**Supplementary Material 2)** Fit and selection statistics of models affecting small mammal richness in the 122 forest fragments studied in Atlantic forest biome.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Models composition | AICc | ΔAICc | wAICc | R2 |
| *Environmental models* |  |  |  |  |
| Latitude + FragSize + PC1m | 563.8 | 0.00 | 0.383 | 0.1751 |
| Latitude + FragSize + PC2m | 564.7 | 0.82 | 0.254 | 0.1684 |
| Latitude + FragSize + PC1m + PC2m | 565.7 | 1.82 | 0.150 | 0.179 |
| FragSize + PC2m | 566.7 | 2.86 | 0.092 | 0.1322 |
| FragSize + PC1m | 567.2 | 3.40 | 0.070 | 0.1276 |
| FragSize + PC1m + PC2m | 567.9 | 4.04 | 0.051 | 0.1418 |
| Latitude + PC1m | 638.1 | 74.31 | 0.000 | 0.04295 |
| Latitude + PC2m | 638.8 | 74.97 | 0.000 | 0.03731 |
| PC2m | 639.6 | 75.78 | 0.000 | 0.01147 |
| Latitude + PC1m + PC2m | 640.0 | 76.12 | 0.000 | 0.04621 |
| PC1m | 640.0 | 76.15 | 0.000 | 0.008208 |
| PC1m + PC2m | 640.8 | 77.0 | 0.000 | 0.01968 |
| Latitude + FragSize | 641.1 | 77.24 | 0.000 | 0.09421 |
| FragSize | 646.7 | 82.88 | 0.000 | 0.02823 |
| Latitude | 703.5 | 139.64 | 0.000 | 0.04396 |
| Null model | 706.9 | 143.03 | 0.000 |  |
|  |  |  |  |  |
| *Methodological models* |  |  |  |  |
| TrapEffort + VertStrat + Pitfall + Seasons + Bait | 550.0 | 0.00 | 0.978 | 0.2304 |
| TrapEffort + Pitfall + Seasons + Bait | 558.8 | 8.78 | 0.012 | 0.1829 |
| TrapEffort + VertStrat + Seasons + Bait | 559.3 | 9.28 | 0.009 | 0.2078 |
| TrapEffort + VertStrat + Pitfall + Seasons | 565.4 | 15.36 | 0.000 | 0.2103 |
| TrapEffort + Seasons + Bait | 567.7 | 17.64 | 0.000 | 0.1651 |
| TrapEffort + VertStrat + Seasons | 575.9 | 25.89 | 0.000 | 0.1802 |
| TrapEffort + Pitfall + Seasons | 576.2 | 26.19 | 0.000 | 0.1835 |
| TrapEffort + Seasons | 586.6 | 36.59 | 0.000 | 0.1558 |
| VertStrat + Pitfall + Seasons + Bait | 602.8 | 52.72 | 0.000 | 0.08102 |
| VertStrat + Seasons + Bait | 611.8 | 61.72 | 0.000 | 0.06232 |
| Pitfall + Seasons + Bait | 612.8 | 62.80 | 0.000 | 0.02049 |
| VertStrat + Pitfall + Seasons | 615.3 | 65.23 | 0.000 | 0.08344 |
| Seasons + Bait | 620.4 | 70.41 | 0.000 | 0.1592 |
| TrapEffort + VertStrat + Seasons + Bait | 624.4 | 74.34 | 0.000 | 0.1394 |
| VertStrat + Seasons | 625.9 | 75.85 | 0.000 | 0.05318 |
| Pitfall + Seasons | 628.9 | 78.85 | 0.000 | 0.03499 |
| TrapEffort + Pitfall + Bait | 630.5 | 80.43 | 0.000 | 0.1407 |
| TrapEffort + VertStrat + Bait | 634.5 | 84.42 | 0.000 | 0.1394 |
| TrapEffort + VertStrat + Pitfall | 636.4 | 86.39 | 0.000 | 0.156 |
| Seasons | 637.9 | 87.39 | 0.000 | 0.0202 |
| TrapEffort + Bait | 640.4 | 90.34 | 0.000 | 0.1196 |
| TrapEffort + Pitfall | 645.8 | 95.72 | 0.000 | 0.1463 |
| TrapEffort + VertStrat | 646.6 | 96.61 | 0.000 | 0.1331 |
| TrapEffort | 656.6 | 106.57 | 0.000 | 0.1199 |
| VertStrat + Pitfall + Bait | 674.3 | 124.22 | 0.000 | 0.04178 |
| VertStrat + Bait | 682.3 | 132.20 | 0.000 | 0.03565 |
| Pitfall + Bait | 682.6 | 132.53 | 0.000 | 0.002256 |
| VertStrat + Pitfall | 685.6 | 135.57 | 0.000 | 0.04098 |
| Bait | 690.2 | 140.13 | 0.000 | 0.001667 |
| VertStrat | 694.5 | 144.43 | 0.000 | 0.03011 |
| Pitfall | 698.4 | 148.39 | 0.000 | 0.006016 |
| Null model | 706.9 | 156.83 | 0.000 |  |

TrapEffort = trapping effort; VertStrat = vertical stratification; FragSize = Fragment size; PC1m = first axis of the PCA for matrix composition; PC2m = second axis of the PCA for matrix composition.