Table S1. GLMM together and time -5 to -1

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 2.825 | 0.255 | 11.071 | 0.000 |
| Sinus time | 0.318 | 0.045 | 7.126 | 0.000 |
| Cosinus time | 0.185 | 0.042 | 4.421 | 0.000 |
| Clutch initiation date (linear) | 55.914 | 30.779 | 1.817 | 0.069 |
| Clutch initiation date (quadratic) | -100.626 | 28.965 | -3.474 | 0.001 |
| Day relative to clutch initiation (linear) | 130.976 | 46.028 | 2.846 | 0.004 |
| Day relative to clutch initiation (quadratic) | -83.673 | 5.599 | -14.946 | 0.000 |
| Random intercept | 4.278 |  |  |  |
| R² conditional | 0.859 |  |  |  |
| R² marginal | 0.074 |  |  |  |

Table S2. GLMM together and time 0 to 3

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 0.277 | 0.146 | 1.903 | 0.057 |
| Sinus time | -0.029 | 0.026 | -1.114 | 0.265 |
| Cosinus time | -0.215 | 0.025 | -8.591 | 0.000 |
| Clutch initiation date (linear) | 17.239 | 18.946 | 0.910 | 0.363 |
| Clutch initiation date (quadratic) | -74.809 | 17.163 | -4.359 | 0.000 |
| Day relative to clutch initiation (linear) | -175.554 | 16.447 | -10.674 | 0.000 |
| Day relative to clutch initiation (quadratic) | -5.892 | 3.043 | -1.936 | 0.053 |
| Random intercept | 1.057 |  |  |  |
| R² conditional | 0.480 |  |  |  |
| R² marginal | 0.303 |  |  |  |

Table S3. GLMM together and year -5 to -1

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 2.390 | 0.456 | 5.247 | 0.000 |
| Day relative to clutch initiation (linear) | 5.147 | 2.512 | 2.049 | 0.040 |
| Day relative to clutch initiation (quadratic) | -4.947 | 1.222 | -4.049 | 0.000 |
| Clutch initiation date (linear) | 1.499 | 1.590 | 0.943 | 0.346 |
| Clutch initiation date (quadratic) | -6.715 | 1.723 | -3.897 | 0.000 |
| Year (2019) | -0.418 | 0.402 | -1.039 | 0.299 |
| Random intercept | 1.701 |  |  |  |
| R² conditional | 1.050 |  |  |  |
| R² marginal | 0.156 |  |  |  |

Table S4. GLMM together and year 0 to 3

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 1.315 | 0.432 | 3.040 | 0.002 |
| Day relative to clutch initiation | -0.877 | 0.079 | -11.063 | 0.000 |
| Clutch initiation date (linear) | 5.372 | 1.918 | 2.801 | 0.005 |
| Clutch initiation date (quadratic) | -5.714 | 1.651 | -3.462 | 0.001 |
| Year (2019) | 0.097 | 0.446 | 0.218 | 0.827 |
| Random intercept | 0.548 |  |  |  |
| R² conditional | 1.035 |  |  |  |
| R² marginal | 0.570 |  |  |  |

Table S5. GLMM together -5 to -1

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 1.997 | 0.164 | 12.197 | 0.000 |
| Day relative to clutch initiation (linear) | 4.764 | 2.145 | 2.221 | 0.026 |
| Day relative to clutch initiation (quadratic) | -4.925 | 1.117 | -4.408 | 0.000 |
| Clutch initiation date (linear) | 1.536 | 1.450 | 1.059 | 0.290 |
| Clutch initiation date (quadratic) | -6.973 | 1.570 | -4.441 | 0.000 |
| Random intercept | 1.599 |  |  |  |
| R² conditional | 1.063 |  |  |  |
| R² marginal | 0.161 |  |  |  |

Table S6. GLMM together and year 0 to 3

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 1.405 | 0.130 | 10.784 | 0.000 |
| Day relative to clutch initiation | -0.878 | 0.079 | -11.100 | 0.000 |
| Clutch initiation date (linear) | 5.348 | 1.906 | 2.806 | 0.005 |
| Clutch initiation date (quadratic) | -5.632 | 1.612 | -3.494 | 0.000 |
| Random intercept | 0.536 |  |  |  |
| R² conditional | 1.035 |  |  |  |
| R² marginal | 0.574 |  |  |  |

Table S7. GLMM together vs. randomized -5 to -1

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 2.029 | 0.115 | 17.664 | 0.000 |
| Day relative to clutch initiation (linear) | 7.692 | 2.485 | 3.095 | 0.002 |
| Day relative to clutch initiation (quadratic) | -7.819 | 1.491 | -5.243 | 0.000 |
| Data type (random pairs) | -4.126 | 0.150 | -27.570 | 0.000 |
| Clutch initiation date (linear) | 9.207 | 2.113 | 4.357 | 0.000 |
| Clutch initiation date (quadratic) | -14.289 | 2.070 | -6.901 | 0.000 |
| Clutch initiation date (linear):data type (random pairs) | -7.978 | 2.554 | -3.124 | 0.002 |
| Clutch initiation date (quadratic):data type (random pairs) | 13.221 | 2.428 | 5.444 | 0.000 |
| Random intercept | 1.029 |  |  |  |
| R² conditional | 1.003 |  |  |  |
| R² marginal | 0.832 |  |  |  |

Table S8. GLMM together vs. randomized 0 to 3

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 1.352 | 0.123 | 11.029 | 0.000 |
| Day relative to clutch initiation | -0.859 | 0.062 | -13.910 | 0.000 |
| Data type (random pairs) | -3.391 | 0.172 | -19.686 | 0.000 |
| Clutch initiation date (linear) | 5.189 | 2.116 | 2.452 | 0.014 |
| Clutch initiation date (quadratic) | -7.044 | 1.950 | -3.612 | 0.000 |
| Day relative to clutch initiation:data type (random pairs) | 0.812 | 0.088 | 9.250 | 0.000 |
| Clutch initiation date (linear):data type (random pairs) | 0.190 | 2.604 | 0.073 | 0.942 |
| Clutch initiation date (quadratic):data type (random pairs) | 6.304 | 2.644 | 2.384 | 0.017 |
| Random intercept | 0.482 |  |  |  |
| R² conditional | 0.949 |  |  |  |
| R² marginal | 0.728 |  |  |  |

Table S9. GLMM together vs. randomized 4 to 10

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | -1.297 | 0.294 | -4.412 | 0.000 |
| Day relative to clutch initiation | -0.148 | 0.044 | -3.334 | 0.001 |
| Data type (random pairs) | -0.569 | 0.376 | -1.512 | 0.130 |
| Clutch initiation date | -0.155 | 0.031 | -4.973 | 0.000 |
| Day relative to clutch initiation:data type (random pairs) | 0.121 | 0.055 | 2.206 | 0.027 |
| Clutch initiation date:data type (random pairs) | 0.158 | 0.030 | 5.207 | 0.000 |
| Random intercept | 0.744 |  |  |  |
| R² conditional | 0.351 |  |  |  |
| R² marginal | 0.097 |  |  |  |

Table S10. GLMM female moving away -5 to -1

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | -0.304 | 0.287 | -1.059 | 0.290 |
| Day relative to clutch initiation | -0.087 | 0.085 | -1.025 | 0.305 |
| Clutch initiation date | -0.124 | 0.048 | -2.584 | 0.010 |
| Random intercept | 0.754 |  |  |  |
| R² conditional | 0.144 |  |  |  |
| R² marginal | 0.055 |  |  |  |

Table S11. GLMM female moving away 0 to 3

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | -0.053 | 0.164 | -0.321 | 0.748 |
| Day relative to clutch initiation | 0.086 | 0.079 | 1.097 | 0.273 |
| Clutch initiation date | 0.045 | 0.028 | 1.643 | 0.100 |
| Random intercept | 0.710 |  |  |  |
| R² conditional | 0.083 |  |  |  |
| R² marginal | 0.008 |  |  |  |

Table S12. GLMM split distance -5 to -1

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 176.404 | 20.272 | 8.702 | 0.000 |
| Sex (male) | -29.511 | 16.525 | -1.786 | 0.074 |
| Day relative to clutch initiation | 4.284 | 6.687 | 0.641 | 0.522 |
| Clutch initiation date | 4.556 | 3.440 | 1.325 | 0.185 |
| Random intercept | 14.205 |  |  |  |
| R² conditional | 0.197 |  |  |  |
| R² marginal | 0.015 |  |  |  |

Table S13. GLMM split distance 0 to 3

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 222.160 | 28.174 | 7.885 | 0.000 |
| Sex (male) | -21.889 | 15.438 | -1.418 | 0.156 |
| Day relative to clutch initiation | -4.178 | 7.743 | -0.540 | 0.590 |
| Clutch initiation date | -2.538 | 6.249 | -0.406 | 0.685 |
| Random intercept | 169.618 |  |  |  |
| R² conditional |  |  |  |  |
| R² marginal | 0.004 |  |  |  |

Table S14. GLMM male at nest 0 to 3

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | -1.314 | 0.097 | -13.562 | 0.000 |
| Day relative to clutch initiation | 0.553 | 0.071 | 7.753 | 0.000 |
| Clutch initiation date | 0.039 | 0.023 | 1.723 | 0.085 |
| Random intercept | 0.461 |  |  |  |
| R² conditional | 0.915 |  |  |  |
| R² marginal | 0.301 |  |  |  |

Table S15. GLMM female at nest 0 to 3

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | -1.594 | 0.101 | -15.761 | 0.000 |
| Day relative to clutch initiation | -0.251 | 0.068 | -3.671 | 0.000 |
| Clutch initiation date (linear) | 4.685 | 1.439 | 3.255 | 0.001 |
| Clutch initiation date (quadratic) | -3.947 | 1.316 | -2.999 | 0.003 |
| Random intercept | 0.436 |  |  |  |
| R² conditional | 0.785 |  |  |  |
| R² marginal | 0.227 |  |  |  |

Table S16. GLMM together and EPY -5 to -1

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 2.019 | 0.179 | 11.280 | 0.000 |
| Day relative to clutch initiation (linear) | 4.847 | 2.303 | 2.104 | 0.035 |
| Day relative to clutch initiation (quadratic) | -4.830 | 1.143 | -4.224 | 0.000 |
| Clutch initiation date (linear) | 1.463 | 1.641 | 0.892 | 0.373 |
| Clutch initiation date (quadratic) | -7.099 | 1.737 | -4.088 | 0.000 |
| EPP (yes) | -0.208 | 0.409 | -0.508 | 0.612 |
| Random intercept | 1.704 |  |  |  |
| R² conditional | 1.055 |  |  |  |
| R² marginal | 0.143 |  |  |  |

Table S17. GLMM together and EPY 0 to 2

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 1.425 | 0.140 | 10.150 | 0.000 |
| Day relative to clutch initiation | -0.935 | 0.090 | -10.414 | 0.000 |
| Clutch initiation date (linear) | 4.661 | 1.650 | 2.824 | 0.005 |
| Clutch initiation date (quadratic) | -5.518 | 1.528 | -3.612 | 0.000 |
| EPP (yes) | 0.505 | 0.413 | 1.225 | 0.221 |
| Random intercept | 0.619 |  |  |  |
| R² conditional | 1.035 |  |  |  |
| R² marginal | 0.530 |  |  |  |

Table S18. GLMM female moves away and EPY -5 to -1

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | -0.309 | 0.302 | -1.021 | 0.307 |
| Day relative to clutch initiation | -0.056 | 0.088 | -0.633 | 0.527 |
| Clutch initiation date | -0.120 | 0.051 | -2.367 | 0.018 |
| EPP (yes) | 0.692 | 0.455 | 1.521 | 0.128 |
| Random intercept | 0.804 |  |  |  |
| R² conditional | 0.167 |  |  |  |
| R² marginal | 0.088 |  |  |  |

Table S19. GLMM female moves away and EPY 0 to 2

| **Parameter** | **Estimate** | **SE** | **Statistic** | **p** |
| --- | --- | --- | --- | --- |
| Intercept | 0.070 | 0.184 | 0.381 | 0.703 |
| Day relative to clutch initiation | 0.002 | 0.112 | 0.020 | 0.984 |
| Clutch initiation date | 0.023 | 0.030 | 0.766 | 0.443 |
| EPP (yes) | 0.113 | 0.313 | 0.360 | 0.719 |
| Random intercept | 0.751 |  |  |  |
| R² conditional | 0.080 |  |  |  |
| R² marginal | 0.002 |  |  |  |