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Comparisons of the impacts of disturbance on amphibian species richness in the Chocóan Rainforest, Ecuador

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Table S1. The total abundance of each of the amphibian species encountered throughout the three study sites within Reserva Tesoro Escondido, Ecuador throughout the survey period.

Species	Site 1	Site 2	Site 3
Boana picturata	13	2	0
Boana rosenbergi	15	3	0
Craugastor longirostris	25	9	5
Cochranella mache	0	1	0
Epipedobates boulengeri	16	7	1
Espadarana callistomma	1	0	4
Espadarana prosoblepon	2	1	11
Hyalinobatrachium chirripoi	2	0	0
Hyalinobatrachium aureoguttatum	0	2	0
Hyloscirtus alytolylax	0	2	0
Hyloscirtus mashpi	0	3	0
Hyloscirtus palmeri	4	2	0
Hyloxalus awa	14	14	20
Hyloxalus toachi	7	4	2
Incilius coniferus	8	0	0
Leptodactylus peritoaktites	2	1	0
Leptodactylus ventrimaculatus	2	0	0
Pristimantis achatinus	33	10	7
Pristimantis colomai	0	0	6
Pristimantis crenunguis	0	0	2
Pristimantis degener	0	0	1

Pristimantis esmeraldas	1	1	1
Pristimantis labiosus	4	7	7
Pristimantis latidiscus	2	2	1
Pristimantis mutabilis	0	0	6
Pristimantis nietoy	0	1	0
Pristimantis parvillus	0	0	9
Pristimantis sp. 1	0	0	2
Pristimantis sp. 2	0	0	5
Pristimantis subsigillatus	0	0	2
Pristimantis tenebrionis	0	1	1
Pristimantis verecundus	0	0	1
Pristimantis w-nigrum	13	0	0
Pristimantis walkeri	9	2	0
Rhinella alata	26	0	0
Rhinella horribilis	2	0	0
Rhaebo haematiticus	4	4	0
Sachatamia ilex	2	0	9
Smilisca phaeota	1	1	0
Teratohyla spinosa	4	2	4
Total	**212**	**82**	**107**

Table S2. A pairwise correlation matrix of the variables under study. CC = Canopy Cover; SL = Sub-canopy layer; HL = Herb layer; LL = Leaf litter %; T = Temperature; H = Humidity; Rain_mm = Rainfall totals in millimetres; Altitude_m = Altitude in metres; H20_dist_m = Distance from water in metres.

	CC	SL	HL	LL	T	H	Rain_mm	Altitude_m	H20_dist_m
CC	-	**0.281198**	**0.06533**	**-0.06464**	**0.060529**	**-0.03636**	**-0.24165**	**0.257408**	**-0.07455**
SL	-	-	**0.285594**	**-0.08452**	**0.093741**	**-0.01479**	**-0.20892**	**0.071604**	**0.074635**
HL	-	-	-	**-0.17533**	**-0.07999**	**-0.00391**	**0.020034**	**0.214953**	**0.164494**
LL	-	-	-	-	**0.196285**	**-0.15249**	**0.000287**	**-0.03084**	**0.302157**
T	-	-	-	-	-	**-0.86909**	**-0.64605**	**-0.40344**	**-0.16735**
H	-	-	-	-	-	-	**0.377759**	**0.245652**	**0.260898**
Rain_mm	-	-	-	-	-	-	-	**0.060296**	**0.101726**
Altitude_m	-	-	-	-	-	-	-	-	**0.295894**
H20_dist_m	-	-	-	-	-	-	-	-	-

Table S3. Univariate richness models for all sites. CC = Canopy Cover; SL = Sub-canopy layer; HL = Herb player; LL = Leaf litter %; T = Temperature; H = Humidity; Rain_mm = Rainfall totals in millimetres; Altitude_m = Altitude in metres; H20_dist_m = Distance from water in metres.

Variable	**p**	**aic**	**Model estimate**	**Standard Error**	**95% confidence interval**
CC	0.146	525.446	-0.006	0.004	-0.0151 | 0.0028
SL	0.048	523.389	0.009	0.005	2e-04 | 0.0188
HL	0.204	525.787	-0.006	0.005	-0.0145 | 0.0032
LL	0.32	526.344	-0.003	0.003	-0.0098 | 0.0031
T	<0.0001	515.656	0.098	0.028	0.0427 | 0.1531
H	0.163	525.486	-0.011	0.008	-0.0266 | 0.0048
Rain_mm	0.028	522.232	-0.038	0.018	-0.074 | -0.0052
Altitude_m	<0.0001	472.417	-0.015	0.002	-0.0185 | -0.0107
H20_dist_m	0.061	523.647	-0.001	0.001	-0.0028 | 0

Table S4. Multiple regression richness models for all sites investigating the abundance of species. LL = Leaf litter %; Rain_mm = Rainfall totals in millimetres; Altitude_m = Altitude in metres.

See CSV File.

Table S5. Univariate abundance models for all sites. CC = Canopy Cover; SL = Sub-canopy layer; HL = Herb layer; LL = Leaf litter %; T = Temperature; H = Humidity; Rain_mm = Rainfall totals in millimetres; Altitude_m = Altitude in metres; H20_dist_m = Distance from water in metres.

	var	**p**	**aic**	**estimate**	**SE**	**confint**
1	CC	0.075	632.642	-0.01	0.005	-0.0212 | 0.0015
2	SL	0.159	633.485	0.008	0.006	-0.0029 | 0.0185
3	HL	0.352	634.661	-0.005	0.005	-0.0159 | 0.0057
4	LL	0.098	632.645	-0.006	0.004	-0.0138 | 0.001
5	T	0.008	629.256	0.089	0.034	0.0199 | 0.1595
6	H	0.535	635.141	-0.006	0.01	-0.0257 | 0.0136
7	Rain_mm	0.088	632.569	-0.033	0.019	-0.0709 | 0.0046
8	Altitude_m	0	589.038	-0.016	0.002	-0.0199 | -0.0114
9	H20_dist_m	0.12	632.856	-0.001	0.001	-0.0028 | 2e-04

Table S6. Multiple regression abundance models for all sites investigating the richness of species. SL = Sub-canopy layer; Rain_mm = Rainfall totals in millimetres; Altitude_m = Altitude in metres; H20_dist_m = Distance from water in metres.

See CSV File.

Figure S1. Scatterplots of the association between variables under study and species richness. Significant associations are bolded. *** = p < 0.0001; ** p = <0.01; * = p <0.05.

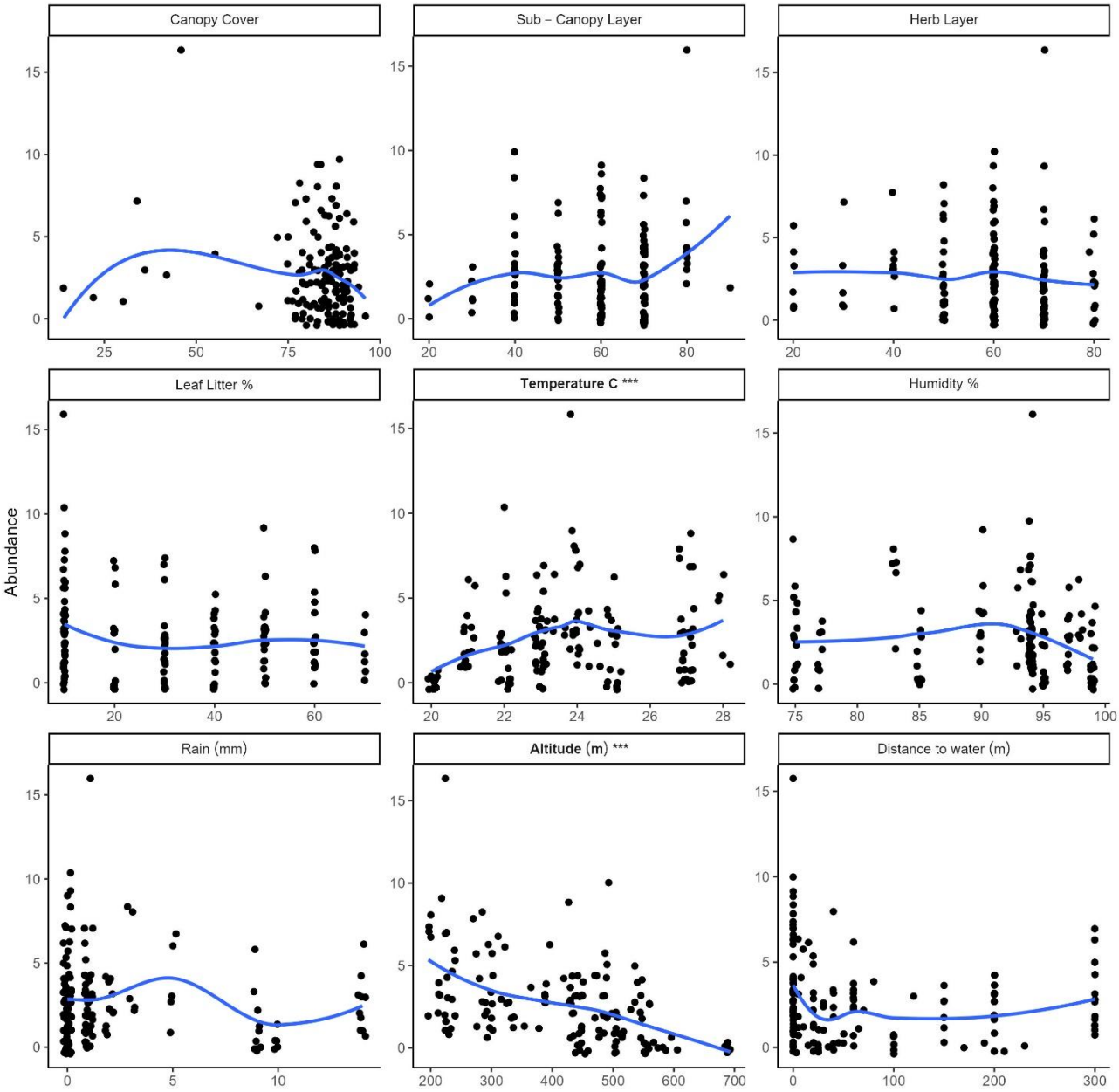

Figure S2. Scatterplots of the association between variables under study and species abundance. Significant associations are bolded. *** = p < 0.0001; ** p = <0.01; * = p < 0.05.