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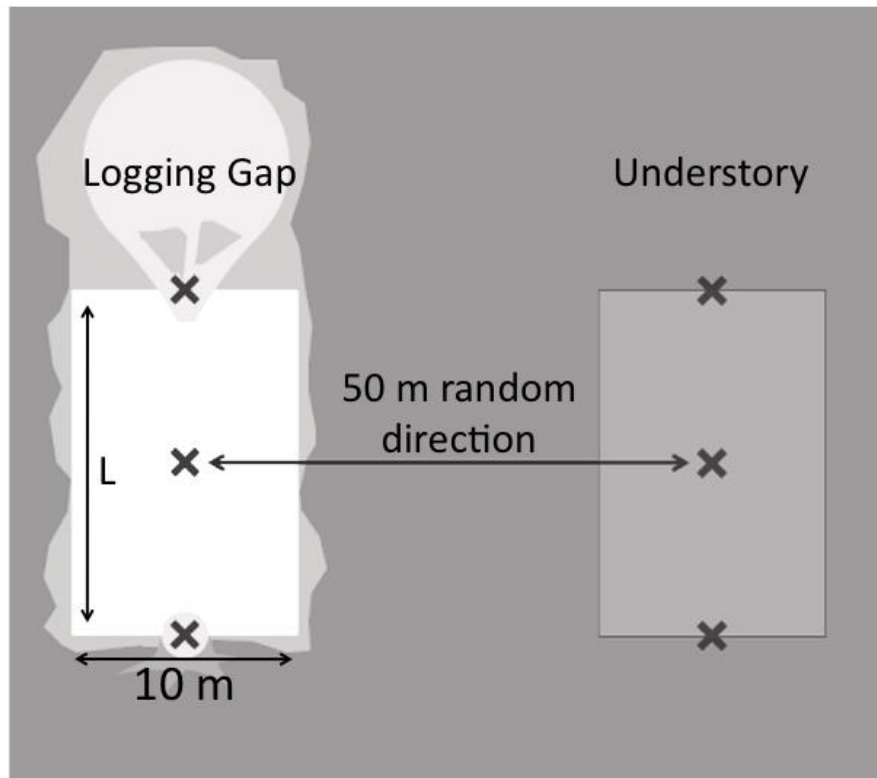
2 **Supplementary materials**

Brazil nut concession		Productive Brazil nut trees		Unshelled Brazil nut harvest (kg yr ⁻¹) *	Gap 1			Gap 2			Gap 3		
ID	Area (Ha)	#	Density		Area (m ²)	Lat (S)	Long (W)	Area (m ²)	Lat (S)	Long (W)	Area (m ²)	Lat (S)	Long (W)
1	290.6	174	0.528	6659.8	246	12.142	69.142	223	12.152	69.134	224	12.153	69.136
2	801.5	405	0.505	15525.3	240	12.120	69.151	198	12.119	69.151	200	12.111	69.149
3	932.7	275	0.513	18540.2	201	12.074	69.094	235	12.075	69.094	219	12.072	69.093
4	1083.0	-	-	19617.5	178	12.089	69.048	120	12.092	69.051	160	12.094	69.044
5	749.1	-	-	19110.0	213	12.138	69.081	252	12.138	69.079	227	12.140	69.082
6	765.4	-	-	23085.3	196	12.120	69.014	203	12.119	69.016	182	12.118	69.015
7	279.1	-	-	7289.8	190	12.265	69.036	290	12.265	69.036	182	12.268	69.039
8	1076.4	-	-	31509.1	243	12.234	69.037	220	12.235	69.036	175	12.236	69.036
9	277.5	300	0.995	12194.7	220	12.268	69.043	160	12.268	69.043	201	12.268	69.040
10	715.4	-	-	11909.1	165	12.224	69.047	284	12.233	69.037	175	12.223	69.047
11	191.3	186	0.972	8325.1	221	12.259	69.131	246	12.260	69.132	223	12.260	69.131
12	152.3	256	1.694	-	263	12.268	69.132	250	12.269	69.133	213	12.269	69.134
13	125.8	95	0.752	4454.8	268	12.278	69.128	213	12.278	69.129	230	12.278	69.130
14	654.5	331	0.506	17290.0	244	12.276	69.171	229	12.278	69.171	220	12.273	69.174
15	242.9	119	0.582	4904.9	255	12.297	69.129	244	12.298	69.130	204	12.296	69.129
16	771.4	318	0.412	11760.0	219	12.164	69.273	268	12.162	69.275	225	12.160	69.278

3 * as reported to the POA for the 2010-2011 harvest season.

4

5 **Supplementary materials A.** The Brazil nut concession ID, total area (ha) and number and density of Brazil nut trees, and the area (m²),
6 and location (decimal degree) of the logging gaps (3 per concession) included in this study.



7

8 **Supplementary materials B.** Diagram showing plot design. Each logging gap and paired
 9 understory plot was rectangular, with a width of 10m and a length (L) determined by the
 10 distance between the stump and the first bifurcation of branches in the fallen crown of the
 11 tree. Black X's mark where each set of four densiometer measurements were taken at the
 12 stump, center, and bifurcation, and the corresponding areas in the paired understory plot.

Height (cm)						
	Tree-fall Gap		Understory		T-test	
	Mean	±Std. dev.	Mean	±Std. dev.	<i>p</i> -value	
August	17.16	4.04	17.64	4.29	0.687	
September	17.77	3.99	18.27	5.45	0.738	
October	19.13	4.35	18.87	5.67	0.947	
November	21.95	6.44	18.99	5.75	0.136	
December	26.79	10.29	18.80	6.59	0.003	**
January	31.83	18.38	19.03	6.15	0.011	*
February	36.15	20.49	19.77	5.93	0.014	*
Total Leaf Area (cm ²)						
August	253.18	66.24	258.44	79.93	0.805	
September	203.92	70.15	194.25	85.74	0.690	
October	208.80	77.81	172.41	79.13	0.178	
November	287.50	150.18	180.45	84.98	0.008	**
December	367.52	241.50	185.32	98.25	0.003	**
January	480.10	360.17	160.05	96.25	0.005	**
February	548.42	394.27	169.95	98.49	0.009	**
Leaf Number #						
August	10.63	3.01	10.41	2.95	0.797	
September	9.47	3.56	7.52	3.34	0.064	
October	8.70	3.76	6.00	3.04	0.020	*
November	10.52	3.91	5.87	3.21	< 0.001	***
December	12.20	4.54	5.90	3.19	< 0.001	***
January	14.04	6.12	4.80	2.91	< 0.001	***
February	15.96	8.16	4.85	3.24	0.004	**

Canopy Openness (%)						
August	29.46	11.51	9.73	2.64	< 0.001	***
September	33.64	14.05	10.63	2.94	< 0.001	***
October	26.13	6.10	10.38	2.79	< 0.001	***
November	28.69	5.88	6.23	1.48	< 0.001	***
December	27.72	9.70	7.56	3.76	< 0.001	***
January	25.01	8.93	6.33	2.88	< 0.001	***
February	26.52	8.30	9.90	4.11	< 0.001	***

13 **Supplementary materials C.** Seedling height (cm) and total leaf area (cm²) and canopy
14 openness (%) for 32 seedling pairs planted across five paired tree-fall gap and understory
15 sites, with mean and \pm std. dev. All t-tests were tested against a bonferroni corrected α -value
16 of 0.0083, *p*-value significance is marked with an * = <0.05, ** = < 0.01, and *** = < 0.001

17