Table S5. Best candidate models (95% confident model set) used to test the effects of predictor variables on records of (a) fox predation, (b) feral cat predation considering only those birds that occur within the distributional range of foxes, and (c) feral cat predation considering all birds. ΔAICc is a measure of change in the Akaike Information Criterion with correction for small sample size; Akaike *wi* is the probability of model *i* is the best model. The dataset used to build these models excluded vagrants, seabirds and birds that do not nest within Australia. All models include the offset terms for the number of ALA records for each bird species (records were limited to the distributional range of foxes for fox-eaten models), and the number of fox- or cat-diet studies that have occurred within the distributional range of each species. For definitions of variables see Table 1.

|  |  |  |  |
| --- | --- | --- | --- |
| Model | ΔAICc | *wi* | R2 |
| *(a) Fox-eaten* | | |  |
| Ground nesting + Ground foraging + Body mass | 0.00 | 0.48 | 0.24 |
| Ground nesting + Ground foraging + Body mass + Urban | 0.71 | 0.33 | 0.24 |
| Ground nesting + Ground foraging + Body mass + Waterholes | 1.83 | 0.19 | 0.24 |
|  |  |  |  |
| *(b) Feral cat-eaten (only birds within the distributional range of foxes)* | | |  |
| Ground nesting + Ground foraging + Body mass | 0.00 | 0.25 | 0.19 |
| Ground nesting + Ground foraging + Body mass + Urban | 0.86 | 0.17 | 0.19 |
| Ground nesting + Ground foraging + Body mass + Waterholes | 1.98 | 0.09 | 0.19 |
| Ground nesting + Habitat + Ground foraging | 2.13 | 0.09 | 0.20 |
| Ground nesting + Habitat + Ground foraging + Body mass | 2.20 | 0.08 | 0.21 |
| Ground nesting + Ground foraging + Body mass + Urban + Waterholes | 2.89 | 0.06 | 0.19 |
| Ground nesting + Habitat + Ground foraging + Body mass + Urban | 3.10 | 0.05 | 0.21 |
| Ground nesting + Habitat + Ground foraging + Urban | 3.24 | 0.05 | 0.20 |
| Ground nesting + Habitat + Ground foraging + Waterholes | 3.92 | 0.04 | 0.20 |
| Ground nesting + Habitat + Ground foraging + Body mass + Waterholes | 4.08 | 0.03 | 0.21 |
| Ground foraging + Body mass | 4.43 | 0.03 | 0.18 |
| Ground nesting + Habitat + Ground foraging + Body mass + Urban + Waterholes | 5.08 | 0.02 | 0.21 |
| Ground nesting + Habitat + Ground foraging + Urban + Waterholes | 5.14 | 0.02 | 0.20 |
| Ground foraging + Body mass + Waterholes | 6.15 | 0.01 | 0.18 |
|  |  |  |  |
| *(c) Feral cat-eaten (including all birds)* |  |  |  |
| Ground nesting + Habitat + Island + Ground foraging | 0.00 | 0.32 | 0.26 |
| Ground nesting + Habitat + Island + Ground foraging + Urban | 1.39 | 0.16 | 0.26 |
| Ground nesting + Habitat + Island + Ground foraging + Body mass | 1.53 | 0.15 | 0.26 |
| Ground nesting + Habitat + Island + Ground foraging + Waterholes | 2.07 | 0.11 | 0.26 |
| Ground nesting + Habitat + Island + Ground foraging + Body mass + Urban | 2.85 | 0.08 | 0.26 |
| Ground nesting + Habitat + Island + Ground foraging + Urban + Waterholes | 3.46 | 0.06 | 0.26 |
| Ground nesting + Habitat + Island + Ground foraging + Body mass + Waterholes | 3.60 | 0.05 | 0.26 |
| Habitat + Island + Ground foraging | 4.36 | 0.04 | 0.25 |
| Ground nesting + Habitat + Island + Ground foraging + Body mass + Urban + Waterholes | 4.92 | 0.03 | 0.26 |
| Habitat + Island + Ground foraging + Body mass | 5.38 | 0.02 | 0.25 |