| **Min sample size** | **Response** | **Fixed effects** | **n** | **n\_RB** | **Marginal R2** | **AIC** | **deltaAIC** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 0 | LogRichness | LandUse:RegionalBiome | 21,182 | 43 | 0.08 | 28,602 | -1,202.24 |
| LogRichness | LandUse:Biome | 21,182 | 43 | 0.05 | 28,958 | -845.65 |
| LogRichness | LandUse:Realm | 21,182 | 43 | 0.03 | 29,365 | -438.54 |
| LogRichness | LandUse | 21,182 | 43 | 0.01 | 29,804 | 0.00 |
| LogAbund | LandUse:RegionalBiome | 18,235 | 43 | 0.08 | 46,950 | -834.37 |
| LogAbund | LandUse:Biome | 18,235 | 43 | 0.03 | 47,276 | -508.00 |
| LogAbund | LandUse:Realm | 18,235 | 43 | 0.03 | 47,418 | -365.72 |
| LogAbund | LandUse | 18,235 | 43 | 0.00 | 47,784 | 0.00 |
| 1 | LogRichness | LandUse:RegionalBiome | 20,555 | 30 | 0.07 | 27,919 | -1,206.71 |
| LogRichness | LandUse:Biome | 20,555 | 30 | 0.06 | 28,259 | -866.77 |
| LogRichness | LandUse:Realm | 20,555 | 30 | 0.03 | 28,685 | -440.74 |
| LogRichness | LandUse | 20,555 | 30 | 0.01 | 29,125 | 0.00 |
| LogAbund | LandUse:RegionalBiome | 17,737 | 30 | 0.08 | 45,681 | -841.90 |
| LogAbund | LandUse:Biome | 17,737 | 30 | 0.04 | 45,988 | -534.94 |
| LogAbund | LandUse:Realm | 17,737 | 30 | 0.03 | 46,160 | -362.98 |
| LogAbund | LandUse | 17,737 | 30 | 0.00 | 46,523 | 0.00 |
| 5 | LogRichness | LandUse:RegionalBiome | 20,477 | 27 | 0.07 | 27,774 | -1,221.93 |
| LogRichness | LandUse:Biome | 20,477 | 27 | 0.06 | 28,121 | -874.78 |
| LogRichness | LandUse:Realm | 20,477 | 27 | 0.03 | 28,555 | -440.84 |
| LogRichness | LandUse | 20,477 | 27 | 0.01 | 28,996 | 0.00 |
| LogAbund | LandUse:RegionalBiome | 17,659 | 27 | 0.08 | 45,474 | -832.56 |
| LogAbund | LandUse:Biome | 17,659 | 27 | 0.04 | 45,756 | -550.48 |
| LogAbund | LandUse:Realm | 17,659 | 27 | 0.03 | 45,944 | -362.43 |
| LogAbund | LandUse | 17,659 | 27 | 0.00 | 46,307 | 0.00 |
| 25 | LogRichness | LandUse:RegionalBiome | 19,048 | 20 | 0.06 | 26,337 | -1,050.10 |
| LogRichness | LandUse:Biome | 19,048 | 20 | 0.06 | 26,559 | -828.14 |
| LogRichness | LandUse:Realm | 19,048 | 20 | 0.03 | 26,988 | -399.02 |
| LogRichness | LandUse | 19,048 | 20 | 0.01 | 27,387 | 0.00 |
| LogAbund | LandUse:RegionalBiome | 16,520 | 20 | 0.07 | 42,901 | -742.34 |
| LogAbund | LandUse:Biome | 16,520 | 20 | 0.04 | 43,110 | -532.76 |
| LogAbund | LandUse:Realm | 16,520 | 20 | 0.04 | 43,305 | -338.00 |
| LogAbund | LandUse | 16,520 | 20 | 0.00 | 43,643 | 0.00 |
| 50 | LogRichness | LandUse:RegionalBiome | 17,686 | 16 | 0.06 | 24,555 | -942.84 |
| LogRichness | LandUse:Biome | 17,686 | 16 | 0.05 | 24,774 | -723.74 |
| LogRichness | LandUse:Realm | 17,686 | 16 | 0.02 | 25,118 | -379.57 |
| LogRichness | LandUse | 17,686 | 16 | 0.01 | 25,498 | 0.00 |
| LogAbund | LandUse:RegionalBiome | 15,158 | 16 | 0.07 | 39,323 | -646.32 |
| LogAbund | LandUse:Biome | 15,158 | 16 | 0.03 | 39,531 | -437.64 |
| LogAbund | LandUse:Realm | 15,158 | 16 | 0.03 | 39,648 | -320.88 |
| LogAbund | LandUse | 15,158 | 16 | 0.00 | 39,969 | 0.00 |