

1 Supplementary results

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3 **Supplementary table S1.** Survival estimates of seven wild caught *Polistes canadensis* colonies
 4 maintained under laboratory conditions for 15 months, as generated by Kaplan-Meier survival
 5 analysis. ^a*Estimation is limited to the largest survival time if it is censored (colony M1).*

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| Colony | Mean ^a | | | | Median | | | |
|---------|-------------------|------------|-------------------------|-------------|----------|------------|-------------------------|-------------|
| | Estimate | Std. Error | 95% Confidence Interval | | Estimate | Std. Error | 95% Confidence Interval | |
| | | | Lower Bound | Upper Bound | | | Lower Bound | Upper Bound |
| M6 | 260.01 | 41.34 | 178.98 | 341.04 | 330 | 25.98 | 279.09 | 380.91 |
| M1 | 238.8 | 28.62 | 182.7 | 294.9 | 240 | 24.81 | 191.34 | 288.66 |
| M2 | 207.6 | 19.2 | 169.95 | 245.25 | 210 | 28.11 | 154.92 | 265.08 |
| M3 | 194.22 | 29.76 | 135.87 | 252.57 | 210 | 31.53 | 148.17 | 271.83 |
| M7 | 167.64 | 20.52 | 127.44 | 207.84 | 180 | 32.58 | 116.16 | 243.84 |
| M4 | 151.59 | 24.96 | 102.63 | 200.52 | 90 | 18.66 | 53.43 | 126.57 |
| M5 | 129.99 | 39.36 | 52.83 | 207.18 | 90 | 44.73 | 2.34 | 177.66 |
| Overall | 193.86 | 10.5 | 173.25 | 214.44 | 180 | 22.41 | 136.05 | 223.95 |

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9 **Supplementary table S2.** Pairwise differences in survival of seven wild caught *Polistes canadensis*
 10 colonies maintained under laboratory conditions for 15 months as detected using the Breslow
 11 statistic in a Kaplan-Meier survival analysis. Red boxes highlight significant pairwise differences.

| Breslow (Generalized Wilcoxon) | Colony | M2 | | M3 | | M4 | | M5 | | M6 | | M7 | |
|-----------------------------------|--------|----------------|------|----------------|------|----------------|-------------|----------------|-------------|----------------|-------------|----------------|-------------|
| | | X ² | Sig. | X ² | Sig. | X ² | Sig. | X ² | Sig. | X ² | Sig. | X ² | Sig. |
| | M1 | 1.093 | .296 | 1.837 | .175 | 4.058 | .044 | 4.693 | .030 | .085 | .770 | 3.795 | .051 |
| | M2 | | | .058 | .810 | 3.491 | .062 | 4.325 | .038 | 2.691 | .101 | 1.593 | .207 |
| | M3 | | | | | .941 | .332 | 1.773 | .183 | 2.735 | .098 | .893 | .345 |
| | M4 | | | | | | | .230 | .631 | 4.713 | .030 | .171 | .679 |
| | M5 | | | | | | | | | 4.843 | .028 | .473 | .492 |
| | M6 | | | | | | | | | | | 5.000 | .025 |

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14 **Supplementary table S3.** Survival estimates of six cohorts of wild caught *Polistes canadensis* split
 15 from 3 wild caught colonies and maintained under laboratory conditions for 220 days, as generated
 16 by Kaplan-Meier survival analysis.

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| Colony | Mean | | | | Median | | | |
|---------|----------|------------|-------------------------|-------------|----------|------------|-------------------------|-------------|
| | Estimate | Std. Error | 95% Confidence Interval | | Estimate | Std. Error | 95% Confidence Interval | |
| | | | Lower Bound | Upper Bound | | | Lower Bound | Upper Bound |
| M10A | 93.077 | 18.790 | 56.249 | 129.905 | 80.000 | 13.156 | 54.214 | 105.786 |
| M10B | 71.250 | 22.791 | 26.580 | 115.920 | 30.000 | 28.284 | 0.000 | 85.437 |
| M8A | 143.158 | 18.322 | 107.246 | 179.069 | 180.000 | 31.839 | 117.595 | 242.405 |
| M8B | 88.889 | 23.000 | 43.808 | 133.969 | 80.000 | 29.814 | 21.564 | 138.436 |
| M9A | 115.000 | 13.577 | 88.389 | 141.611 | 140.000 | 8.452 | 123.435 | 156.565 |
| M9B | 103.333 | 19.293 | 65.519 | 141.148 | 120.000 | 59.628 | 3.128 | 236.872 |
| Overall | 108.889 | 8.140 | 92.935 | 124.843 | 120.000 | 19.574 | 81.635 | 158.365 |

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19 **Supplementary table S4.** Pairwise differences in survival of six cohorts of wild caught *Polistes*
20 *canadensis* split from 3 wild caught colonies and maintained under laboratory conditions for 220
21 days, as detected using the Breslow statistic in a Kaplan-Meier survival analysis. Red boxes highlight
22 significant pairwise differences.

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| Breslow (Generalized Wilcoxon) | Colony | M10B | | M8A | | M8B | | M9A | | M9B | |
|-----------------------------------|--------|----------------|------|----------------|------|----------------|------|----------------|------|----------------|------|
| | | X ² | Sig. |
| | M10A | .394 | .530 | 2.797 | .094 | .004 | .947 | 1.225 | .268 | .214 | .643 |
| | M10B | | | 6.880 | .009 | .459 | .498 | 2.441 | .118 | 1.364 | .243 |
| | M8A | | | | | 3.829 | .050 | 4.340 | .037 | 4.103 | .043 |
| | M8B | | | | | | | .832 | .362 | .280 | .597 |
| | M9A | | | | | | | | | .173 | .677 |

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26 **Supplementary table S5.** Survival differences between cohorts taken from the same colonies (3
27 colonies in total), of wild caught *Polistes canadensis* and maintained under laboratory conditions for
28 220 days, as detected using the Breslow statistic in a Kaplan-Meier survival analysis.

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| Origin | Chi-Square | df | Sig. |
|--------|------------|----|------|
| M8 | 3.829 | 1 | .050 |
| M9 | .173 | 1 | .677 |
| M10 | .394 | 1 | .530 |

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