|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | ***a. log(Abundance)*** | | | ***b. log(Richness)*** | | | ***c. log(Diversity)*** | | |
| ***Predictors*** | *Est.* | *CI* | *p* | *Est.* | *CI* | *p* | *Est.* | *CI* | *p* |
| *Intercept* | *3.31* | *2.09,4.52* | ***<0.001*** | *2.21* | *1.72,2.7* | ***<0.001*** | *1.94* | *1.31,2.56* | ***<0.001*** |
| *Surface Area [log]* | *0.71* | *0.29,1.13* | ***0.001*** | *0.36* | *0.19,0.53* | ***<0.001*** | *0.17* | *-0.05,0.39* | *0.126* |
| *PostS1* | *-2.89* | *-4.48,-1.29* | ***<0.001*** | *-1.81* | *-2.45,-1.17* | ***<0.001*** | *-1.56* | *-2.38,-0.74* | ***<0.001*** |
| *PostS2* | *-0.88* | *-2.48,0.72* | *0.277* | *-0.18* | *-0.83,0.46* | *0.574* | *0.02* | *-0.81,0.84* | *0.968* |
| *PostS3* | *-0.78* | *-2.37,0.82* | *0.34* | *-0.81* | *-1.45,0.17* | ***0.014*** | *-1.02* | *-1.84,-0.2* | ***0.015*** |
| *Surface Area [log] \* PostS1* | *0.64* | *0.09, 1.2* | ***0.024*** | *0.47* | *0.24,0.69* | ***<0.001*** | *0.53* | *0.24,0.82* | ***<0.001*** |
| *Surface Area [log] \* PostS2* | *0.2* | *-0.35,0.76* | *0.496* | *0.05* | *-0.17,0.28* | *0.638* | *0.01* | *-0.28,0.29* | *0.954* |
| *Surface Area [log] \* PostS3* | *0.24* | *-0.31,0.8* | *0.39* | *0.26* | *-0.03,0.48* | ***0.026*** | *0.35* | *0.06,0.64* | *0.017* |
| ***Observations*** | *204* | | | *204* | | | *204* | | |
| ***R2 / R2 adjusted*** | *0.463 / 0.444* | | | *0.618 / 0.604* | | | *0.322 / 0.298* | | |

***Table #.*** *Results of the linear models examining the relationship between knolls'**surface area* to ***(a)*** *fish**abundance,* ***(b)*** *fish**richness, and* ***(c)*** *fish diversity, calculated as the effective number of species after transformation by the Shannon-Wiener. The surface area is modeled as interaction with the survey in all models. All response variables and the predictor surface area were log-transformed. In these analyses all fish were included and only subset of the 51 knolls that were surveyed in PostS1 were included.*