**Table S1. Variable relative importance weights and weighted parameter estimates for collectively standardized dataset**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *rCBC* |  |  | **0.64** | 0.00 |  | -0.01 | **0.14** | 0.03 | 0.04 | -0.07 | 0.00 | 0.01 |  | -0.04 | -0.07 | Variable relative importance weights (*wi+*) and weighted parameter estimates () based on all multivariate models predicting carrying capacity (*K*) and growth rate (*r*) for both the BBS and CBC datasets and abundance (N) for 2010 CBC sites. Variables with a relative importance weight greater than 0.7 and their corresponding parameter estimates are highlighted in bold. Coefficient of determination (*R*2) and Akaike weight for the model with the lowest AICc score are provided for each dependent variable and dataset. Data for the models was drawn from a merged, scaled dataset containing both BBS and CBC data. | 0.46 |
| *wi+* |  | **1.00** | 0.26 |  | 0.29 | **0.76** | 0.37 | 0.38 | 0.59 | 0.26 | 0.32 |  | 0.35 | 0.57 |  |
| *r*BBS |  |  | **0.45** | -0.02 |  | 0.01 | 0.01 | 0.20 | -0.05 | 0.00 | -**0.14** | -0.02 |  | 0.01 | 0.14 |  | 0.40 |
| *wi+* |  | **0.98** | 0.31 |  | 0.24 | 0.30 | 0.48 | 0.36 | 0.25 | **0.93** | 0.34 |  | 0.28 | 0.60 |  |
| *K*CBC |  |  | -0.01 | **0.16** |  | -0.05 | 0.06 | 0.01 | 0.03 | -0.01 | -0.02 | **0.11** |  | **-0.21** | **-0.07** |  | 0.35 |
| *wi+* |  | 0.28 | **0.99** |  | 0.63 | 0.61 | 0.33 | 0.48 | 0.37 | 0.49 | **0.99** |  | **1.00** | **0.76** |  |
| *K*BBS |  |  | -0.06 | -0.01 |  | -0.06 | -0.34 | **2.63** | **-2.11** | -0.12 | -0.08 | 0.00 |  | 0.12 | 0.31 |  | 0.46 |
| *wi+* |  | 0.29 | 0.23 |  | 0.29 | 0.55 | **0.99** | **0.93** | 0.42 | 0.39 | 0.22 |  | 0.35 | 0.51 |  |
|  |  | *Historical/geographical variables* | Distance to invasion origin | Time since colonization | *Land cover variables* | Developed: open cover | Developed: low intensity | Developed: med. Intensity | Developed: high intensity | Forest | Pasture | Crops | *Climate variables* | Avg. Precipitation | Avg. Temperature |  | Model Averaged R2 |