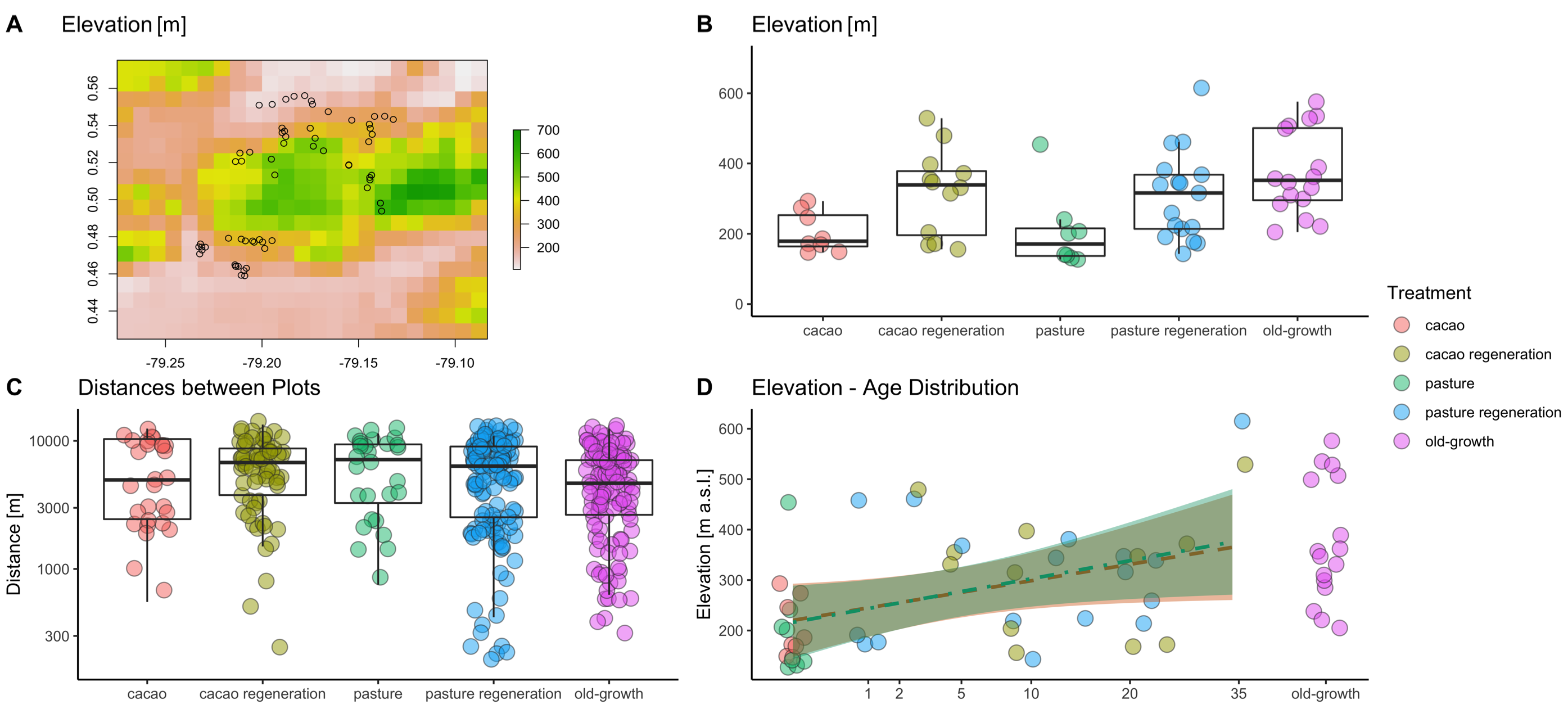
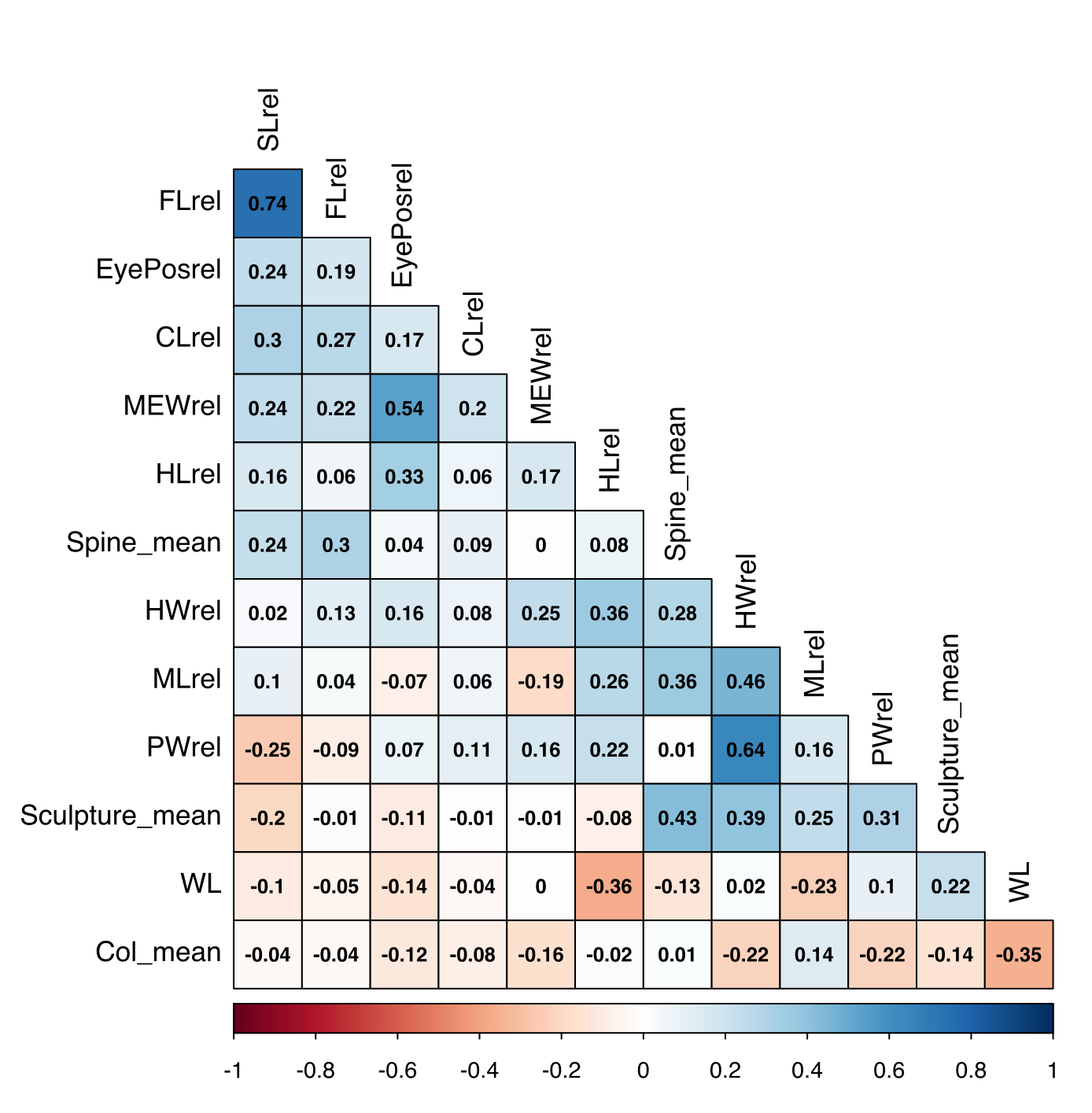
**Supplement.** Hoenle P.O., Staab, M., Donoso, D.A., Argoti, A.A., and Blüthgen, N. **Stratification and recovery time jointly shape ant functional re-assembly in a Neotropical forest**



**Figure S1**. **A**: Map of all plots superimposed on an elevation heatmap of the study area, made with the r-package ‘raster‘ (Hijman 2011: http://raster.r-forge.r-project.org/) **B**: Elevational distribution of each plot category. **C**: Distances among each plot within each category. The y-axis is log-transformed. Mean ± SD distance is 5,799 ± 3,373 m. The shortest inter-category distance is 170 m, the longest is 13,403 m. **D**: Relationship between elevation and recovery time. The two variables are significantly correlated (linear model; F = 4.80, R2 = 0.18, p = 0.003), and there is no difference between cacao and pasture land-use legacy (same model, p = 0.95).

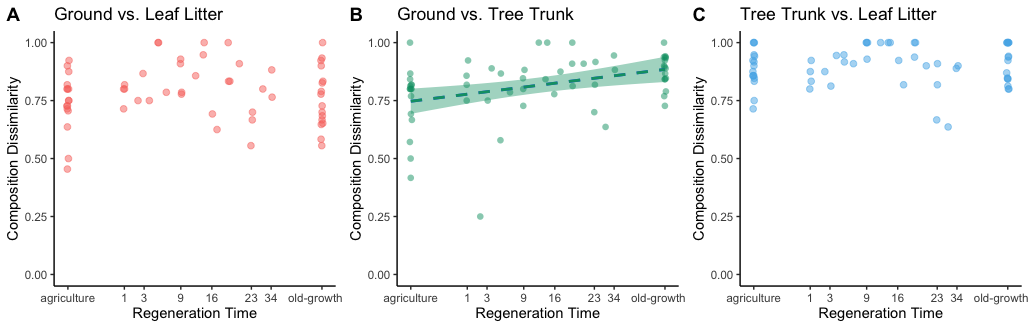


**Figure S2** Correlation plot of all measured ant traits. Blue indicates a positive, red a negative pairwise correlation (Spearman correlation). Color intensity scales with strength of correlation. FL= Femur length; EyePosrel; relative Eye position; CLrel = relative Clypeus length; MEWrel = relative Maximum Eye width; HLrel= relative head length; Spine\_mean = number of spines; HWrel = relative head width; MLrel = relative mandible length; PWrel = relative pronotum width; Sculpture\_mean: Sculpture; WL = Weber’s Length; Col\_mean: Color lightness.

Chart, scatter chart

Description automatically generated

**Figure S3**. Community weighted means of head width amd along the recovery sequence. The prediction and 95% confidence intervals of each stratum taken from a linear model are plotted.. Colors indicate strata (green = tree trunk; red = ground; blue = leaf litter). Head width has a trajectory consistent with the stratification hypothesis, while Femur length is neither shaped through recovery nor stratification. For the full statistical models see Table S3.

****

**Figure S4**: Pairwise comparison of species overlap (as Bray-Curtis Dissimilarity) along recovery time in A) ground vs. leaf litter communities, B) ground vs. tree trunk communities and C) tree trunk vs. leaf litter communities. Only B) was statistically significant (at p<0.05) and was plotted with a regression line and 95% CI from a linear model. For the full models see Supplement Table S2.

**Table S1**: Species list of the ants collected during this study. In total, 284 species were collected. They are sorted alphabetically within subfamilies. Further given are the sum of occurences for each stratum and the number of individuals measured for the trait analysis. Non-native species are marked with an asterix (\*).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Species** | **n measured** | **Leaf litter** | **Ground** | **Tree** |
| **Amblyoponinae** | | | | |
| *Prionopelta amabilis* | 4 | 5 | 0 | 0 |
| *Prionopelta modesta* | 4 | 8 | 5 | 0 |
|  |  |  |  |  |
| **Dolichoderinae** | | | | |
| *Azteca* sp.A | 2 | 0 | 0 | 2 |
| *Azteca* sp. B | 0 | 0 | 0 | 1 |
| *Azteca* sp. C | 2 | 0 | 0 | 2 |
| *Azteca* sp. D | 0 | 0 | 0 | 1 |
| *Azteca* sp. E | 2 | 0 | 0 | 1 |
| *Azteca* sp. F | 2 | 0 | 0 | 1 |
| *Azteca* sp.G | 0 | 0 | 0 | 1 |
| *Azteca* sp.H | 0 | 0 | 0 | 1 |
| *Azteca* sp.I | 2 | 0 | 0 | 4 |
| *Azteca* sp.J | 0 | 0 | 0 | 1 |
| *Azteca* sp.K | 0 | 0 | 1 | 1 |
| *Azteca* sp.L | 1 | 0 | 0 | 1 |
| *Azteca* sp.O | 0 | 0 | 0 | 1 |
| *Azteca* sp.P | 1 | 0 | 0 | 2 |
| *Azteca* sp.Q | 0 | 0 | 0 | 1 |
| *Dolichoderus baenae* | 2 | 0 | 1 | 5 |
| *Dolichoderus* cf. *bispinosus* | 2 | 0 | 0 | 3 |
| *Dolichoderus* cf. *validus* | 2 | 0 | 1 | 2 |
| *Dolichoderus lamellosus* | 2 | 0 | 0 | 1 |
| *Dolichoderus laurae* | 0 | 0 | 0 | 1 |
| *Linepithema piliferum* | 3 | 2 | 7 | 6 |
| *Linepithema tsachila* | 3 | 0 | 1 | 3 |
| *Tapinoma ramulorum inrectum* | 6 | 0 | 0 | 4 |
| *Tapinoma* sp. A | 0 | 0 | 0 | 1 |
| *Tapinoma* sp.C | 4 | 0 | 1 | 3 |
|  |  |  |  |  |
| **Dorylinae** | | | | |
| *Eciton burchellii* | 2 | 0 | 1 | 2 |
| *Eciton lucanoides* | 3 | 0 | 1 | 0 |
| *Neivamyrmex* sp. A | 1 | 0 | 1 | 0 |
|  |  |  |  |  |
| **Ectatomminae** | | | | |
| *Ectatomma goninion* | 0 | 1 | 3 | 0 |
| *Ectatomma ruidum* | 4 | 7 | 34 | 24 |
| *Ectatomma tuberculatum* | 3 | 0 | 0 | 13 |
| *Gnamptogenys annulata* | 2 | 0 | 1 | 2 |
| *Gnamptogenys banksi* | 0 | 0 | 1 | 0 |
| *Gnamptogenys* cf. *brunnea* | 4 | 0 | 2 | 3 |
| *Gnamptogenys* cf. *enodis* | 0 | 0 | 1 | 0 |
| *Gnamptogenys concinna* | 1 | 0 | 0 | 1 |
| *Gnamptogenys continua* | 1 | 1 | 0 | 0 |
| *Gnamptogenys extra* | 2 | 1 | 1 | 1 |
| *Gnamptogenys haenschi* | 2 | 1 | 1 | 0 |
| *Gnamptogenys horni* | 3 | 0 | 5 | 0 |
| *Gnamptogenys minuta* | 1 | 1 | 1 | 0 |
| *Gnamptogenys* nr. *banski* | 2 | 0 | 1 | 0 |
| *Gnamptogenys porcata* | 4 | 0 | 1 | 20 |
| *Gnamptogenys regularis* | 1 | 0 | 0 | 1 |
| *Gnamptogenys sulcata* | 4 | 0 | 0 | 4 |
| *Gnamptogenys tornata* | 2 | 2 | 1 | 1 |
| *Typhlomyrmex pusillus* | 2 | 1 | 1 | 0 |
| *Typhlomyrmex rogenhoferi* | 0 | 0 | 0 | 1 |
| *Typhlomyrmex* sp. A | 0 | 0 | 1 | 0 |
|  |  |  |  |  |
| **Formicinae** | | | | |
| *Acropyga* cf. *guianensis* | 4 | 2 | 0 | 2 |
| *Acropyga fuhrmanni* | 2 | 0 | 1 | 2 |
| *Brachymyrmex cavernicola* | 2 | 0 | 4 | 0 |
| *Brachymyrmex* cf. *australis* | 7 | 8 | 4 | 10 |
| *Brachymyrmex* cf. *termitophilus* | 2 | 0 | 1 | 2 |
| *Brachymyrmex pictus* | 6 | 4 | 2 | 7 |
| *Brachymyrmex* sp.A | 4 | 1 | 5 | 8 |
| *Brachymyrmex* sp.B | 1 | 0 | 0 | 2 |
| *Camponotus* cf. *brettesi* | 0 | 0 | 0 | 1 |
| *Camponotus* cf. *senex* | 2 | 0 | 0 | 2 |
| *Camponotus novogranadensis* | 5 | 0 | 1 | 7 |
| *Camponotus sericeiventris* | 4 | 0 | 0 | 5 |
| *Camponotus* sp.A | 0 | 0 | 0 | 1 |
| *Camponotus* sp.B | 0 | 0 | 0 | 1 |
| *Myrmelachista* sp. B | 0 | 0 | 0 | 1 |
| *Nylanderia* cf. *guatemalensis* | 5 | 5 | 6 | 9 |
| *Nylanderia* sp. A | 1 | 0 | 0 | 1 |
| *Nylanderia* sp. B | 3 | 0 | 1 | 1 |
| *Nylanderia* sp.C | 2 | 3 | 0 | 0 |
| *Nylanderia* sp.D | 2 | 3 | 2 | 0 |
| *Nylanderia* sp.F | 2 | 0 | 0 | 1 |
| *Nylanderia* sp.G | 0 | 0 | 0 | 1 |
| *Nylanderia steinheili* complex | 3 | 9 | 13 | 20 |
|  |  |  |  |  |
| **Heteroponerinae** |  |  |  |  |
| *Acanthoponera minor* | 2 | 0 | 0 | 3 |
| *Acanthoponera* PH1 | 0 | 0 | 0 | 1 |
|  |  |  |  |  |
| **Myrmicinae** | | | | |
| *Acromyrmex* cf. *octospinosus* | 3 | 0 | 4 | 4 |
| *Acromyrmex* cf. *volcanus* | 2 | 0 | 0 | 4 |
| *Adelomyrmex* sp.A | 2 | 1 | 1 | 0 |
| *Apterostigma carinatum* | 3 | 0 | 2 | 14 |
| *Apterostigma chocoense* | 2 | 1 | 1 | 0 |
| *Apterostigma* sp. A | 3 | 1 | 1 | 0 |
| *Atta cephalotes* | 0 | 3 | 0 | 0 |
| *\*Cardiocondyla emeryi* | 0 | 0 | 1 | 0 |
| *\*Cardiocondyla minutior* | 1 | 1 | 1 | 0 |
| *Carebara brevipilosa* | 2 | 0 | 1 | 0 |
| *Cephalotes* cf. *peruviensis* | 0 | 0 | 0 | 1 |
| *Cephalotes* cf. *umbraculatus* | 0 | 0 | 0 | 1 |
| *Crematogaster arcuata* | 2 | 0 | 1 | 2 |
| *Crematogaster brasiliensis* | 2 | 0 | 0 | 3 |
| *Crematogaster carinata* | 4 | 0 | 0 | 9 |
| *Crematogaster* cf. *flavomicrops* | 3 | 0 | 3 | 7 |
| *Crematogaster crinosa complex* | 4 | 0 | 2 | 9 |
| *Crematogaster curvispinosa* | 4 | 1 | 1 | 9 |
| *Crematogaster limata* | 4 | 0 | 3 | 12 |
| *Crematogaster longispina* | 4 | 2 | 6 | 11 |
| *Crematogaster nigropilosa* | 4 | 0 | 3 | 13 |
| *Crematogaster raptor* | 2 | 0 | 0 | 1 |
| *Crematogaster sotobosque* | 4 | 2 | 5 | 1 |
| *Crematogaster* sp.A | 0 | 0 | 0 | 1 |
| *Crematogaster tenuicula* | 2 | 0 | 4 | 3 |
| *Cyphomyrmex castagnei* | 4 | 1 | 5 | 3 |
| *Cyphomyrmex* cf. *bicarinatus* | 4 | 3 | 8 | 0 |
| *Cyphomyrmex* cf. *cornutus* sp.A | 4 | 1 | 9 | 21 |
| *Cyphomyrmex* cf. *cornutus* sp*.* B | 2 | 1 | 2 | 0 |
| *Cyphomyrmex* cf. *cornutus* sp.C | 0 | 0 | 0 | 1 |
| *Cyphomyrmex costatus* | 4 | 0 | 5 | 0 |
| *Cyphomyrmex longiscapus* | 2 | 0 | 0 | 4 |
| *Cyphomyrmex* nr. *rimosus* sp*.* A | 4 | 2 | 10 | 6 |
| *Cyphomyrmex* nr*. rimosus* sp. B | 3 | 0 | 5 | 3 |
| *Cyphomyrmex* nr. *salvini* sp.B | 4 | 1 | 7 | 4 |
| *Cyphomyrmex* nr*. salvini* sp. C | 4 | 6 | 4 | 0 |
| *Eurhopalothrix xibalba* | 0 | 0 | 1 | 0 |
| *Hylomyrma montana* | 2 | 2 | 0 | 0 |
| *Lachnomyrmex* cf. *haskinsi* | 1 | 0 | 1 | 0 |
| *Lenomyrmex foveolatus* | 4 | 2 | 2 | 2 |
| *Megalomyrmex bidentatus* | 1 | 0 | 0 | 2 |
| *Megalomyrmex incisus* | 2 | 1 | 0 | 0 |
| *Megalomyrmex leoninus* groupsp.A | 2 | 0 | 0 | 3 |
| *Megalomyrmex leoninus* groupsp.B | 0 | 0 | 1 | 0 |
| *Megalomyrmex leoninus* groupsp.C | 12 | 0 | 9 | 7 |
| *Megalomyrmex modestus* groupsp.A | 4 | 0 | 1 | 6 |
| *Megalomyrmex* sp. A | 1 | 1 | 0 | 0 |
| *\*Monomorium floricola* | 4 | 5 | 1 | 1 |
| *Mycecopurus tardus* | 1 | 0 | 1 | 0 |
| *Mycetomoellerius isthmicus* | 3 | 2 | 11 | 0 |
| *Mycetomoellerius* sp.A | 1 | 0 | 1 | 0 |
| *Mycetomoellerius* sp.B | 1 | 0 | 1 | 0 |
| *Nesomyrmex asper* | 0 | 0 | 0 | 1 |
| *Octostruma* cf. *amrishi* | 4 | 17 | 9 | 0 |
| *Octostruma* cf. *gymnogon* | 0 | 0 | 1 | 0 |
| *Octostruma* cf. *onorei* | 0 | 1 | 0 | 0 |
| *Octostruma stenoscapa* | 2 | 3 | 2 | 0 |
| *Paratrachymyrmex bugnioni* | 1 | 0 | 0 | 1 |
| *Paratrachymyrmex cornetzi* | 2 | 1 | 3 | 0 |
| *Pheidole* cf. *anastasii* | 2 | 1 | 0 | 3 |
| *Pheidole* cf. *boliviana* | 1 | 0 | 0 | 1 |
| *Pheidole* cf. *cataphracta* | 1 | 0 | 0 | 1 |
| *Pheidole* cf. *excubitor* | 2 | 0 | 2 | 0 |
| *Pheidole* cf. *flavens* | 3 | 2 | 2 | 26 |
| *Pheidole* cf. *harrisonfordi* | 4 | 28 | 11 | 1 |
| *Pheidole* cf. *hazenae* | 1 | 0 | 0 | 1 |
| *Pheidole* cf. *jaculifera* | 4 | 1 | 9 | 0 |
| *Pheidole* cf. *simonsi* | 2 | 0 | 1 | 2 |
| *Pheidole* cf. *tennantae* | 2 | 1 | 0 | 1 |
| *Pheidole* cf. *unicornis* | 0 | 0 | 1 | 0 |
| *Pheidole* cf. *verricula* | 0 | 0 | 1 | 0 |
| *Pheidole colobopsis* | 5 | 1 | 4 | 0 |
| *Pheidole dilligens* groupsp.A | 2 | 0 | 2 | 1 |
| *Pheidole dilligens* groupsp.B | 1 | 0 | 1 | 0 |
| *Pheidole ectatommoides* | 2 | 0 | 2 | 0 |
| *Pheidole fallax* groupsp.A | 1 | 0 | 0 | 1 |
| *Pheidole fallax* groupsp.C | 2 | 0 | 1 | 0 |
| *Pheidole fallax* groupsp.D | 1 | 0 | 0 | 3 |
| *Pheidole fallax* groupsp.E | 3 | 1 | 3 | 0 |
| *Pheidole fallax* groupsp.F | 4 | 0 | 5 | 1 |
| *Pheidole fallax* groupsp.G | 4 | 0 | 7 | 2 |
| *Pheidole fallax* groupsp. I | 2 | 0 | 2 | 0 |
| *Pheidole fallax* groupsp.K | 2 | 0 | 1 | 1 |
| *Pheidole flavens* groupsp.A | 1 | 1 | 0 | 0 |
| *Pheidole flavens* groupsp.D | 2 | 0 | 0 | 4 |
| *Pheidole flavens* groupsp.E | 1 | 0 | 0 | 1 |
| *Pheidole flavens* groupsp. G | 3 | 0 | 0 | 4 |
| *Pheidole flavens* groupsp.H | 2 | 2 | 2 | 0 |
| *Pheidole flavens* groupsp.L | 3 | 2 | 3 | 0 |
| *Pheidole flavens* group sp. M | 2 | 1 | 1 | 0 |
| *Pheidole flavens* group sp. N | 2 | 2 | 1 | 0 |
| *Pheidole flavens* group sp. O | 0 | 0 | 0 | 1 |
| *Pheidole flavens* group sp. P | 2 | 1 | 2 | 0 |
| *Pheidole flavens* group sp. Q | 1 | 0 | 0 | 1 |
| *Pheidole flavens* group sp. R | 3 | 0 | 0 | 3 |
| *Pheidole flavens* group sp. S | 1 | 0 | 0 | 1 |
| *Pheidole flavens* group sp. T | 2 | 1 | 0 | 0 |
| *Pheidole flavens* group sp. U | 1 | 0 | 0 | 1 |
| *Pheidole flavens* group sp. V | 2 | 0 | 0 | 3 |
| *Pheidole flavens* group sp. W | 1 | 0 | 1 | 0 |
| *Pheidole flavens* groupsp.Z | 1 | 0 | 0 | 1 |
| *Pheidole gauthieri* | 2 | 0 | 1 | 2 |
| *Pheidole guyasana* | 3 | 2 | 7 | 0 |
| *Pheidole nitella* | 3 | 8 | 16 | 6 |
| *Pheidole* nr. *ajax* | 2 | 0 | 0 | 1 |
| *Pheidole* nr. *exquisita* | 2 | 1 | 1 | 0 |
| *Pheidole* nr. *onyx* | 6 | 2 | 4 | 5 |
| *Pheidole* nr. *specularis* | 4 | 3 | 3 | 1 |
| *Pheidole perpusilla* | 2 | 0 | 0 | 3 |
| *Pheidole perpusilla* group sp. A | 2 | 0 | 0 | 3 |
| *Pheidole perpusilla* group sp. B | 1 | 0 | 0 | 1 |
| *Pheidole rhinomontana* | 3 | 2 | 4 | 2 |
| *Pheidole rugiceps* | 4 | 5 | 9 | 0 |
| *Pheidole sensitiva* | 2 | 0 | 1 | 0 |
| *Pheidole tristis* group sp. A | 1 | 0 | 0 | 1 |
| *Pheidole tristis* group sp. B | 1 | 0 | 1 | 0 |
| *Pheidole ulothrix* | 4 | 0 | 1 | 9 |
| *Pheidole vorax* | 2 | 0 | 0 | 1 |
| *Pheidole zeteki* | 4 | 6 | 3 | 1 |
| *Rogeria* cf. *belti* | 4 | 19 | 13 | 1 |
| *Rogeria* cf. *leptonana* | 0 | 0 | 1 | 0 |
| *Rogeria gibba* | 2 | 2 | 5 | 1 |
| *Rogeria inermis* | 2 | 0 | 1 | 2 |
| *Rogeria scandens* | 0 | 0 | 0 | 1 |
| *Rogeria* sp.A | 2 | 0 | 0 | 1 |
| *Sericomyrmex* cf. *amabilis* | 8 | 5 | 11 | 0 |
| *Solenopsis bicolor* | 6 | 3 | 1 | 4 |
| *Solenopsis* cf. *brevicornis* | 5 | 21 | 4 | 5 |
| *Solenopsis* cf. *stricta* | 2 | 1 | 4 | 0 |
| *Solenopsis* cf. *zeteki* | 4 | 0 | 5 | 5 |
| *Solenopsis geminata* | 4 | 3 | 9 | 3 |
| *Solenopsis modesta* group | 11 | 26 | 10 | 10 |
| *Solenopsis* sp.A | 7 | 8 | 5 | 0 |
| *Solenopsis* sp. B | 4 | 3 | 4 | 0 |
| *Solenopsis* sp.C | 2 | 2 | 0 | 0 |
| *Solenopsis* sp. D | 2 | 1 | 2 | 0 |
| *Solenopsis* sp.E | 2 | 1 | 2 | 0 |
| *Solenopsis* sp. F | 3 | 3 | 2 | 2 |
| *Solenopsis subterranea* | 2 | 4 | 0 | 0 |
| *Stenamma schmidti* | 4 | 4 | 8 | 1 |
| *Strumigenys biolleyi* | 3 | 3 | 0 | 2 |
| *Strumigenys cascanteae* | 1 | 0 | 0 | 1 |
| *Strumigenys denticulata* | 6 | 11 | 1 | 0 |
| *Strumigenys eggersi* | 3 | 7 | 2 | 0 |
| *Strumigenys fridericimuelleri* | 2 | 1 | 0 | 1 |
| *Strumigenys gundlachi* | 4 | 11 | 1 | 1 |
| *Strumigenys gundlachi* group sp. A | 1 | 0 | 0 | 1 |
| *Strumigenys lalassa* | 2 | 2 | 0 | 1 |
| *Strumigenys longispina* | 3 | 0 | 6 | 0 |
| *Strumigenys louisianae* | 4 | 5 | 11 | 1 |
| *Strumigenys myllorhapha* | 2 | 2 | 1 | 0 |
| *Strumigenys nigrescens* | 1 | 0 | 0 | 1 |
| *Strumigenys oconitrilloae* | 1 | 0 | 0 | 1 |
| *Strumigenys schulzi* | 1 | 0 | 0 | 1 |
| *Strumigenys* sp.A (=*S*. *ayersthey*) | 0 | 0 | 1 | 0 |
| *Strumigenys spathula* | 1 | 0 | 1 | 0 |
| *Strumigenys trinidadensis* | 2 | 0 | 0 | 2 |
| *Tranopelta gilva* | 4 | 7 | 1 | 12 |
| *Wasmannia auropunctata* | 7 | 36 | 35 | 40 |
| *Wasmannia sigmoidea* | 3 | 7 | 3 | 2 |
|  |  |  |  |  |
| **Paraponerinae** | | | | |
| *Paraponera clavata* | 1 | 0 | 0 | 5 |
|  |  |  |  |  |
| **Ponerinae** | | | | |
| *Anochetus diegensis* | 2 | 1 | 1 | 0 |
| *Anochetus mayri* | 2 | 0 | 3 | 0 |
| *Anochetus simoni* | 3 | 3 | 4 | 1 |
| *Hypoponera* cf. *distinguenda* | 5 | 6 | 6 | 1 |
| *Hypoponera* cf. *parva* | 3 | 2 | 5 | 1 |
| *Hypoponera* sp.A | 4 | 10 | 13 | 2 |
| *Hypoponera* sp.B | 3 | 6 | 10 | 1 |
| *Hypoponera* sp. D | 1 | 1 | 0 | 0 |
| *Hypoponera* sp.E | 2 | 4 | 1 | 0 |
| *Hypoponera* sp. F | 2 | 2 | 1 | 1 |
| *Hypoponera* sp. G | 2 | 2 | 2 | 0 |
| *Hypoponera* sp. I | 2 | 0 | 0 | 4 |
| *Hypoponera* sp. J | 0 | 1 | 0 | 0 |
| *Hypoponera* sp.K | 5 | 22 | 15 | 1 |
| *Hypoponera* sp.L | 4 | 3 | 4 | 12 |
| *Hypoponera* sp.N | 0 | 1 | 0 | 0 |
| *Leptogenys* cf. *punctaticeps* | 1 | 0 | 0 | 1 |
| *Leptogenys* sp.B | 2 | 0 | 1 | 1 |
| *Leptogenys* sp.C | 2 | 0 | 1 | 1 |
| *Odontomachus bauri* | 5 | 4 | 17 | 16 |
| *Odontomachus chelifer* | 3 | 0 | 4 | 1 |
| *Odontomachus hastatus* | 3 | 0 | 0 | 5 |
| *Odontomachus meinerti* | 2 | 0 | 1 | 1 |
| *Odontomachus* sp.A | 1 | 0 | 0 | 2 |
| *Pachycondyla harpax* | 4 | 6 | 22 | 8 |
| *Pachycondyla impressa* | 2 | 0 | 0 | 1 |
| *Platythyrea angusta* | 1 | 0 | 1 | 0 |
| *Platythyrea prizo* | 2 | 0 | 0 | 2 |
| *Pseudoponera* cf. *succedanea* | 2 | 1 | 2 | 3 |
| *Pseudoponera stigma* | 3 | 1 | 0 | 3 |
| *Rasopone (=Mayaponera) arhuaca* | 2 | 2 | 2 | 0 |
| *Neoponera apicalis* | 3 | 0 | 0 | 9 |
| *Neoponera bugabensis* | 0 | 0 | 0 | 1 |
| *Neoponera carinulata* | 4 | 0 | 0 | 12 |
| *Neoponera laevigata* | 2 | 0 | 0 | 1 |
| *Neoponera striatinodis* | 2 | 0 | 0 | 2 |
| *Neoponera villosa* | 2 | 0 | 1 | 6 |
|  |  |  |  |  |
| **Proceratiinae** |  |  |  |  |
| *Discothyrea sexarticulata* | 0 | 1 | 0 | 0 |
| *Proceratium convexiceps* | 0 | 0 | 1 | 0 |
|  |  |  |  |  |
| **Pseudomyrmecinae** | | | | |
| *Pseudomyrmex boopis* | 3 | 0 | 5 | 8 |
| *Pseudomyrmex gracilis* group sp. A | 2 | 0 | 0 | 3 |
| *Pseudomyrmex oki* | 1 | 0 | 1 | 2 |
| *Pseudomyrmex pallidus* group sp. A | 2 | 0 | 0 | 1 |
| *Pseudomyrmex pallidus* group sp. B | 1 | 0 | 0 | 1 |
| *Pseudomyrmex spiculus* | 1 | 0 | 0 | 1 |
| *Pseudomyrmex subater* | 0 | 0 | 0 | 1 |

**Table S2** Statistical results for analysis on species richness from Figure 3A and species composition from Figure 2 and Figure S4. The table shows results from PERMANOVA, envfit vectors and linear mixed effects models (LME). The anova in parentheses indicates an Anova test (Type III analysis of variance) on the model for significance. When testing for legacy effects we used a dataset without old-growth forests (see methods). Significant p-values are highlighted in bold.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Composition Dissimilarity: HS vs. T** | | | | |
| - LME | *Estimates* | *SE* | *p* | |
| Intercept | 0.7768 | 0.0484 | **<0.0001** | |
| Elevation [m] | -0.0001 | 0.0002 | 0.5655 | |
| Richness | 0.0035 | 0.0039 | 0.3746 | |
| Recovery Time | 0.0027 | 0.0001 | **0.0029** | |
| - Legacy (Anova) |  |  | 0.4498 | |
| - Legacy\*Recovery Time (Anova) |  |  | 0.7088 | |
| - Marginal R2 / Conditional R2 | 0.1771/ 0.2681 | | |
| **Composition Dissimilarity: HS vs. W** | | | | |
| - LME | *Estimates* | *SE* | *p* | |
| Intercept | 0.8057 | 0.0360 | **<0.0001** | |
| Elevation [m] | 0.0003 | 0.0001 | **0.0163** | |
| Richness | -0.0020 | 0.0031 | 0.5360 | |
| Recovery Time | -0.0007 | 0.0008 | 0.3892 | |
| - Legacy (Anova) |  |  | 0.3241 | |
| - Legacy\*Recovery Time (Anova) |  |  | 0.4325 | |
| - Marginal R2 / Conditional R2 | 0.0938/ 0.0938 | | |
| **Composition Dissimilarity: T vs. W** | | | | |
| - LME | *Estimates* | *SE* | *p* | |
| Intercept | 0.9092 | 0.0266 | **<0.0001** | |
| Elevation [m] | <0.0001 | 0.0001 | 0.7870 | |
| Richness | 0.0012 | 0.0020 | 0.5710 | |
| Recovery Time | 0.0002 | 0.0005 | 0.7230 | |
| - Legacy (Anova) |  |  | 0.3241 | |
| - Legacy\*Recovery Time (Anova) |  |  | 0.4325 | |
| - Marginal R2 / Conditional R2 | 0.0190/ 0.0727 | | |
| **Species Richness** | | | | |
| - LME | *Estimates* | *SE* | *p* | |
| Intercept | 6.5560 | 1.6816 | **0.0307** | |
| Elevation [m] | 0.0080 | 0.0027 | **0.0042** | |
| Recovery Time | 0.0461 | 0.0301 | 0.1278 | |
| - Marginal R2 / Conditional R2 | 0.2286/ 0.3879 | | | |
| - Stratum\*Recovery Time (Anova) |  |  | 0.9747 | |
| - Legacy (Anova) |  |  | 0.4004 | |
| - Legacy\*Recovery Time (Anova) |  |  | 0.1777 | |
| - Stratum (Anova) |  |  | **0.0256** | |
| - contrast estimate (Holm-adj.) |  |  |  | |
| Ground - Tree | -1.0656 | 0.6823 | 0.1210 | |
| Ground - Leaf litter | 2.7705 | 0.6823 | **0.0002** | |
| Tree - Leaf litter | 3.8361 | 0.6823 | **<0.0001** | |
| **Species Composition Tree Trunk** | | | | |
| - PERMANOVA | *R2* | *F* | *p* | |
| Elevation [m] | 0.0312 | 1.974 | **0.0002** | |
| Recovery Time | 0.0364 | 2.301 | **<0.0001** | |
| **Species Composition Leaf litter** | | | | |
| - PERMANOVA | *R2* | *F* | *p* | |
| Elevation [m] | 0.0207 | 1.3158 | 0.0954 | |
| Recovery Time | 0.0428 | 2.7236 | **<0.0001** | |
| **Species Composition Ground** | | | | |
| - PERMANOVA | *R2* | *F* | *p* | |
| Elevation [m] | 0.0292 | 1.9066 | **0.0032** | |
| Recovery Time | 0.0495 | 3.2307 | **<0.001** | |

**Table S3** Model results for functional diversity, as SES Rao Q. The table shows linear mixed effects model (LME) results and subsequent post-hoc tests The anova in parentheses indicates an Anova test (type III analysis of variance) on the model for significance. If ‘Stratum’ was significant in the anova, we applied a contrast as post-hoc procedure to test specifically between the strata. If recovery time or an interaction was significant in the LME, we tested the recovery trajectory of each subset separately (‘Recovery subset models’). When testing for legacy effects we used a dataset without old-growth forests (see methods). Significant p-values are highlighted in bold.

|  |  |  |  |
| --- | --- | --- | --- |
| **Functional Diversity: Stratification Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 0.3306 | 0.2343 | 0.1860 |
| Elevation [m] | -3.365e-05 | 4.544e-04 | 0.9410 |
| Recovery Time | -0.0050 | 0.0050 | 0.3160 |
| Richness | -0.0183 | 0.0124 | 0.1420 |
| - Marginal R2 / Conditional R2 | 0.3881 / 0.4490 | | |
| - Legacy (Anova) |  |  | 0.3378 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.2517 |
| - Stratum (Anova) |  |  | **<0.0001** |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | -0.4460 | 0.1136 | **0.0001** |
| Ground - Leaf litter | 0.8549 | 0.1183 | **<0.0001** |
| Tree - Leaf litter | 1.3009 | 0.1231 | **<0.0001** |

**Table S4** Model results for the trait community weighted mean trajectories which are shown in Figure 4. For each trait, we indicated if its trajectory was consistent with the stratification or interaction hypothesis. The anova in parentheses indicates an Anova test (Type III analysis of variance) on the model for significance. If ‘Stratum’ was significant in the anova, we applied a contrast as post-hoc procedure to test specifically between the strata. If recovery time or an interaction was significant in the LME, we tested the recovery trajectory of each subset separately (‘Recovery subset models’). When testing for legacy effects we used a dataset without old-growth forests (see methods). Significant p-values are highlighted in bold.

|  |  |  |  |
| --- | --- | --- | --- |
| **Head Width CWM: Stratification Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 28.6321 | 13.9148 | 0.0603 |
| Elevation [m] | -0.0043 | 0.0273 | 0.8763 |
| Recovery Time | -0.3512 | 0.3028 | 0.2477 |
| Richness | -0.1502 | 0.7494 | 0.8414 |
| - Marginal R2 / Conditional R2 | 0.1362/ 0.2074 | | |
| - Legacy (Anova) |  |  | 0.1197 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.1625 |
| - Stratum (Anova) |  |  | **0.0001** |
| -Stratum\*Recovery Time (Anova) |  |  | 0.0526 |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | -7.9736 | 6.9097 | 0.2508 |
| Ground - Leaf litter | 23.4133 | 7.1953 | **0.0029** |
| Tree - Leaf litter | 31.3869 | 7.4905 | **0.0002** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Sculpture CWM: Recovery Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 2.2848 | 0.0868 | **<0.0001** |
| Elevation [m] | -0.0004 | 0.0002 | 0.0757 |
| Recovery Time | -0.0049 | 0.0022 | **0.0238** |
| Richness | -0.0077 | 0.0051 | 0.1313 |
| - Marginal R2 / Conditional R2 | 0.1410/ 0.1791 | | |
| - Legacy (Anova) |  |  | 0.8631 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.9489 |
| - Stratum (Anova) |  |  | **0.0007** |
| - Stratum\*Recovery Time (Anova) |  |  | 0.0990 |
| - Recovery subset models |  |  |  |
| Tree Recovery Time | <0.0001 | 0.0022 | 0.9973 |
| Leaf litter Recovery Time | -0.0025 | 0.0026 | 0.3517 |
| Ground Recovery Time | -0.0038 | 0.0022 | 0.0811 |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | 0.0168 | 0.0491 | 0.7300 |
| Ground - Leaf litter | 0.1937 | 0.0491 | **0.0007** |
| Tree - Leaf litter | 0.1769 | 0.0491 | **0.0025** |
| **Eye Position CWM: Recovery Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 12.5731 | 7.2302 | 0.0841 |
| Elevation [m] | 0.0151 | 0.0170 | 0.3793 |
| Recovery Time | -0.5956 | 0.1786 | **0.0011** |
| Richness | -0.3387 | 0.4210 | 0.4222 |
| - Marginal R2 / Conditional R2 | 0.3020/ 0.3752 | | |
| - Legacy (Anova) |  |  | 0.4466 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.7341 |
| - Stratum (Anova) |  |  | **0.0002** |
| - Stratum\*Recovery Time (Anova) |  |  | 0.6021 |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | -22.7456 | 3.8967 | **<0.0001** |
| Ground - Leaf litter | 6.2510 | 4.0981 | 0.1297 |
| Tree - Leaf litter | 28.9966 | 4.3043 | **<0.0001** |
| - Recovery subset models |  |  |  |
| Ground Recovery Time | -0.5316 | 0.1679 | **0.0025** |
| Leaf litter Recovery Time | -0.4398 | 0.1461 | **0.0040** |
| Tree Recovery Time | -0.5397 | 0.2527 | **0.0370** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Color CWM: Interaction Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 47.6032 | 3.4072 | **<0.0001** |
| Elevation [m] | 0.0016 | 0.0077 | 0.8333 |
| Recovery Time | 0.2261 | 0.0791 | **0.0050** |
| Richness | 0.4892 | 0.1906 | **0.0112** |
| - Marginal R2 / Conditional R2 | 0.2863/ 0.3963 | | |
| -Stratum (Anova) |  |  | **<0.0001** |
| - Stratum\*Recovery Time (Anova) |  |  | **<0.0001** |
| - Legacy (Anova) |  |  | 0.0550 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.0744 |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | 2.1554 | 1.6951 | 0.2060 |
| Ground - Leaf litter | -9.4887 | 1.7740 | **<0.0001** |
| Tree - Leaf litter | -11.6442 | 1.8551 | **<0.0001** |
| - Recovery subset models |  |  |  |
| Ground Recovery Time | 0.2267 | 0.0871 | **0.0118** |
| Leaf litter Recovery Time | -0.2422 | 0.0920 | **0.0109** |
| Tree Recovery Time | 0.2722 | 0.0762 | **0.0007** |
| **Pronotum Width CWM: Interaction Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 36.0498 | 10.3645 | **0.0012** |
| Elevation [m] | 0.0091 | 0.0262 | 0.7304 |
| Recovery Time | -0.63841 | 0.2478 | **0.0111** |
| Richness | -1.0910 | 0.5599 | 0.0534 |
| - Marginal R2 / Conditional R2 | 0.1859/ 0.4189 | | |
| - Legacy (Anova) |  |  | 0.1362 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.3068 |
| - Stratum (Anova) |  |  | **<0.0001** |
| - Stratum\*Recovery Time (Anova) |  |  | **0.0016** |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | -9.7953 | 4.7780 | **0.0433** |
| Ground - Leaf litter | 11.6867 | 5.0238 | **0.0433** |
| Tree - Leaf litter | 21.4820 | 5.2755 | **0.0013** |
| - Recovery subset models |  |  |  |
| Ground Recovery Time | -0.3791 | 0.2108 | 0.0774 |
| Leaf litter Recovery Time | -0.0503 | 0.1593 | 0.7531 |
| Tree Recovery Time | -1.1354 | 0.3717 | **0.0034** |
| **Scape Length CWM: Interaction Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | -0.6435 | 0.1608 | **0.0002** |
| Elevation [m] | 0.0006 | 0.0035 | 0.9867 |
| Recovery Time | 0.9251 | 0.3949 | **0.0203** |
| Richness | 1.951 | 0.9511 | **0.0433** |
| - Marginal R2 / Conditional R2 | 0.2332/ 0.2332 | | |
| - Stratum\*Recovery Time (Anova) |  |  | **<0.0001** |
| - Stratum (Anova) |  |  | 0.0792 |
| - Legacy (Anova) |  |  | 0.4491 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.6334 |
| - Recovery subset models |  |  |  |
| Ground Recovery Time | 0.8860 | 0.3744 | **0.0214** |
| Leaf litter Recovery Time | -0.5900 | 0.3286 | 0.0779 |
| Tree Recovery Time | 1.4972 | 0.5679 | **0.0108** |
| **Clypeus Length CWM: Interaction Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 44.2905 | 8.4672 | **<0.0001** |
| Elevation [m] | -0.0087 | 0.0182 | 0.6337 |
| Recovery Time | -0.8019 | 0.2069 | **0.0002** |
| Richness | -1.1781 | 0.5002 | **0.0205** |
| - Marginal R2 / Conditional R2 | 0.2799/ 0.2987 | | |
| - Legacy (Anova) |  |  | 0.4223 |
| - Legacy \*Recovery Time (Anova) |  |  | 0.4712 |
| - Stratum (Anova) |  |  | **<0.0001** |
| - Stratum\*Recovery Time (Anova) |  |  | **0.0214** |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | -22.6480 | 4.81238 | **<0.0001** |
| Ground - Leaf litter | 9.9380 | 5.03184 | 0.0505 |
| Tree - Leaf litter | 32.586 | 5.2578 | **<0.0001** |
| - Recovery subset models |  |  |  |
| Ground Recovery Time | -0.698 | 0.1714 | **0.0001** |
| Leaf litter Recovery Time | -0.2732 | 0.1471 | 0.0686 |
| Tree Recovery Time | -0.7623 | 0.3043 | **0.0152** |
| **Head Length CWM: Interaction Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | -13.0733 | 11.1391 | 0.2424 |
| Elevation [m] | 0.0086 | 0.0263 | 0.7444 |
| Recovery Time | 0.4439 | 0.2751 | 0.1086 |
| Richness | 0.2089 | 0.6478 | 0.7475 |
| - Marginal R2 / Conditional R2 | 0.0659/ 0.1689 | | |
| - Legacy (Anova) |  |  | 0.6153 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.8816 |
| - Stratum (Anova) |  |  | 0.0504 |
| - Stratum\*Recovery Time (Anova) |  |  | **0.0230** |
| - Recovery subset models |  |  |  |
| Ground Recovery Time | 0.2773299 | 0.3493535 | 0.4306 |
| Leaf litter Recovery Time | -0.2819231 | 0.2113474 | 0.1875 |
| Tree Recovery Time | 0.75100227 | 0.31975011 | **0.0223** |
| **Weber’s Length CWM: Interaction Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 1278.6596 | 119.5524 | **0.0017** |
| Elevation [m] | 0.0279 | 0.1794 | 0.8769 |
| Recovery Time | -1.9746 | 1.9847 | 0.3212 |
| Richness | -0.9566 | 4.9423 | 0.8468 |
| - Marginal R2 / Conditional R2 | 0.5067/ 0.6169 | | |
| - Legacy (Anova) |  |  | 0.4688 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.1015 |
| - Stratum (Anova) |  |  | **<0.0001** |
| - Stratum\*Recovery Time (Anova) |  |  | **0.0078** |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | -162.9934 | 45.1853 | **0.0005** |
| Ground - Leaf litter | 485.6714 | 46.9930 | **<0.0001** |
| Tree - Leaf litter | 648.6648 | 48.8640 | **<0.0001** |
| - Recovery subset models |  |  |  |
| Ground Recovery Time | -2.5107 | 1.7920 | 0.1667 |
| Leaf litter Recovery Time | 3.9682 | 1.7579 | **0.0279** |
| Tree Recovery Time | 6.7283 | 2.7224 | **0.0165** |
| **Mandible Length CWM: Interaction Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | -4.9406 | 10.7036 | 0.6457 |
| Elevation [m] | -0.0114 | 0.0240 | 0.6371 |
| Recovery Time | 0.3502 | 0.2644 | 0.1871 |
| Richness | 0.3615 | 0.6309 | 0.5684 |
| - Marginal R2 / Conditional R2 | 0.1203/ 0.1526 | | |
| - Legacy (Anova) |  |  | **0.0391** |
| - contrast estimate (Holm-adj.) |  |  |  |
| cacao - pasture | 9.98 | 5.44 | 0.0744 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.1656 |
| - Stratum (Anova) |  |  | **0.0007** |
| - Stratum\*Recovery Time (Anova) |  |  | **0.0238** |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | 12.6941 | 6.0236 | 0.0744 |
| Ground - Leaf litter | -5.9885 | 6.3192 | 0.3451 |
| Tree - Leaf litter | -18.6826 | 6.6227 | **0.0167** |
| - Recovery subset models |  |  |  |
| Ground Recovery Time | 0.4283 | 0.1772 | **0.0189** |
| Leaf litter Recovery Time | -0.1192 | 0.2082 | 0.5693 |
| Tree Recovery Time | 0.9527 | 0.4272 | **0.0297** |
| **Maximum Eye Width CWM: Interaction Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 33.7688 | 8.7952 | **0.0002** |
| Elevation [m] | 0.0124 | 0.0202 | 0.5435 |
| Recovery Time | -0.8937 | 0.2177 | **<0.0001** |
| Richness | -0.6791 | 0.5158 | 0.1897 |
| - Marginal R2 / Conditional R2 | 0.4629/ 0.4994 | | |
| - Legacy (Anova) |  |  | 0.1073 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.5820 |
| - Stratum (Anova) |  |  | **<0.0001** |
| - Stratum\*Recovery Time (Anova) |  |  | **0.0024** |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | -25.4758 | 4.8628 | **<0.0001** |
| Ground - Leaf litter | 21.4291 | 5.1101 | **0.0001** |
| Tree - Leaf litter | 46.9049 | 5.3635 | **<0.0001** |
| - Recovery subset models |  |  |  |
| Ground Recovery Time | -0.8681 | 0.1821 | **<0.0001** |
| Leaf litter Recovery Time | -0.6701 | 0.1588 | **<0.0001** |
| Tree Recovery Time | -1.2897 | 0.3160 | **0.0001** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Spines CWM** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | **1.3140** | **0.2365** | **<0.0001** |
| Elevation [m] | -0.0004 | 0.0005 | 0.4095 |
| Recovery Time | -0.0060 | 0.0059 | 0.3060 |
| Richness | 0.01441 | 0.0140 | 0.3036 |
| - Marginal R2 / Conditional R2 | 0.0396/ 0.0427 | | |
| - Legacy (Anova) |  |  | 0.2315 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.4655 |
| - Stratum (Anova) |  |  | 0.6004 |
| - Stratum\*Recovery Time (Anova) |  |  | 0.9315 |
| - Stratum (Anova) |  |  | 0.1921 |
| **Femur Length CWM** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | -4.2872 | 21.4078 | 0.8415 |
| Elevation [m] | -0.0209 | 0.0468 | 0.6557 |
| Recovery Time | -0.8496 | 0.5325 | 0.1124 |
| Richness | 1.6126 | 1.2648 | 0.2041 |
| - Marginal R2 / Conditional R2 | 0.1847/ 0.1847 | | |
| - Legacy (Anova) |  |  | 0.5596 |
| -Legacy\*Recovery Time (Anova) |  |  | 0.8826 |
| - Stratum (Anova) |  |  | 0.1136 |
| - Stratum\*Recovery Time (Anova) |  |  | 0.9055 |
| **Head Width CWM: Stratification Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 28.6321 | 13.9148 | 0.0603 |
| Elevation [m] | -0.0042 | 0.0273 | 0.8764 |
| Recovery Time | -0.3512 | 0.3028 | 0.2477 |
| Richness | -0.1502 | 0.7494 | 0.8414 |
| - Marginal R2 / Conditional R2 | 0.1362/ 0.2074 | | |
| - Legacy (Anova) |  |  | 0.1197 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.1625 |
| - Stratum (Anova) |  |  | **0.0001** |
| -Stratum\*Recovery Time (Anova) |  |  | 0.0526 |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | -7.9736 | 6.9097 | 0.2508 |
| Ground - Leaf litter | 23.4133 | 7.1953 | **0.0029** |
| Tree - Leaf litter | 31.3869 | 7.4905 | **0.0002** |

**Table S5** Model results for the phylogenetic diversity trajectory from Figure 3D, which was consistent with the stratification hypothesis. The Anova in brackets indicates an Anova test on the model (type III analysis of variance). Because ‘Stratum’ was significant in the anova, we applied a contrast as post-hoc procedure to test specifically between the strata. When testing for legacy effects we used a dataset without old-growth forests (see methods). Significant p-values are highlighted in bold.

|  |  |  |  |
| --- | --- | --- | --- |
| **Phylogenetic Diversity: Stratification Hypothesis** | | | |
| - LME | *Estimates* | *SE* | *p* |
| Intercept | 0.0564 | 0.2747 | 0.8839 |
| Elevation [m] | 0.0002 | 0.0006 | 0.7366 |
| Recovery Time | 0.0102 | 0.0063 | 0.1065 |
| Richness | -0.0031 | 0.0157 | **0.0407** |
| - Marginal R2 / Conditional R2 | 0.0830/ 0.1111 | | |
| - Legacy (Anova) |  |  | 0.5192 |
| - Legacy\*Recovery Time (Anova) |  |  | 0.6267 |
| - Stratum (Anova) |  |  | **0.0437** |
| - contrast estimate (Holm-adj.) |  |  |  |
| Ground - Tree | -0.3936 | 0.1409 | **0.0162** |
| Ground - Leaf litter | 0.1053 | 0.1525 | 0.4908 |
| Tree - Leaf litter | 0.4990 | 0.1586 | **0.0062** |