

### Supplementary\_material\_3

**Supplementary Material Table S3.** Models relating predictor variables to taxonomic richness ( $q = 0$ ) of phyllostomid bats in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta\text{AICc} < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b> | <b>AICc</b> | <b><math>\Delta\text{AICc}</math></b> | <b>wi</b>   |
|----------------|-----------|---------------|-------------|---------------------------------------|-------------|
| <b>DNW</b>     | <b>3</b>  | <b>-25.25</b> | <b>58.7</b> | <b>0.00</b>                           | <b>0.30</b> |
| <b>ELE</b>     | <b>3</b>  | <b>-25.82</b> | <b>59.8</b> | <b>1.14</b>                           | <b>0.17</b> |
| NULL           | 2         | -28.09        | 61.2        | 2.49                                  | 0.09        |
| ELE+DNW        | 4         | -25.09        | 62.2        | 3.50                                  | 0.05        |
| VCL+DNW        | 4         | -25.11        | 62.2        | 3.53                                  | 0.05        |
| DNW+CH         | 4         | -25.16        | 62.3        | 3.65                                  | 0.05        |
| DNW+BA         | 4         | -25.18        | 62.4        | 3.67                                  | 0.05        |
| BA             | 3         | -27.09        | 62.4        | 3.67                                  | 0.05        |
| ELE+BA         | 4         | -25.41        | 62.8        | 4.14                                  | 0.04        |

|             |   |        |      |      |      |
|-------------|---|--------|------|------|------|
| VCL+ELE     | 4 | -25.79 | 63.6 | 4.90 | 0.03 |
| ELE+CH      | 4 | -25.82 | 63.6 | 4.95 | 0.03 |
| CH          | 3 | -27.97 | 64.1 | 5.43 | 0.02 |
| VCL         | 3 | -28.02 | 64.2 | 5.54 | 0.02 |
| VCL+BA      | 4 | -27.02 | 66.1 | 7.37 | 0.01 |
| BA+CH       | 4 | -27.08 | 66.2 | 7.48 | 0.01 |
| VCL+ELE+DNW | 5 | -24.93 | 66.5 | 7.85 | 0.01 |
| ELE+DNW+BA  | 5 | -24.98 | 66.6 | 7.95 | 0.01 |
| ELE+DNW+CH  | 5 | -25.00 | 66.7 | 7.99 | 0.01 |
| VCL+DNW+CH  | 5 | -25.03 | 66.7 | 8.06 | 0.01 |
| VCL+DNW+BA  | 5 | -25.06 | 66.8 | 8.12 | 0.01 |
| DNW+BA+CH   | 5 | -25.07 | 66.8 | 8.13 | 0.01 |
| ELE+BA+CH   | 5 | -25.37 | 67.4 | 8.74 | 0.00 |
| VCL+ELE+BA  | 5 | -25.39 | 67.5 | 8.77 | 0.00 |
| VCL+CH      | 4 | -27.93 | 67.9 | 9.17 | 0.00 |

|                   |   |        |      |       |      |
|-------------------|---|--------|------|-------|------|
| VCL+ELE+CH        | 5 | -25.79 | 68.2 | 9.56  | 0.00 |
| VCL+BA+CH         | 5 | -27.02 | 70.7 | 12.03 | 0.00 |
| VCL+ELE+DNW+CH    | 6 | -24.86 | 72.2 | 13.55 | 0.00 |
| VCL+ELE+DNW+BA    | 6 | -24.87 | 72.2 | 13.55 | 0.00 |
| ELE+DNW+BA+CH     | 6 | -24.87 | 72.3 | 13.57 | 0.00 |
| VCL+DNW+BA+CH     | 6 | -24.98 | 72.5 | 13.77 | 0.00 |
| VCL+ELE+BA+CH     | 6 | -25.36 | 73.2 | 14.54 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | -24.78 | 79.6 | 20.87 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).

**Supplementary Material Table S4.** Models relating predictor variables to taxonomic diversity ( $q = 2$ ) of phyllostomid bats in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta\text{AICc} < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b>  | <b>AICc</b>  | <b><math>\Delta\text{AICc}</math></b> | <b>wi</b>   |
|----------------|-----------|----------------|--------------|---------------------------------------|-------------|
| <b>DNW</b>     | <b>3</b>  | <b>-235.80</b> | <b>479.8</b> | <b>0.00</b>                           | <b>0.31</b> |
| <b>NULL</b>    | <b>2</b>  | <b>-237.86</b> | <b>480.7</b> | <b>0.95</b>                           | <b>0.19</b> |
| ELE+DNW        | 4         | -235.31        | 482.6        | 2.84                                  | 0.07        |
| ELE            | 3         | -237.41        | 483.0        | 3.24                                  | 0.06        |
| VCL+DNW        | 4         | -235.65        | 483.3        | 3.53                                  | 0.05        |
| DNW+BA         | 4         | -235.74        | 483.5        | 3.71                                  | 0.05        |
| DNW+CH         | 4         | -235.75        | 483.5        | 3.72                                  | 0.05        |
| BA             | 3         | -237.66        | 483.5        | 3.72                                  | 0.05        |
| CH             | 3         | -237.76        | 483.7        | 3.93                                  | 0.04        |

|             |   |         |       |       |      |
|-------------|---|---------|-------|-------|------|
| VCL         | 3 | -237.83 | 483.8 | 4.07  | 0.04 |
| ELE+BA      | 4 | -237.34 | 486.7 | 6.91  | 0.01 |
| ELE+CH      | 4 | -237.39 | 486.8 | 7.01  | 0.01 |
| VCL+ELE     | 4 | -237.41 | 486.8 | 7.05  | 0.01 |
| VCL+ELE+DNW | 5 | -235.17 | 487.0 | 7.22  | 0.01 |
| ELE+DNW+BA  | 5 | -235.21 | 487.1 | 7.31  | 0.01 |
| ELE+DNW+CH  | 5 | -235.25 | 487.2 | 7.38  | 0.01 |
| BA+CH       | 4 | -237.60 | 487.2 | 7.42  | 0.01 |
| VCL+BA      | 4 | -237.61 | 487.2 | 7.45  | 0.01 |
| VCL+CH      | 4 | -237.75 | 487.5 | 7.72  | 0.01 |
| VCL+DNW+BA  | 5 | -235.53 | 487.7 | 7.95  | 0.01 |
| VCL+DNW+CH  | 5 | -235.61 | 487.9 | 8.12  | 0.01 |
| DNW+BA+CH   | 5 | -235.70 | 488.1 | 8.28  | 0.01 |
| ELE+BA+CH   | 5 | -237.33 | 491.3 | 11.55 | 0.00 |
| VCL+ELE+BA  | 5 | -237.34 | 491.3 | 11.57 | 0.00 |

|                   |   |         |       |       |      |
|-------------------|---|---------|-------|-------|------|
| VCL+ELE+CH        | 5 | -237.39 | 491.5 | 11.68 | 0.00 |
| VCL+BA+CH         | 5 | -237.57 | 491.8 | 12.04 | 0.00 |
| VCL+ELE+DNW+BA    | 6 | -234.97 | 492.4 | 12.68 | 0.00 |
| VCL+ELE+DNW+CH    | 6 | -235.12 | 492.7 | 12.96 | 0.00 |
| ELE+DNW+BA+CH     | 6 | -235.15 | 492.8 | 13.03 | 0.00 |
| VCL+DNW+BA+CH     | 6 | -235.49 | 493.5 | 13.71 | 0.00 |
| VCL+ELE+BA+CH     | 6 | -237.33 | 497.2 | 17.38 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | -234.93 | 499.9 | 20.09 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).

**Supplementary Material Table S5.** Models relating predictor variables with functional richness ( $q = 0$ ) of phyllostomid bats in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta AICc < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b>  | <b>AICc</b>  | <b><math>\Delta AICc</math></b> | <b>wi</b>   |
|----------------|-----------|----------------|--------------|---------------------------------|-------------|
| <b>NULL</b>    | <b>2</b>  | <b>-305.33</b> | <b>615.7</b> | <b>0.00</b>                     | <b>0.35</b> |
| <b>DNW</b>     | <b>3</b>  | <b>-304.73</b> | <b>617.6</b> | <b>1.98</b>                     | <b>0.13</b> |
| VCL            | 3         | -305.19        | 618.6        | 2.90                            | 0.08        |
| BA             | 3         | -305.26        | 618.7        | 3.03                            | 0.08        |
| CH             | 3         | -305.28        | 618.7        | 3.08                            | 0.08        |
| ELE            | 3         | -305.33        | 618.8        | 3.17                            | 0.07        |
| ELE+DNW        | 4         | -304.03        | 620.0        | 4.38                            | 0.04        |
| VCL+DNW        | 4         | -304.19        | 620.4        | 4.72                            | 0.03        |
| DNW+BA         | 4         | -304.77        | 621.5        | 5.78                            | 0.02        |

|             |   |         |       |       |      |
|-------------|---|---------|-------|-------|------|
| DNW+CH      | 4 | -304.73 | 621.5 | 5.79  | 0.02 |
| VCL+CH      | 4 | -305.10 | 622.2 | 6.52  | 0.01 |
| VCL+BA      | 4 | -305.13 | 622.3 | 6.58  | 0.01 |
| VCL+ELE     | 4 | -305.15 | 622.3 | 6.63  | 0.01 |
| BA+CH       | 4 | -305.23 | 622.5 | 6.78  | 0.01 |
| ELE+BA      | 4 | -305.26 | 622.5 | 6.84  | 0.01 |
| ELE+CH      | 4 | -305.28 | 622.6 | 6.90  | 0.01 |
| VCL+ELE+DNW | 5 | -303.46 | 623.6 | 7.93  | 0.08 |
| ELE+DNW+BA  | 5 | -303.99 | 624.6 | 8.98  | 0.00 |
| ELE+DNW+CH  | 5 | -304.02 | 624.7 | 9.04  | 0.00 |
| VCL+DNW+BA  | 5 | -304.09 | 624.9 | 9.18  | 0.00 |
| VCL+DNW+CH  | 5 | -304.19 | 625.1 | 9.38  | 0.00 |
| DNW+BA+CH   | 5 | -304.72 | 626.1 | 10.44 | 0.00 |
| VCL+BA+CH   | 5 | -305.06 | 626.8 | 11.11 | 0.00 |
| VCL+ELE+CH  | 5 | -305.08 | 626.8 | 11.15 | 0.00 |



|                   |   |         |       |       |      |
|-------------------|---|---------|-------|-------|------|
| VCL+ELE+BA        | 5 | -305.11 | 626.9 | 11.22 | 0.00 |
| ELE+BA+CH         | 5 | -305.22 | 627.1 | 11.44 | 0.00 |
| VCL+ELE+DNW+BA    | 6 | -303.29 | 629.1 | 13.40 | 0.00 |
| VCL+ELE+DNW+CH    | 6 | -303.46 | 629.4 | 13.76 | 0.00 |
| ELE+DNW+BA+CH     | 6 | -303.99 | 630.5 | 14.80 | 0.00 |
| VCL+DNW+BA+CH     | 6 | -304.09 | 630.7 | 15.02 | 0.00 |
| VCL+ELE+BA+CH     | 6 | -305.05 | 632.6 | 16.93 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | -303.29 | 636.6 | 20.90 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).

**Supplementary Material Table S6.** Models relating the predictor variables to the functional diversity ( $q = 2$ ) of phyllostomid bats in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta\text{AICc} < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b> | <b>AICc</b>  | <b><math>\Delta\text{AICc}</math></b> | <b>wi</b>   |
|----------------|-----------|---------------|--------------|---------------------------------------|-------------|
| <b>DNW</b>     | <b>3</b>  | <b>296.86</b> | <b>601.9</b> | <b>0.00</b>                           | <b>0.41</b> |
| ELE+DNW        | 4         | 296.40        | 604.8        | 2.92                                  | 0.10        |
| NULL           | 2         | 300.00        | 605.0        | 3.12                                  | 0.09        |
| VCL+DNW        | 4         | 296.71        | 605.4        | 3.53                                  | 0.07        |
| DNW+CH         | 4         | 296.84        | 605.7        | 3.79                                  | 0.06        |
| DNW+BA         | 4         | 296.85        | 605.7        | 3.80                                  | 0.06        |
| ELE            | 3         | 299.15        | 606.5        | 4.58                                  | 0.04        |
| BA             | 3         | 299.52        | 607.2        | 5.33                                  | 0.03        |
| CH             | 3         | 299.53        | 607.2        | 5.34                                  | 0.03        |
| VCL            | 3         | 299.92        | 608.0        | 6.12                                  | 0.02        |

|             |   |        |       |       |      |
|-------------|---|--------|-------|-------|------|
| VCL+ELE+DNW | 5 | 296.27 | 609.2 | 7.31  | 0.01 |
| ELE+DNW+BA  | 5 | 296.38 | 609.4 | 7.53  | 0.01 |
| ELE+DNW+CH  | 5 | 296.39 | 609.5 | 7.56  | 0.01 |
| ELE+CH      | 4 | 298.92 | 609.8 | 7.95  | 0.01 |
| ELE+BA      | 4 | 298.93 | 609.9 | 7.97  | 0.01 |
| VCL+DNW+BA  | 5 | 296.67 | 610.0 | 8.12  | 0.01 |
| VCL+DNW+CH  | 5 | 296.69 | 610.1 | 8.16  | 0.01 |
| VCL+ELE     | 4 | 299.15 | 610.3 | 8.40  | 0.01 |
| DNW+BA+CH   | 5 | 296.84 | 610.3 | 8.44  | 0.01 |
| BA+CH       | 4 | 299.18 | 610.4 | 8.46  | 0.01 |
| VCL+BA      | 4 | 299.40 | 610.8 | 8.90  | 0.01 |
| VCL+CH      | 4 | 299.50 | 611.0 | 9.11  | 0.00 |
| ELE+BA+CH   | 5 | 298.75 | 614.2 | 12.27 | 0.00 |
| VCL+ELE+CH  | 5 | 298.92 | 614.5 | 12.61 | 0.00 |
| VCL+ELE+BA  | 5 | 298.92 | 614.5 | 12.61 | 0.00 |

|                   |   |        |       |       |      |
|-------------------|---|--------|-------|-------|------|
| VCL+ELE+DNW+BA    | 6 | 296.19 | 614.9 | 12.99 | 0.00 |
| VCL+BA+CH         | 5 | 299.12 | 614.9 | 13.02 | 0.00 |
| VCL+ELE+DNW+CH    | 6 | 296.25 | 615.0 | 13.10 | 0.00 |
| ELE+DNW+BA+CH     | 6 | 296.37 | 615.2 | 13.34 | 0.00 |
| VCL+DNW+BA+CH     | 6 | 296.65 | 615.8 | 13.91 | 0.00 |
| VCL+ELE+BA+CH     | 6 | 298.74 | 620.0 | 18.09 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | 296.17 | 622.3 | 20.44 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).

**Supplementary Material Table S7.** Models relating predictor variables to phylogenetic richness ( $q = 0$ ) of phyllostomid bats in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta\text{AICc} < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b>  | <b>AICc</b>  | <b><math>\Delta\text{AICc}</math></b> | <b>wi</b>   |
|----------------|-----------|----------------|--------------|---------------------------------------|-------------|
| NULL           | <b>2</b>  | <b>-221.99</b> | <b>449.0</b> | <b>0.00</b>                           | <b>0.40</b> |
| DNW            | 3         | -221.85        | 451.9        | 2.90                                  | 0.10        |
| VCL            | 3         | -221.88        | 451.9        | 2.94                                  | 0.09        |
| CH             | 3         | -221.99        | 452.2        | 3.17                                  | 0.08        |
| ELE            | 3         | -221.97        | 452.2        | 3.18                                  | 0.08        |
| BA             | 3         | -221.97        | 452.2        | 3.18                                  | 0.08        |
| VCL+DNW        | 4         | -221.58        | 455.2        | 6.17                                  | 0.02        |
| ELE+DNW        | 4         | -221.62        | 455.2        | 6.24                                  | 0.02        |
| DNW+BA         | 4         | -221.82        | 455.6        | 6.64                                  | 0.02        |
| DNW+CH         | 4         | -221.85        | 455.7        | 6.71                                  | 0.01        |

|             |   |         |       |       |      |
|-------------|---|---------|-------|-------|------|
| VCL+CH      | 4 | -221.86 | 455.7 | 6.72  | 0.01 |
| VCL+ELE     | 4 | -221.87 | 455.7 | 6.75  | 0.01 |
| VCL+BA      | 4 | -221.88 | 455.8 | 6.76  | 0.01 |
| ELE+CH      | 4 | -221.99 | 456.0 | 6.99  | 0.01 |
| BA+CH       | 4 | -221.99 | 456.0 | 6.99  | 0.01 |
| ELE+BA      | 4 | -221.99 | 456.0 | 7.00  | 0.01 |
| VCL+ELE+DNW | 5 | -221.35 | 459.4 | 10.37 | 0.00 |
| VCL+DNW+BA  | 5 | -221.45 | 459.6 | 10.58 | 0.00 |
| ELE+DNW+BA  | 5 | -221.55 | 459.8 | 10.78 | 0.00 |
| VCL+DNW+CH  | 5 | -221.58 | 459.8 | 10.83 | 0.00 |
| ELE+DNW+CH  | 5 | -221.61 | 459.9 | 10.89 | 0.00 |
| DNW+BA+CH   | 5 | -221.81 | 460.3 | 11.30 | 0.00 |
| VCL+ELE+CH  | 5 | -221.85 | 460.4 | 11.38 | 0.00 |
| VCL+BA+CH   | 5 | -221.86 | 460.4 | 11.38 | 0.00 |
| VCL+ELE+BA  | 5 | -221.87 | 460.4 | 11.41 | 0.00 |

|                   |   |         |       |       |      |
|-------------------|---|---------|-------|-------|------|
| ELE+BA+CH         | 5 | -221.99 | 460.6 | 11.65 | 0.00 |
| VCL+ELE+DNW+BA    | 6 | -221.16 | 464.9 | 15.86 | 0.00 |
| VCL+ELE+DNW+CH    | 6 | -221.35 | 465.2 | 16.20 | 0.00 |
| VCL+DNW+BA+CH     | 6 | -221.45 | 465.4 | 16.41 | 0.00 |
| ELE+DNW+BA+CH     | 6 | -221.55 | 465.6 | 16.60 | 0.00 |
| VCL+ELE+BA+CH     | 6 | -221.85 | 466.2 | 17.21 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | -221.17 | 472.3 | 23.36 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).

**Supplementary Material Table S8.** Models relating predictor variables to phylogenetic diversity ( $q = 2$ ) of phyllostomid bats in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta\text{AICc} < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b>  | <b>AICc</b>   | <b><math>\Delta\text{AICc}</math></b> | <b>wi</b>   |
|----------------|-----------|----------------|---------------|---------------------------------------|-------------|
| NULL           | <b>2</b>  | <b>-499.81</b> | <b>1004.6</b> | <b>0.00</b>                           | <b>0.28</b> |
| DNW            | <b>3</b>  | <b>-498.79</b> | <b>1005.8</b> | <b>1.14</b>                           | <b>0.16</b> |
| <b>CH</b>      | <b>3</b>  | <b>-499.04</b> | <b>1006.3</b> | <b>1.64</b>                           | <b>0.12</b> |
| ELE            | 3         | -499.25        | 1006.7        | 2.06                                  | 0.10        |
| VCL            | 3         | -499.69        | 1007.6        | 2.94                                  | 0.06        |
| BA             | 3         | -499.78        | 1007.7        | 3.13                                  | 0.06        |
| DNW+CH         | 4         | -498.46        | 1008.9        | 4.30                                  | 0.03        |
| DNW+BA         | 4         | -498.65        | 1009.3        | 4.69                                  | 0.03        |
| ELE+CH         | 4         | -498.74        | 1009.5        | 4.86                                  | 0.02        |
| ELE+DNW        | 4         | -498.78        | 1009.6        | 4.95                                  | 0.02        |



|             |   |         |        |       |      |
|-------------|---|---------|--------|-------|------|
| VCL+DNW     | 4 | -498.79 | 1009.6 | 4.96  | 0.02 |
| VCL+CH      | 4 | -499.00 | 1010.0 | 5.39  | 0.02 |
| BA+CH       | 4 | -499.04 | 1010.1 | 5.46  | 0.02 |
| VCL+ELE     | 4 | -499.23 | 1010.5 | 5.84  | 0.02 |
| ELE+BA      | 4 | -499.24 | 1010.5 | 5.87  | 0.02 |
| VCL+BA      | 4 | -499.65 | 1011.3 | 6.69  | 0.01 |
| DNW+BA+CH   | 5 | -498.31 | 1013.3 | 8.67  | 0.00 |
| VCL+DNW+CH  | 5 | -498.45 | 1013.6 | 8.96  | 0.00 |
| ELE+DNW+CH  | 5 | -498.46 | 1013.6 | 8.96  | 0.00 |
| VCL+DNW+BA  | 5 | -498.64 | 1014.0 | 9.34  | 0.00 |
| ELE+DNW+BA  | 5 | -498.65 | 1014.0 | 9.35  | 0.00 |
| ELE+BA+CH   | 5 | -498.71 | 1014.1 | 9.47  | 0.00 |
| VCL+ELE+CH  | 5 | -498.73 | 1014.1 | 9.52  | 0.00 |
| VCL+ELE+DNW | 5 | -498.78 | 1014.2 | 9.62  | 0.00 |
| VCL+BA+CH   | 5 | -499.00 | 1014.7 | 10.05 | 0.00 |

|                   |   |         |        |       |      |
|-------------------|---|---------|--------|-------|------|
| VCL+ELE+BA        | 5 | -499.22 | 1015.1 | 10.50 | 0.00 |
| VCL+DNW+BA+CH     | 6 | -498.28 | 1019.1 | 14.45 | 0.00 |
| ELE+DNW+BA+CH     | 6 | -498.31 | 1019.1 | 14.50 | 0.00 |
| VCL+ELE+DNW+CH    | 6 | -498.45 | 1019.4 | 14.79 | 0.00 |
| VCL+ELE+DNW+BA    | 6 | -498.64 | 1019.8 | 15.16 | 0.00 |
| VCL+ELE+BA+CH     | 6 | -498.71 | 1019.9 | 15.30 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | -498.28 | 1026.6 | 21.94 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).

**Supplementary Material Table S9.** Models relating the predictor variables with the CWM of the mean body mass of phyllostomid bats in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta\text{AICc} < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b>  | <b>AICc</b>  | <b><math>\Delta\text{AICc}</math></b> | <b>wi</b>   |
|----------------|-----------|----------------|--------------|---------------------------------------|-------------|
| <b>BA</b>      | <b>3</b>  | <b>-452.05</b> | <b>912.3</b> | <b>0.00</b>                           | <b>0.24</b> |
| <b>VCL+BA</b>  | <b>4</b>  | <b>-450.62</b> | <b>913.2</b> | <b>0.95</b>                           | <b>0.15</b> |
| <b>NULL</b>    | <b>2</b>  | <b>-454.31</b> | <b>913.6</b> | <b>1.35</b>                           | <b>0.12</b> |
| VCL            | 3         | -453.08        | 914.3        | 2.06                                  | 0.09        |
| BA+CH          | 4         | -451.30        | 914.6        | 2.31                                  | 0.08        |
| ELE+BA         | 4         | -451.73        | 915.5        | 3.18                                  | 0.05        |
| DNW+BA         | 4         | -451.91        | 915.8        | 3.54                                  | 0.04        |
| CH             | 3         | -454.12        | 916.4        | 4.12                                  | 0.03        |
| DNW            | 3         | -454.18        | 916.5        | 4.25                                  | 0.03        |
| VCL+DNW        | 4         | -452.27        | 916.5        | 4.25                                  | 0.03        |

|             |   |         |       |       |      |
|-------------|---|---------|-------|-------|------|
| ELE         | 3 | -454.31 | 916.8 | 4.53  | 0.03 |
| VCL+BA+CH   | 5 | -450.14 | 917.0 | 4.67  | 0.02 |
| VCL+ELE+BA  | 5 | -450.57 | 917.8 | 5.53  | 0.02 |
| VCL+DNW+BA  | 5 | -450.59 | 917.9 | 5.57  | 0.02 |
| VCL+ELE     | 4 | -452.98 | 918.0 | 5.67  | 0.01 |
| VCL+CH      | 4 | -453.01 | 918.0 | 5.73  | 0.01 |
| ELE+BA+CH   | 5 | -451.15 | 919.0 | 6.67  | 0.01 |
| DNW+BA+CH   | 5 | -451.29 | 919.2 | 6.95  | 0.01 |
| DNW+CH      | 4 | -453.76 | 919.5 | 7.23  | 0.01 |
| ELE+DNW     | 4 | -453.92 | 919.8 | 7.55  | 0.01 |
| ELE+DNW+BA  | 5 | -451.73 | 920.1 | 7.84  | 0.01 |
| ELE+CH      | 4 | -454.10 | 920.2 | 7.91  | 0.01 |
| VCL+DNW+CH  | 5 | -451.89 | 920.4 | 8.14  | 0.00 |
| VCL+ELE+DNW | 5 | -451.97 | 920.6 | 8.33  | 0.00 |
| VCL+ELE+CH  | 5 | -452.85 | 922.4 | 10.09 | 0.00 |

|                   |   |         |       |       |      |
|-------------------|---|---------|-------|-------|------|
| VCL+DNW+BA+CH     | 6 | -450.01 | 922.5 | 10.24 | 0.00 |
| VCL+ELE+BA+CH     | 6 | -450.14 | 922.8 | 10.49 | 0.00 |
| VCL+ELE+DNW+BA    | 6 | -450.37 | 923.2 | 10.96 | 0.00 |
| ELE+DNW+CH        | 5 | -453.47 | 923.6 | 11.32 | 0.00 |
| ELE+DNW+BA+CH     | 6 | -451.08 | 924.7 | 12.37 | 0.00 |
| VCL+ELE+DNW+CH    | 6 | -451.56 | 925.6 | 13.33 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | -449.76 | 929.5 | 17.24 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).

**Supplementary Material Table S10.** Models relating predictor variables with CWM of phytophagous phyllostomid bats in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta\text{AICc} < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b> | <b>AICc</b>  | <b><math>\Delta\text{AICc}</math></b> | <b>wi</b>   |
|----------------|-----------|---------------|--------------|---------------------------------------|-------------|
| NULL           | <b>2</b>  | <b>13.42</b>  | <b>-21.8</b> | <b>0.00</b>                           | <b>0.34</b> |
| DNW            | <b>3</b>  | <b>14.06</b>  | <b>-19.9</b> | <b>1.90</b>                           | <b>0.13</b> |
| CH             | 3         | 13.53         | -18.9        | 2.95                                  | 0.08        |
| VCL            | 3         | 13.44         | -18.7        | 3.14                                  | 0.07        |
| BA             | 3         | 13.44         | -18.7        | 3.14                                  | 0.07        |
| ELE            | 3         | 13.42         | -18.7        | 3.18                                  | 0.07        |
| ELE+DNW        | 4         | 15.10         | -18.2        | 3.64                                  | 0.05        |
| DNW+CH         | 4         | 14.69         | -17.4        | 4.47                                  | 0.04        |
| VCL+DNW        | 4         | 14.34         | -16.7        | 5.15                                  | 0.03        |
| DNW+BA         | 4         | 14.16         | -16.3        | 5.52                                  | 0.02        |

|             |   |       |       |       |      |
|-------------|---|-------|-------|-------|------|
| ELE+DNW+CH  | 5 | 16.03 | -15.4 | 6.44  | 0.01 |
| BA+CH       | 4 | 13.58 | -15.2 | 6.69  | 0.01 |
| ELE+CH      | 4 | 13.54 | -15.1 | 6.75  | 0.01 |
| VCL+CH      | 4 | 13.54 | -15.1 | 6.76  | 0.01 |
| VCL+BA      | 4 | 13.46 | -14.9 | 6.93  | 0.01 |
| VCL+ELE     | 4 | 13.44 | -14.9 | 6.96  | 0.01 |
| ELE+BA      | 4 | 13.44 | -14.9 | 6.96  | 0.01 |
| VCL+ELE+DNW | 5 | 15.48 | -14.3 | 7.54  | 0.01 |
| ELE+DNW+BA  | 5 | 15.38 | -14.1 | 7.74  | 0.01 |
| VCL+DNW+CH  | 5 | 14.97 | -13.3 | 8.56  | 0.01 |
| DNW+BA+CH   | 5 | 14.82 | -13.0 | 8.87  | 0.00 |
| VCL+DNW+BA  | 5 | 14.64 | -12.6 | 9.21  | 0.00 |
| VCL+BA+CH   | 5 | 13.58 | -10.5 | 11.35 | 0.00 |
| ELE+BA+CH   | 5 | 13.58 | -10.5 | 11.35 | 0.00 |
| VCL+ELE+CH  | 5 | 13.55 | -10.4 | 11.39 | 0.00 |

|                   |   |       |       |       |      |
|-------------------|---|-------|-------|-------|------|
| VCL+ELE+DNW+CH    | 6 | 16.44 | -10.4 | 11.47 | 0.00 |
| ELE+DNW+BA+CH     | 6 | 16.42 | -10.3 | 11.50 | 0.00 |
| VCL+ELE+BA        | 5 | 13.46 | -10.2 | 11.59 | 0.00 |
| VCL+ELE+DNW+BA    | 6 | 16.19 | -9.9  | 11.96 | 0.00 |
| VCL+DNW+BA+CH     | 6 | 15.33 | -8.2  | 13.67 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | 17.35 | -4.7  | 17.14 | 0.00 |
| VCL+ELE+BA+CH     | 6 | 13.58 | -4.7  | 17.17 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).



**Supplementary Material Table S11.** Models relating predictor variables with CWM of animal-eating phyllostomid bats in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta\text{AICc} < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b> | <b>AICc</b>  | <b><math>\Delta\text{AICc}</math></b> | <b>wi</b>   |
|----------------|-----------|---------------|--------------|---------------------------------------|-------------|
| <b>NULL</b>    | <b>2</b>  | <b>14.28</b>  | <b>-23.6</b> | <b>0.00</b>                           | <b>0.32</b> |
| <b>CH</b>      | <b>3</b>  | <b>15.05</b>  | <b>-21.9</b> | <b>1.63</b>                           | <b>0.14</b> |
| VCL            | 3         | 14.64         | -21.1        | 2.46                                  | 0.09        |
| BA             | 3         | 14.42         | -20.7        | 2.89                                  | 0.07        |
| DNW            | 3         | 14.40         | -20.6        | 2.94                                  | 0.07        |
| ELE            | 3         | 14.29         | -20.4        | 3.15                                  | 0.07        |
| DNW+CH         | 4         | 15.64         | -19.3        | 4.27                                  | 0.04        |
| BA+CH          | 4         | 15.40         | -18.8        | 4.76                                  | 0.03        |
| VCL+CH         | 4         | 15.26         | -18.5        | 5.03                                  | 0.03        |
| ELE+CH         | 4         | 15.07         | -18.1        | 5.42                                  | 0.02        |

|             |   |       |       |       |      |
|-------------|---|-------|-------|-------|------|
| VCL+DNW     | 4 | 15.02 | -18.0 | 5.51  | 0.02 |
| ELE+DNW     | 4 | 14.81 | -17.6 | 5.94  | 0.02 |
| VCL+BA      | 4 | 14.76 | -17.5 | 6.03  | 0.02 |
| VCL+ELE     | 4 | 14.64 | -17.3 | 6.27  | 0.01 |
| ELE+BA      | 4 | 14.49 | -17.0 | 6.58  | 0.01 |
| DNW+BA      | 4 | 14.46 | -16.9 | 6.64  | 0.01 |
| VCL+DNW+CH  | 5 | 16.24 | -15.8 | 7.74  | 0.01 |
| ELE+DNW+CH  | 5 | 16.16 | -15.6 | 7.90  | 0.01 |
| DNW+BA+CH   | 5 | 15.73 | -14.8 | 8.77  | 0.00 |
| VCL+BA+CH   | 5 | 15.56 | -14.5 | 9.10  | 0.00 |
| VCL+ELE+DNW | 5 | 15.44 | -14.2 | 9.33  | 0.00 |
| ELE+BA+CH   | 5 | 15.40 | -14.1 | 9.43  | 0.00 |
| VCL+ELE+CH  | 5 | 15.32 | -14.0 | 9.58  | 0.00 |
| VCL+DNW+BA  | 5 | 15.03 | -13.4 | 10.17 | 0.00 |
| ELE+DNW+BA  | 5 | 14.84 | -13.0 | 10.53 | 0.00 |

|                   |   |       |       |       |      |
|-------------------|---|-------|-------|-------|------|
| VCL+ELE+BA        | 5 | 14.77 | -12.9 | 10.69 | 0.00 |
| VCL+ELE+DNW+CH    | 6 | 16.77 | -11.0 | 12.52 | 0.00 |
| VCL+DNW+BA+CH     | 6 | 16.25 | -10.0 | 13.56 | 0.00 |
| ELE+DNW+BA+CH     | 6 | 16.21 | -9.9  | 13.63 | 0.00 |
| VCL+ELE+BA+CH     | 6 | 15.57 | -8.6  | 14.92 | 0.00 |
| VCL+ELE+DNW+BA    | 6 | 15.45 | -8.4  | 15.16 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | 16.77 | -3.5  | 20.02 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).

**Supplementary Material Table S12.** Models relating the predictor variables with the CWM of the relative aspect of the wing of phyllostomid bats in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta\text{AICc} < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b> | <b>AICc</b> | <b><math>\Delta\text{AICc}</math></b> | <b>wi</b>   |
|----------------|-----------|---------------|-------------|---------------------------------------|-------------|
| NULL           | <b>2</b>  | <b>3.31</b>   | <b>-1.6</b> | <b>0.00</b>                           | <b>0.37</b> |
| CH             | 3         | 3.75          | 0.7         | 2.31                                  | 0.12        |
| BA             | 3         | 3.49          | 1.2         | 2.83                                  | 0.09        |
| VCL            | 3         | 3.46          | 1.3         | 2.89                                  | 0.09        |
| DNW            | 3         | 3.36          | 1.5         | 3.09                                  | 0.08        |
| ELE            | 3         | 3.34          | 1.6         | 3.17                                  | 0.08        |
| BA+CH          | 4         | 3.84          | 4.3         | 5.93                                  | 0.02        |
| ELE+CH         | 4         | 3.83          | 4.3         | 5.96                                  | 0.02        |
| VCL+CH         | 4         | 3.82          | 4.4         | 5.98                                  | 0.02        |
| DNW+CH         | 4         | 3.75          | 4.5         | 6.12                                  | 0.02        |

|             |   |      |     |       |      |
|-------------|---|------|-----|-------|------|
| VCL+BA      | 4 | 3.66 | 4.7 | 6.30  | 0.02 |
| ELE+BA      | 4 | 3.53 | 4.9 | 6.55  | 0.01 |
| ELE+DNW     | 4 | 3.51 | 5.0 | 6.59  | 0.01 |
| VCL+ELE     | 4 | 3.50 | 5.0 | 6.62  | 0.01 |
| DNW+BA      | 4 | 3.49 | 5.0 | 6.65  | 0.01 |
| VCL+DNW     | 4 | 3.46 | 5.1 | 6.69  | 0.01 |
| ELE+BA+CH   | 5 | 3.99 | 8.7 | 10.31 | 0.00 |
| VCL+ELE+CH  | 5 | 3.95 | 8.8 | 10.38 | 0.00 |
| VCL+BA+CH   | 5 | 3.93 | 8.8 | 10.42 | 0.00 |
| ELE+DNW+CH  | 5 | 3.91 | 8.9 | 10.47 | 0.00 |
| DNW+BA+CH   | 5 | 3.87 | 8.9 | 10.54 | 0.00 |
| VCL+DNW+CH  | 5 | 3.83 | 9.0 | 10.62 | 0.00 |
| VCL+ELE+BA  | 5 | 3.82 | 9.1 | 10.67 | 0.00 |
| VCL+DNW+BA  | 5 | 3.69 | 9.3 | 10.90 | 0.00 |
| VCL+ELE+DNW | 5 | 3.63 | 9.4 | 11.02 | 0.00 |

|                   |   |      |      |       |      |
|-------------------|---|------|------|-------|------|
| ELE+DNW+BA        | 5 | 3.62 | 9.4  | 11.05 | 0.00 |
| VCL+ELE+BA+CH     | 6 | 4.18 | 14.1 | 15.76 | 0.00 |
| VCL+DNW+BA+CH     | 6 | 4.04 | 14.4 | 16.03 | 0.00 |
| ELE+DNW+BA+CH     | 6 | 4.01 | 14.5 | 16.10 | 0.00 |
| VCL+ELE+DNW+CH    | 6 | 3.99 | 14.5 | 16.12 | 0.00 |
| VCL+ELE+DNW+BA    | 6 | 3.83 | 14.8 | 16.46 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | 4.18 | 21.6 | 23.25 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).

**Supplementary Material Table S13.** Models relating the predictor variables with the CWM of the relative load of phyllostomid bat wings in a terra firme forest gradient in Northeastern Brazilian Amazon. The models were listed according to the corrected Akaike information criterion (AICc), selecting those that presented values of  $\Delta\text{AICc} < 2$  (in bold). The predictors that enter the models are distance to the nearest watercourse – DNW; elevation – ELE; canopy height – CH; basal area – BA; vegetation clutter – VCL.

| <b>Modelos</b> | <b>df</b> | <b>logLik</b> | <b>AICc</b> | <b><math>\Delta\text{AICc}</math></b> | <b>wi</b>   |
|----------------|-----------|---------------|-------------|---------------------------------------|-------------|
| <b>NULL</b>    | <b>2</b>  | <b>7.40</b>   | <b>-9.8</b> | <b>0.00</b>                           | <b>0.34</b> |
| VCL            | 3         | 7.84          | -7.5        | 2.30                                  | 0.11        |
| DNW            | 3         | 7.78          | -7.4        | 2.41                                  | 0.10        |
| BA             | 3         | 7.63          | -7.1        | 2.71                                  | 0.09        |
| CH             | 3         | 7.45          | -6.7        | 3.08                                  | 0.07        |
| ELE            | 3         | 7.40          | -6.6        | 3.18                                  | 0.07        |
| VCL+DNW        | 4         | 8.77          | -5.5        | 4.25                                  | 0.04        |
| ELE+DNW        | 4         | 8.33          | -4.7        | 5.14                                  | 0.03        |
| VCL+BA         | 4         | 8.05          | -4.1        | 5.70                                  | 0.02        |
| DNW+CH         | 4         | 8.03          | -4.1        | 5.74                                  | 0.02        |

|             |   |      |      |       |      |
|-------------|---|------|------|-------|------|
| VCL+ ELE    | 4 | 7.89 | -3.8 | 6.01  | 0.02 |
| VCL+CH      | 4 | 7.85 | -3.7 | 6.10  | 0.02 |
| DNW+BA      | 4 | 7.83 | -3.7 | 6.13  | 0.02 |
| BA+CH       | 4 | 7.74 | -3.5 | 6.32  | 0.01 |
| ELE+BA      | 4 | 7.65 | -3.3 | 6.50  | 0.01 |
| ELE+CH      | 4 | 7.45 | -2.9 | 6.89  | 0.01 |
| VCL+ELE+DNW | 5 | 9.35 | -2.0 | 7.76  | 0.01 |
| VCL+DNW+CH  | 5 | 8.98 | -1.3 | 8.51  | 0.01 |
| VCL+DNW+BA  | 5 | 8.77 | -0.9 | 8.92  | 0.00 |
| ELE+DNW+CH  | 5 | 8.61 | -0.5 | 9.25  | 0.00 |
| ELE+DNW+BA  | 5 | 8.35 | 0.0  | 9.76  | 0.00 |
| DNW+BA+CH   | 5 | 8.09 | 0.5  | 10.28 | 0.00 |
| VCL+BA+CH   | 5 | 8.09 | 0.5  | 10.29 | 0.00 |
| VCL+ELE+BA  | 5 | 8.06 | 0.6  | 10.35 | 0.00 |
| VCL+ELE+CH  | 5 | 7.92 | 0.8  | 10.62 | 0.00 |



|                   |   |      |      |       |      |
|-------------------|---|------|------|-------|------|
| ELE+BA+CH         | 5 | 7.74 | 1.2  | 10.98 | 0.00 |
| VCL+ELE+DNW+CH    | 6 | 9.59 | 3.3  | 13.11 | 0.00 |
| VCL+ELE+DNW+BA    | 6 | 9.37 | 3.8  | 13.56 | 0.00 |
| VCL+DNW+BA+CH     | 6 | 8.98 | 4.5  | 14.34 | 0.00 |
| ELE+DNW+BA+CH     | 6 | 8.64 | 5.2  | 15.02 | 0.00 |
| VCL+ELE+BA+CH     | 6 | 8.10 | 6.3  | 16.09 | 0.00 |
| VCL+ELE+DNW+BA+CH | 7 | 9.60 | 10.8 | 20.59 | 0.00 |

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**Note:** df – number of model parameters, logLik – log-likelihood, AICc – Akaike information criterion corrected for small samples,  $\Delta$ AICc – difference between the AICc values of the model in question and the model with the lowest AICc,  $w_i$  – model weight (Akaike).