

**Table S1 Results from simulations with harem sizes of 2, 3 or 18 females with the "long" age structure.**

|                             | $N_{e-mt}$      | $N_{e-x}$                      | $N_{e-a}$                      | $N_{e-y}$                     | $N_{e-mt} / N_{e-a}$         | $N_{e-x} / N_{e-a}$ | $N_{e-y} / N_{e-a}$ |
|-----------------------------|-----------------|--------------------------------|--------------------------------|-------------------------------|------------------------------|---------------------|---------------------|
| <b>2 females per harem</b>  |                 |                                |                                |                               |                              |                     |                     |
| Theoretical expectation     | 182.0           | 544.2                          | 724.4                          | 180.2                         | 0.251                        | 0.751               | 0.249               |
| "Seasonal harem"            | 195.9           | 563.6                          | 684.5                          | 209.9                         | 0.286                        | 0.823               | 0.307               |
|                             | (156.9 – 235.0) | (498.0 – 629.6)                | (612.0 – 757.4)                | (170.6 – 249.3)               | (0.226 – 0.353)              | (0.698 – 0.967)     | (0.240 – 0.376)     |
| "Harem for life"            | 194.2           | 480.9                          | 560.1                          | 119.0                         | 0.346                        | 0.858               | 0.212               |
|                             | (143.6 – 244.8) | 405.9 – 555.8) <sup>1,3</sup>  | (482.9 – 637.4) <sup>1,3</sup> | (80.5 – 157.5) <sup>1,3</sup> | (0.269 – 0.447)              | (0.691 – 0.975)     | (0.148 – 0.242)     |
| <b>3 females per harem</b>  |                 |                                |                                |                               |                              |                     |                     |
| Theoretical expectation     | 182.0           | 542.5                          | 721.0                          | 178.5                         | 0.252                        | 0.752               | 0.248               |
| "Seasonal harem"            | 202.2           | 540.6                          | 713.4                          | 149.3                         | 0.283                        | 0.769               | 0.212               |
|                             | (162.7 – 241.7) | (476.2 – 605.2)                | (639.8 – 787.5)                | (115.8 – 182.9)               | (0.226 – 0.349)              | (0.635 – 0.882)     | (0.165 – 0.264)     |
| "Harem for life"            | 193.4           | 382.6                          | 416.6                          | 94.7                          | 0.464                        | 0.918               | 0.227               |
|                             | (142.9 – 243.9) | (313.7 – 451.5) <sup>1,3</sup> | (347.5 – 485.8) <sup>1,3</sup> | (59.4 – 130.0) <sup>1,3</sup> | (0.341 – 0.586) <sup>2</sup> | (0.785 – 1.278)     | (0.153 – 0.274)     |
| <b>18 females per harem</b> |                 |                                |                                |                               |                              |                     |                     |
| Theoretical expectation     | 182.0           | 517.7                          | 672.9                          | 156.4                         | 0.270                        | 0.769               | 0.232               |
| "Seasonal harem"            | 198.2           | 522.6                          | 675.0                          | 160.6                         | 0.294                        | 0.774               | 0.238               |
|                             | (160.1 – 236.5) | (459.0 – 586.6)                | (603.5 – 746.9)                | (125.9 – 195.5)               | (0.231 – 0.369)              | (0.648 – 0.923)     | (0.185 – 0.297)     |
| "Harem for life"            | 177.6           | 105.1                          | 94.6                           | 21.8                          | 1.872                        | 1.111               | 0.230               |
|                             | (141.5 – 213.9) | (78.1 – 132.3) <sup>1,3</sup>  | (68.4 – 120.9) <sup>1,3</sup>  | (8.1 – 35.5) <sup>1,3</sup>   | (1.343 – 2.679) <sup>2</sup> | (0.618 – 1.359)     | (0.084 – 0.386)     |

Abbreviations and superscripts follow Table 1