|  |  |  |  |
| --- | --- | --- | --- |
|  | **Variable name** | **Range** | **Reference** |
| Locomotor | fossorial | 0 or 1 | Derived from Reed (1997, 2008, personal communication) |
| arboreal | 0 or 1 | Derived from Reed (1997, 2008, personal communication) |
| terrestrial | 0 or 1 | Derived from Reed (1997, 2008, personal communication) |
| aquatic | 0 or 1 | Derived from Reed (1997, 2008, personal communication) |
| Trophic | Vertebrate | 0 - 3 | Kissling et al., 2014 |
| Invertebrate | 0 - 3 | Kissling et al., 2014 |
| Fish | 0 - 3 | Kissling et al., 2014 |
| Seed | 0 - 3 | Kissling et al., 2014 |
| Fruit | 0 - 3 | Kissling et al., 2014 |
| Woody | 0 - 3 | Kissling et al., 2014 |
| Herbaceous | 0 - 3 | Kissling et al., 2014 |
| Nectar | 0 - 3 | Kissling et al., 2014 |
|  | Body Mass (g) | numeric | Jones et al., 2009 |

Table 1: Variables used in the calculation of the quantitative functional diversity metrics. For the locomotor traits, 0 indicates a species does not engage in a particular locomotor behavior, while 1 indicates it does. For the trophic traits, 0 indicates a species does not consume a food, 1 indicates a species occasionally consumes a food, 2 indicates a species consumes a food as a secondary food item, and 3 indicates that a species consumes the food as a primary food item.

|  |  |  |
| --- | --- | --- |
| **Response variables** | **Predictor variables** | **Covariates** |
| FRic – functional richness, total volume of trait space occupied by community | patchDensity – the total number of vegetation patches divided by the spatial area of the site | nbsp – the total number of species at a site; species richness. |
| FDiv – functional divergence, degree to which species traits are divergent, towards the convex hull of trait space | patchRichness – the number distinct habitat types represented at a given site | Log10 area – the log10 of the spatial area of a site |
| FEve – functional evenness, how evenly trait values are distributed across the minimum spanning tree in trait space | CVwc – the coefficient of variation of woody vegetation percentage cover for all pixels at a given site. |  |
| nLocomotor – the total number of categorical locomotor traits in a community |  |  |
| nTrophic - the total number of categorical dietary traits in a community |  |  |

﻿Table 2: Response variables, predictor variables, and covariates used in the multiple regressions reported in this paper. Covariates are predictor variables which not the primary focus of the study, but which are thought to influence the response variables. Variance inflation factors for all regressions were less than 5, indicating that multicollinearity is not a major issue for these regressions.