Supplementary Information

Table S1. Average number of individuals (N) per diameter class (DC). These values were used as estimates of tree richness per hectare.

| DC (cm) | N  |
|---------|----|
| 10-20   | 428 |
| 20-30   | 192 |
| 30-40   | 121 |
| 40-50   | 75  |
| 50-60   | 43  |
| 60-70   | 33  |
| >70     | 55  |

Table S2. Selection statistics of the different rank-abundance models for each of the land uses.

AIC = Akaike Information Criterion, BIC = Bayesian Information Criterion and D = Deviation.

| Land Use | Statistics | Broken-stick | Lognormal | Preemption | Zipf | Zipf-Mandelbrot |
|----------|------------|--------------|-----------|------------|------|----------------|
| AGRI     | AIC        | 405.13       | 244.32    | 376.73     | **217.68** | 217.74        |
|          | BIC        | 405.13       | 248.81    | 378.98     | **222.18** | 224.49        |
|          | D          | 202.57       | 37.76     | 172.17     | 11.12  | 9.18           |
| RF       | AIC        | 2334.69      | **788.39**| 1947.14    | 852.63 | 854.63         |
|          | BIC        | 2334.69      | **794.52**| 1950.21    | 858.76 | 863.82         |
|          | D          | 1771.9       | 221.6     | 1382.35    | 285.84 | 285.84         |
| SF       | AIC        | 1395.2       | 495.03    | 880.07     | 535.74 | **390.78**     |
|          | BIC        | 1395.2       | 500.45    | 882.78     | 541.16 | **398.91**     |
|          | D          | 1038.51      | 134.33    | 521.37     | 175.04 | 28.09          |
| SFF      | AIC        | 1589.62      | 826.75    | 1047.87    | 1224.39| **730.23**     |
|          | BIC        | 1589.62      | 833.28    | 1051.13    | 1230.92| **740.02**     |
|          | D          | 909.17       | 142.3     | 365.42     | 539.94 | 43.78          |
| LF       | AIC        | 11242.07     | 1444.38   | 5604.59    | 1405.64| **1029.81**    |
|          | BIC        | 11242.07     | 1450.46   | 5607.63    | 1411.72| **1038.92**    |
|          | D          | 10668.73     | 867.05    | 5029.26    | 828.31 | 450.48         |
| PAST     | AIC        | 1040.04      | 368.17    | 646.57     | 443.95 | **344.08**     |
|          | BIC        | 1040.04      | 373.26    | 649.11     | 449.03 | **351.71**     |
|          | D          | 723.63       | 47.76     | 328.16     | 123.54 | 21.67          |
| AFC      | AIC        | 290.5        | **230.77**| 275.82     | 251.66 | 245.16         |
|          | BIC        | 290.5        | **235.12**| 278        | 256    | 251.68         |
|          | D          | 90.76        | 27.03     | 74.08      | 47.91  | 39.42          |
Figure S1. Common tree species of the Catacamas landscape and their abundance by land use.