Table S6. Summary of GLM model selection procedure for the historical dataset of 14 species of native frogs in the Luquillo Mountains, Puerto Rico. Given are the number of parameters (k); twice the negative log-likelihhod (-2loglike); Akaike Information Criteria (AIC); the relative difference in AIC values compared to the top-ranked model (∆AIC) and the AIC model weights (AICwt)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model** | **K** | **-2logLike** | **AIC** | **∆AIC** | **AICwt** |
| ***E. brittoni*** |  |  |  |  |  |
| Occupancy(elevation)  | 2 | 44.282 | 48.5 | 0 | 0.516 |
| Occupancy(elevation2)  | 3 | 42.46 | 49 | 0.44 | 0.415 |
| Occupancy(.)  | 1 | 50.482 | 52.6 | 4.03 | 0.069 |
| ***E. locustus*** |  |   |  |  |  |
| Occupancy(elevation)  | 2 | 58.28 | 62.5 | 0 | 0.67 |
| Occupancy(elevation2)  | 3 | 57.52 | 64 | 1.5 | 0.31 |
| Occupancy(.)  | 1 | 67.35 | 69.4 | 6.9 | 0.02 |
| ***E. gryllus*** |  |   |  |  |  |
| Occupancy(.)  | 1 | 53.182 | 55.3 | 0 | 0.378 |
| Occupancy(elevation2) | 3 | 49.102 | 55.6 | 0.35 | 0.318 |
| Occupancy(elevation)  | 2 | 51.45 | 55.7 | 0.44 | 0.304 |
| ***E. richmondi*** |  |   |  |  |  |
| Occupancy(elevation2) | 3 | 55.992 | 62.5 | 0 | 0.54 |
| Occupancy(.)  | 1 | 61.792 | 63.9 | 1.37 | 0.27 |
| Occupancy(elevation)  | 2 | 60.35 | 64.6 | 2.1 | 0.19 |
| ***E. wightmanae*** |  |   |  |  |  |
| Occupancy(elevation2) | 3 | 54.666 | 61.2 | 0 | 0.93 |
| Occupancy(.)  | 1 | 64.924 | 67 | 5.83 | 0.05 |
| Occupancy(elevation)  | 2 | 64.572 | 68.8 | 7.64 | 0.02 |
| ***E. portoricensis*** |  |   |  |  |  |
| Occupancy(elevation2) | 3 | 52.528 | 59 | 0 | 0.704 |
| Occupancy(elevation)  | 2 | 56.528 | 60.8 | 1.74 | 0.295 |
| Occupancy(.)  | 1 | 70.524 | 72.6 | 13.57 | 0.001 |
| ***E. unicolor*** |  |   |  |  |  |
| Occupancy(elevation)  | 2 | 15.348 | 19.6 | 0 | 0.71 |
| Occupancy(elevation2) | 3 | 15.234 | 21.7 | 2.15 | 0.24 |
| Occupancy(.)  | 1 | 22.82 | 24.9 | 5.3 | 0.05 |
| ***E. hedricki*** |  |   |  |  |  |
| Occupancy(elevation2) | 3 | 22.218 | 28.7 | 0 | 0.589 |
| Occupancy(.)  | 1 | 28.042 | 30.1 | 1.39 | 0.293 |
| Occupancy(elevation)  | 2 | 27.7 | 32 | 3.22 | 0.118 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Model** | **k** | **-2logLike** | **AIC** | **∆AIC** | **AICwt** |
| ***E. antillensis*** |   |   |   |   |   |
| Occupancy(elevation) | 2 | 36.864 | 41.1 | 0 | 0.709 |
| Occupancy(elevation2) | 3 | 36.402 | 42.9 | 1.8 | 0.289 |
| Occupancy(.)  | 1 | 50.482 | 52.6 | 11.45 | 0.002 |
| ***E. cochranae*** |  |   |  |  |  |
| Occupancy(elevation) | 2 | 19.436 | 23.7 | 0 | 0.477 |
| Occupancy(elevation2) | 3 | 18.366 | 24.9 | 1.19 | 0.263 |
| Occupancy(.)  | 1 | 22.82 | 24.9 | 1.22 | 0.26 |
| ***L. albilabris*** |  |   |  |  |  |
| Occupancy(.)  | 1 | 44.312 | 46.4 | 0 | 0.642 |
| Occupancy(elevation) | 2 | 44.066 | 48.3 | 1.92 | 0.246 |
| Occupancy(elevation2) | 3 | 43.368 | 49.9 | 3.49 | 0.112 |
| ***E. eneidae*** |  |   |  |  |  |
| Occupancy(elevation2) | 3 | 42.242 | 48.8 | 0 | 0.512 |
| Occupancy(.)  | 1 | 47.532 | 49.6 | 0.86 | 0.333 |
| Occupancy(elevation) | 2 | 46.884 | 51.1 | 2.38 | 0.156 |
| ***E*. *karlschmidti*** |  |   |  |  |  |
| Occupancy(elevation2) | 3 | 35.576 | 42.1 | 0 | 0.497 |
| Occupancy(.)  | 1 | 40.794 | 42.9 | 0.79 | 0.335 |
| Occupancy(elevation) | 2 | 40 | 44.2 | 2.16 | 0.168 |
| ***E*. *coqui*** |  |   |  |  |  |
| Occupancy(.) | 3 | 70.682 | 72.8 | 0 | 0.642 |
| Occupancy(elevation)  | 1 | 70.68 | 74.9 | 2.17 | 0.217 |
| Occupancy(elevation2) | 2 | 69.278 | 75.8 | 3.03 | 0.141 |