

Supplementary material

Ramírez-Mejía et al. 2021. The interplay of spatial scale and landscape transformation moderates the abundance and intraspecific variation in the ecomorphological traits of a phyllostomid bat.

Table S1. Species and abundance of phyllostomid bats in an urban-rural landscape of Villavicencio municipality, Colombian Orinoquia. Distance to the centroid of Villavicencio urban center increases with landscape units (LU) numeration. Capture percentage: percentage of individuals captured by LU.

Species	LU1	LU2	LU3	LU4	LU5	Total
<i>Carollia perspicillata</i>	11	40	36	27	84	198
<i>Carollia castanea</i>	0	0	6	3	7	16
<i>Artibeus lituratus</i>	6	5	4	8	1	24
<i>Artibeus planirostris</i>	67	44	21	78	22	232
<i>Sturnira lilium</i>	0	2	4	35	0	41
<i>Platyrrhinus</i> sp.	1	1	0	1	0	0
<i>Platyrrhinus</i> sp.	2	1	0	0	0	0
<i>Uroderma bilobatum</i>	0	0	3	4	1	8
<i>Mesophylla macconnelli</i>	0	0	1	0	1	2
<i>Desmodus rotundus</i>	0	0	16	0	4	20
<i>Glossophaga soricina</i>	2	0	1	1	0	4
<i>Anoura</i> sp.	1	0	0	0	0	1
<i>Phyllostomus discolor</i>	3	10	0	6	1	20
<i>Phyllostomus elongatus</i>	0	0	7	1	5	13
<i>Phyllostomus hastatus</i>	0	0	0	2	1	3
<i>Gardnerycteris crenulatum</i>	0	0	2	14	0	16
<i>Tonatia saurophila</i>	0	0	1	1	1	3
<i>Micronycteris</i> sp.	0	0	3	0	0	3
<i>Lophostoma brasiliense</i>	0	0	0	0	1	1
<i>Rhinophylla</i> sp.	0	0	0	0	1	1
Total number of individuals	92	101	106	180	130	609
Capture percentage	14.8	18.6	17.2	28.7	20.7	100
Sampling effort (m^2 of mist-nets night)	468	432	432	504	468	2304
Recaptures	3	0	2	0	2	7

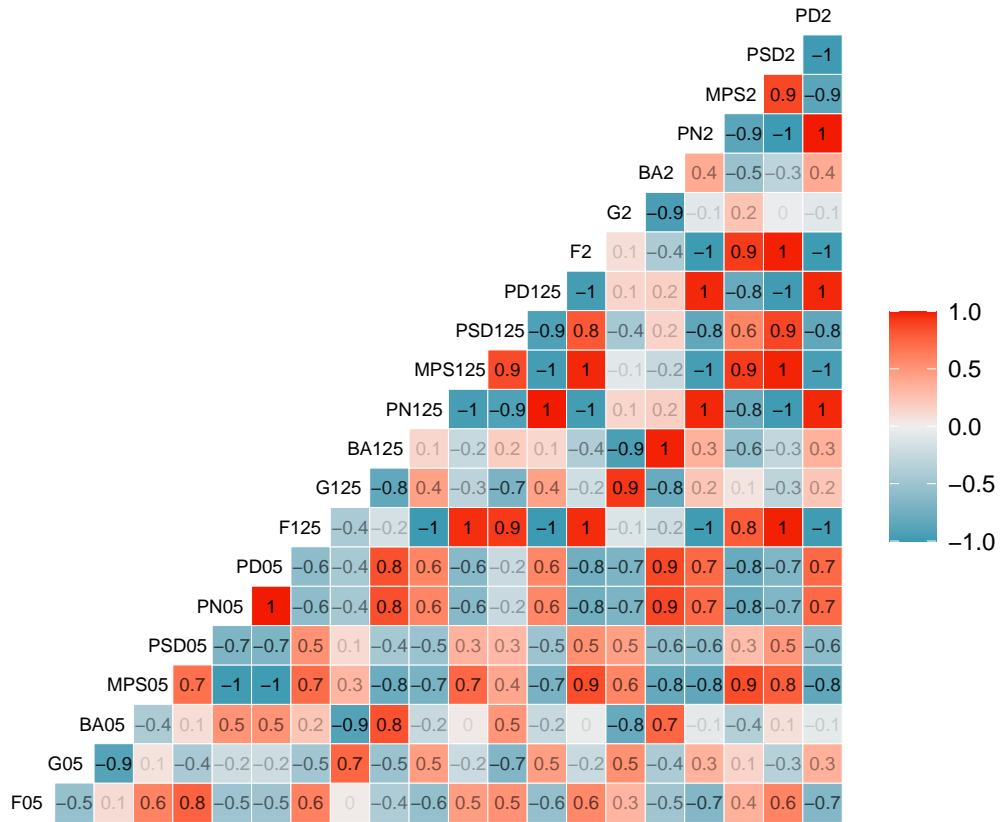


Figure S1. Pearson's correlation matrix of landscape predictor variables. BA = built area, F = forest, G = grassland, MPS = mean patch size, PD = patch density, PN = patch number, PSD = patch size standard deviation, 05 = 0.5 km scale, 125 = 1.25 km scale, 2 = 2 km scale.

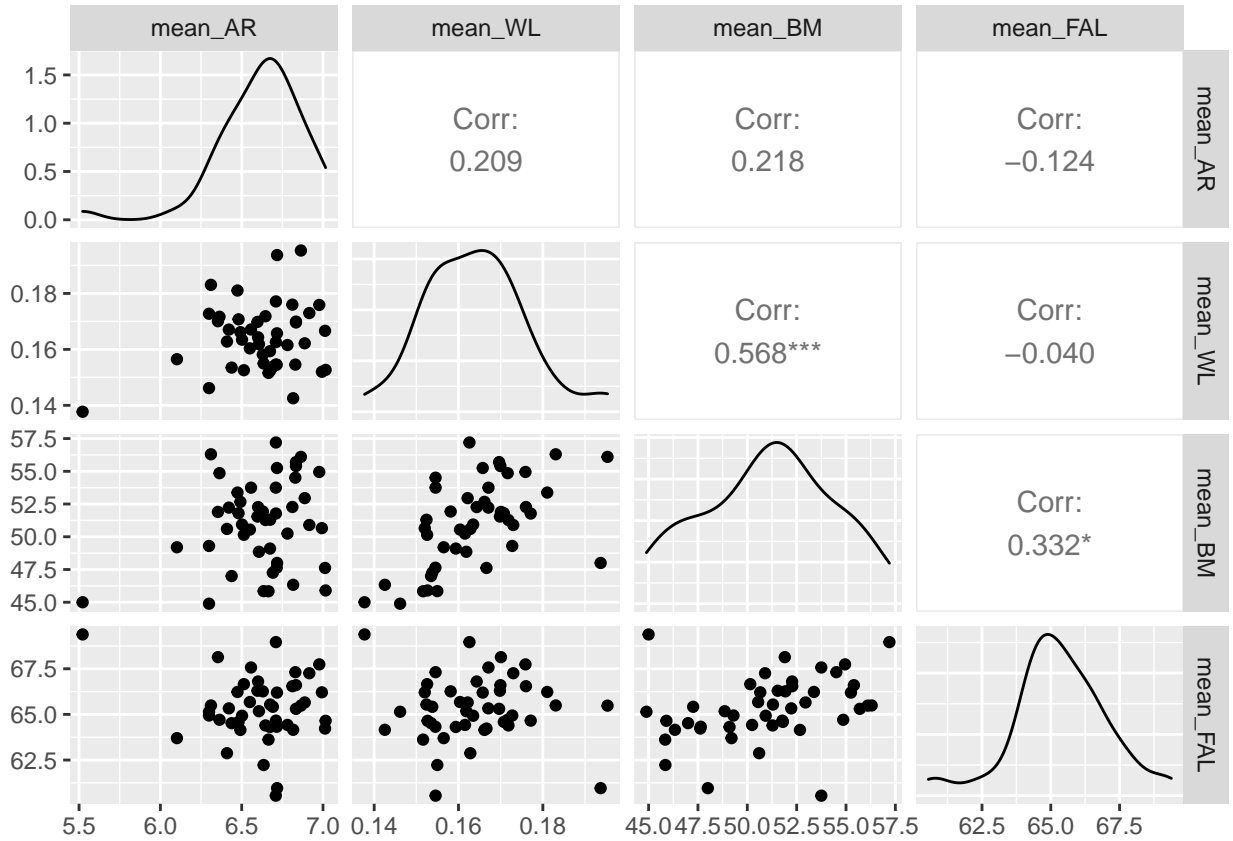


Figure S2. Pearson's correlations of *A. planirostris* ecomorphological traits. FAL = forearm length, AR = wing aspect ratio, WL = wing loading, BM = body mass. Diagonal density plots show the distribution of each variable in the population. One asterik indicates significant correlations ($p < 0.05$), two asteriks indicate highly significant correlations ($p < 0.01$).

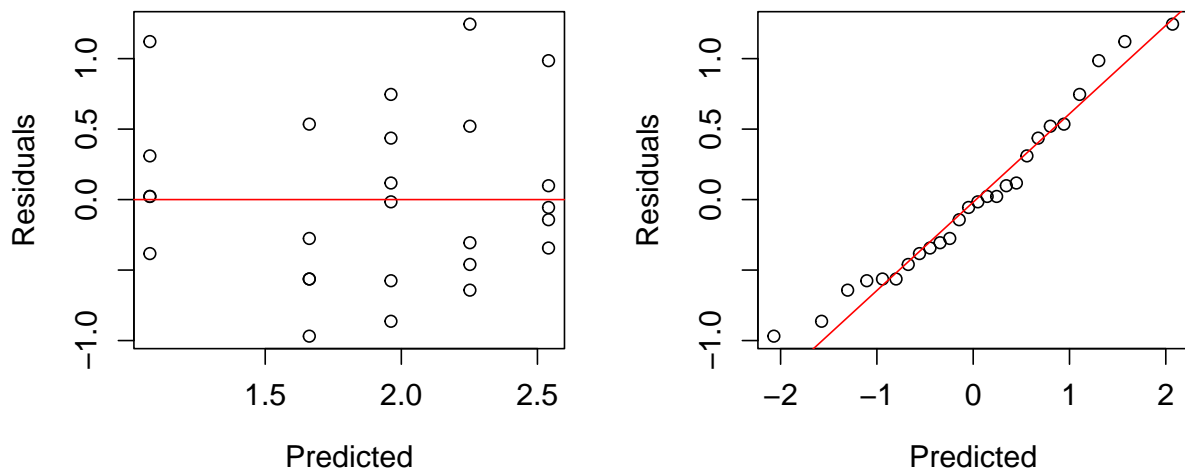


Figure S3. Residual analysis of best fitted model explaining changes of *A. planirostris* abundance as function of landscape variables. Left: residual vs. fitted values. Right: quantile-quantile plot of model's residuals.

This model included the grassland percentage at 2 km and 0.5 km, and the forest percentage at 1.25 km.

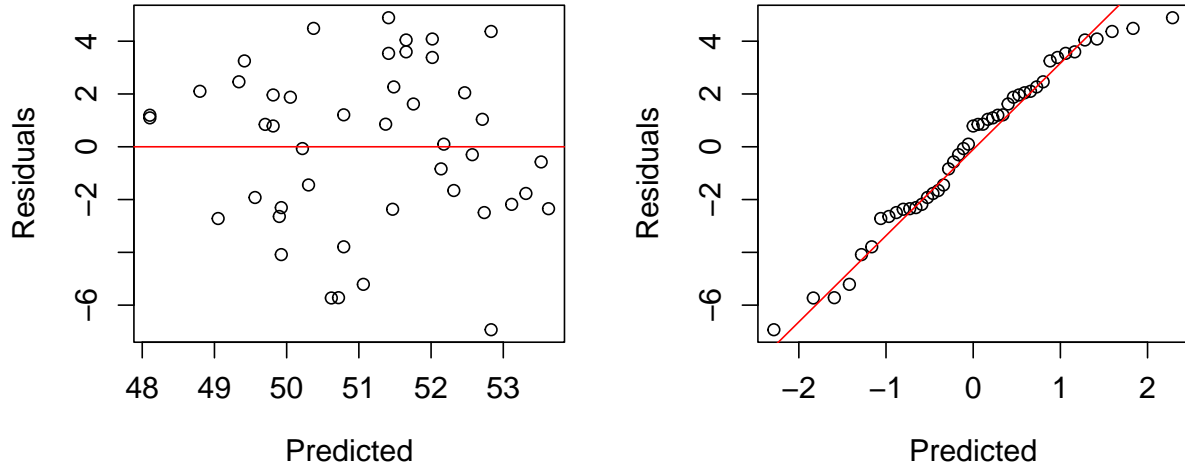


Figure S4. Residual analysis of best fitted model explaining changes of *A. planirostris* body mass (g) as function of landscape variables. Left: residual vs. fitted values. Right: quantile-quantile plot of model's residuals. This model included the grassland percentage at 2 km and 0.5 km, and the forest percentage at 1.25 km and 0.5 km.

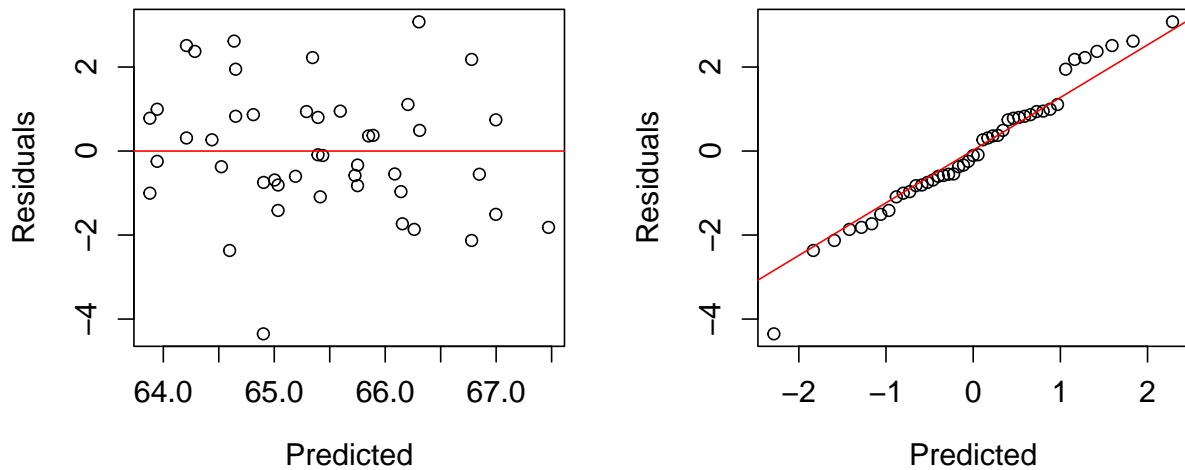


Figure S5. Residual analysis of best fitted model explaining changes of *A. planirostris* forearm length (mm) as function of landscape variables. Left: residual vs. fitted values. Right: quantile-quantile plot of model's residuals. This model included the grassland percentage at 2 km and 0.5 km, and the forest percentage at 1.25 km and 0.5 km.

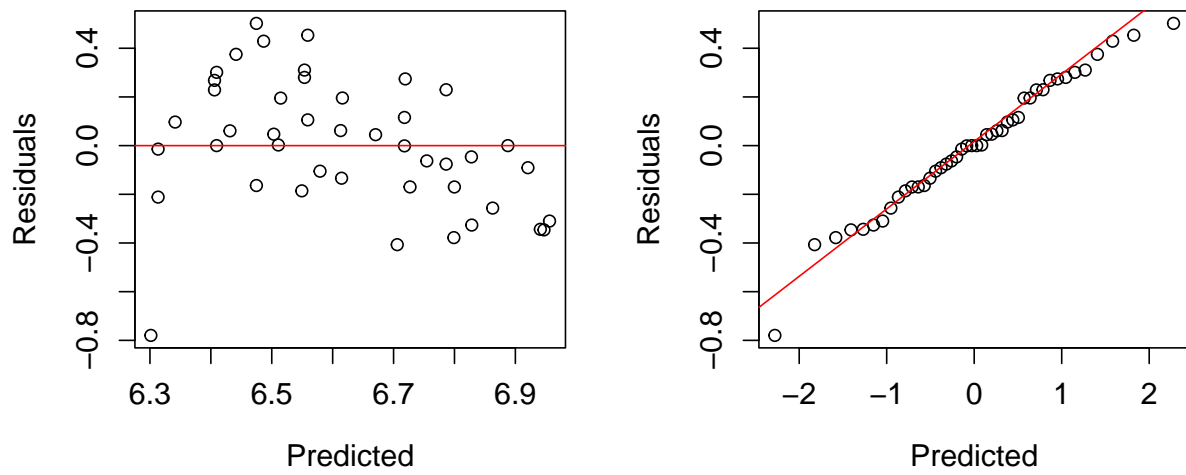


Figure S6. Residual analysis of best fitted model explaining changes of *A. planirostris* wing aspect ratio as function of landscape variables. Left: residual vs. fitted values. Right: quantile-quantile plot of model's residuals. This model included the grassland percentage at 2 km and 0.5 km, and the forest percentage at 1.25 km and 0.5 km.

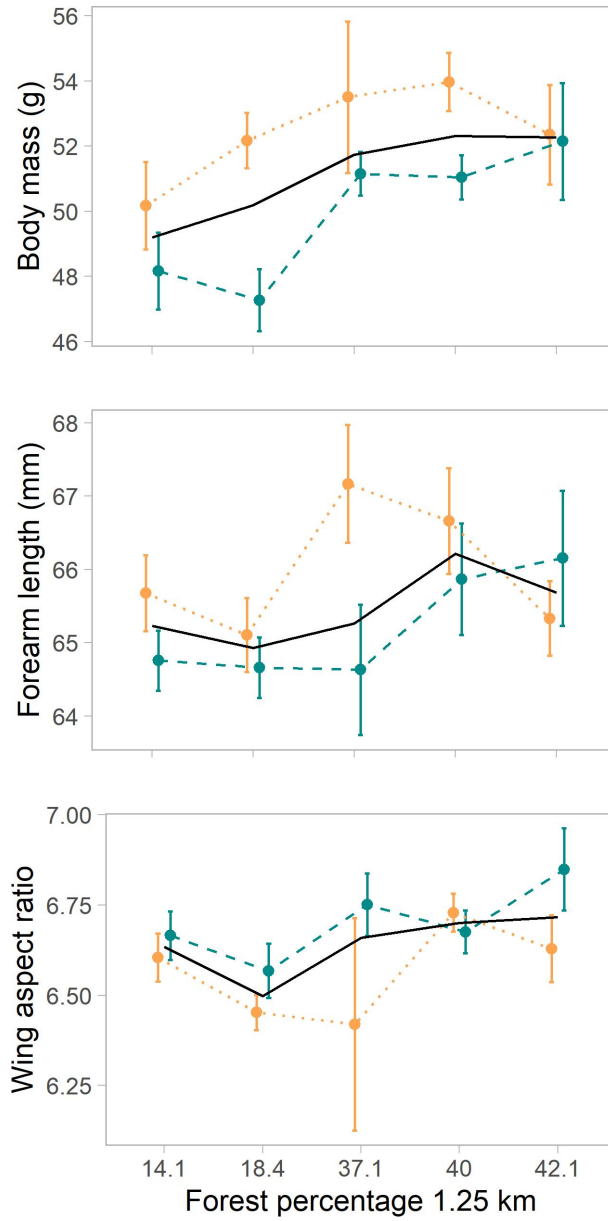


Figure S7. Mean value and 95% confidence intervals of *Artibeus planirostris* ecomorphological traits at different percentages of forest cover. Forest cover at 1.25 km scale was the most important predictor in all models. Yellow: females. Blue: males. The solid black line represents the average trend without considering the bat's sex differences.