Table 1:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Hypotheses & Best Model** | **AIC** | **BIC** | **p-value** | **Additional summary variables of significant model results.** |
| **H1: Domestic cattle addition would result in a decrease in *D.******occidentalis* abundance.**  *D. occidentalis* ~ Herbivory Tx. + year  **Intercept:** wildlife only (W) in 2016 (pre-exclosure installation) | 3987.01 | 4028.93 | CW plot  *(0.0158) \** | Estimate = -1.07526  St. Error = 0.77538  z-statistic = -2.414 |
| **H2: Increasing aridity through the climate levels would decrease tick *D. occidentalis* abundance.**  *D. occidentalis ~* Climate level\*year  **Intercept:** Intermediate climate level in 2016 | 3867.84 | 3941.21 | Arid level  *(0.01716) \** | Estimate = -1.3097  St. Error = 0.5496  z-statistic = -2.383 |
| Mesic level  *(0.00962) \*\** | Estimate = -1.6929  St. Error = 0.6505  z-statistic = -2.602 |
| **H3: Herbivory treatment and climate level would have an interacting effect on *D. occidentalis* counts.**  *D. occidentalis* ~ herbivory treatment\*climate level  **Intercept:** W exclosures at Intermediate in 2016 | 5726.35 | 5784.00 | CW plot:Arid level  *(0.00529) \*\** | Estimate = -1.8931  St. Error = 0.6789  z-statistic = -2.789 |