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| **Linear mixed effects model: Worker spatial fidelity zone size and mean distance to the nest entrance**  Formula: SFZ ~ MeanScaledDist\*Nest\*Density + (1 | Colony ID) + (1 | ColorID) | | | | | |
| Random effects: | Name | Variance | Std. dev |  |  |
| ColorID | (Intercept) | 0.020 | 0.141 |  |  |
| Colony ID | (Intercept) | 0.029 | 0.170 |  |  |
| Residual |  | 0.677 | 0.823 |  |  |
| Fixed effects: | *β* a | *SE* b | *df* c | *t* d | *P* |
| (Intercept) | 1.122 | 0.425 | 300.839 | 2.642 | **0.009** |
| MeanScaledDist | 3.177 | 2.305 | 359.305 | 1.378 | 0.169 |
| Nest | 1.216 | 0.568 | 373.809 | 2.140 | **0.033** |
| Density | 0.402 | 0.555 | 321.080 | 0.723 | 0.470 |
| MeanScaledDist\*Nest | -4.810 | 2.420 | 365.722 | -1.988 | **0.048** |
| MeanScaledDist\*Density | -4.252 | 3.212 | 374.037 | -1.324 | 0.186 |
| Nest\*Density | -1.896 | 0.739 | 372.667 | -2.566 | **0.011** |
| MeanScaledDist\*Nest\*Density | 6.794 | 3.341 | 374.092 | 2.034 | **0.043** |
| Model Statistics: |  |  |  |  |  |
| Number of obs: 383, groups: Color ID, 228; Colony ID, 19  Marginal *R*2 = 0.090, Conditional *R*2 = 0.706  a Coefficient  b Standard error  c Degrees of freedom  d T statistic | | | | | |