**Table S1.** Summary of linear mixed effects model examining the factors affecting space use within the experimental arena. For the factor "shoal location", the condition of "no shoal" is used as the reference level. Individual identity and family were used as random effects. MMR = maximum metabolic rate. Model marginal R2 = 0.63, conditional R2 = 0.67.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | coefficient | s.e.m. | d.f. | *t* | *p* |
| intercept | -0.287 | 0.241 | 34.02 | -1.19 | 0.241 |
| preferred temperature (oC) | 0.224 | 0.080 | 26.94 | 2.81 | 0.009 |
| shoal location  cool side | -1.003 | 0.137 | 68.05 | -7.31 | <0.001 |
| warm side | 0.728 | 0.137 | 68.05 | 5.30 | <0.001 |
| sociability | 0.067 | 0.099 | 85.41 | 0.68 | 0.499 |
| log body mass (log mg) | 0.187 | 0.090 | 27.14 | 2.06 | 0.049 |
| log MMR (log mg O2 h-1) | -0.461 | 0.256 | 29.02 | -1.80 | 0.082 |
| date | -0.134 | 0.074 | 24.17 | -1.81 | 0.083 |
| shoal location x sociability  cool side x sociability | -0.607 | 0.128 | 67.75 | -4.74 | <0.001 |
| warm side x sociability | 0.007 | 0.128 | 67.75 | 0.06 | 0.956 |
|  |  |  |  |  |  |