|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A.** | **Differences in weight** | | | | | |  | **Rates of weight increase** | | | | | | |
| **Week** | **Treatment** | **Estimate** | **SE** | **DF** | **T-value** | **P-value** |  | **Contrasts** | | **Estimate** | **SE** | **DF** | **T-ratio** | **P-value** |
| **0** | **Brumated** | -0.345 | 0.428 | 737 | -1.150 | 0.2503 |  | **Brumated – non-brumated** | | -0.345 | 0.300 | 995 | -1.150 | 0.2503 |
| **4** | **Brumated** | 0.843 | 0.292 | 737 | 2.889 | 0.0040\*\* |  | **Brumated – non-brumated** | | -1.232 | 0.300 | 995 | -4.114 | 0.0001\*\*\* |
| **8** | **Brumated** | 0.861 | 0.292 | 737 | 2.953 | 0.0032\*\* |  | **Brumated – non-brumated** | | -1.208 | 0.300 | 995 | -4.031 | 0.0001\*\*\* |
| **12** | **Brumated** | 1.937 | 0.564 | 737 | 3.434 | 0.0006\*\*\* |  | **Brumated – non-brumated** | | -2.262 | 0.300 | 995 | -7.552 | 0.001\*\*\* |
| **16** | **Brumated** | 2.101 | 0.564 | 737 | 3.735 | 0.0002\*\*\* |  | **Brumated – non-brumated** | | -3.038 | 0.300 | 995 | -10.143 | 0.001\*\*\* |
| **17** | **Brumated** | 1.04 | 2.580 | 41 | 0.404 | 0.6890 |  | **Brumated – non-brumated** | | -2.904 | 1.246 | Inf | -2.331 | 0.0198\* |
| **18** | **Brumated** | 0.778 | 2.541 | 41 | 0.306 | 0.7615 |  | **Brumated – non-brumated** | | -2.505 | 1.133 | Inf | -2.211 | 0.0271\* |
| **19** | **Brumated** | -0.400 | 3.409 | 41 | -0.117 | 0.9073 |  | **Brumated – non-brumated** | | -2.107 | 1.035 | Inf | -2.036 | 0.0418\* |
| **20** | **Brumated** | 1.100 | 2.6403 | 41 | 0.417 | 0.6800 |  | **Brumated – non-brumated** | | **No recapture** | | | | |
| **24** | **Brumated** | 6.550 | 2.603 | 41 | 2.516 | 0.0171\* |  | **Brumated – non-brumated** | | -0.112 | 0.902 | Inf | -0.125 | 0.9009 |
| **28** | **Brumated** | 13.800 | 3.409 | 41 | 4.049 | 0.0003\*\*\* |  | **Brumated – non-brumated** | | 1.483 | 1.259 | Inf | 1.178 | 0.2388 |
| **32** | **Brumated** | 12.133 | 2.783 | 41 | 4.360 | 0.0001\*\*\* |  | **Brumated – non-brumated** | | 3.079 | 1.796 | Inf | 1.714 | 0.0864 |
| **Confidence interval: 0.95** | | | **F-statistic: 82.68** | | | **p<0.05** |  |  | **F-statistic 11.49** | | **DF 44** |  | | **p<0.05** |

**Table 5. Comparison in A) weight and B) SUL and rates of growth between 12-week brumated and non-brumated frogs translocated to the wild**. Frogs brumated for 12 weeks showed significantly lighter weights (A) and smaller SULs (B) compared to captive non-brumated conspecifics until translocation. Post-release weights matched those of non-brumated conspecifics within 1-week of translocation and rates of weight gain were significantly higher in the brumation group in the weeks after translocation before levelling out (Fig. 6). Week 0 represents the beginning of the brumation period (blue shaded) and week 12 marks the end, week 16 (yellow) marks date of translocation and green includes subsequent weeks of recapture.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **B.** | **Differences in SUL** | | | | | | |  | **Rates of SUL increase** | | | | | | |
| **Week** | **Treatment** | **Estimate** | **SE** | **DF** | **T-value** | **P-value** | |  | **Contrasts** | | **Estimate** | **SE** | **DF** | **T-ratio** | **P-value** |
| **0** | **Brumated** | -0.345 | 0.428 | 737 | -1.150 | 0.2503 | |  | **Brumated – non-brumated** | | -0.345 | 0.300 | 995 | -1.150 | 0.2503 |
| **4** | **Brumated** | 0.843 | 0.292 | 737 | 2.889 | 0.0040\*\* | |  | **Brumated – non-brumated** | | -1.232 | 0.300 | 995 | -4.114 | 0.0001\*\*\* |
| **8** | **Brumated** | 0.861 | 0.292 | 737 | 2.953 | 0.0032\*\* | |  | **Brumated – non-brumated** | | -1.208 | 0.300 | 995 | -4.031 | 0.0001\*\*\* |
| **12** | **Brumated** | 1.937 | 0.564 | 737 | 3.434 | 0.0006\*\*\* | |  | **Brumated – non-brumated** | | -2.262 | 0.300 | 995 | -7.552 | 0.001\*\*\* |
| **16** | **Brumated** | 2.101 | 0.564 | 737 | 3.735 | 0.0002\*\*\* | |  | **Brumated – non-brumated** | | -3.038 | 0.300 | 995 | -10.143 | 0.001\*\*\* |
| **17** | **Brumated** | 1.04 | 2.580 | 41 | 0.404 | 0.6890 | |  | **Brumated – non-brumated** | | -1.04 | 2.58 | 32 | -0.404 | 0.6890 |
| **18** | **Brumated** | 0.778 | 2.541 | 41 | 0.306 | 0.7615 | |  | **Brumated – non-brumated** | | -2.72 | 1.61 | 32 | -1.694 | 0.1000 |
| **19** | **Brumated** | -0.400 | 3.409 | 41 | -0.117 | 0.9073 | |  | **Brumated – non-brumated** | | -1.95 | 2.78 | 32 | -0.701 | 0.4886 |
| **20** | **Brumated** | 1.100 | 2.6403 | 41 | 0.417 | 0.6800 | |  | **Brumated – non-brumated** | | No recapture | | | | |
| **24** | **Brumated** | 6.550 | 2.603 | 41 | 2.516 | 0.0171\* | |  | **Brumated – non-brumated** | | -0.75 | 1.70 | 32 | -0.440 | 0.6629 |
| **28** | **Brumated** | 13.800 | 3.409 | 41 | 4.049 | 0.0003\*\*\* | |  | **Brumated – non-brumated** | | -3.00 | 3.41 | 32 | -0.880 | 0.3854 |
| **32** | **Brumated** | 12.133 | 2.783 | 41 | 4.360 | 0.0001\*\*\* | |  | **Brumated – non-brumated** | | 4.96 | 2.20 | 32 | 2.254 | 0.0312\* |
| **Confidence interval: 0.95** | | | **Translocated data:**  **F-statistic: 26.42** | | | | **p<0.05** |  |  | **Translocated data: F-statistic 11.49** | | **DF 32** |  | | **p<0.05** |