

Supplementary Materials

Table S1. – List of species grouped by successional stage and their abundance by treatment and year. * Denotes significant difference at $\alpha = 0.05$ for the Indicator Species Analysis.

SPECIES		CONTROL							REMOVAL					
		2007	2010	2012	2014	2016	2018	2020	2010	2012	2014	2016	2018	2020
PIONEER	<i>Aegiphila riedeliana</i> Schauer	0	9	0	0	0	0	0	198*	12*	5	1	1	0
	Asteraceae	1	5	6	2	0	0	0	0	0	0	0	0	0
	<i>Baccharis microdonta</i> DC.	0	3	3	3	1	1	0	0	0	0	0	0	0
	<i>Baccharis oblongifolia</i> (Ruiz & Pav.) Pers.	0	1	1	0	0	0	0	0	0	0	0	0	0
	<i>Clethra scabra</i> Pers.	0	0	0	0	0	0	0	0	3	9	11	13	21
	Indet.	0	0	0	0	0	0	0	23*	3	1	1	0	0
	<i>Jacaranda puberula</i> Cham.	0	0	0	0	0	0	0	1	2	2	2	2	2
	<i>Manihot grahamii</i> Hook.	4	11	12	7	2	0	0	14	13	10	10	5	6
	<i>Mimosa scabrella</i> Benth.	1	50	61	49	41	36	26	93	72	48	38	30	21
	<i>Myrsine coriacea</i> (Sw.) R. Br. ex Roem. & Schult.	0	2	3	3	2	1	1	0	0	5	8	12	10
	<i>Myrsine umbellata</i> Mart.	0	0	0	0	0	0	0	1	6	5	5	5	3
	<i>Piptocarpha angustifolia</i> Dusén ex Malme	32	139	154	102	57	36	25	248	208	131	88	53	27
	<i>Sapium glandulosum</i> (L.) Morong	1	1	1	1	1	1	1	4	5	6	5	6	4
	<i>Solanum erianthum</i> D. Don	3	19	0	5	3	2	0	0	1	0	0	0	0
	<i>Solanum pseudoquina</i> A. St.-Hil.	0	0	0	0	0	0	0	0	0	1	2	2	2
	<i>Solanum sanctaecatharinae</i> Dunal	0	0	0	0	0	0	0	48*	43*	26*	27*	25*	22*
	<i>Vernonanthura discolor</i> (Spreng.) H. Rob	0	13	18	15	14	10	9	1	1	6	6	6	5
SECONDARY	<i>Annona rugulosa</i> (Schltdl.) H. Rainer	1	1	2	2	2	2	2	0	2	5	7	11	14
	<i>Campomanesia xanthocarpa</i> (Mart.) O. Berg	0	0	0	0	0	0	0	1	1	1	2	2	4
	<i>Casearia decandra</i> Jacq.	0	0	0	0	0	0	0	4	4	5	4	3	4
	<i>Casearia obliqua</i> Spreng.	0	0	0	0	0	0	0	0	0	0	0	0	1
	<i>Cupania vernalis</i> Cambess.	1	1	1	1	1	1	1	0	0	1	2	4	4
	<i>Ilex paraguariensis</i> A St.-Hil.	0	1	2	2	2	2	3	0	0	1	2	9	25*
	<i>Inga lentiscifolia</i> Benth.	0	0	0	0	0	0	0	0	0	1	1	1	1
	<i>Lamanonia ternata</i> Vell.	0	0	0	0	0	0	0	1	1	1	1	2	2
	<i>Lonchocarpus campestris</i> Mart. ex Benth.	0	0	0	0	0	0	0	0	0	0	0	0	1
	<i>Matayba elaeagnoides</i> Radlk.	0	0	1	1	1	1	1	2	2	2	3	4	4
	<i>Ocotea puberula</i> (Rich.) Nees	1	7	9	5	4	2	1	8	8	4	3	2	2
	<i>Prunus brasiliensis</i> Dietrich	0	0	0	0	0	0	1	2	2	2	2	2	2
	<i>Symplocos uniflora</i> (Pohl) Benth.	0	0	0	0	0	0	1	0	0	0	0	0	3
	<i>Symplocos tenuifolia</i> Brand	0	0	0	0	0	0	0	2	2	2	2	3	3
	<i>Zanthoxylum rhoifolium</i> Lam.	0	1	1	1	1	1	0	1	0	0	0	0	0

	<i>Strychnos brasiliensis</i> (Spreng.) Mart.	0	0	0	0	0	0	0	0	0	0	0	1	2
LATE	<i>Nectandra megapotamica</i> (Spreng.) Mez	0	0	0	0	0	0	0	0	0	0	0	4	8
	<i>Ocotea porosa</i> (Nees & C. Mart.) Barroso	0	0	0	0	0	0	0	0	1	1	1	3	7
	<i>Sloanea guianensis</i> (Aubl.) Benth.	0	0	19	0	0	0	0	0	1	0	1	1	1

Table S2. – Results for statistical significance (*p*-values) using mixed model statistics for comparisons between control and removal during the 2010–2020 period and between years for control and removal separately for stand basal area (*G*, m².ha⁻¹), density (*N*, no. trees.ha⁻¹), mean diameter (\overline{DBH} , cm) and mean height (\overline{H} , m). Annual values and standard deviations (SD) are also included for each parameter. * Denotes significant difference at $\alpha = 0.05$ after Bonferroni correction.

STAND BASAL AREA														
year	Control x Removal	CONTROL							REMOVAL					
		2007	2010	2012	2014	2016	2018	2020	2010	2012	2014	2016	2018	2020
2010	<0.001*		-	0.006*	<0.001*	<0.001*	<0.001*	<0.001*	-	1.0	1.0	1.0	1.0	1.0
2012	1.0			-	1.0	1.0	1.0	1.0		-	1.0	1.0	1.0	1.0
2014	1.0				-	1.0	1.0	1.0			-	1.0	1.0	1.0
2016	1.0					-	1.0	1.0				-	1.0	1.0
2018	1.0						-	1.0					-	1.0
2020	1.0							-						-
Stand basal area (SD)		4.32 (4.9)	9.91 (7.6)	16.45 (7.7)	17.69 (6.7)	19.01 (6.8)	18.83 (4.7)	18.05 (6.2)	20.98* (4.5)	18.99 (4.5)	19.26 (4.5)	20.39 (5.4)	22.06 (4.5)	20.81 (4.4)
DENSITY														
year	Control x Removal	CONTROL							REMOVAL					
		2007	2010	2012	2014	2016	2018	2020	2010	2012	2014	2016	2018	2020
2010	<0.001*		-	1.0	1.0	0.022*	<0.001*	<0.001*	-	0.168	<0.001*	<0.001*	<0.001*	<0.001*
2012	0.623			-	1.0	0.002*	<0.001*	<0.001*		-	1.0	0.248	0.036*	0.046*
2014	0.278				-	0.892	0.006*	<0.001*			-	1.0	1.0	1.0
2016	0.015*					-	1.0	0.040*				-	1.0	1.0
2018	<0.001*						-	1.0					-	1.0
2020	<0.001*							-						-
Density (SD)		400 (365)	1,956 (833)	2,178 (792)	1,474 (429)	978 (235)	711 (141)	533 (141)	4,844* (1,434)	2,904 (1,012)	2,096 (433)	1,756* (506)	1,600* (592)	1,593* (526)
DBH (MEAN)														
year	Control x Removal	CONTROL							REMOVAL					
		2007	2010	2012	2014	2016	2018	2020	2010	2012	2014	2016	2018	2020
2010	1.0		-	0.001*	<0.001*	<0.001*	<0.001*	<0.001*	-	0.115	<0.001*	<0.001*	<0.001*	<0.001*
2012	0.453			-	0.002*	<0.001*	<0.001*	<0.001*		-	0.492	0.002*	<0.001*	<0.001*
2014	0.005*				-	0.003*	<0.001*	<0.001*			-	1.0	0.056	1.0
2016	<0.001*					-	0.130	<0.001*				-	1.0	1.0
2018	<0.001*						-	1.0					-	1.0
2020	<0.001*							-						-
DBH (SD)		6.6 (9.8)	6.6 (4.5)	8.3 (5.3)	10.7 (6.2)	13.8 (7.6)	16.6 (7.9)	18.6 (9.2)	6.1 (4.3)	7.4 (5.4)	8.7* (6.4)	9.7* (7.3)	10.4* (8.3)	9.7* (8.5)
HEIGHT (MEAN)														
year	Control x Removal	CONTROL							REMOVAL					
		2007	2010	2012	2014	2016	2018	2020	2010	2012	2014	2016	2018	2020
2010	1.0		-	<0.001*	<0.001*	<0.001*	<0.001*	<0.001*	-	0.001	<0.001*	<0.001*	<0.001*	<0.001*
2012	<0.001*			-	0.084	<0.001*	<0.001*	<0.001*		-	0.873	0.007	0.001	0.781
2014	<0.001*				-	1.0	0.002*	<0.001*			-	1.0	1.0	1.0
2016	<0.001*					-	1.0	0.483				-	1.0	1.0
2018	<0.001*						-	1.0					-	1.0

2020	<0.001*						-						-
Height (SD)	4.1 (9.8)	5.6 (1.7)	9.4 (3.1)	11.6 (3.5)	13.4 (3.7)	15.3 (3.8)	15.9 (5.0)	5.4 (2.5)	7.4* (3.5)	8.3* (3.9)	9.1* (4.3)	9.3* (5.0)	8.1* (5.4)

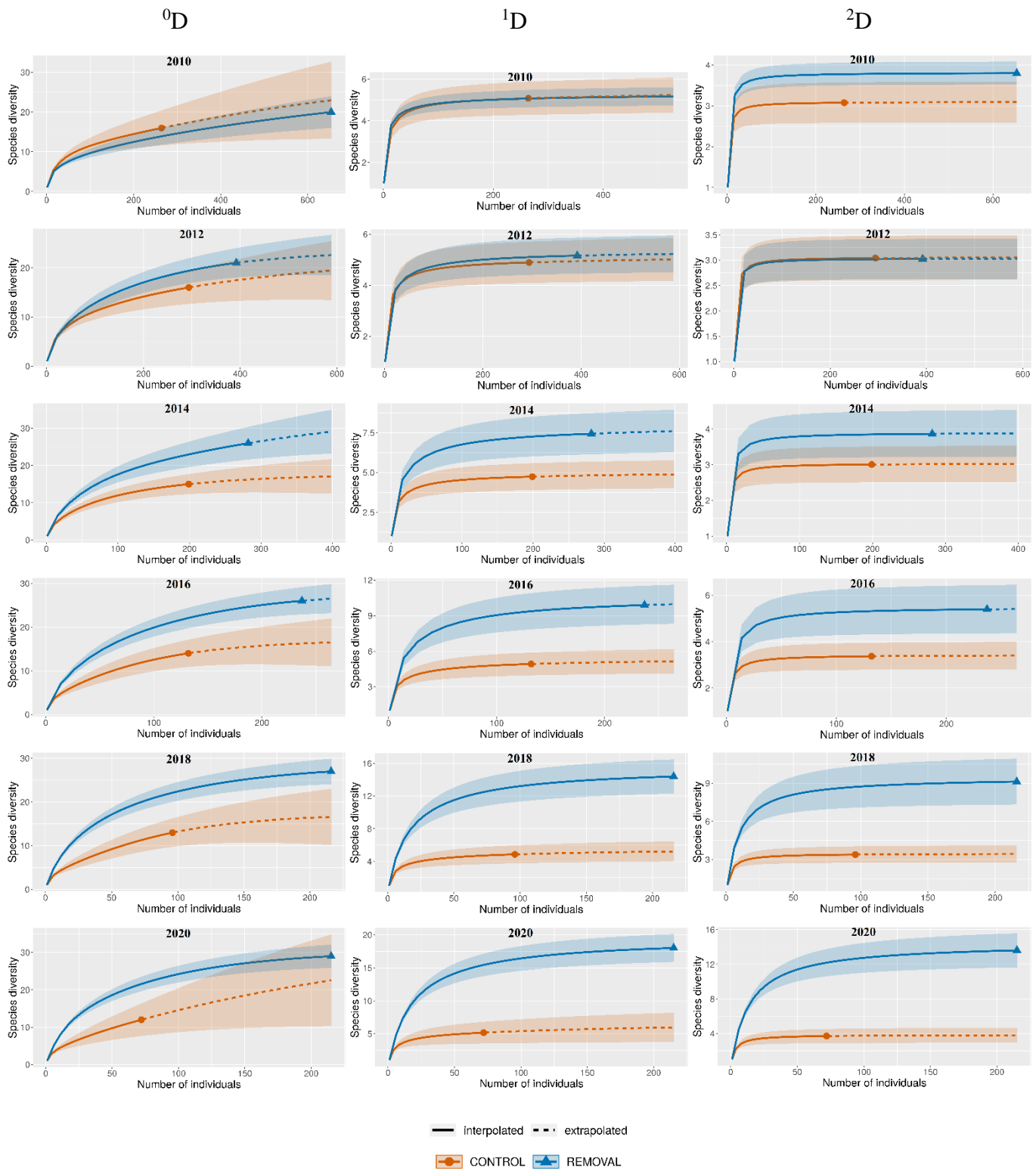


Figure S1. – Interpolated and extrapolated curves of the effective number of species based on Hill numbers: 0D is the species richness; 1D is the algebraic logarithmic transformation of Shannon-Wiener Index; and 2D is the inverse of the Simpson concentration.