

Additional file 1. Table S1. Parameters in zero-and-one-inflated beta regression

models favoured by DIC.

| Habitat type | Class | Model parameters | | | |
|--------------|--------------------|---|--|----------------------------------|--|
| | | Mixture parameter (α) ¹ | Bernoulli distribution probability (γ) ² | Beta distribution mean (μ) | Beta distribution precision (ϕ) |
| Angiosperm | Random | 0.59 | 0 | 0.03 | 37.90 |
| | Lizard, oviparous | 0.87 | 0 | 0.14 | 11.15 |
| | Lizard, viviparous | 0.65 | 0 | 0.11 | 11.15 |
| Grass | Random | 0.04 | 0.67 | 0.70 | 2.71 |
| | Lizard | 0.04 | 0.74 | 0.55 | 2.71 |
| Leaf litter | Random | 0.90 | 0 | 0.1 | 29.61 |
| | Lizard | 0.93 | 0 | 0.18 | 8.55 |
| Moss | Random | 0.88 | 0 | 0.24 | 3.97 |
| | Lizard, oviparous | 0.71 | 0 | 0.22 | 3.97 |
| | Lizard, viviparous | 0.86 | 0 | 0.19 | 3.97 |
| Rock | Random | 0.83 | 0 | 0.29 | 2.05 |
| | Lizard | 0.89 | 0 | 0.27 | 6.04 |
| Water | Random | 0.99 | 0 | 0.14 | 11.92 |
| | Lizard, oviparous | 0.91 | 0 | 0.19 | 11.92 |
| | Lizard, viviparous | 0.99 | 0 | 0.14 | 11.92 |
| Wood | Random | 0.86 | 0 | 0.22 | 3.14 |
| | Lizard, female | 0.42 | 0 | 0.47 | 3.14 |
| | Lizard, male | 0.47 | 0 | 0.42 | 3.14 |
| Other | Random | 0.94 | 0 | 0.14 | 8.89 |
| | Lizard, oviparous | 0.97 | 0 | 0.39 | 8.89 |
| | Lizard, viviparous | 0.92 | 0 | 0.19 | 8.89 |
| Cover | Random | 0.06 | 0.66 | 0.65 | 2.31 |
| | Lizard, oviparous | 0.01 | 0.61 | 0.54 | 2.31 |
| | Lizard, viviparous | 0.12 | 0.59 | 0.56 | 2.31 |
| Bare ground | Random | 0.58 | 0 | 0.18 | 4.91 |
| | Lizard, female | 0.57 | 0 | 0.16 | 10.07 |
| | Lizard, male | 0.67 | 0 | 0.19 | 10.07 |

¹Where $\gamma = 0$, the mixture parameter, α , represents the probability of the microhabitat being absent (proportion = 0).

²Where $\gamma = 0$, no microhabitat proportions of 1 were observed, otherwise γ is the estimated probability that a discrete proportion is 1 rather than 0.