**Linear versus non-linear effects of forest loss on Brazilian primates: assessing extinction thresholds in the Amazon and Atlantic Forest**

Supplementary Material



**Figure S1.** Linear and non-linear effects of landscape-scale forest cover on primate species richness in the Atlantic Forest (excluding the 17 Cerrado sites). We show both the linear models and the non-linear (logistic) models. The pseudo-R2 (in percentage) is indicated in each panel. The line indicates the extinction thresholds based on the inflection points. Note that forest cover is different in linear and non-linear models because they showed different scales of effect (see details in Table S1).

**Table S1**. Linear vs. non-linear effects of forest cover on primate species richness in the Atlantic Forest (excluding the 17 Cerrado sites). The linear effect was assessed with GLMs, and the non-linear effect with logistic models. We ranked the models based on the Akaike information criterion corrected for small samples (i.e. AICc, from low to high values), and indicated the Akaike weight (*wi*) and percentage of explained deviance (pseudo-R2) of each model.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Biome | Taxon | Modela | AICc | ΔAICc | wi | pseudo-R2 |
| Atlantic Forest | Community | Logistic900 | 126.07 | 0.0 | 0.58 | 34.5 |
|  | GLM900 | 127.22 | 1.15 | 0.32 | 28.2 |
|  |  | Null | 129.55 | 3.48 | 0.1 | 0 |

aNumbers next to each model represent the scale of effect for each linear and non-linear model.

**Table S2**. Mean home range of the studied primate species.

|  |  |  |
| --- | --- | --- |
| **Species name** |  | **Home range** |
| *Sapajus xanthosternos* | Atlantic Forest | 846.5 |
| *Chiropotes albinasus* | Amazon, Atlantic Forest | 605 |
| *Chiropotes sagulatus* | Amazon | 507 |
| *Sapajus apella* | Amazon | 355 |
| *Ateles paniscus* | Amazon | 255 |
| *Ateles marginatus\** | Amazon | 287 |
| *Brachyteles arachnoides* | Atlantic Forest | 238.5 |
| *Sapajus flavius* | Atlantic Forest | 223.99 |
| *Sapajus nigritus* | Atlantic Forest | 200.5 |
| *Saimiri sciureus* | Amazon | 181 |
| *Leontopithecus crysopygus* | Atlantic Forest | 151.5 |
| *Sapajus robustus* | Atlantic Forest | 110.5 |
| *Leontopithecus rosalia* | Atlantic Forest | 96.1 |
| *Pithecia pithecia* | Amazon | 48.36 |
| *Saguinus midas* | Amazon | 35.75 |
| *Callithrix flaviceps* | Atlantic Forest | 35.5 |
| *Callicebus nigrifrons* | Atlantic Forest | 34.5 |
| *Alouatta macconnelli* | Amazon | 25.81 |
| *Callithrix aurita* | Atlantic Forest | 23.425 |
| *Callithrix geoffroyi* | Atlantic Forest | 23.3 |
| *Callicebus melanochir* | Atlantic Forest | 23 |
| *Mico argentatus* | Amazon | 17.386 |
| *Alouatta guariba* | Atlantic Forest | 15.065 |
| *Callicebus personatus* | Atlantic Forest | 11.5 |
| *Alouatta belzebul* | Amazon, Atlantic Forest | 11.4375 |
| *Callicebus coimbrai* | Atlantic Forest | 10 |
| *Plecturocebus sp. \** | Amazon | 8.1 |
| *Callithrix penicillata* | Atlantic Forest | 7.43 |
| *Alouatta caraya* | Atlantic Forest | 6.9125 |
| *Callithrix jacchus* | Atlantic Forest | 3.6 |

\*Home range was imputated calculating the mean home range of the gender.