is entanglements of marine life. To truly understand the implications of our actions and create effective management strategies, further studies into anthropogenic disturbances are critical. This study was conducted on entanglement rates in *Zalophus californianus*, at two rookeries along the Northern California Coast. The results show that the average proportion of entanglements at each site were almost identical. However, there were major differences in the types of entanglements between locations. The Monterey Coast Guard Pier entanglements consisted of 54% monofilament line ($p = <0.0001$), while Ano Nuevo Island had the highest percentage of old entanglements, at 27% ($p = <0.0001$). The age class with the most entanglements was subadult ($p=< 0.0001$). These findings suggest that the data reflect the same population of sea lions, who are entangled at a rate of ~0.3%. The types of entanglements differed by location, likely because there is more risk of entanglement at the Pier due to its public nature, and popular recreational fishing use. Potential conservation efforts could be afforded to better protect *Z. Californianus* from entanglements at the Monterey Coast Guard Pier.