Table 1:

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| 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.  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 |
| Mesic:2017  *(0.04166) \** | Estimate = 1.0937  St. Error = 0.5370  z-statistic = 2.037 |
| Arid:2018  *(0.02102) \** | Estimate = -0.9788  St. Error = 0.4241  z-statistic = -2.308 |
| 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 | Arid level  *(0.03181) \** | Estimate = -0.9644  St. Error = 0.4492  z-statistic = -2.147 |
| CW plot:Arid level  *(0.00529) \*\** | Estimate = -1.8931  St. Error = 0.6789  z-statistic = -2.789 |