|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **JAGS Abundance and Occupancy Results** | | |  |  |  |
|  | Mean | SD | 85% CRI LL | 85%  CRI UL | Rhat |
| Abundance |  |  |  |  |  |
| Intercept | 13.24 | 11.17 |  |  | 1.22 |
| Elevation CV | **0.67** | 0.22 | **0.21** | **1.44** | 1.02 |
| Canopy | **0.32** | 0.22 | **0.28** | **1.25** | 1.01 |
|  |  |  |  |  |  |
| Occupancy |  |  |  |  |  |
| Intercept | -0.12 | 0.31 |  |  | 1.00 |
| Elevation CV | **0.67** | 0.32 | **0.37** | **0.99** | 1.00 |
| Canopy | **0.75** | 0.34 | **0.02** | **0.64** | 1.00 |

Table XX. Northern barrens tiger beetle abundance and occupancy results from hierarchical Bayesian modeling in JAGS. Upper and lower credible interval limits (CRIs) are given. Bolded non-intercept parameters are significant at p < 0.15.

Table XX. Parameter estimates, including mean, SD, 95% credible intervals, and R-hat statistics from hierarchical JAGS model of northern barrens tiger beetle occupancy, abundance, and detection probability.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | mean | sd | 0.025 | 0.975 | R-hat |
| Occupancy |  |  |  |  |  |
| Intercept | -0.12 | 0.31 | -0.74 | 0.49 | 1.00 |
| Elevation CV | 0.67 | 0.32 | 0.06 | 1.34 | 1.00 |
| Canopy | 0.75 | 0.34 | 0.12 | 1.46 | 1.00 |
| Abundance |  |  |  |  |  |
| Intercept | 13.24 | 11.17 | 1.73 | 42.45 | 1.22 |
| Random effect | 2.04 | 0.29 | 1.56 | 2.73 | 1.09 |
| Elevation CV | 0.67 | 0.22 | 0.27 | 1.12 | 1.02 |
| Canopy | 0.32 | 0.22 | -0.09 | 0.75 | 1.01 |
| Detection |  |  |  |  |  |
| alpha | 0.57 | 0.11 | 0.38 | 0.82 | 1.00 |
| beta | 50.82 | 40.26 | 8.88 | 179.91 | 1.28 |
| p(derived) | 0.02 | 0.01 | 0.003 | 0.05 | 1.32 |