|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Weight differences** | | | |  |  |  | **Rate of weight gain** | | |
| **Week** | **Estimate** | **SE** | | **T-ratio** | **P-value** |  | **Contrasts** | **Estimate** | **SE** | **T-ratio** | **P-value** |
| **0** | 3.707 | 2.994 | | 0.00 | 0.2180 |  | **Brumated – Non-brumated** | -0.956 | 0.589 | 0.00 | 1.000 |
| **4** | 4.134 | 0.4407 | | 0.781 | 0.4358 |  | **Brumated – Non-brumated** | -0.956 | 0.589 | -2.811 | 0.0056\* |
| **9** | 3.779 | 3.291 | | -5.981 | 0.0031\*\* |  | **Brumated – Non-brumated** | -5.561 | 0.589 | -5.981 | <0.0001\*\*\* |
| **17** | 11.246 | 3.291 | | -3.651 | 0.0024\*\* |  | **Brumated – Non-brumated** | -2.212 | 0.589 | -3.651 | 0.0004\*\*\*\* |
| **34** | 12.662 | 3.291 | | -3.271 | 5.39e-16\*\*\*\* |  | **Brumated – Non-brumated** | -3.707 | 1.290 | -3.271 | 0.0013\*\* |
| **Confidence interval: 0.95** | | | **F-statistic: 27.66** | | **DF 146** |  |  |  | **F-statistic: 19.61** | | **DF 142** |

**Table 1.** Comparison in weights and rates of weight gain between frogs brumated for 4-weeks and non-brumated frogs. Compared to non-brumated, the brumated frogs differed significantly in the rates of weight gain from the non-brumated animals after only 4 weeks of brumation; however, weights within the brumated frog group did not differ during the brumation period due to a cessation of weight gain during this period. Within the brumated group, changes in weight became significant at week 9 (four weeks after the end of brumation). Estimated marginal means were used to analyse the differences in rates of weight gain, every four weeks for 34 weeks. Week 0 represents the beginning of the brumation period (blue shaded) and week 4 marks the end.