

March 2018

SABAJO PROJECT

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

Appendix 4A

Supporting Information for Vegetation Baseline Study

Report No. 1669326-7000

Environmental and Social Impact Assessment

Appendix 4A, Supporting Information for Vegetation Baseline Study

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Variable	N ^(a)	Recorded Quality / Quantity	Details / Remarks ^(b)
Landform and meso-topography			
level plateau cover	4	proportion of plot that is part of level terrain of plateau	estimate to nearest 5% based on walkthrough
gully cover	4	proportion of plot that represents a (minor) gully	estimate to nearest 5% based on walkthrough
slope cover	4	proportion of plot that is part of a (major) slope	estimate to nearest 5% based on walkthrough
ridge cover	4	proportion of plot that is part of a (minor) ridge	estimate to nearest 5% based on walkthrough
level valley cover	4	proportion of plot that is part of level terrain of valley	estimate to nearest 5% based on walkthrough
duricrust cover	4	proportion of plot covered by exposed duricrust (continuous rock surface)	estimate to nearest 5% based on walkthrough
boulder cover	4	proportion of plot covered by exposed boulders (at least 60 cm diam.)	estimate to nearest 5% based on walkthrough
stone cover	4	proportion of plot covered by exposed stones (6-60 cm diam.)	estimate to nearest 5% based on walkthrough
<i>escarpment distance</i>	1	<i>distance from plot to the nearest (duricrust) escarpment</i>	<i>estimate of distance (m) based on reconnaissance</i>
<i>escarpment drop</i>	1	<i>vertical drop of nearest (duricrust) escarpment</i>	<i>estimate of drop (m) based on reconnaissance</i>
<i>plateau margin distance</i>	1	<i>distance from plot to the margin of the plateau</i>	<i>estimate in m, based on map and field reconnaissance</i>
Drainage / hydrology			
stagnant water cover	4	proportion of plot that is covered with stagnant water (e.g., pool)	estimate to nearest 5% based on walkthrough
running water cover	4	proportion of plot that is covered with running water (e.g., creek)	estimate to nearest 5% based on walkthrough
surface water surface	4	surface area within plot of any stagnant or running water in the plot	estimate of length x width (m) based on walkthrough
surface water depth	4	depth of any stagnant or running water in the plot	estimate to nearest 0.1 m, based on walkthrough
ground water depth	5	depth of ground water vis-à-vis mineral soil surface	estimate of depth (cm) at 10 cm deep mineral soil pit at node
<i>seasonal creek distance</i>	1	<i>distance from plot to the nearest seasonal creek</i>	<i>estimate of distance (m) based on reconnaissance</i>
<i>seasonal creek width</i>	1	<i>width of nearest seasonal creek bed</i>	<i>estimate of width (m) based on reconnaissance</i>
<i>perennial creek distance</i>	1	<i>distance from plot to the nearest perennial creek</i>	<i>estimate of distance (m) based on reconnaissance</i>
<i>perennial creek width</i>	1	<i>width of nearest perennial creek bed</i>	<i>estimate of width (m) based on reconnaissance</i>
<i>seasonal pool distance</i>	1	<i>distance from plot to the nearest seasonal pool</i>	<i>estimate of distance (m) based on reconnaissance</i>
<i>seasonal pool surface</i>	1	<i>surface of nearest seasonal pool</i>	<i>estimate of length x width (m) based on reconnaissance</i>
<i>seasonal pool depth</i>	1	<i>depth of nearest seasonal pool</i>	<i>estimate of depth to nearest 0.1 m, based on reconnaissance</i>
<i>perennial pool distance</i>	1	<i>distance from plot to the nearest perennial pool</i>	<i>estimate of distance (m) based on reconnaissance</i>
<i>perennial pool surface</i>	1	<i>surface of nearest perennial pool</i>	<i>estimate of length x width (m) based on reconnaissance</i>
<i>perennial pool depth</i>	1	<i>depth of nearest perennial pool</i>	<i>estimate of depth to nearest 0.1 m, based on reconnaissance</i>
Climate			

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Variable	N ^(a)	Recorded Quality / Quantity	Details / Remarks ^(b)
near-ground floor moss cover	5	proportion of near-ground rock / wood / leaf surface covered by epilythic / epiphytic mosses	estimate of % cover to nearest 5%, within 2.5 m from node, till 30 cm above soil surface,
near-ground non-moss cover	5	proportion of near-ground rock / wood / leaf surface covered by epilythic / epiphytic plants other than mosses	estimate of % cover to nearest 5%, within 2.5 m from node, till 30 cm above soil surface,
understory moss cover	5	proportion of understory rock / wood leaf surface covered by epilythic / epiphytic mosses	estimate of % cover to nearest 5%, within 2.5 m from node, 30-300 cm above soil surface
understory non-moss cover	5	proportion of understory rock / wood / leaf surface covered by epilythic / epiphytic plants other than mosses	estimate of % cover to nearest 5%, within 2.5 m from node, 30-300 cm above soil surface
Soil			
debris / litter cover	4	proportion of plot covered by debris / litter	estimate to nearest 5% based on walkthrough
debris / litter layer thickness	5	thickness of litter layer (mainly non-fragmented dead leaves and twigs)	estimate of depth (cm) of litter layer above mineral soil pit at node
humus layer thickness	5	thickness of humus layer (mainly fragmented dead leaves and twigs)	estimate of depth (cm) of humus layer above mineral soil pit at node
mineral soil penetration	5	penetrability of mineral soil	estimate of penetration depth (cm) of machete blade pushed in soil at node
mineral soil color	5	overall color of the smaller particles (clay / loam / sand) in the upper mineral soil layer	observation of color at 10 cm deep mineral soil pit near node
largest soil particles	5	largest particles in the upper mineral soil (clay / loam / sand / gravel / stone)	observation at 10 cm deep mineral soil pit near node
smallest soil particles	5	smallest particles in the upper mineral soil (clay / loam / sand / gravel / stone)	observation at 10 cm deep mineral soil pit near node
soil type	5	major components of the upper mineral soil (clay / loam / sand / gravel / stone)	observation at 10 cm deep mineral soil pit near node
Vegetation structure			
minimum canopy height	4	height of lower sections of closed forest canopy	estimate to nearest 5 m based on walkthrough
maximum canopy height	4	height of higher sections of closed forest canopy	estimate to nearest 5 m based on walkthrough
erect dead tree stem density	4	number of large dead tree stems standing in the forest	count of dead stems of at least 10 cm diam., standing taller than 3 m
fallen dead tree stems density	4	number of large fallen tree stems or branches in the forest	count of dead stems of at least 10 cm diam., fallen below 3 m / on forest floor
small woody stem density	5	number of small live stems in the understory	count of number of live stems within 2.5 m from node
subcanopy cover	5	proportion of understory that is shielded from incident light by subcanopy vegetation	estimate to nearest 5% based on upward view at node, using a tube to restrict scope
canopy cover	5	proportion of subcanopy that is shielded from incident light by canopy vegetation	estimate to nearest 5% based on upward view at node, using a tube to restrict scope
emergent cover	5	proportion of canopy that is shielded from incident light by emergent tree crowns	estimate to nearest 5% based on upward view at node, using a tube to restrict scope
<i>emergent tree distance</i>	1	<i>distance from plot to the nearest emergent tree</i>	<i>estimate of distance (m) based on reconnaissance</i>
<i>emergent tree height</i>	1	<i>height of the nearest emergent tree</i>	<i>estimate of height (m) based on reconnaissance</i>
large tree density	1	canopy tree density in plot	number of trees / ha with stem diameter of at least 10 cm, based on separate vegetation survey of plot

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Variable	N ^(a)	Recorded Quality / Quantity	Details / Remarks ^(b)
large liana density	1	canopy liana density in plot	number of lianas / ha with stem diameter of at least 1 cm, based on separate vegetation survey of plot
Disturbance			
recent gap distance	1	distance from plot to the nearest recent natural gap (with regrowth < 1 m tall)	estimate of distance (m) based on reconnaissance
recent gap surface	1	surface of nearest recent natural gap (with regrowth < 1 m tall)	estimate of length x width (m) based on reconnaissance
older gap distance	1	distance from plot to the nearest older natural gap (with regrowth > 1 m tall)	estimate of distance (m) based on reconnaissance
older gap surface	1	surface of nearest recent gap (with regrowth > 1 m tall)	estimate of length x width (m) based on reconnaissance
track distance	1	distance from plot to nearest vehicle track (ATV, skidder, excavator, truck)	estimate of distance (m) based on reconnaissance and access to plot
type of track	1	observation of type of vehicle track (ATV trail, skidder or excavator trail, secondary road, primary road)	estimate of distance (m) based on reconnaissance and access to plot
main road distance	1	distance from plot to the main access road	estimate of distance (m) based on satellite image & field reconnaissance
clearance distance	1	distance from plot to the nearest major (> 1 ha) man-made clearing (other than tracks / roads)	estimate of size (m ²) based on satellite image & field reconnaissance
clearance size	1	size of nearest major (> 1 ha) man-made clearing (other than tracks / roads)	estimate of distance (m) based on map and field reconnaissance

a) N = number of replicate observations / measurements per plot; N = 1: one observation only in relation to the plot or its surroundings, mostly based on reconnaissance (see next footnote); N = 4: one observation in each of the four plot segments; N = 5: one observation at each of the five plot nodes.

b) Note that: i) reconnaissance refers to the exploration of the entire plot and an area of some 100 m around it, ii) walkthrough refers to observations / measurements within the plot segments, iii) within 2.5 m from each node, a 10 cm deep soil pit was dug, and various observations / measurements were done, and iv) large tree and liana density data was generated as part of a separate study by ESS.

ATV = all-terrain vehicle; m = meter; cm = centimeter; % = percent; ha = hectare; > = greater than; < = less than.

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Table 4A-2 Habitat Observation/Measurements by ESS at Sabajo, June-July 2017

A. Single observations / measurements per plot (each measurement made once).

Plot	Seasonal creek distance	Seasonal creek width	Serennial creek distance	Perennial creek width	Seasonal pool distance	Seasonal pool surface	Seasonal pool depth
Note	110 is default	0 is default	110 is default	0 is default	110 is default	0 is default	0 is default
A1	0	2	110	0	0	4	0.1
AF1	0	20	110	0	110	0	0
C1	110	0	0	2	110	0	0
E1	110	0	110	0	110	0	0
F1	110	0	110	0	110	0	0
F2	110	0	110	0	110	0	0
F3	110	0	110	0	110	0	0
F4	110	0	110	0	110	0	0
F5	110	0	50	2	110	0	0
F6	12	2	12	2	110	0	0
F7	110	0	110	0	110	0	0
F8	110	0	110	0	50	45	0.2
F9	0	30	110	0	110	0	0

Plot	Perennial pool distance	Perennial pool surface	Perennial pool depth	Escarpment distance	Escarpment drop	Plateau margin distance	Recent gap distance
Note	110 is default	0 is default	0 is default	110 is default	0 is default		110 is default
A1	110	0	0	110	0	110	0
AF1	110	0	0	110	0	110	110
C1	110	0	0	110	0	110	0
E1	110	0	0	110	0	110	110
F1	110	0	0	110	0	110	0
F2	110	0	0	110	0	110	0
F3	50	1500	1	110	0	110	0
F4	110	0	0	110	0	110	110
F5	110	0	0	110	0	110	0
F6	110	0	0	110	0	110	110
F7	110	0	0	110	0	110	110
F8	110	0	0	110	0	110	110
F9	0	900	1	110	0	110	110

Plot	Recent gap surface	Old gap distance	Old gap surface	Emergent tree distance	Emergent tree height	# Lianas	# Trees
Note	0 is default	110 is default	0 is default	110 is default	0 is default		
A1	250	110	0	10	45	33	58
AF1	0	110	0	5	30	18	55
C1	30	110	0	110	0	30	64
E1	0	0	100	110	0	13	90
F1	100	0	100	0	45	33	55
F2	150000	110	0	110	0	0	0
F3	150000	110	0	110	0	0	0
F4	0	0	312500	110	0	0	0
F5	200	0	80	0	35	17	61
F6	0	110	0	110	0	0	0
F7	0	0	60	10	40	21	42
F8	0	0	750	3	35	6	5

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Plot	Recent gap surface	Old gap distance	Old gap surface	Emergent tree distance	Emergent tree height	# Lianas	# Trees
Note	<i>0 is default</i>	<i>110 is default</i>	<i>0 is default</i>	<i>110 is default</i>	<i>0 is default</i>		
F9	0	110	0	50	35	4	3

Plot	Track distance	Type of track	Type of track code	Main road distance	Clearance distance	Clearance size
Note						
A1	0	narrow track	1	125	2000	5000
AF1	110		0	50	2000	
C1	20	narrow track	1	400	1370	570000
E1	0	narrow track	1	500		
F1	0	narrow track	1	125	1	1000
F2	110		0	150	0	150000
F3	110		0	300	0	150000
F4	110		0	300	0	312500
F5	5	narrow track	1	200	200	1000000
F6	10	narrow track	1	20	0	7500
F7	0	narrow track	1	200	200	
F8	10	narrow track	1	30	30	
F9	110		0	100	0	30000

B. Observations/measurements in each plot segment (each measurement made 4 times)

Plot segment	Level plateau cover	Gully cover	Slope cover	Ridge cover	Level valley cover	Stagnant water cover	Running water cover
Note	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>
A1-a	100	0	0	0	0	1	0
A1-b	100	0	0	0	0	0	0
A1-c	100	0	0	0	0	0	0
A1-d	100	0	0	0	0	0	1
AF1-a	0	0	0	0	100	0	90
AF1-b	0	0	0	0	100	0	90
AF1-c	0	0	0	0	100	0	90
AF1-d	0	0	0	0	100	0	90
C1-a	95	5	0	0	0	0	0
C1-b	80	20	0	0	0	5	5
C1-c	95	5	0	0	0	5	5
C1-d	90	10	0	0	0	10	0
E1-a	0	0	100	0	0	0	0
E1-b	0	0	100	0	0	0	0
E1-c	0	0	100	0	0	0	0
E1-d	0	0	100	0	0	0	0
F1-a	0	5	95	0	0	0	0
F1-b	0	0	100	0	0	0	0
F1-c	80	0	20	0	0	0	0
F1-d	100	0	0	0	0	0	0
F2-a	60	20	0	0	30	0	0
F3-a	100	0	0	0	0	100	0
F4-a	100	0	0	0	0	30	0
F5-a	20	0	80	0	0	0	0
F5-b	0	0	100	0	0	0	0
F5-c	30	0	70	0	0	0	0

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Plot segment	Level plateau cover	Gully cover	Slope cover	Ridge cover	Level valley cover	Stagnant water cover	Running water cover
Note	Average	Average	Average	Average	Average	Average	Average
F5-d	0	0	100	0	0	0	0
F6-a	100	0	0	0	0	0	0
F7-a	100	0	0	0	0	0	0
F7-b	70	30	0	0	0	0	0
F7-c	100	0	0	0	0	0	0
F7-d	100	0	0	0	0	0	0
F8-a	40	0	60	0	0	0	0
F9-a	0	0	0	0	100	5	10

Plot segment	Duricrust cover	Boulder cover	Stone cover	Debris / litter cover	Surface water surface	Surface water depth
Note	Average	Average	Average	Average	Sum	Median
A1-a	0	0	0	85	4	0.1
A1-b	0	0	0	90	0	0
A1-c	0	0	0	85	0	0
A1-d	0	0	0	85	5	0.2
AF1-a	0	0	0	50	225	0.1
AF1-b	0	0	0	80	225	0.2
AF1-c	0	0	0	80	225	0.2
AF1-d	0	0	0	80	225	0.2
C1-a	0	0	0	90	0	0
C1-b	0	0	0	60	10	0.1
C1-c	0	0	0	60	15	0.2
C1-d	0	0	0	95	30	0.1
E1-a	0	0	100	100	0	0
E1-b	0	0	100	85	0	0
E1-c	0	0	100	90	0	0
E1-d	0	5	5	80	0	0
F1-a	0	5	95	85	0	0
F1-b	0	0	100	95	0	0
F1-c	0	0	100	95	0	0
F1-d	0	0	100	100	0	0
F2-a	0	0	100	40	0	0
F3-a	0	0	0	100	250	0.1
F4-a	0	0	100	50	150	0.1
F5-a	0	0	100	100	0	0
F5-b	0	0	100	100	0	0
F5-c	0	0	100	100	0	0
F5-d	0	0	100	100	0	0
F6-a	0	0	100	100	0	0
F7-a	0	5	95	95	0	0
F7-b	0	10	90	80	0	0
F7-c	0	5	95	95	0	0
F7-d	0	0	100	90	0	0
F8-a	0	0	0	90	0	0
F9-a	0	0	100	50	20	0.3

Plot segment	Min. canopy height	Max. canopy height	Erect dead tree stem density	Fallen dead tree stem density
Note	Average	Average	Sum	Sum
A1-a	15	25	0	2

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Plot segment	Min. canopy height	Max. canopy height	Erect dead tree stem density	Fallen dead tree stem density
Note	Average	Average	Sum	Sum
A1-b	15	25	0	5
A1-c	20	25	1	3
A1-d	15	25	0	4
AF1-a	15	25	0	19
AF1-b	15	25	1	7
AF1-c	15	25	0	6
AF1-d	10	30	0	10
C1-a	20	25	0	2
C1-b	25	25	0	3
C1-c	5	25	0	6
C1-d	20	25	0	7
E1-a	25	35	0	6
E1-b	20	25	0	7
E1-c	25	35	0	4
E1-d	25	30	1	3
F1-a	25	35	1	7
F1-b	30	35	6	12
F1-c	30	35	5	5
F1-d	25	35	1	9
F2-a	0	0	0	4
F3-a	0	0	0	0
F4-a	0	0	0	4
F5-a	15	25	0	7
F5-b	15	25	3	5
F5-c	15	25	0	5
F5-d	20	30	0	3
F6-a	5	5	0	4
F7-a	10	25	0	4
F7-b	20	35	2	6
F7-c	15	25	1	10
F7-d	10	25	0	5
F8-a	15	30	0	15
F9-a	5	15	0	1

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Table 4A-2 Habitat Observation/Measurements by ESS at Sabajo, June-July 2017

C. Observations / measurements in each plot node (each measurement made 5 times)

Plot node	UTM X*	UTM Y*	Debris/ litter layer thickn. (average)	Humus layer thickness (median)	Mineral soil pene-tration (median)	Soil type	Soil type code (median)	Mineral soil color
A1-1	738781	563031	1	0	25	loamy sand	2	grey(ish) to black
A1-2	738757	562988	2	1	25	loamy sand	2	grey(ish) to black
A1-3	738733	562945	2	1	40	loamy sand	2	yellow(ish) grey
A1-4	738702	562898	1	1	50	loamy sand	2	yellow(ish) grey
A1-5	738681	562847	1	1	50	sandy loam	1.5	grey(ish) to black
AF1-1	739275	563509	1	0.5	50	loamy	1	yellow(ish)
AF1-2	739257	563566	10	10	15	loamy sand	2	grey(ish) to black
AF1-3	739240	563597	1	2	50	loamy sand	2	brown
AF1-4	739245	563651	0.5	2	40	loamy sand	2	brown
AF1-5	739200	563703	1.5	2	50	loamy sand	2	brown
C1-1	743104	564330	1.5	2	25	sandy	2.5	grey(ish) to black
C1-2	743144	564314	1.5	1	50	sandy	2.5	grey(ish) to black
C1-3	743198	564296	2	2	50	loamy	1	grey(ish) to black
C1-4	743277	564251	1	0.5	50	loamy	1	grey(ish) to black
C1-5	743236	564276	0.5	10	30	sandy	2.5	grey(ish) to black
E1-1	750550	563694	2	2	15	loam w. gravel & rocks	3	brown
E1-2	750532	563647	2	1	3	loam w. gravel & rocks	3	brown
E1-3	750515	563602	1	0.5	10	gravel & loam (50/50)	4	brown
E1-4	750497	563551	0.5	0.5	10	gravel & loam (50/50)	4	brown
E1-5	750479	563517	1	3	0	gravel & loam (50/50)	4	brown
F1-1	742044	565949	1	1	0	loamy	1	red-brown
F1-2	742023	565897	1	1	0	loamy	1	red-brown
F1-3	742003	565860	1	2	10	gravel & loam (50/50)	4	red-brown
F1-4	741971	565823	1	1.5	10	gravel & loam (50/50)	4	red-brown
F1-5	741961	565779	2	4	5	gravel & loam (50/50)	4	brown
F2-1	741574	563530	1	0	0	gravel & rocks w. loam	4.5	yellow(ish)
F2-2	741598	563486	1	0	0	gravel & rocks w. loam	4.5	brown
F3-1	741641	563497	0.5	0	40	loamy	1	yellow(ish) grey
F3-2	741640	563547	0.5	0	50	loamy	1	yellow(ish) grey
F4-1	741232	565388	0	0	10	sand w. gravel & rocks	3.5	grey(ish) to black
F4-2	741280	565402	0.5	0	50	loamy	1	grey(ish) to black
F5-1	749470	563012	1	1	3	sand w. gravel & rocks	3.5	dark brown
F5-2	749473	562970	1	1	0	loamy	1	brown
F5-3	749447	562908	2	2	0	gravel & rocks w. loam	4.5	brown
F5-4	749431	562858	3	2	20	gravel & loam (50/50)	4	yellow(ish)
F5-5	749415	562833	1	1	10	gravel & loam (50/50)	4	yellow(ish)
F6-1	745985	562927	0.5	1	10	sandy loam	1.5	grey(ish) to black
F6-2	746009	562889	1	5	15	loamy	1	grey(ish) to black

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-2 Habitat Observation/Measurements by ESS at Sabajo, June-July 2017

Plot node	UTM X*	UTM Y*	Debris/ litter layer thickn. (average)	Humus layer thickness (median)	Mineral soil pene-tration (median)	Soil type	Soil type code (median)	Mineral soil color
F7-1	740804	563009	1	1.5	15	gravel & loam (50/50)	4	brown
F7-2	740841	562985	1	0.5	15	gravel & loam (50/50)	4	brown
F7-3	740889	562979	0.5	1	10	gravel & loam (50/50)	4	brown
F7-4	740942	562954	1	1	0	gravel & loam (50/50)	4	brown
F7-5	740976	562943	0.3	0.5	5	gravel & loam (50/50)	4	brown
F8-1	741024	563202	0.5	0.3	20	loamy	1	brown
F8-2	741027	563246	1	3	10	gravel & loam (50/50)	4	brown
F9-1	743185	562552	1	0	50	sandy loam	1.5	grey(ish) to black
F9-2	743232	562567	0.1	0	50	sandy loam	1.5	grey(ish) to black

Plot node	Mineral soil color code	Largest soil particle	Largest soil particle code	Smallest soil particle	Smallest soil particle code	Ground water depth
<i>Note</i>	<i>Median</i>		<i>Median</i>		<i>Median</i>	<i>11 is default; average</i>
A1-1	1	sand	3	loam	2	5
A1-2	1	sand	3	loam	2	11
A1-3	1.5	sand	3	loam	2	11
A1-4	1.5	sand	3	loam	2	11
A1-5	1	sand	3	clay	1	11
AF1-1	2	clay	1	clay	1	-10
AF1-2	1	sand	3	loam	2	10
AF1-3	4	sand	3	loam	2	0
AF1-4	4	sand	3	loam	2	0
AF1-5	4	sand	3	loam	2	0
C1-1	1	sand	3	sand	3	11
C1-2	1	sand	3	sand	3	11
C1-3	1	clay	1	clay	1	11
C1-4	1	clay	1	clay	1	11
C1-5	1	sand	3	sand	3	11
E1-1	4	stones/rock	5	clay	1	11
E1-2	4	stones/rock	5	clay	1	11
E1-3	4	gravel	4	clay	1	11
E1-4	4	gravel	4	clay	1	11
E1-5	4	gravel	4	clay	1	11
F1-1	3.5	gravel	4	clay	1	11
F1-2	3.5	gravel	4	clay	1	11
F1-3	3.5	gravel	4	clay	1	11
F1-4	3.5	gravel	4	clay	1	11
F1-5	4	gravel	4	clay	1	11
F2-1	2	gravel	4	clay	1	11
F2-2	4	gravel	4	clay	1	11
F3-1	1.5	clay	1	clay	1	-1
F3-2	1.5	clay	1	clay	1	0
F4-1	1	gravel	4	sand	3	11
F4-2	1	clay	1	clay	1	-1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-2 Habitat Observation/Measurements by ESS at Sabajo, June-July 2017

Plot node	Mineral soil color code	Largest soil particle	Largest soil particle code	Smallest soil particle	Smallest soil particle code	Ground water depth
<i>Note</i>	<i>Median</i>		<i>Median</i>		<i>Median</i>	<i>11 is default; average</i>
F5-1	5	gravel	4	sand	3	11
F5-2	4	gravel	4	clay	1	11
F5-3	4	gravel	4	clay	1	11
F5-4	2	gravel	4	clay	1	11
F5-5	2	gravel	4	clay	1	11
F6-1	1	sand	3	clay	1	11
F6-2	1	clay	1	clay	1	11
F7-1	4	gravel	4	clay	1	11
F7-2	4	gravel	4	clay	1	11
F7-3	4	gravel	4	clay	1	11
F7-4	4	gravel	4	clay	1	11
F7-5	4	gravel	4	clay	1	11
F8-1	4	clay	1	clay	1	11
F8-2	4	gravel	4	clay	1	11
F9-1	1	sand	3	clay	1	11
F9-2	1	sand	3	clay	1	0

Plot node	Small woody stems density	Near-ground moss cover	Near ground non-moss cover	Under-storey moss cover	Under-storey non-moss cover	Sub-canopy cover	Canopy cover	Emergent tree cover
<i>Note</i>	<i>Median</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>
A1-1	8	60	10	70	10	50	80	0
A1-2	7	60	5	40	5	50	90	0
A1-3	10	60	10	30	5	50	80	0
A1-4	3	40	10	0	5	60	80	0
A1-5	4	10	5	15	5	30	70	0
AF1-1	6	50	15	40	5	30	20	0
AF1-2	8	50	15	30	20	30	30	0
AF1-3	2	40	10	20	5	15	30	0
AF1-4	3	50	10	20	10	20	10	0
AF1-5	7	10	30	20	40	70	20	0
C1-1	1	50	10	10	5	30	60	0
C1-2	5	80	5	25	0	60	70	0
C1-3	5	10	5	30	5	30	40	0
C1-4	1	0	0	0	0	40	40	0
C1-5	0	10	5	10	0	60	70	0
E1-1	2	30	0	20	0	30	30	0
E1-2	9	25	0	15	0	30	50	0
E1-3	3	20	0	15	0	30	30	0
E1-4	5	30	0	25	0	40	50	0
E1-5	2	10	0	5	0	30	70	0
F1-1	6	30	5	15	0	65	40	0
F1-2	3	20	0	10	0	70	70	0
F1-3	4	30	0	20	0	10	70	0
F1-4	0	30	0	10	0	30	80	0
F1-5	4	35	0	30	0	40	70	0
F2-1	10	0	0	0	0	0	0	0
F2-2	7	0	0	0	0	0	0	0

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-2 Habitat Observation/Measurements by ESS at Sabajo, June-July 2017

Plot node	Small woody stems density	Near-ground moss cover	Near ground non-moss cover	Under-storey moss cover	Under-storey non-moss cover	Sub-canopy cover	Canopy cover	Emergent tree cover
<i>Note</i>	<i>Median</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>	<i>Average</i>
F3-1	0	0	0	0	0	0	0	0
F3-2	0	0	0	0	0	0	0	0
F4-1	0	0	0	0	0	0	0	0
F4-2	1	0	0	0	0	0	0	0
F5-1	1	20	0	15	0	30	80	0
F5-2	7	25	5	15	5	40	30	20
F5-3	0	50	0	50	0	20	10	0
F5-4	1	15	0	10	0	40	70	0
F5-5	6	15	0	15	0	70	70	0
F6-1	0	0	0	0	0	0	0	0
F6-2	2	0	0	0	0	90	0	0
F7-1	4	40	15	20	5	40	80	70
F7-2	5	60	5	15	0	20	70	0
F7-3	6	60	10	15	0	50	30	0
F7-4	6	10	0	5	0	80	20	0
F7-5	5	15	0	10	0	20	60	0
F8-1	1	10	10	10	10	10	70	30
F8-2	3	20	5	10	0	30	50	20
F9-1	34	5	0	5	0	25	35	0
F9-2	9	0	0	0	0	0	85	0

Note: Tables are organized by the number of times each measurement was made (i.e., number of replicates).

= number; UTM = Universal Transverse Mercator.

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Appendix 4A, Supporting Information for Vegetation Baseline Study

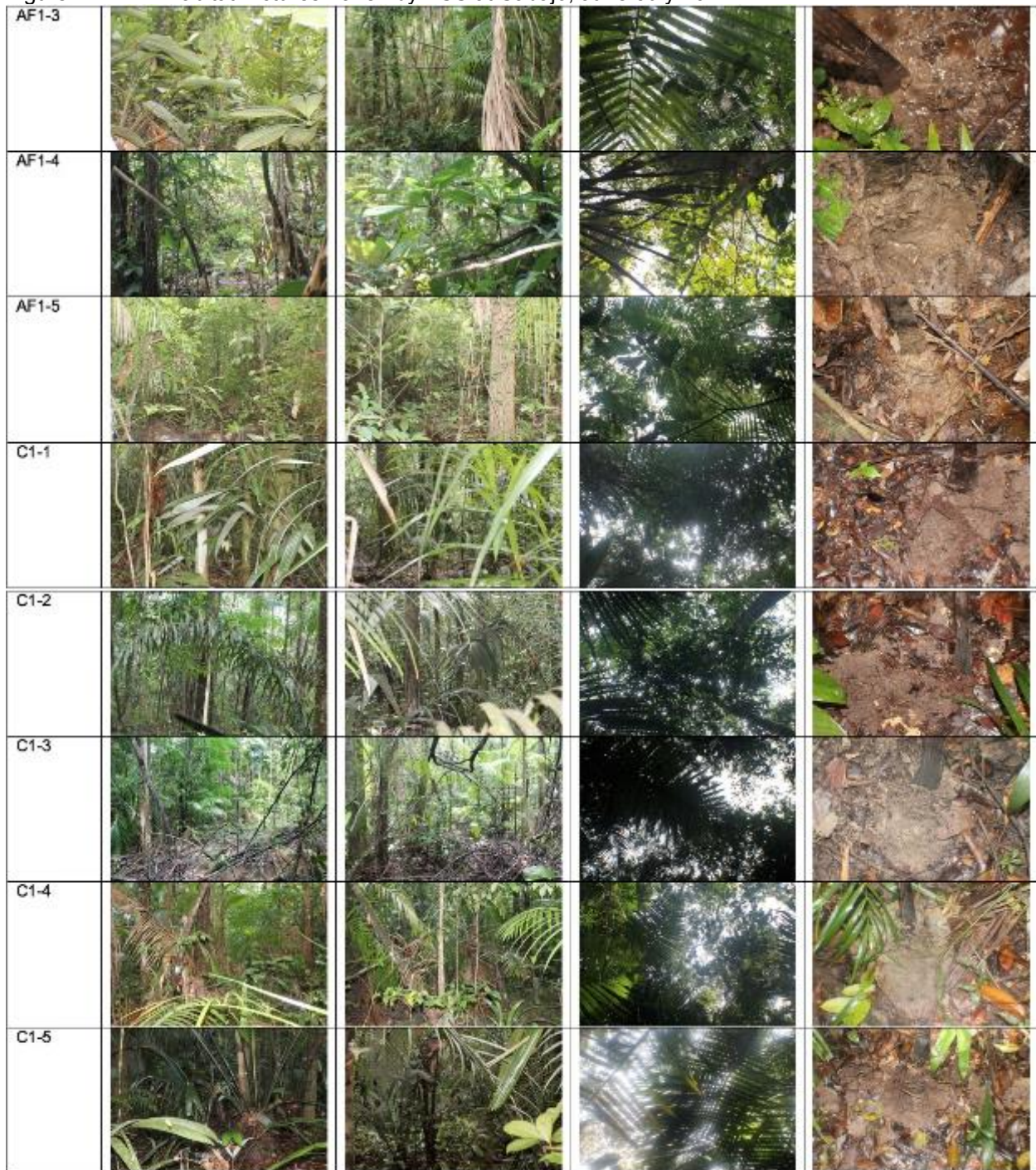
Figure 4A-1 Habitat Pictures Taken by ESS at Sabajo, June-July 2017

Plot node	Forward	Backward	Canopy	Soil
A1-1				
A1-2				
A1-3				
A1-4				
A1-5				
AF1-1				
AF1-2				

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Appendix 4A, Supporting Information for Vegetation Baseline Study

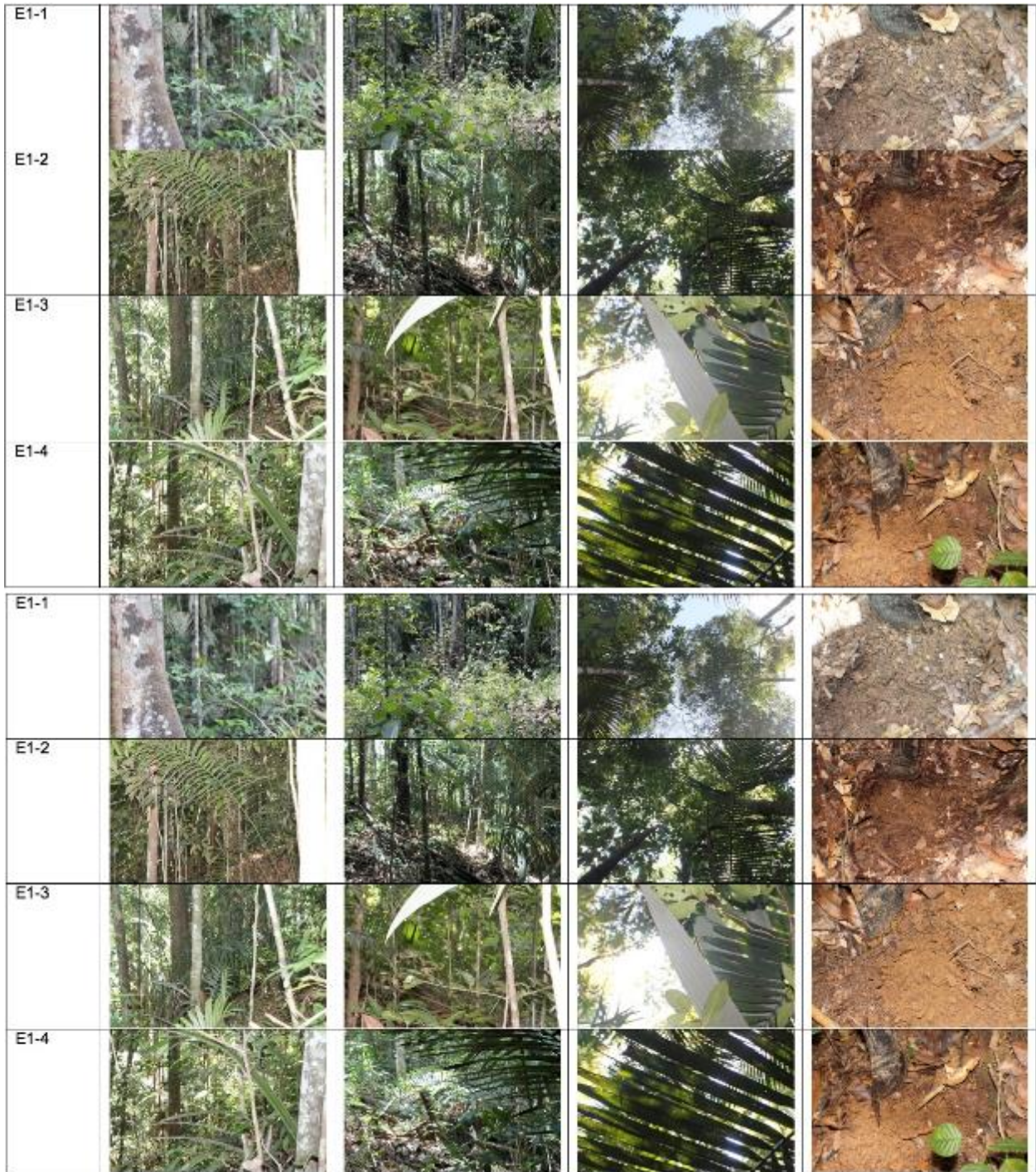
Figure 4A-1 Habitat Pictures Taken by ESS at Sabajo, June-July 2017



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Appendix 4A, Supporting Information for Vegetation Baseline Study

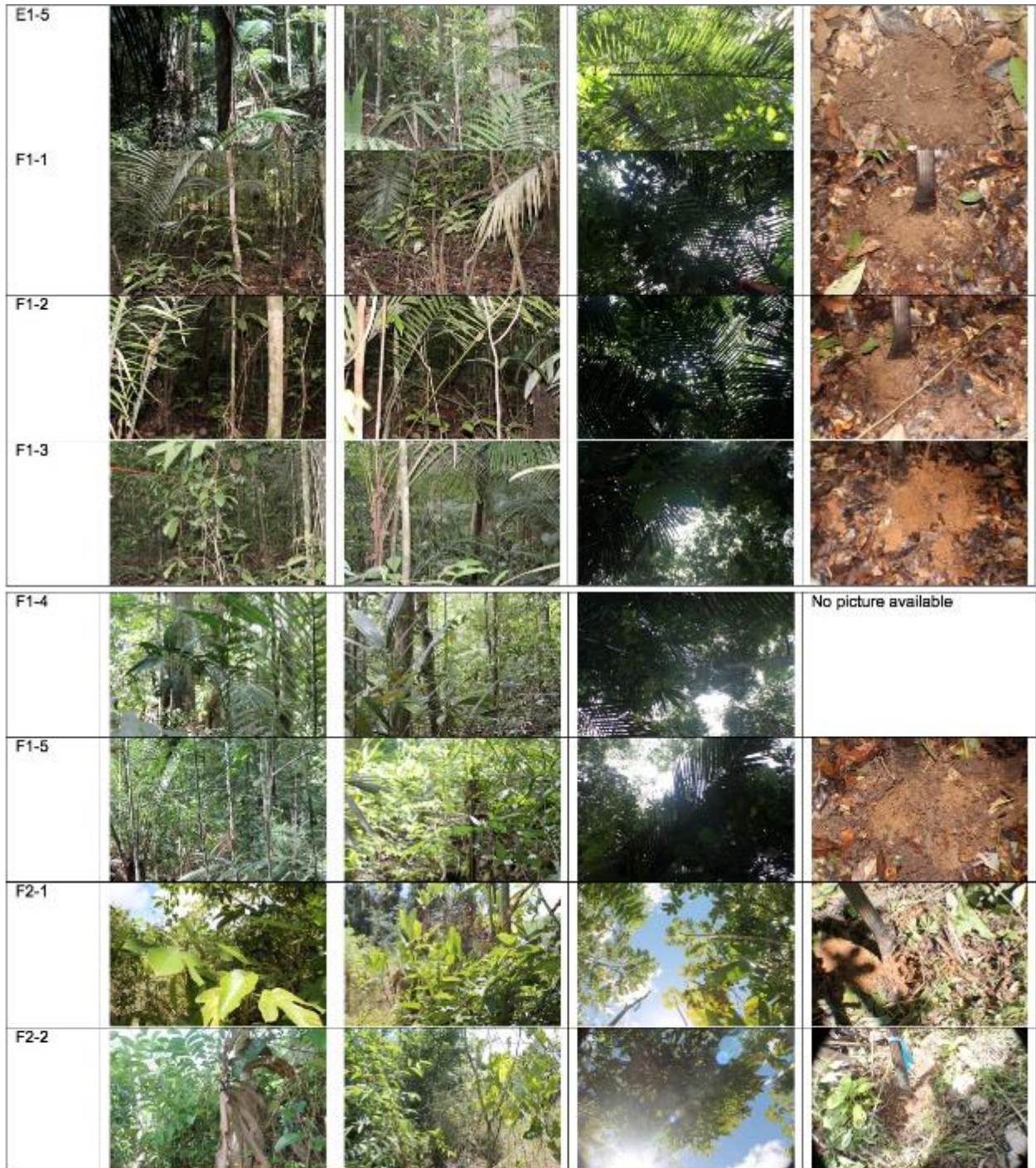
Figure 4A-1 Habitat Pictures Taken by ESS at Sabajo, June-July 2017



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Appendix 4A, Supporting Information for Vegetation Baseline Study

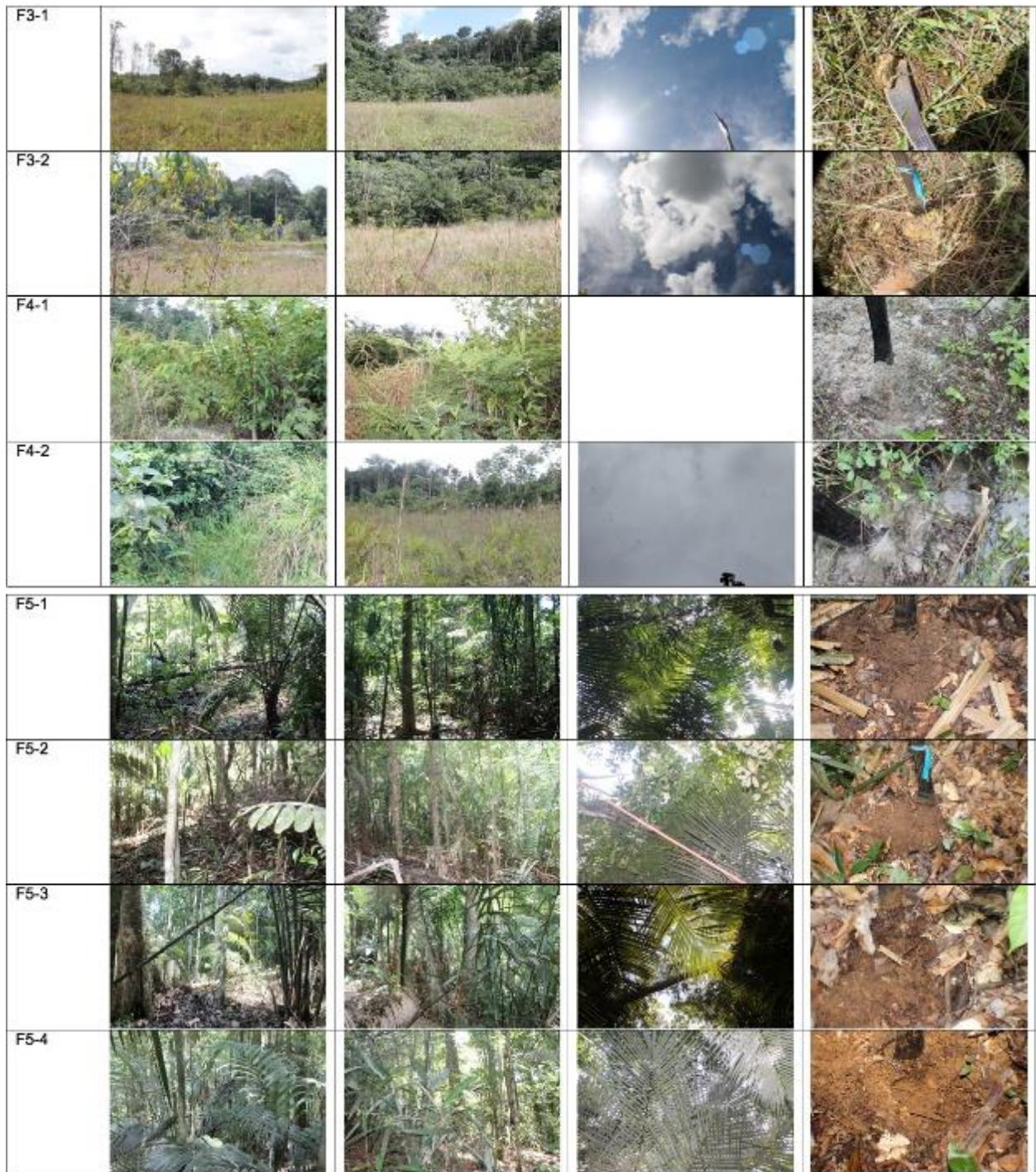
Figure 4A-1 Habitat Pictures Taken by ESS at Sabajo, June-July 2017



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Appendix 4A, Supporting Information for Vegetation Baseline Study

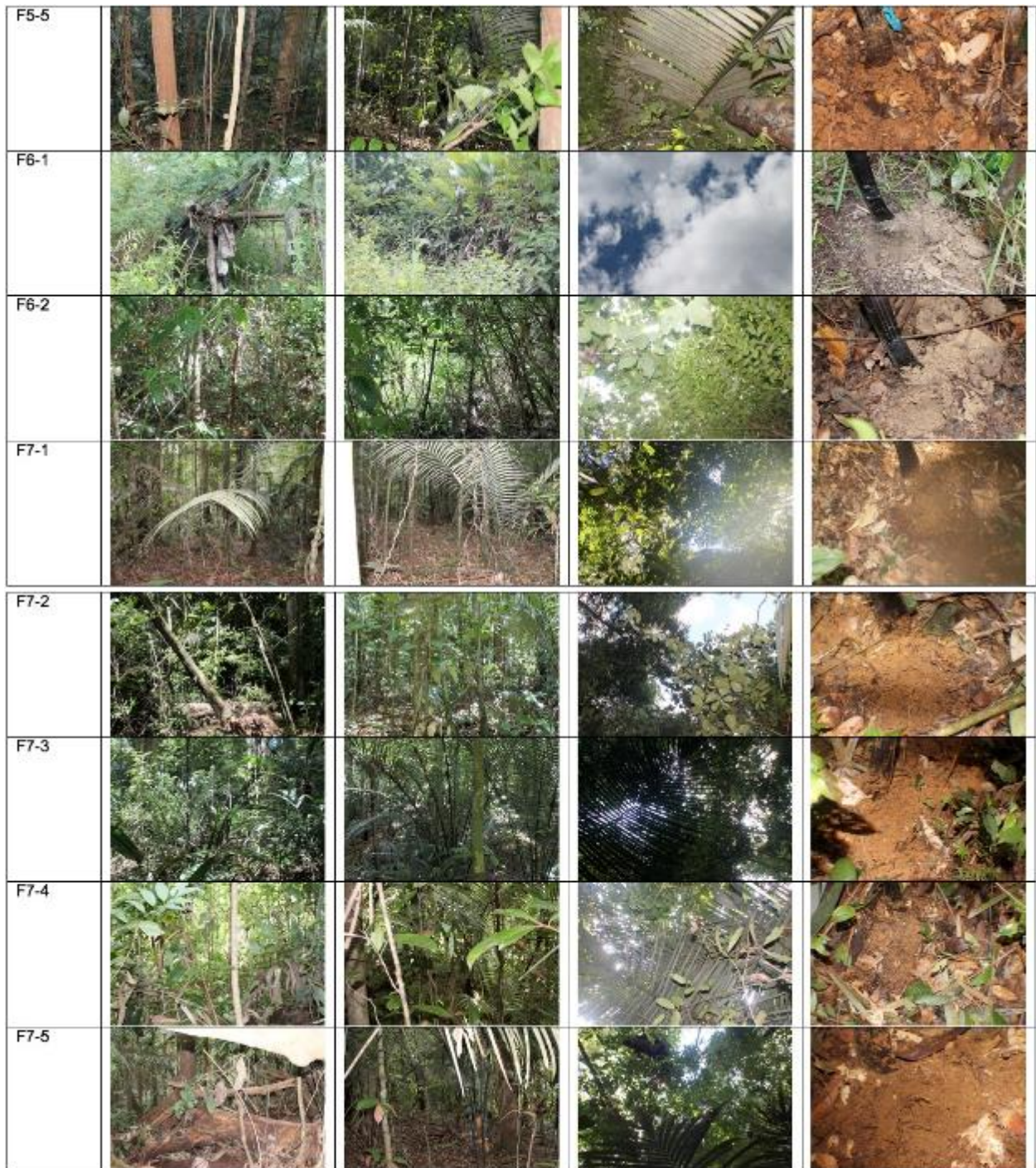
Figure 4A-1 Habitat Pictures Taken by ESS at Sabajo, June-July 2017



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Appendix 4A, Supporting Information for Vegetation Baseline Study

Figure 4A-1 Habitat Pictures Taken by ESS at Sabajo, June-July 2017



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Appendix 4A, Supporting Information for Vegetation Baseline Study

Figure 4A-1 Habitat Pictures Taken by ESS at Sabajo, June-July 2017



Note: At each node, forward and backward pictures were taken at around 1.6 meter (m) height, canopy was photographed from 1 m height and pictures were taken of the soil.

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
1	A1	a	t	katun, bos klein blad	<i>Eriotheca surinamensis</i>	19	
2	A1	a	h	rapata, groot	<i>Spathanthus unilateralis</i>		3
3	A1	a	h	miconia, bron	<i>Clidemia conglomerata</i>		1
4	A1	a	h	heliconia, glauca	<i>Heliconia cf. acuminata</i>		2
5	A1	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	12	
6	A1	a	h	warimbo, pagara, paarsbloem	<i>Monotagma spicatum</i>		2
7	A1	a	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	14	
8	A1	a	h	warimbo, hoogland = uma	<i>Ischnosiphon arouma</i>		1
9	A1	a	h	warimbo, knopo	<i>Ischnosiphon cf. gracilis</i>		1
10	A1	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	11	
11	A1	a	h	lindsea	<i>Lindsea lancea</i>		1
12	A1	a	t	knepa, bos	<i>Talisia cf. micrantha</i>	10	
13	A1	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	10	
14	A1	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	16	
15	A1	a	t	walaba	<i>Eperua falcata</i>	37	
16	A1	a	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
17	A1	a	t	boletri, dju	<i>Pouteria sagotiana</i>	35	
18	A1	a	t	tite-udu, geelbast	<i>Lecythis poiteaui</i>	62	
19	A1	a	l	clusia, grandiflora	<i>Clusia grandiflora</i>	5	
20	A1	a	l	clusia, grandiflora	<i>Clusia grandiflora</i>	2	
21	A1	a	l	abuta	<i>Abuta spp.</i>	2	
22	A1	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	12	
23	A1	a	l	clusia, grandiflora	<i>Clusia grandiflora</i>	5	
24	A1	a	l	clusia, grandiflora	<i>Clusia grandiflora</i>	7	
25	A1	a	l	clusia, grandiflora	<i>Clusia grandiflora</i>	3	
26	A1	a	l	clusia, grandiflora	<i>Clusia grandiflora</i>	4	
27	A1	a	l	clusia, grandiflora	<i>Clusia grandiflora</i>	4	
28	A1	a	l	clusia, grandiflora	<i>Clusia grandiflora</i>	5	
29	A1	a	y	paramaka	<i>Astrocaryum paramaca</i>		1
30	A1	a	t	ijzerhart	<i>Bocoa prouacensis</i>	16	
31	A1	a	h	olyra, groot	<i>Olyra spp.</i>		1
32	A1	a	h	diplasia	<i>Diplasia karataefolia</i>		1
33	A1	a	h	calyptrocarya	<i>Bisboeckleria microcephala</i>		1
34	A1	a	t	walaba	<i>Eperua falcata</i>	39	
35	A1	a	y	maripa, bergi	<i>Attalea microcarpa</i>		1
36	A1	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	14	
37	A1	a	t	konkoni-udu, hoogland	<i>Gustavia hexapetala</i>	18	
38	A1	a	t	foman	<i>Chaetocarpus schomburgkianus</i>	23	
39	A1	b	t	bugrumaka	<i>Astrocaryum sciophilum</i>	12	
40	A1	b	h	rapata, groot	<i>Spathanthus unilateralis</i>		2
41	A1	b	t	fungu, witte drypetes	<i>Drypetes variabilis</i>	21	
42	A1	b	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	3	
43	A1	b	l	trigonia	<i>Trigonia spp.</i>	5	
44	A1	b	l	bauhinia	<i>Bauhinia spp.</i>	5	
45	A1	b	l	abuta	<i>Abuta spp.</i>	7	
46	A1	b	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	14	
47	A1	b	t	krapa, witte	<i>Carapa procera</i>	35	
48	A1	b	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	13	

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
49	A1	b	h	masusa, kapasi	<i>Renealmia spp.</i>		1
50	A1	b	y	paramaka	<i>Astrocaryum paramaca</i>		1
51	A1	b	h	calatea, hoogland	<i>Calathea elliptica</i>		1
52	A1	b	l	dichapetala	<i>Dichapetala spp.</i>	5	
53	A1	b	h	calyptrocarya	<i>Bisboeckleria microcephala</i>		2
54	A1	b	t	walaba	<i>Eperua falcata</i>	38	
55	A1	b	l	machaerium	<i>Machaerium spp.</i>	3	
56	A1	b	l	machaerium	<i>Machaerium spp.</i>	2	
57	A1	b	h	tococa	<i>Tococa cf. guianensis</i>		1
58	A1	b	t	foman	<i>Chaetocarpus schomburgkianus</i>	17	
59	A1	b	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	11	
60	A1	b	y	kumbu	<i>Oenocarpus bacaba</i>		1
61	A1	b	l	abuta	<i>Abuta spp.</i>	6	
62	A1	b	l	connaraceae	<i>Connaraceae n.d. spp.</i>	2	
63	A1	b	h	lindsea	<i>Lindsea lancea</i>		1
64	A1	b	h	diplasia	<i>Diplasia karataefolia</i>		1
65	A1	b	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	10	
66	A1	b	h	cyperaceae, fijnblad	<i>Calyptrocarya glomerulata</i>		1
67	A1	b	l	dobrudua	<i>Strychnos cf. erichsonii</i>	5	
68	A1	b	t	kwepi, swamp	<i>Licania apetala</i>	16	
69	A1	b	l	coccoloba, liaan	<i>Coccoloba spp.</i>	2	
70	A1	b	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	26	
71	A1	b	y	maripa	<i>Attalea maripa</i>		1
72	A1	b	h	olyra	<i>Olyra spp.</i>		1
73	A1	b	t	pisi, zwarte	<i>Nectandra globosa</i>	18	
74	A1	b	t	foman	<i>Chaetocarpus schomburgkianus</i>	28	
75	A1	c	l	doliocarpus, carinia	<i>Doliocarpus spp.</i>	5	
76	A1	c	t	foman	<i>Chaetocarpus schomburgkianus</i>	30	
77	A1	c	h	cyperaceae, fijnblad	<i>Calyptrocarya glomerulata</i>		1
78	A1	c	t	bugubugu, zwarte	<i>Swartzia remiger</i>	9	
79	A1	c	t	bugubugu, zwarte	<i>Swartzia remiger</i>	23	
80	A1	c	h	miconia, lange haren, ongelijke bladeren	<i>Melastomataceae n.d. sp. 1</i>		1
81	A1	c	h	calyptrocarya	<i>Bisboeckleria microcephala</i>		2
82	A1	c	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
83	A1	c	t	bugrumaka	<i>Astrocaryum sciophilum</i>	11	
84	A1	c	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	10	
85	A1	c	h	miconia, bron	<i>Clidemia conglomerata</i>		1
86	A1	c	h	calatea, hoogland, paarsbloem	<i>Calathea elliptica</i>		1
87	A1	c	h	voyria	<i>Voyria rosea</i>		1
88	A1	c	h	burmannia	<i>Burmannia sp.</i>		1
89	A1	c	t	kokriki, kleinblad	<i>Ormosia melanocarpa</i>	62	
90	A1	c	l	doliocarpus, carinia	<i>Doliocarpus spp.</i>	3	
91	A1	c	l	dichapetala	<i>Dichapetala spp.</i>	2	
92	A1	c	t	fungu, wit	<i>Drypetes variabilis</i>	13	
93	A1	c	l	machaerium	<i>Machaerium spp.</i>	7	
94	A1	c	h	warimbo, knopo	<i>Ischnosiphon cf. gracilis</i>		1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
95	A1	c	h	heliconia, acuminata	<i>Heliconia cf. acuminata</i>		1
96	A1	c	t	djadjidja	<i>Sclerobium melinonii</i>	44	
97	A1	c	t	okro-udu	<i>Sterculia excelsa</i>	42	
98	A1	c	l	dichapetala	<i>Dichapetala spp.</i>	2	
99	A1	c	l	lorantea	<i>Norantea guianensis</i>	9	
100	A1	c	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	19	
101	A1	c	h	warimbo, hoogland = uma	<i>Ischnosiphon arouma</i>		1
102	A1	c	l	coccoloba, liaan	<i>Coccoloba spp.</i>	4	
103	A1	c	l	coccoloba, liaan	<i>Coccoloba spp.</i>	3	
104	A1	c	l	coccoloba, liaan	<i>Coccoloba spp.</i>	4	
105	A1	c	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	17	
106	A1	c	t	doifisiri, witbast	<i>Guarea pubescens</i>	12	
107	A1	c	h	warimbo, pagara paarsbloem	<i>Monotagma spicatum</i>		1
108	A1	c	h	rapata, groot	<i>Spathanthus unilateralis</i>		1
109	A1	c	y	paramaka	<i>Astrocaryum paramaca</i>		1
110	A1	c	t	bugrumaka	<i>Astrocaryum sciophilum</i>	16	
111	A1	d	t	spikri-udu	<i>Mouriri sp.</i>	10	
112	A1	d	h	warimbo, hoogland = uma	<i>Ischnosiphon arouma</i>		2
113	A1	d	l	machaerium	<i>Machaerium spp.</i>	4	
114	A1	d	y	maripa	<i>Attalea maripa</i>		1
115	A1	d	t	podosiri	<i>Euterpe oleracea</i>	12	
116	A1	d	t	podosiri	<i>Euterpe oleracea</i>	10	
117	A1	d	t	podosiri	<i>Euterpe oleracea</i>	14	
118	A1	d	h	rapata, groot	<i>Spathanthus unilateralis</i>		2
119	A1	d	h	olyra, groot	<i>Olyra spp.</i>		1
120	A1	d	h	warimbo, pagara witbloem	<i>cf. Monotagma sp.</i>		2
121	A1	d	t	alata-udu	<i>Minuartia guianensis</i>	52	
122	A1	d	h	warimbo, knopo	<i>Ischnosiphon cf. gracilis</i>		1
123	A1	d	l	apocynac	<i>Apocynaceae n.d. spp.</i>	4	
124	A1	d	l	doliocarpus	<i>Doliocarpus spp.</i>	4	
125	A1	d	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	31	
126	A1	d	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	19	
127	A1	d	h	lindsea	<i>Lindsea lancea</i>		1
128	A1	d	h	miconia, bron	<i>Clidemia conglomerata</i>		1
129	A1	d	h	masusa, kapas	<i>Renealmia spp.</i>		1
130	A1	d	y	bambamaka	<i>Desmoncus spp.</i>		1
131	A1	d	t	fungu, rode	<i>Parinari campestris</i>	39	
132	A1	d	t	bugrumaka	<i>Astrocaryum sciophilum</i>	10	
133	A1	d	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	11	
134	A1	d	t	maripa	<i>Attalea maripa</i>	26	
135	A1	d	t	bugubugu, zwarte	<i>Swartzia remiger</i>	29	
136	A1	d	t	walaba	<i>Eperua falcata</i>	52	
137	A1	d	t	fungu, zwarte	<i>Licania densiflora</i>	28	
138	A1	d	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
139	A1	d	l	doliocarpus	<i>Doliocarpus spp.</i>	7	
140	A1	d	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	23	
141	A1	d	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	12	
142	A1	d	t	mangro, bos, hoogland	<i>Tovomita sp.</i>	11	
143	A1	d	h	calatea, hoogland	<i>Calathea elliptica</i>		1

Environmental and Social Impact Assessment

Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
144	A1	d	h	warimbo, laagland, paarsbloem	<i>Marantaceae n.d. sp.</i>		1
145	A1	d	t	amandel, bos	<i>Terminalia sp.</i>	29	
146	F1	a	l	coccoloba, liaan	<i>Coccoloba spp.</i>	3	
147	F1	a	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
148	F1	a	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	17	
149	F1	a	h	selaginella	<i>Selaginella parkeri</i>		1
150	F1	a	t	barklak, man, hoogland witbast	<i>Eschweilera coriacea</i>	17	
151	F1	a	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	23	
152	F1	a	h	trichomanes	<i>Trichomanes pinnatum</i>		1
153	F1	a	y	paramaka	<i>Astrocaryum paramaca</i>		1
154	F1	a	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	15	
155	F1	a	h	varen	<i>Triplophyllum hirsutum</i>		1
156	F1	a	l	abrasa	<i>Clusia grandiflora</i>	6	
157	F1	a	l	coccoloba, liaan	<i>Coccoloba spp.</i>	4	
158	F1	a	t	kwepi, klein blad	<i>Hirtella obidensis</i>	41	
159	F1	a	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	10	
160	F1	a	l	machaerium	<i>Machaerium spp.</i>	2	
161	F1	a	h	warimbo, knopo	<i>Ischnosiphon cf. gracilis</i>		1
162	F1	a	t	barklak, man, bergi	<i>Eschweilera sp.</i>	21	
163	F1	a	l	abuta	<i>Abuta spp.</i>	5	
164	F1	a	t	prokoni, rode	<i>Inga alba</i>	28	
165	F1	a	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	10	
166	F1	a	t	pisi, wit	<i>Ocotea petalentera</i>	16	
167	F1	a	t	kwepi, harde bast	<i>Licania majuscula</i>	10	
168	F1	a	l	watratite	<i>Doliocarpus spp.</i>	3	
169	F1	a	l	watratite	<i>Doliocarpus spp.</i>	5	
170	F1	a	l	abuta	<i>Abuta spp.</i>	2	
171	F1	a	l	watratite	<i>Doliocarpus spp.</i>	8	
172	F1	a	t	sali, tingimoni	<i>Tetragastris panamensis</i>	11	
173	F1	a	h	warimbo, pagara, witbloem	<i>cf. Monotagma sp.</i>		1
174	F1	a	t	barklak, man, bergi	<i>Eschweilera sp.</i>	11	
175	F1	a	l	coccoloba, liaan	<i>Coccoloba spp.</i>	2	
176	F1	a	l	coccoloba, liaan	<i>Coccoloba spp.</i>	2	
177	F1	a	l	machaerium	<i>Machaerium spp.</i>	4	
178	F1	a	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	10	
179	F1	a	l	combretaceae	<i>Combretaceae n.d. spp.</i>	5	
180	F1	a	l	coccoloba, liaan	<i>Coccoloba spp.</i>	4	
181	F1	a	l	coccoloba, liaan	<i>Coccoloba spp.</i>	4	
182	F1	a	t	tamarinde, bos, gevlamde	<i>Zygia racemosa</i>	11	
183	F1	a	l	sekreatutrapu	<i>Bauhinia spp.</i>	6	
184	F1	b	y	maripa, bergi	<i>Attalea microcarpa</i>		1
185	F1	b	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
186	F1	b	y	paramaka	<i>Astrocaryum paramaca</i>		1
187	F1	b	h	grasi, bamboe, behaard	<i>Olyra spp.</i>		1
188	F1	b	h	grasi, bamboe, dwerg	<i>Piresia goeldii</i>		1
189	F1	b	h	varen	<i>Triplophyllum hirsutum</i>		1
190	F1	b	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	35	
191	F1	b	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	15	
192	F1	b	t	kwepi, harde bast	<i>Licania majuscula</i>	42	

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
193	F1	b	t	kwepi, kleinblad	<i>Hirtella obidensis</i>	39	
194	F1	b	t	bugrumaka	<i>Astrocaryum sciophilum</i>	10	
195	F1	b	t	walaba	<i>Eperua falcata</i>	67	
196	F1	b	h	saprofyt, kleine bloem	<i>Soridium spruceanum</i>		1
197	F1	b	t	jakanta, witbast	<i>Discophora guianensis</i>	22	
198	F1	b	h	masusa, kapas	<i>Renealmia spp.</i>		1
199	F1	b	t	taja-udu, geelbloem	<i>Paypayrola guianensis</i>	12	
200	F1	b	l	machaerium	<i>Machaerium spp.</i>	3	
201	F1	b	h	heliconia, acuminata	<i>Heliconia cf. acuminata</i>		1
202	F1	b	l	forstroinia	<i>Forsteronia spp.</i>		1
203	F1	b	t	tite-udu, witbast	<i>Eschweilera simiorum</i>	16	
204	F1	b	y	kumbu	<i>Oenocarpus spp.</i>		1
205	F1	b	t	bugrumaka	<i>Astrocaryum sciophilum</i>	13	
206	F1	b	u	nanaimaka	<i>Bactris cf. acanthocarpa</i>		1
207	F1	c	u	paramaka	<i>Astrocaryum paramaca</i>		1
208	F1	c	t	walaba	<i>Eperua falcata</i>	48	
209	F1	c	h	mapania?	<i>Mapania sylvatica</i>		1
210	F1	c	l	abuta	<i>Abuta spp.</i>	5	
211	F1	c	t	kwepi, kleinblad	<i>Hirtella obidensis</i>	21	
212	F1	c	t	taja-udu, geelbloem	<i>Paypayrola guianensis</i>	11	
213	F1	c	t	barmani	<i>Catostemma fragrans</i>	12	
214	F1	c	u	boomvaren	<i>Cyathea cyatheoides</i>		1
215	F1	c	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
216	F1	c	t	bebe, bergi	<i>Swartzia benthamiana</i>	10	
217	F1	c	t	tite-udu, geelbast	<i>Lecythis poiteaui</i>	31	
218	F1	c	y	kumbu	<i>Oenocarpus bacaba</i>		1
219	F1	c	t	bugrumaka	<i>Astrocaryum sciophilum</i>	10	
220	F1	c	t	kwepi, rood, kleinblad	<i>Excellodendron barbatum</i>	16	
221	F1	c	t	switbonki, witbast, Inga capitata	<i>Inga capitata</i>	14	
222	F1	c	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	3	
223	F1	c	t	babun, hoogland	<i>Virola michelii</i>	63	
224	F1	c	t	barklak, man, bergi	<i>Eschweilera sp.</i>	13	
225	F1	c	l	connaraceae	<i>Connaraceae n.d. spp.</i>	3	
226	F1	c	t	bita, bergi	<i>Geissospermum laeve</i>	35	
227	F1	c	t	kumbu	<i>Oenocarpus bacaba</i>	13	
228	F1	c	y	paramaka	<i>Astrocaryum paramaca</i>		1
229	F1	c	h	bamboegras, behaard	<i>Olyra spp.</i>		2
230	F1	c	t	tite-udu, geelbast	<i>Lecythis poiteaui</i>	45	
231	F1	c	t	walaba	<i>Eperua falcata</i>	55	
232	F1	c	t	yzerhart	<i>Bocoa prouacensis</i>	13	
233	F1	c	l	clusia, grandiflora	<i>Clusia grandiflora</i>	5	
234	F1	c	t	jakanta, witbast	<i>Discophora guianensis</i>	17	
235	F1	c	l	malpigia	<i>Malpighiaceae n.d. spp.</i>	8	
236	F1	c	t	walaba	<i>Eperua falcata</i>	51	
237	F1	c	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
238	F1	d	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	27	
239	F1	d	h	bamboegras, behaard	<i>Olyra spp.</i>		3
240	F1	d	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
241	F1	d	y	kumbu	<i>Oenocarpus bacaba</i>		1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
242	F1	d	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	30	
243	F1	d	l	abuta	<i>Abuta spp.</i>	4	
244	F1	d	t	barklak, man, bergi	<i>Eschweilera sp.</i>	21	
245	F1	d	l	connaraceae	<i>Connaraceae n.d. spp.</i>	6	
246	F1	d	t	pisi, zwarte	<i>Nectandra globosa</i>	78	
247	F1	d	h	saprofyt, kleine bloem	<i>Soridium spruceanum</i>		1
248	F1	d	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	12	
249	F1	d	y	paramaka	<i>Astrocaryum paramaca</i>		1
250	F1	d	t	rafrunjanjan	<i>Sloanea spp.</i>	63	
251	F1	d	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	21	
252	F1	d	l	connaraceae	<i>Connaraceae n.d. spp.</i>	6	
253	F1	d	l	watratite	<i>Dolioscarpus spp.</i>	7	
254	F1	d	l	machaerium	<i>Machaerium spp.</i>	4	
255	F1	d	l	abuta	<i>Abuta spp.</i>	4	
256	F1	d	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	3	
257	F1	d	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	3	
258	F1	d	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	3	
259	F1	d	t	foman	<i>Chaetocarpus schomburgkianus</i>	26	
260	F1	d	t	fungu, rood, parinari campestris	<i>Parinari campestris</i>	51	
261	F1	d	h	diplasia	<i>Diplasia karataefolia</i>		1
262	F1	d	t	jamboka, rode / jansnijder	<i>Pouteria guianensis</i>	36	
263	F1	d	l	clusia, grandiflora	<i>Clusia grandiflora</i>	4	
264	F1	d	h	varen	<i>Adiantum fuliginosum</i>		1
265	F1	d	t	pangapanga, (kankanudu)	<i>Palicourea guianensis</i>	13	
266	F2	a	h	kunami, wilde	<i>Clibadium cf. surinamense</i>		1
267	F2	a	h	miconia	<i>Miconia racemosa</i>		1
268	F2	a	h	melastome	<i>Clidemia dentata</i>		1
269	F2	a	y	pinya, swamp, grootblad	<i>Vismia sp.</i>		1
270	F2	a	l	sabicea	<i>Sabicea spp.</i>		2
271	F2	a	h	comolia	<i>Comolia sp.</i>		1
272	F2	a	y	paullinia	<i>Paullinia cf. pinnata</i>		1
273	F2	a	h	babunnefi	<i>Scleria spp.</i>		2
274	F2	a	h	asitere	<i>Andropogon bicornis</i>		3
275	F2	a	h	borreria, zonder hoofdje	<i>Spermacoce cf. latifolia</i>		1
276	F2	a	y	kopi	<i>Goupia glabra</i>		1
277	F2	a	y	busipaya, uma	<i>Cecropia cf. peltata</i>		3
278	F2	a	y	pikintiki	<i>Maprounea guianensis</i>		1
279	F2	a	y	pinya, uma	<i>Vismia cf. japurensis</i>		2
280	F2	a	y	mispel, eetbare	<i>Bellucia grossularioides</i>		1
281	F2	a	h	brokobaka	<i>Mikania micrantha</i>		1
282	F2	a	y	pinya, zwart, kleinblad	<i>Vismia cf. guianensis</i>		1
283	F2	a	h	wetbaka, (stempelvaren)	<i>Pityrogramma calomelanos</i>		1
284	F2	a	h	droifimaka	<i>Solanum subinerme</i>		3
285	F2	a	h	diabita	<i>Chelonanthus alatus</i>		1
286	F2	a	h	merkiwiri, sabana	<i>Euphorbia hirta</i>		1
287	F2	a	y	kankanudu	<i>Apeiba echinata</i>		1
288	F2	a	h	finibita	<i>Phyllanthus amarus</i>		1
289	F2	a	h	pratilobi	<i>Lycopodiella cernua</i>		1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
290	F2	a	l	snekimarkusa, busi	<i>Passiflora coccinea</i>		1
291	F2	a	s	sabanamangro	<i>Clusia sp.</i>		1
292	F2	a	y	pangapanga, (kankanudu)	<i>Palicourea guianensis</i>		1
293	F2	a	h	scrophularia	<i>Achetaria guianensis</i>		1
294	F2	a	h	aneisiwiri, man	<i>Piper spp.</i>		1
295	F2	a	y	busipaya, man	<i>Cecropia sciadophylla</i>		1
296	F2	a	y	mispel, eetbare, niet Bellucia	<i>Melastomataceae n.d. sp. 3</i>		1
297	F2	a	e	fowrudoti	<i>Loranthaceae n.d. sp.</i>		1
298	F3	a	h	ludwigia	<i>Ludwigia affinis</i>		4
299	F3	a	h	ludwigia	<i>Ludwigia octovalvis</i>		4
300	F3	a	h	isigrasi	<i>Fimbristylis sp.</i>		3
301	3	a	h	grasi	<i>Panicum sp.</i>		1
302	F3	a	h	comolia	<i>Comolia sp.</i>		1
303	F3	a	h	scophularia	<i>Achetaria guianensis</i>		1
304	F3	a	h	xyris	<i>Xyris fallax</i>		1
305	F3	a	h	rhynchospora	<i>Rhynchospora cf. barbata</i>		1
306	F3	a	h	borreria, met hoofdje	<i>Spermacoce cf. oligodontha</i>		1
307	F3	a	h	fayadyan	<i>Hyptis lanceolata</i>		1
308	F3	a	l	apocynac	<i>Apocynaceae n.d. spp.</i>		1
309	F3	a	h	brokobaka	<i>Mikania micrantha</i>		1
310	F3	a	h	sauvagesia	<i>Sauvagesia sp.</i>		1
311	F3	a	h	wetbaka, (stempelvaren)	<i>Pityrogramma calomelanos</i>		1
312	F3	a	h	pratilobi	<i>Lycopodiella cernua</i>		1
313	F4	a	l	wacht-een-beetje, liaan	<i>Mimosa myriadenia</i>		2
314	F4	a	h	asitere	<i>Andropogon bicornis</i>		3
315	F4	a	h	finibita	<i>Phyllanthus amarus</i>		1
316	F4	a	h	fayadyan	<i>Hyptis lanceolata</i>		1
317	F4	a	h	lindernia	<i>Lindernia sp.</i>		1
318	F4	a	h	emilia	<i>Emilia sonchifolia</i>		1
319	F4	a	h	miconia	<i>Miconia racemosa</i>		1
320	F4	a	y	pinya, swamp, grootblad	<i>Vismia sp.</i>		1
321	F4	a	h	diabita	<i>Chelonanthus alatus</i>		1
322	F4	a	l	snekimarkusa, busi	<i>Passiflora coccinea</i>		1
323	F4	a	h	wetimaka	<i>Solanum jamaicense</i>		1
324	F4	a	y	busipaya, uma	<i>Cecropia cf. peltata</i>		1
325	F4	a	h	konkonikasaba	<i>Stigmaphyllon sp.</i>		1
326	F4	a	h	scophularia	<i>Achetaria guianensis</i>		1
327	F4	a	h	scrophularia	<i>Scrophulariaceae n.d. sp.</i>		1
328	F4	a	h	isigrasi	<i>Fimbristylis sp.</i>		1
329	F4	a	h	speldekussen	<i>cf. Paepalanthus sp.</i>		1
330	F4	a	h	aeshinomene	<i>cf. Aeschinomene sp.</i>		1
331	F4	a	l	wilkensbita	<i>Allamanda cathartica</i>		1
332	F4	a	h	xyris	<i>Xyris fallax</i>		1
333	F4	a	h	ludwigia	<i>Ludwigia octovalvis</i>		4
334	F4	a	h	wetbaka, (stempelvaren)	<i>Pityrogramma calomelanos</i>		1
335	F4	a	h	prasorograsi	<i>Cyperus giganteus</i>		1
336	F4	a	h	patatatitei	<i>Ipomoea cf. tiliaceae</i>		1
337	F4	a	h	gadodede, klein	<i>cf. Murdannia sp.</i>		1
338	F4	a	h	blechnum	<i>Blechnum serrulatum</i>		3

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
339	F4	a	h	toriman	<i>Desmodium canum</i>		1
340	F4	a	h	zegge	<i>Fuirena umbellata</i>		1
341	F4	a	h	sauvagesia	<i>Sauvagesia sp.</i>		1
342	F4	a	h	borreria, met hoofdje	<i>Spermacoce cf. oligodontha</i>		1
343	C1	a	h	warimbo, pagara, paarsbloem	<i>Monotagma spicatum</i>		4
344	C1	a	t	maripa	<i>Attalea maripa</i>	28	
345	C1	a	t	bugrumaka	<i>Astrocaryum sciophilum</i>	14	
346	C1	a	t	kopi	<i>Goupia glabra</i>	11	
347	C1	a	t	kopi	<i>Goupia glabra</i>	25	
348	C1	a	t	gubaya	<i>Jacaranda copaia</i>	11	
349	C1	a	t	kopi	<i>Goupia glabra</i>	14	
350	C1	a	l	connaraceae	<i>Connaraceae n.d. spp.</i>	2	
351	C1	a	t	prokoni, rode	<i>Inga alba</i>	46	
352	C1	a	l	macherium	<i>Machaerium spp.</i>	4	
353	C1	a	l	dichapetala	<i>Dichapetala spp.</i>	2	
354	C1	a	t	krapa, witte	<i>Carapa procera</i>	14	
355	C1	a	l	sekreatutrapu	<i>Bauhinia spp.</i>	10	
356	C1	a	l	sekreatutrapu	<i>Bauhinia spp.</i>	8	
357	C1	a	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
358	C1	a	t	kopi	<i>Goupia glabra</i>	37	
359	C1	a	l	sekreatutrapu	<i>Bauhinia spp.</i>	4	
360	C1	a	t	krapa, witte	<i>Carapa procera</i>	22	
361	C1	a	t	bugrumaka	<i>Astrocaryum sciophilum</i>	11	
362	C1	a	t	tafrabon, hoogland	<i>Cordia sagotii</i>	16	
363	C1	a	t	podosiri	<i>Euterpe oleracea</i>	13	
364	C1	a	u	obe, sabana	<i>Elaeis oleifera</i>		1
365	C1	a	u	obe, sabana	<i>Elaeis oleifera</i>		1
366	C1	a	u	obe, sabana	<i>Elaeis oleifera</i>		1
367	C1	a	u	obe, sabana	<i>Elaeis oleifera</i>		1
368	C1	a	y	obe, sabana	<i>Elaeis oleifera</i>		3
369	C1	a	u	bactris, stamloos, lange stekels	<i>Bactris cf. acanthocarpa</i>		1
370	C1	a	t	walaba	<i>Eperua falcata</i>	46	
371	C1	a	t	kwatabobi	<i>Chrysophyllum cuneifolium</i>	11	
372	C1	a	u	tasi	<i>Geonoma baculifera</i>		1
373	C1	a	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	17	
374	C1	b	t	sponshout, (sergantskloot)	<i>Licania divaricata</i>	39	
375	C1	b	l	coccoloba, liaan	<i>Coccoloba spp.</i>	2	
376	C1	b	y	maripa	<i>Attalea maripa</i>		1
377	C1	b	h	warimbo, knopo	<i>Ischnosiphon cf. gracilis</i>		1
378	C1	b	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
379	C1	b	h	rapata, groot	<i>Spathanthus unilateralis</i>		1
380	C1	b	t	walaba	<i>Eperua falcata</i>	41	
381	C1	b	l	abrasa	<i>Clusia grandiflora</i>	10	
382	C1	b	l	memora	<i>Memora spp.</i>	2	
383	C1	b	l	abuta	<i>Abuta spp.</i>	2	
384	C1	b	l	abuta	<i>Abuta spp.</i>	3	
385	C1	b	u	tasi	<i>Geonoma baculifera</i>		4
386	C1	b	l	kawai, (fayaston)	<i>Mucuna spp.</i>	6	
387	C1	b	t	podosiri	<i>Euterpe oleracea</i>	11	

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
388	C1	b	t	podosiri	<i>Euterpe oleracea</i>	13	
389	C1	b	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	12	
390	C1	b	l	abuta	<i>Abuta spp.</i>	3	
391	C1	b	t	sponshout, (sergantskloot)	<i>Licania divaricata</i>	36	
392	C1	b	t	walaba	<i>Eperua falcata</i>	20	
393	C1	b	h	bamboegras, behaard	<i>Olyra spp.</i>		1
394	C1	b	t	jamboka, zwarte	<i>Pouteria melanopoda</i>	52	
395	C1	b	t	bebe, watra	<i>Pterocarpus officinalis</i>	41	
396	C1	b	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	12	
397	C1	b	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	10	
398	C1	b	h	cyperaceae, fijnblad	<i>Calyptrocarya glomerulata</i>		1
399	C1	b	t	kwepi, swamp	<i>Licania apetala</i>	25	
400	C1	b	l	coccoloba, liaan	<i>Coccoloba spp.</i>	3	
401	C1	b	h	hymenocallis	<i>Hymenocallis tubiflora</i>		1
402	C1	b	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	4	
403	C1	b	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	31	
404	C1	b	t	kwepi, swamp	<i>Licania apetala</i>	14	
405	C1	b	l	dalbergia	<i>Dalbergia spp.</i>	5	
406	C1	b	l	onbekend	<i>n.d. n.d. sp.</i>	6	
407	C1	b	y	podosiri	<i>Euterpe oleracea</i>		1
408	C1	b	t	podosiri	<i>Euterpe oleracea</i>	10	
409	C1	b	t	krapa, witte	<i>Carapa procera</i>	33	
410	C1	b	t	jamboka, zwarte	<i>Pouteria melanopoda</i>	10	
411	C1	b	t	krapa, witte	<i>Carapa procera</i>	22	
412	C1	b	t	podosiri	<i>Euterpe oleracea</i>	12	
413	C1	b	t	podosiri	<i>Euterpe oleracea</i>	10	
414	C1	b	t	sponshout, (sergantskloot)	<i>Licania divaricata</i>	11	
415	C1	c	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	23	
416	C1	c	h	bamboegras, behaard	<i>Olyra spp.</i>		2
417	C1	c	t	sponshout, (sergantskloot)	<i>Licania divaricata</i>	29	
418	C1	c	l	dalbergia	<i>Dalbergia spp.</i>	6	
419	C1	c	l	dalbergia	<i>Dalbergia spp.</i>	2	
420	C1	c	l	watratite	<i>Dolioscarpus spp.</i>	2	
421	C1	c	t	podosiri	<i>Euterpe oleracea</i>	12	
422	C1	c	t	podosiri	<i>Euterpe oleracea</i>	11	
423	C1	c	u	hymenocallis	<i>Hymenocallis tubiflora</i>		1
424	C1	c	t	panta, swamp, 5-part blad	<i>Tabebuia insignis</i>	10	
425	C1	c	l	baskitatitei, (cydista)	<i>Cydista cf. aequinoctialis</i>	5	
426	C1	c	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	21	
427	C1	c	t	podosiri	<i>Euterpe oleracea</i>	14	
428	C1	c	y	maripa	<i>Attalea maripa</i>		1
429	C1	c	l	abrasa	<i>Clusia grandiflora</i>	6	
430	C1	c	t	sponshout, (sergantskloot)	<i>Licania divaricata</i>	23	
431	C1	c	h	kasaba, bofru	<i>Psychotria apoda</i>		1
432	C1	c	l	memora	<i>Memora spp.</i>	6	
433	C1	c	l	memora	<i>Memora spp.</i>	5	
434	C1	c	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	10	
435	C1	c	t	bugrumaka	<i>Astrocaryum sciophilum</i>	11	
436	C1	c	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
437	C1	c	u	tasi	<i>Geonoma baculifera</i>		2
438	C1	c	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	14	
439	C1	c	h	warimbo, knopo	<i>Ischnosiphon cf. gracilis</i>		2
440	C1	c	l	forstroinia	<i>Forsteronia spp.</i>	7	
441	C1	c	l	dalbergia	<i>Dalbergia spp.</i>	4	
442	C1	c	l	connaraceae	<i>Connaraceae n.d. spp.</i>	2	
443	C1	c	t	walaba	<i>Eperua falcata</i>	40	
444	C1	c	h	diplasia	<i>Diplasia karataefolia</i>		1
445	C1	c	t	podosiri	<i>Euterpe oleracea</i>	13	
446	C1	c	t	podosiri	<i>Euterpe oleracea</i>	12	
447	C1	c	h	rapata, groot	<i>Spathanthus unilateralis</i>		1
448	C1	c	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	11	
449	C1	d	h	warimbo, knopo	<i>Ischnosiphon cf. gracilis</i>		1
450	C1	d	h	cyperaceae, fijnblad	<i>Calyptrocarya glomerulata</i>		1
451	C1	d	y	podosiri	<i>Euterpe oleracea</i>		1
452	C1	d	h	lindsea	<i>Lindsea lancea</i>		1
453	C1	d	t	anaura, swamp	<i>Licania divaricata</i>	34	
454	C1	d	l	dalbergia	<i>Dalbergia spp.</i>	3	
455	C1	d	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	29	
456	C1	d	t	sponshout, (sergantskloot)	<i>Licania divaricata</i>	44	
457	C1	d	y	maripa	<i>Attalea maripa</i>		1
458	C1	d	h	rapata, groot	<i>Spathanthus unilateralis</i>		4
459	C1	d	t	switbonki, granbusi (inga divaricata)	<i>Inga rubiginosa</i>	14	
460	C1	d	h	warimbo, hoogland = uma	<i>Ischnosiphon arouma</i>		1
461	C1	d	t	neku-udu, (lonchocarpus)	<i>Lonchocarpus heptaphyllus</i>	15	
462	C1	d	h	selaginella	<i>Selaginella parkeri</i>		1
463	C1	d	h	kasaba, bofru	<i>Psychotria apoda</i>		1
464	C1	d	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	3	
465	C1	d	t	walaba	<i>Eperua falcata</i>	36	
466	C1	d	t	bugrumaka	<i>Astrocaryum sciophilum</i>	10	
467	C1	d	h	warimbo, pagara, paarsbloem	<i>Monotagma spicatum</i>		1
468	C1	d	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
469	C1	d	t	krapa, witte	<i>Carapa procera</i>	18	
470	C1	d	l	dalbergia	<i>Dalbergia spp.</i>	6	
471	C1	d	h	warimbo, pagara witbloem	<i>cf. Monotagma sp.</i>		1
472	C1	d	t	krapa, witte	<i>Carapa procera</i>	30	
473	F5	a	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	14	
474	F5	a	t	barklak, man, bergi	<i>Eschweilera sp.</i>	41	
475	F5	a	y	kumbu	<i>Oenocarpus spp.</i>		1
476	F5	a	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
477	F5	a	x	pisi, wana	<i>Ocotea splendens</i>	70	
478	F5	a	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	11	
479	F5	a	t	lokus, pinto, zwarte	<i>Talisia cf. simaboides</i>	18	
480	F5	a	t	bugrumaka	<i>Astrocaryum sciophilum</i>	15	
481	F5	a	u	paramaka	<i>Astrocaryum paramaca</i>		1
482	F5	a	t	doifisiri, witte bast	<i>Guarea pubescens</i>	10	
483	F5	a	t	unidentified		17	
484	F5	a	u	maripa, bergi	<i>Attalea microcarpa</i>		1
485	F5	a	t	uma-udu	<i>Casearia javitensis</i>	10	

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
486	F5	a	t	zyzerhart	<i>Bocoa prouacensis</i>	11	
487	F5	a	t	riemhout, witte	<i>Micropholis guianensis</i>	42	
488	F5	a	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	6	
489	F5	a	t	pisi, kaneel	<i>Aniba megaphylla</i>	14	
490	F5	a	t	zyzerhart	<i>Bocoa prouacensis</i>	18	
491	F5	a	t	fungu, witte	<i>Drypetes variabilis</i>	16	
492	F5	a	t	barklak, man, hoogland witbast	<i>Eschweilera coriacea</i>	26	
493	F5	a	t	kumbu, gewone	<i>Oenocarpus bacaba</i>	13	
494	F5	b	t	zyzerhart	<i>Bocoa prouacensis</i>	17	
495	F5	b	h	babunnefi	<i>Scleria spp.</i>		1
496	F5	b	t	kopi	<i>Goupia glabra</i>	32	
497	F5	b	t	pikapika, uma	<i>cf. Oxandra asbeckii</i>	14	
498	F5	b	u	maripa, bergi	<i>Attalea microcarpa</i>		1
499	F5	b	l	abrasa, (coussapoa)	<i>Coussapoa spp.</i>	3	
500	F5	b	t	zyzerhart	<i>Bocoa prouacensis</i>	14	
501	F5	b	t	tamarinde, bos, gevlamde	<i>Zygia racemosa</i>	20	
502	F5	b	y	kumbu	<i>Oenocarpus spp.</i>		1
503	F5	b	u	paramaka	<i>Astrocaryum paramaca</i>		1
504	F5	b	t	santi-udu	<i>Licania ovalifolia</i>	12	
505	F5	b	t	pisi, zwarte	<i>Nectandra globosa</i>	43	
506	F5	b	l	watratite	<i>Dolioscarpus spp.</i>	7	
507	F5	b	t	santi-udu	<i>Licania ovalifolia</i>	19	
508	F5	c	t	uma-udu	<i>Casearia javitensis</i>	11	
509	F5	c	t	bugrumaka	<i>Astrocaryum sciophilum</i>	11	
510	F5	c	t	bugubugu, zwarte	<i>Swartzia remiger</i>	33	
511	F5	c	t	pisi, wana	<i>Ocotea splendens</i>	54	
512	F5	c	x	pisi, wana	<i>Ocotea splendens</i>	75	
513	F5	c	t	tyrsodium	<i>Thyrsodium sp.</i>	13	
514	F5	c	t	anaura, hoogland	<i>Couepia guianensis</i>	11	
515	F5	c	t	kabbes, rode	<i>Andira surinamensis</i>	51	
516	F5	c	l	watratite	<i>Dolioscarpus spp.</i>	4	
517	F5	c	y	kumbu	<i>Oenocarpus spp.</i>		1
518	F5	c	u	paramaka	<i>Astrocaryum paramaca</i>		1
519	F5	c	t	kwepi, klein blad	<i>Hirtella obidensis</i>	18	
520	F5	c	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	13	
521	F5	c	t	pakuli, hoogland (macrofera)	<i>Rheedia cf. macrophylla</i>	12	
522	F5	c	t	zyzerhart	<i>Bocoa prouacensis</i>	15	
523	F5	c	u	psychotria?	<i>Faramea quadricostata</i>		1
524	F5	c	l	dalbergia	<i>Dalbergia spp.</i>	7	
525	F5	c	h	ananas, bos	<i>cf. Bromelia alta</i>		1
526	F5	c	l	watratite	<i>Dolioscarpus spp.</i>	2	
527	F5	c	l	abuta	<i>Abuta spp.</i>	6	
528	F5	c	t	pisi, kaneel	<i>Aniba megaphylla</i>	36	
529	F5	c	t	pikapika, uma	<i>cf. Oxandra asbeckii</i>	10	
530	F5	c	t	brudu-udu	<i>Iryanthera sagotiana</i>	28	
531	F5	c	t	zyzerhart	<i>Bocoa prouacensis</i>	19	
532	F5	c	t	kumbu, afa	<i>Oenocarpus sp.</i>	17	
533	F5	c	t	kumbu, afa	<i>Oenocarpus sp.</i>	18	
534	F5	c	u	tafrabon, knopo	<i>Cordia nodosa</i>		1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
535	F5	c	t	bofru-udu, zwarte	<i>Sacoglottis guianensis</i>	25	
536	F5	c	t	santi-udu	<i>Licania ovalifolia</i>	33	
537	F5	c	l	abuta	<i>Abuta spp.</i>	4	
538	F5	c	t	santi-udu	<i>Licania ovalifolia</i>	21	
539	F5	d	y	kumbu, patawa	<i>Oenocarpus bataua</i>		1
540	F5	d	t	kumbu, afa	<i>Oenocarpus sp.</i>	14	
541	F5	d	t	pikapika, uma	<i>cf. Oxandra asbeckii</i>	12	
542	F5	d	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	3	
543	F5	d	l	connaraceae	<i>Connaraceae n.d. spp.</i>	2	
544	F5	d	l	machaerium	<i>Machaerium spp.</i>	2	
545	F5	d	t	lokus, pinto, zwarte	<i>Talisia cf. simaboides</i>	30	
546	F5	d	t	uma-udu	<i>Casearia javitensis</i>	18	
547	F5	d	l	watratite	<i>Dolioscarpus spp.</i>	3	
548	F5	d	t	prasara-udu	<i>cf. Neea floribunda</i>	15	
549	F5	d	t	kwepi, klein blad	<i>Hirtella obidensis</i>	19	
550	F5	d	t	jarijari	<i>Unonopsis glaucopetala</i>	17	
551	F5	d	t	kumbu, gewone	<i>Oenocarpus bacaba</i>	14	
552	F5	d	u	psychotria?	<i>Faramea quadricostata</i>		1
553	F5	d	t	zyzerhart	<i>Bocoa prouacensis</i>	22	
554	F5	d	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
555	F5	d	t	rafrunjanjan, grootblad	<i>Sloanea sp.</i>	27	
556	F5	d	l	machaerium	<i>Machaerium spp.</i>	20	
557	F5	d	y	paramaka	<i>Astrocaryum paramaca</i>		1
558	F5	d	t	lokus, pinto, zwarte	<i>Talisia cf. simaboides</i>	11	
559	F5	d	h	calatea, paarse bloem	<i>Monotagma spicatum</i>		1
560	F5	d	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
561	F5	d	t	pikapika, man	<i>Ephedranthus guianensis</i>	20	
562	F5	d	l	dobrudua	<i>Strychnos cf. erichsonii</i>	10	
563	F5	d	l	dobrudua	<i>Strychnos cf. erichsonii</i>	10	
564	F5	d	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	5	
565	F5	d	t	zyzerhart	<i>Bocoa prouacensis</i>	46	
566	F5	d	l	dobrudua	<i>Strychnos cf. erichsonii</i>	11	
567	F5	d	h	adiantum	<i>Adiantum terminatum</i>		1
568	F5	d	h	calyptrocarya	<i>Bisboeckleria microcephala</i>		1
569	F5	d	t	brudu-udu	<i>Iryanthera sagotiana</i>	30	
570	F5	d	l	connaraceae	<i>Connaraceae n.d. spp.</i>	2	
571	F5	d	h	trichomanes	<i>Trichomanes pinnatum</i>		1
572	F6	a	h	borreria, met hoofdje	<i>Spermacoce cf. oligodontha</i>		3
573	F6	a	h	cassia, kruid	<i>Chamaecrista cf. nictitans</i>		3
574	F6	a	h	comolia	<i>Comolia sp.</i>		1
575	F6	a	l	wacht-een-beetje, liaan	<i>Mimosa myriadenia</i>		1
576	F6	a	h	lindernia	<i>Lindernia sp.</i>		1
577	F6	a	h	pratilobi	<i>Lycopodiella cernua</i>		1
578	F6	a	h	droifimaka	<i>Solanum subinerme</i>		1
579	F6	a	h	babunnefi, groot, zwarte vrucht	<i>Scleria spp.</i>		1
580	F6	a	h	toriman, paarse bloem	<i>Desmodium canum</i>		1
581	F6	a	h	fayadyan	<i>Hyptis lanceolata</i>		1
582	F6	a	h	wetimaka	<i>Solanum jamaicense</i>		1
583	F6	a	h	diabita, (erobachia)	<i>Chelonanthus alatus</i>		1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
584	F6	a	h	hyptis	<i>cf. Hyptis sp.</i>		1
585	F6	a	y	pinya, swamp	<i>Vismia cayennensis</i>		3
586	F6	a	y	kopi	<i>Goupia glabra</i>		1
587	F6	a	y	kandra-udu	<i>Isertia cf. spiciformis</i>		1
588	F6	a	y	busipaya, man	<i>Cecropia sciadophylla</i>		1
589	F6	a	y	busipaya, uma	<i>Cecropia cf. peltata</i>		1
590	F6	a	h	miconia, racemosa	<i>Miconia racemosa</i>		1
591	F6	a	h	mispel, eetbare	<i>Bellucia grossularioides</i>		1
592	F6	a	l	taratitei, (forstroinia)	<i>Odontadenia cf. macrantha</i>		1
593	F6	a	l	sabicea	<i>Sabicea spp.</i>		1
594	F6	a	h	centrosema	<i>Centrosema sp.</i>		1
595	F6	a	h	borreria, lange bloem	<i>Spermacoce cf. ocymifolia</i>		1
596	F6	a	h	rhynchospora, barbata	<i>Rhynchospora cf. barbata</i>		1
597	F6	a	h	gras, onbekend	<i>Poaceae n.d. sp.</i>		4
598	F6	a	h	gleichenia	<i>Gleichenia remota</i>		1
599	F6	a	y	fungu, rode	<i>Parinari campestris</i>		1
600	F6	a	h	tonina	<i>Tonina fluviatilis</i>		1
601	F6	a	l	markusa, rood cauliflore	<i>Passiflora amoena</i>		1
602	F6	a	t	solanum, boompje	<i>Solanum leucocarpon</i>		1
603	F6	a	h	rapata, groot	<i>Spathanthus unilateralis</i>		1
604	F6	a	h	warimbo, pagara, paarsbloem	<i>Monotagma spicatum</i>		1
605	E1	a	t	purperhart	<i>Peltogyne sp.</i>	47	
606	E1	a	t	riemhout, zwarte	<i>Micropholis sp.</i>	17	
607	E1	a	t	bruinhart	<i>Vouacapoua americana</i>	14	
608	E1	a	h	lindsea	<i>Lindsea sp. 3</i>		1
609	E1	a	t	bugrumaka	<i>Astrocaryum sciophilum</i>	10	
610	E1	a	t	kwepi, klein blad	<i>Hirtella obidensis</i>	24	
611	E1	a	h	lindsea, klein blad	<i>Lindsea sp. 2</i>		1
612	E1	a	u	paramaka	<i>Astrocaryum paramaca</i>		1
613	E1	a	y	kumbu	<i>Oenocarpus spp.</i>		1
614	E1	a	t	babun-udu, hoogland	<i>Virola michelii</i>	21	
615	E1	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	12	
616	E1	a	h	diplasia, smal blad	<i>Diplasia karataefolia</i>		1
617	E1	a	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	29	
618	E1	a	t	jamboka, rode	<i>Pouteria guianensis</i>	33	
619	E1	a	t	walaba	<i>Eperua falcata</i>	10	
620	E1	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	10	
621	E1	a	t	bugrumaka	<i>Astrocaryum sciophilum</i>	12	
622	E1	a	t	zyerhart	<i>Bocoa prouacensis</i>	23	
623	E1	a	t	kwepi, rood, kleinblad	<i>Excellodendron barbatum</i>	23	
624	E1	a	t	barklak, man, bergi	<i>Eschweilera sp.</i>	12	
625	E1	a	t	tingimoni, hoog savannebos	<i>Tetragastris hostmannii</i>	28	
626	E1	a	t	zyerhart	<i>Bocoa prouacensis</i>	25	
627	E1	a	l	watratite	<i>Dolioscarpus spp.</i>	7	
628	E1	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	14	
629	E1	a	l	connaraceae	<i>Connaraceae n.d. spp.</i>	5	
630	E1	a	l	watratite	<i>Dolioscarpus spp.</i>	2	
631	E1	a	l	watratite	<i>Dolioscarpus spp.</i>	2	
632	E1	a	t	bugrumaka	<i>Astrocaryum sciophilum</i>	15	

Environmental and Social Impact Assessment

Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
633	E1	a	t	kumbu, afa	<i>Oenocarpus sp.</i>	22	
634	E1	a	h	bamboegras, behaard, klein	<i>Olyra spp.</i>		1
635	E1	b	l	connaraceae	<i>Connaraceae n.d. spp.</i>	4	
636	E1	b	t	bugrumaka	<i>Astrocaryum sciophilum</i>	11	
637	E1	b	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	19	
638	E1	b	y	kumbu	<i>Oenocarpus spp.</i>		1
639	E1	b	t	fungu, witte drypetes	<i>Drypetes variabilis</i>	47	
640	E1	b	t	brudu-udu	<i>Iryanthera sagotiana</i>	16	
641	E1	b	h	trichomanes	<i>Trichomanes tuerckheimii</i>		1
642	E1	b	h	calyptrocarya	<i>Bisboeckleria microcephala</i>		1
643	E1	b	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
644	E1	b	t	letterhout, man	<i>Maquira guianensis</i>	13	
645	E1	b	t	kwepi, rood, kleinblad	<i>Excellodendron barbatum</i>	10	
646	E1	b	t	zyzerhart	<i>Bocoa prouacensis</i>	16	
647	E1	b	t	switbonki, rode bast	<i>Inga pezizifera</i>	12	
648	E1	b	t	kwepi, rood, kleinblad	<i>Excellodendron barbatum</i>	15	
649	E1	b	t	bugrumaka	<i>Astrocaryum sciophilum</i>	12	
650	E1	b	t	kwepi, rood, kleinblad	<i>Excellodendron barbatum</i>	18	
651	E1	b	t	barmani	<i>Catostemma fragrans</i>	27	
652	E1	b	t	kumbu, afa	<i>Oenocarpus sp.</i>	13	
653	E1	b	t	walaba	<i>Eperua falcata</i>	38	
654	E1	b	t	anaura, hoogland	<i>Couepia guianensis</i>	11	
655	E1	b	t	geri-udu	<i>Pogonophora schomburgkiana</i>	10	
656	E1	b	h	saprofyt, kleine bloem	<i>Soridium spruceanum</i>		1
657	E1	b	t	walaba	<i>Eperua falcata</i>	25	
658	E1	b	y	maripa, bergi	<i>Attalea microcarpa</i>		1
659	E1	b	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
660	E1	b	y	kumbu, gewone	<i>Oenocarpus bacaba</i>		1
661	E1	b	t	zyzerhart	<i>Bocoa prouacensis</i>	27	
662	E1	b	t	fungu, zwart, kleinblad	<i>Licania cf. discolor</i>	42	
663	E1	b	t	foman	<i>Chaetocarpus schomburgkianus</i>	20	
664	E1	b	t	pisi, kaneel	<i>Aniba megaphylla</i>	34	
665	E1	b	t	walaba	<i>Eperua falcata</i>	12	
666	E1	b	t	zyzerhart	<i>Bocoa prouacensis</i>	25	
667	E1	b	t	babun, hoogland	<i>Virola michelii</i>	29	
668	E1	b	t	brudu-udu	<i>Iryanthera sagotiana</i>	21	
669	E1	b	t	pikapika, uma	<i>cf. Oxandra asbeckii</i>	13	
670	E1	b	t	lokus, basra	<i>Dicorynia guianensis</i>	56	
671	E1	b	t	barklak, man, hoogland roodbast	<i>Eschweilera cf. micrantha</i>	11	
672	E1	b	t	anaura, hoogland	<i>Couepia guianensis</i>	14	
673	E1	b	h	heliconia, acuminata	<i>Heliconia cf. acuminata</i>		1
674	E1	b	l	machaerium	<i>Machaerium spp.</i>	2	
675	E1	b	h	adiantum, trifid blad	<i>Triplophyllum dicksonioides</i>		1
676	E1	c	y	kumbu, gewone	<i>Oenocarpus bacaba</i>		1
677	E1	c	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	12	
678	E1	c	l	memora	<i>Memora spp.</i>	2	
679	E1	c	h	miconia	<i>cf. Miconia spp.</i>		1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
680	E1	c	h	heliconia, acuminata	<i>Heliconia cf. acuminata</i>		1
681	E1	c	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
682	E1	c	h	calyptrocarya	<i>Bisboeckleria microcephala</i>		1
683	E1	c	h	adiantum, trifid blad	<i>Triplophyllum dicksonioides</i>		1
684	E1	c	t	kwepi, rood, kleinblad	<i>Excelloidendron barbatum</i>	14	
685	E1	c	t	zyzerhart	<i>Bocoa prouacensis</i>	15	
686	E1	c	t	zyzerhart	<i>Bocoa prouacensis</i>	21	
687	E1	c	t	barmani	<i>Catostemma fragrans</i>	58	
688	E1	c	l	abuta	<i>Abuta spp.</i>	2	
689	E1	c	t	zyzerhart	<i>Bocoa prouacensis</i>	14	
690	E1	c	t	kumbu, gewone	<i>Oenocarpus bacaba</i>	10	
691	E1	c	t	kabbes, zwarte	<i>Diploptropis purpurea</i>	42	
692	E1	c	t	pakuli, hoogland (macrofera)	<i>Rheedia cf. macrophylla</i>	19	
693	E1	c	t	lokus, basra	<i>Dicorynia guianensis</i>	23	
694	E1	c	l	watratite	<i>Dolioscarpus spp.</i>	4	
695	E1	c	t	zyzerhart	<i>Bocoa prouacensis</i>	21	
696	E1	c	t	zyzerhart	<i>Bocoa prouacensis</i>	13	
697	E1	c	t	bugrumaka	<i>Astrocaryum sciophilum</i>	13	
698	E1	c	t	barklak, man, bergi	<i>Eschweilera sp.</i>	11	
699	E1	c	u	paramaka	<i>Astrocaryum paramaca</i>		1
700	E1	c	h	calatea, hoogland	<i>Calathea elliptica</i>		1
701	E1	c	h	calyptrocarya, fijn blad	<i>Calyptrocarya glomerulata</i>		1
702	E1	c	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	2	
703	E1	c	t	tafrabon, hoogbos	<i>Cordia sp.</i>	12	
704	E1	c	u	maripa, bergi	<i>Attalea microcarpa</i>		1
705	E1	c	t	gubaya	<i>Jacaranda copaia</i>	18	
706	E1	c	t	barklak, man, bergi	<i>Eschweilera sp.</i>	13	
707	E1	d	t	switbonki, witbast	<i>Inga capitata</i>	10	
708	E1	d	t	kopi, kromanti	<i>Aspidosperma megalocarpon</i>	16	
709	E1	d	h	diplasia	<i>Diplasia karataefolia</i>		1
710	E1	d	t	pakiratiki	<i>Tapura capitulifera</i>	10	
711	E1	d	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	6	
712	E1	d	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
713	E1	d	h	miconia	<i>cf. Miconia spp.</i>		1
714	E1	d	h	rubiaceae, blauw-paarse bes	<i>Psychotria officinalis</i>		1
715	E1	d	t	zyzerhart	<i>Bocoa prouacensis</i>	10	
716	E1	d	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	32	
717	E1	d	t	pisi, kaneel	<i>Aniba megaphylla</i>	11	
718	E1	d	t	lokus, basra	<i>Dicorynia guianensis</i>	10	
719	E1	d	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	16	
720	E1	d	t	tamarinde, bos, gevlamde	<i>Zygia racemosa</i>	51	
721	E1	d	t	jakanta, rode bast	<i>Dendrobangia boliviana</i>	15	
722	E1	d	y	paramaka	<i>Astrocaryum paramaca</i>		1
723	E1	d	y	kumbu	<i>Oenocarpus spp.</i>		1
724	E1	d	t	zyzerhart	<i>Bocoa prouacensis</i>	11	
725	E1	d	l	maytenus	<i>Maytenus spp.</i>	4	
726	E1	d	y	kumbu, patawa	<i>Oenocarpus bataua</i>		1
727	E1	d	t	pisi, kaneel	<i>Aniba megaphylla</i>	15	

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
728	E1	d	u	tafrabon, knopo	<i>Cordia nodosa</i>		1
729	E1	d	t	lokus, basra	<i>Dicorynia guianensis</i>	55	
730	E1	d	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	13	
731	E1	d	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	29	
732	E1	d	t	bugrumaka	<i>Astrocaryum sciophilum</i>	11	
733	E1	d	t	kokriki, gewone	<i>Ormosia cf. paraensis</i>	14	
734	E1	d	t	lokus, basra	<i>Dicorynia guianensis</i>	13	
735	E1	d	l	dobrudua	<i>Strychnos cf. erichsonii</i>	3	
736	E1	d	t	bugrumaka	<i>Astrocaryum sciophilum</i>	10	
737	E1	d	h	heliconia, acuminata	<i>Heliconia cf. acuminata</i>		1
738	E1	d	t	kwepi, klein blad	<i>Hirtella obidensis</i>	21	
739	E1	d	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	30	
740	E1	d	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	2	
741	E1	d	t	kwepi, klein blad	<i>Hirtella obidensis</i>	45	
742	E1	d	t	barklak, man, bergi	<i>Eschweilera sp.</i>	10	
743	F7	a	h	heliconia, glauca	<i>Heliconia cf. acuminata</i>		1
744	F7	a	t	krapa, witte	<i>Carapa procera</i>	11	
745	F7	a	h	bamboe gras, dwerg	<i>Raddiella esenbeckii</i>		1
746	F7	a	h	adiantum, trifid blad	<i>Triplophyllum dicksonioides</i>		1
747	F7	a	u	paramaka	<i>Astrocaryum paramaca</i>		1
748	F7	a	t	pi si, zwarte	<i>Nectandra globosa</i>	16	
749	F7	a	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	4	
750	F7	a	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	35	
751	F7	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	11	
752	F7	a	t	bugrumaka	<i>Astrocaryum sciophilum</i>	11	
753	F7	a	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
754	F7	a	u	maripa, bergi	<i>Attalea microcarpa</i>		1
755	F7	a	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	11	
756	F7	a	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	31	
757	F7	a	l	abuta	<i>Abuta spp.</i>	2	
758	F7	a	t	uma-udu	<i>Casearia javitensis</i>	14	
759	F7	a	t	lokus, pinto, zwarte	<i>Talisia cf. simaboides</i>	14	
760	F7	a	t	geri-udu	<i>Pogonophora schomburgkiana</i>	12	
761	F7	a	h	trichomanes	<i>Trichomanes pinnatum</i>		1
762	F7	a	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	2	
763	F7	a	t	sawari, (ruwbast sopo-udu)	<i>Caryocar sp.</i>	24	
764	F7	a	t	guyave, bos, grijsbast	<i>cf. Calycalolpus revolutus</i>	10	
765	F7	a	h	voyria, rosea	<i>Voyria rosea</i>		1
766	F7	a	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	2	
767	F7	a	t	bebe, bergi	<i>Swartzia benthamiana</i>	21	
768	F7	a	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	5	
769	F7	a	l	watratite	<i>Dollicarpus spp.</i>	3	
770	F7	a	t	barklak, man, hoogland witbast	<i>Eschweilera coriacea</i>	18	
771	F7	a	l	guatteria	<i>Guatteria scandens</i>	6	
772	F7	a	l	petrea	<i>Petrea spp.</i>	2	
773	F7	a	t	barklak, man, hoogland witbast	<i>Eschweilera coriacea</i>	10	
774	F7	a	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	4	
775	F7	a	t	barklak, man, hoogland witbast	<i>Eschweilera coriacea</i>	19	

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
776	F7	b	t	jakanta, geelbast	<i>Hebepetalum humiriifolium</i>	41	
777	F7	b	l	forstroinia	<i>Forsteronia spp.</i>	2	
778	F7	b	t	menisperma, (niet abuta)	<i>Menispermaceae n.d. sp.</i>	11	
779	F7	b	t	tingimoni, sabana	<i>Protium heptaphyllum</i>	10	
780	F7	b	h	ananas, bos	<i>cf. Bromelia alta</i>		1
781	F7	b	h	calatea, hoogland	<i>Calathea elliptica</i>		1
782	F7	b	h	adiantum, (lindsea?)	<i>Adiantum fuliginosum</i>		1
783	F7	b	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
784	F7	b	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
785	F7	b	h	piper	<i>Piper spp.</i>		1
786	F7	b	t	letterhout, man	<i>Maquira guianensis</i>	10	
787	F7	b	u	rinorea	<i>Rinorea sp.</i>		1
788	F7	b	t	bugubugu, zwarte	<i>Swartzia remiger</i>	95	
789	F7	b	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	7	
790	F7	b	t	barklak, man, hoogland witbast	<i>Eschweilera coriacea</i>	22	
791	F7	b	l	machaerium	<i>Machaerium spp.</i>	11	
792	F7	b	h	bamboegras, dwerg (Olyra nana)	<i>Raddiella esenbeckii</i>		1
793	F7	b	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	24	
794	F7	b	t	sali, tingimoni, sabana	<i>Tetragastris hostmannii</i>	17	
795	F7	b	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	4	
796	F7	b	l	connaraceae	<i>Connaraceae n.d. spp.</i>	2	
797	F7	b	h	miconia	<i>cf. Miconia spp.</i>		1
798	F7	c	h	adiantum, trifid blad	<i>Triplophyllum dicksonioides</i>		1
799	F7	c	h	masusa, kapasi	<i>Renealmia spp.</i>		1
800	F7	c	h	heliconia, glauca	<i>Heliconia cf. acuminata</i>		1
801	F7	c	t	bugrumaka	<i>Astrocaryum sciophilum</i>	10	
802	F7	c	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	13	
803	F7	c	t	bugrumaka	<i>Astrocaryum sciophilum</i>	12	
804	F7	c	t	ijzerhart	<i>Bocoa prouacensis</i>	11	
805	F7	c	h	bamboegras, ovaal blad	<i>Ichnanthus panicoides</i>		1
806	F7	c	t	boletri, pinto (gewone, Pouteria)	<i>cf. Pouteria sp.</i>	43	
807	F7	c	h	bamboegras, dwerg (Olyra nana)	<i>Raddiella esenbeckii</i>		1
808	F7	c	h	trichomanes	<i>Trichomanes pinnatum</i>		1
809	F7	c	t	lokus, pinto, zwarte	<i>Talisia cf. simaboides</i>	19	
810	F7	c	t	bugrumaka	<i>Astrocaryum sciophilum</i>	14	
811	F7	c	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
812	F7	c	t	walaba	<i>Eperua falcata</i>	49	
813	F7	c	h	calatea, hoogland	<i>Calathea elliptica</i>		1
814	F7	c	l	connaraceae	<i>Connaraceae n.d. spp.</i>	6	
815	F7	c	h	anijs, man	<i>Piper spp.</i>		1
816	F7	c	t	fungu, witte drypetes	<i>Drypetes variabilis</i>	12	
817	F7	c	t	barklak, man, hoogland witbast	<i>Eschweilera coriacea</i>	34	
818	F7	c	y	bugrumaka	<i>Astrocaryum sciophilum</i>		1
819	F7	c	t	geri-udu	<i>Pogonophora schomburgkiana</i>	11	
820	F7	c	t	boletri, dju (hoogland)	<i>Pouteria sagotiana</i>	18	
821	F7	d	h	olyra, groot	<i>Olyra spp.</i>		1
822	F7	d	h	calatea, hoogland	<i>Calathea elliptica</i>		1
823	F7	d	h	masusa, kapasi	<i>Renealmia spp.</i>		1

Environmental and Social Impact Assessment

Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
824	F7	d	h	heliconia, acuminata	<i>Heliconia cf. acuminata</i>		1
825	F7	d	h	piper	<i>Piper spp.</i>		1
826	F7	d	t	kwatapatu	<i>Lecythis zabucajo</i>	42	
827	F7	d	t	walaba	<i>Eperua falcata</i>	41	
828	F7	d	t	pisi, kaneel	<i>Aniba megaphylla</i>	10	
829	F7	d	h	calyptrocarya	<i>Bisboeckleria microcephala</i>		1
830	F7	d	l	connaraceae	<i>Connaraceae n.d. spp.</i>	4	
831	F7	d	t	jakanta, witbast	<i>Discophora guianensis</i>	14	
832	F7	d	h	trichomanes	<i>Trichomanes pinnatum</i>		1
833	F7	d	u	nanaimaka, stekel plat en zwart	<i>Bactris cf. acanthocarpoides</i>		1
834	F7	d	u	paramaka	<i>Astrocaryum paramaca</i>		1
835	F7	d	u	maripa, bergi	<i>Attalea microcarpa</i>		1
836	F7	d	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	4	
837	F7	d	t	walaba	<i>Eperua falcata</i>	44	
838	F7	d	t	barklak, man, hoogland witbast	<i>Eschweilera coriacea</i>	33	
839	F7	d	l	petrea	<i>Petrea spp.</i>	2	
840	F7	d	l	forstroinia	<i>Forsteronia spp.</i>	13	
841	F7	d	t	bugrumaka	<i>Astrocaryum sciophilum</i>	11	
842	F7	d	u	paramaka	<i>Astrocaryum paramaca</i>		1
843	F7	d	t	barklak, uma, bergi	<i>Lecythis idatimon</i>	43	
844	F7	d	l	connaraceae	<i>Connaraceae n.d. spp.</i>	2	
845	F7	d	h	bamboegras, dwerg (Olyra nana)	<i>Raddiella esenbeckii</i>		1
846	F7	d	h	adiantum, (lindsea?)	<i>Adiantum fuliginosum</i>		1
847	F7	d	l	maripa, liaan	<i>Maripa spp.</i>	2	
848	F8	a	u	mispel, caulifloor	<i>Hienriettella caudata</i>		3
849	F8	a	l	petrea	<i>Petrea spp.</i>	2	
850	F8	a	t	switbonki, witbast	<i>Inga capitata</i>	21	
851	F8	a	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	3	
852	F8	a	l	petrea	<i>Petrea spp.</i>	3	
853	F8	a	h	miconia, ceramicarpa	<i>Miconia ceramicarpa</i>		1
854	F8	a	l	dobrudua, ourari (trio naam); klein blad	<i>Strychnos cf. guianensis</i>	6	
855	F8	a	t	gronfolo, hoogland	<i>Qualea albiflora</i>	33	
856	F8	a	u	nanaimaka, platte stekel	<i>Bactris cf. maraja</i>		2
857	F8	a	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	5	
858	F8	a	t	bugrumaka	<i>Astrocaryum sciophilum</i>	12	
859	F8	a	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	5	
860	F8	a	y	podosiri	<i>Euterpe oleracea</i>		1
861	F8	a	u	miconia, (groot #1)	<i>cf. Miconia sp. 1</i>		2
862	F8	a	u	miconia, (groot #2)	<i>cf. Miconia sp. 2</i>		1
863	F8	a	h	solanum	<i>Solanum sp.</i>		1
864	F8	a	h	piper	<i>Piper spp.</i>		1
865	F8	a	h	piper, dikblad	<i>Piper trichoneuron</i>		1
866	F8	a	h	varen	<i>Nephrolepis rivularis</i>		1
867	F8	a	y	solanum, rubiginosum	<i>Solanum rubiginosum</i>		1
868	F8	a	h	heliconia, acuminata	<i>Heliconia cf. acuminata</i>		1
869	F8	a	t	switbonki, rode bast	<i>Inga pezizifera</i>	33	
870	F8	a	h	calatea, hoogland	<i>Calathea elliptica</i>		1

Environmental and Social Impact Assessment

Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
871	F8	a	h	miconia, blauw-paarse bes	<i>Psychotria officinalis</i>		1
872	F8	a	e	philodendron, linne	<i>Philodendron insigne</i>		1
873	F8	a	u	solanum, rugosum	<i>Solanum rugosum</i>		1
874	F8	a	e	lindsea, epifiet	<i>Lindsea sp. 1</i>		1
875	F8	a	u	paramaka	<i>Astrocaryum paramaca</i>		1
876	F8	a	t	mispel, pari-udu	<i>Henriettea sp.</i>	16	
877	F8	a	y	busipaya, granbusi	<i>Pourouma spp.</i>		2
878	F8	a	h	costus, claviger	<i>Costus cf. claviger</i>		1
879	F8	a	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
880	F8	a	h	mispel, bruinblad	<i>Melastomataceae n.d. sp. 2</i>		1
881	A/F1	a	y	podosiri	<i>Euterpe oleracea</i>		1
882	A/F1	a	h	warimbo, laagland	<i>Ischnosiphon obliquus</i>		4
883	A/F1	a	e	cyclant	<i>Cyclanthaceae n.d. spp.</i>		1
884	A/F1	a	t	okro-udu	<i>Sterculia excelsa</i>	14	
885	A/F1	a	e	araceae	<i>Araceae n.d. spp.</i>		1
886	A/F1	a	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
887	A/F1	a	h	varen, diphylla	<i>Cyclodium mensicioides</i>		1
888	A/F1	a	h	masusa, kapasi	<i>Renealmia spp.</i>		1
889	A/F1	a	h	lindsea, lancea	<i>Lindsea lancea</i>		1
890	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	17	
891	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	11	
892	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	13	
893	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	15	
894	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	11	
895	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	13	
896	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	11	
897	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	16	
898	A/F1	a	t	panta, swamp, 5-part blad	<i>Tabebuia insignis</i>	15	
899	A/F1	a	h	heliconia	<i>Heliconia cf. richardiana</i>		1
900	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	12	
901	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	17	
902	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	17	
903	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	15	
904	A/F1	a	h	cyclant	<i>Cyclanthaceae n.d. sp.</i>		1
905	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	12	
906	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	13	
907	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	13	
908	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	13	
909	A/F1	a	t	podosiri	<i>Euterpe oleracea</i>	17	
910	A/F1	a	h	miconia, blauw bes cluster	<i>Clidemia dentata</i>		1
911	A/F1	a	t	tamarinde, zwamp	<i>Pithecellobium sp.</i>	12	
912	A/F1	a	t	panta, swamp, 5-part blad	<i>Tabebuia insignis</i>	79	
913	A/F1	a	t	hoepelhout	<i>Copaifera guyanensis</i>	11	
914	A/F1	a	l	abrasa, ficus	<i>Coussapoa spp.</i>	7	
915	A/F1	a	l	abrasa, ficus	<i>Coussapoa spp.</i>	10	
916	A/F1	a	l	abuta	<i>Abuta spp.</i>	6	
917	A/F1	a	l	petrea	<i>Petrea spp.</i>	4	
918	A/F1	a	l	petrea	<i>Petrea spp.</i>	3	
919	A/F1	a	l	petrea	<i>Petrea spp.</i>	2	

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
920	A/F1	a	h	tocoa	<i>Tocoa cf. guianensis</i>		1
921	A/F1	b	h	metaxya, rostrata	<i>Metaxya spp.</i>		2
922	A/F1	b	e	cyclant	<i>Cyclanthaceae n.d. spp.</i>		1
923	A/F1	b	h	warimbo, pagara, paarsbloem	<i>Monotagma spicatum</i>		2
924	A/F1	b	t	bebe, watra	<i>Pterocarpus officinalis</i>	20	
925	A/F1	b	t	weti-udu	<i>Tapirira guianensis</i>	14	
926	A/F1	b	t	podosiri	<i>Euterpe oleracea</i>	10	
927	A/F1	b	e	philodendron, linne	<i>Philodendron insigne</i>		1
928	A/F1	b	t	podosiri	<i>Euterpe oleracea</i>	11	
929	A/F1	b	y	podosiri	<i>Euterpe oleracea</i>		3
930	A/F1	b	t	podosiri	<i>Euterpe oleracea</i>	13	
931	A/F1	b	t	podosiri	<i>Euterpe oleracea</i>	14	
932	A/F1	b	t	podosiri	<i>Euterpe oleracea</i>	16	
933	A/F1	b	t	bebe, watra	<i>Pterocarpus officinalis</i>	32	
934	A/F1	b	h	tocoa	<i>Tocoa cf. guianensis</i>		1
935	A/F1	b	t	bebe, watra	<i>Pterocarpus officinalis</i>	31	
936	A/F1	b	t	podosiri	<i>Euterpe oleracea</i>	12	
937	A/F1	b	t	podosiri	<i>Euterpe oleracea</i>	15	
938	A/F1	b	t	podosiri	<i>Euterpe oleracea</i>	17	
939	A/F1	b	t	podosiri	<i>Euterpe oleracea</i>	16	
940	A/F1	b	t	podosiri	<i>Euterpe oleracea</i>	12	
941	A/F1	b	t	bebe, watra	<i>Pterocarpus officinalis</i>	50	
942	A/F1	b	t	jarijari	<i>Unonopsis glaucopetala</i>	14	
943	A/F1	b	l	taratitei	<i>Odontadenia cf. macrantha</i>	4	
944	A/F1	b	l	machaerium	<i>Machaerium spp.</i>	2	
945	A/F1	b	t	walaba	<i>Eperua falcata</i>	19	
946	A/F1	c	t	djadjidja	<i>Sclerobium melinonii</i>	35	
947	A/F1	c	t	ingipipa, grootblad	<i>Couratari gloriosa</i>	19	
948	A/F1	c	h	warimbo, knopo	<i>Ischnosiphon cf. gracilis</i>		1
949	A/F1	c	h	metaxya, rostrata	<i>Metaxya spp.</i>		1
950	A/F1	c	e	gesneria, witte bloem	<i>Paradrymonia campostyla</i>		3
951	A/F1	c	y	podosiri	<i>Euterpe oleracea</i>		2
952	A/F1	c	h	varen, diphylla	<i>Cyclodium mensicioides</i>		1
953	A/F1	c	h	heliconia, acuminata	<i>Heliconia cf. richardiana</i>		1
954	A/F1	c	e	araceae	<i>Araceae n.d. spp.</i>		1
955	A/F1	c	h	gurania	<i>Gurania spp.</i>		1
956	A/F1	c	t	mataki	<i>Symphonia globulifera</i>	22	
957	A/F1	c	h	warimbo, pagara, paarsbloem	<i>Monotagma spicatum</i>		3
958	A/F1	c	t	barklak, uma	<i>Lecythis corrugata</i>	18	
959	A/F1	c	h	masusa, kapasi	<i>Renealmia spp.</i>		1
960	A/F1	c	t	panta, hoogland (conceveiba hostmannii)	<i>Conceveiba guianensis</i>	34	
961	A/F1	c	l	dalbergia	<i>Dalbergia spp.</i>	3	
962	A/F1	c	t	ingipipa, grootblad	<i>Couratari gloriosa</i>	17	
963	A/F1	c	t	panta, swamp, 5-part blad	<i>Tabebuia insignis</i>	55	
964	A/F1	c	l	connaraceae	<i>Connaraceae n.d. spp.</i>	7	
965	A/F1	c	l	watratite	<i>Doliocarpus spp.</i>	5	
966	A/F1	c	l	petrea	<i>Petrea spp.</i>	2	
967	A/F1	c	h	miconia, blauw bes cluster	<i>Clidemia dentata</i>		1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
968	A/F1	c	h	tocoa	<i>Tocoa cf. guianensis</i>		1
969	A/F1	c	u	tasi	<i>Geonoma baculifera</i>		2
970	A/F1	c	t	barklak, uma	<i>Lecythis corrugata</i>	15	
971	A/F1	c	l	machaerium	<i>Machaerium spp.</i>	8	
972	A/F1	c	e	philodendron, linne	<i>Philodendron insigne</i>		1
973	A/F1	c	t	ingipipa, grootblad	<i>Couratari gloriosa</i>	15	
974	A/F1	c	t	podosiri	<i>Euterpe oleracea</i>	13	
975	A/F1	c	l	machaerium	<i>Machaerium spp.</i>	2	
976	A/F1	c	l	abuta	<i>Abuta spp.</i>	9	
977	A/F1	c	l	petrea	<i>Petrea spp.</i>	4	
978	A/F1	d	t	panta, swamp, 5-part blad	<i>Tabebuia insignis</i>	63	
979	A/F1	d	h	warimbo, pagara, paarsbloem	<i>Monotagma spicatum</i>		3
980	A/F1	d	y	maripa	<i>Attalea maripa</i>		1
981	A/F1	d	l	bignonia	<i>Bignoniaceae n.d. spp.</i>	5	
982	A/F1	d	h	varen, diphylla	<i>Cyclodium mensicioides</i>		1
983	A/F1	d	h	calatea, hoogland	<i>Calathea elliptica</i>		1
984	A/F1	d	e	philodendron, linne	<i>Philodendron insigne</i>		1
985	A/F1	d	h	warimbo, laagland	<i>Ischnosiphon obliquus</i>		3
986	A/F1	d	t	ingipipa, grootblad	<i>Couratari gloriosa</i>	22	
987	A/F1	d	u	keskesmaka	<i>Bactris brongniartii</i>		1
988	A/F1	d	t	fungu, rode	<i>Parinari campestris</i>	70	
989	A/F1	d	t	podosiri	<i>Euterpe oleracea</i>	11	
990	A/F1	d	u	palicourea	<i>Palicourea sp.</i>		1
991	A/F1	d	u	cyathea	<i>Cyathea cyatheoides</i>		1
992	A/F1	d	t	panta, swamp, 5-part blad	<i>Tabebuia insignis</i>	32	
993	A/F1	d	h	trichomanes	<i>Trichomanes pinnatum</i>		1
994	A/F1	d	h	miconia, rode vrucht cluster	<i>Maetia guianensis</i>		1
995	F9	a	l	machaerium	<i>Machaerium spp.</i>	6	
996	F9	a	l	machaerium	<i>Machaerium spp.</i>	7	
997	F9	a	l	forstroinia	<i>Forsteronia spp.</i>	3	
998	F9	a	l	sabicea	<i>Sabicea spp.</i>		3
999	F9	a	l	markoesa, fremusu	<i>Passiflora vespertilio</i>		1
1000	F9	a	t	tabakabron	<i>Croton matourensis</i>	24	
1001	F9	a	l	solanaceae	<i>Solanaceae n.d. sp.</i>	3	
1002	F9	a	t	tabakabron	<i>Croton matourensis</i>	26	
1003	F9	a	y	pinja, swamp	<i>Vismia cayennensis</i>		1
1004	F9	a	h	comolia	<i>Comolia sp.</i>		1
1005	F9	a	h	miconia	<i>Miconia racemosa</i>		1
1006	F9	a	h	xyrid	<i>Xyris fallax</i>		1
1007	F9	a	h	wetbaka, (stempelvaren)	<i>Pityrogramma calomelanos</i>		1
1008	F9	a	h	diabita	<i>Chelonanthus alatus</i>		1
1009	F9	a	h	rhynchospora	<i>Rhynchospora cf. barbata</i>		1
1010	F9	a	h	pratilobi	<i>Lycopodiella cernua</i>		1
1011	F9	a	h	gras, onbekend	<i>Panicum sp.</i>		1
1012	F9	a	h	solanum, subinerme	<i>Solanum subinerme</i>		1
1013	F9	a	h	isigrasi	<i>Fimbristylis sp.</i>		1
1014	F9	a	h	cyperus, luzulae	<i>Cyperus luzulae</i>		1
1015	F9	a	h	lindernia	<i>Lindernia sp.</i>		1
1016	F9	a	y	panta, swamp, 5-part blad	<i>Tabebuia insignis</i>		1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
1017	F9	a	h	markusa, sneki	<i>Passiflora foetida</i>		1
1018	F9	a	h	borreria, zonder hoofdje	<i>Spermacoce cf. latifolia</i>		1
1019	F9	a	y	kopi	<i>Goupia glabra</i>		1
1020	F9	a	h	fayadyan	<i>Hyptis lanceolata</i>		1
1021	F9	a	h	miconia, klein	<i>Pterolepis glomerata</i>		1
1022	F9	a	h	ludwigia	<i>Ludwigia octovalvis</i>		1
1023	F9	a	s	cassia, chrysophylla	<i>Senna chrysocarpa</i>		1
1024	F9	a	h	cyperac, 5-kant stengel	<i>Fuirena umbellata</i>		1
1025	F9	a	y	busipaya, uma	<i>Cecropia cf. peltata</i>		1
1026	F9	a	y	busipaya, man	<i>Cecropia sciadophylla</i>		1
1027	F9	a	y	obe, sabana	<i>Elaeis oleifera</i>		1
1028	F9	a	h	wetimaka	<i>Solanum jamaicense</i>		1
1029	F9	a	y	clusia, grandiflora	<i>Clusia grandiflora</i>		1
1030	F9	a	h	bolomaka	<i>Solanum stramonifolium</i>		1
1031	F9	a	t	busipaya, uma	<i>Cecropia cf. peltata</i>	15	
1032	F9	a	y	pangapanga, (kankanudu)	<i>Palicourea guianensis</i>		1
1033	C2	a	t	prasara, ingi	<i>Socratea exorrhiza</i>	12	
1034	C2	a	t	prasara, ingi	<i>Socratea exorrhiza</i>	15	
1035	C2	a	t	prasara, ingi	<i>Socratea exorrhiza</i>	10	
1036	C2	a	t	kaaimanudu, klein blad	<i>Ryania sp.</i>	16	
1037	C2	a	t	switbonki, inga muserki	<i>Inga bourgonii</i>	12	
1038	C2	a	t	switbonki, laagland / kokobe	<i>Zygia inequalis</i>	25	
1039	C2	a	t	walaba	<i>Eperua falcata</i>	22	
1040	C2	a	t	kototiki	<i>Mabea cf. piriri</i>	20	
1041	C2	a	t	prasara, ingi	<i>Socratea exorrhiza</i>	12	
1042	C2	a	t	krapa, witte	<i>Carapa procera</i>	12	
1043	C2	a	t	kototiki	<i>Mabea cf. piriri</i>	10	
1044	C2	a	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	20	
1045	C2	a	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	30	
1046	C2	a	t	kwepi, swamp	<i>Licania apetala</i>	30	
1047	C2	a	t	kandra-udu	<i>Isertia cf. spiciformis</i>	13	
1048	C2	a	t	weti-udu	<i>Tapirira guianensis</i>	45	
1049	C2	a	t	watrabiri	<i>Crudia glaberrima</i>	12	
1050	C2	a	t	kofi, bos	<i>Casearia pitumba</i>	14	
1051	C2	a	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	23	
1052	C2	a	t	sowtmeti-udu	<i>Maytenus myrsinoides</i>	45	
1053	C2	a	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	42	
1054	C2	b	t	podosiri	<i>Euterpe oleracea</i>	14	
1055	C2	b	t	busapra	<i>Sarcaulus brasiliensis</i>	18	
1056	C2	b	t	busapra	<i>Sarcaulus brasiliensis</i>	15	
1057	C2	b	t	podosiri	<i>Euterpe oleracea</i>	13	
1058	C2	b	t	tafrabon, laagland	<i>Cordia tetrandra</i>	10	
1059	C2	b	t	anaura, hoogland	<i>Couepia guianensis</i>	20	
1060	C2	b	t	jamboka, rode / jansnijder	<i>Pouteria guianensis</i>	23	
1061	C2	b	t	spikri-udu, laagland	<i>Mouriri grandiflora</i>	17	
1062	C2	b	t	busapra	<i>Sarcaulus brasiliensis</i>	14	
1063	C2	b	t	apra-udu	<i>Pouteria gonggripii</i>	21	
1064	C2	b	t	fungu, rode	<i>Parinari campestris</i>	65	
1065	C2	b	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	60	

Environmental and Social Impact Assessment

Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-3 Vegetation Survey Data (Raw Data, in Sequence Recorded)

#	Plot	Segment	Habitus ^(a)	Field name	Scientific name	DBH	Abund ^(b)
1066	C2	b	t	gawetri, zwarte	<i>Cupania cf. scrobiculata</i>	28	
1067	C2	b	t	prokoni, rode	<i>Inga alba</i>	45	
1068	C2	b	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	85	
1069	C2	b	t	bugrumaka	<i>Astrocaryum sciophilum</i>	10	
1070	C2	b	t	busipaya, granbusi	<i>Pourouma sp.</i>	13	
1071	C2	b	t	doifisiri, zwartbast	<i>Guarea cf. kunthiana</i>	80	
1072	C2	b	t	bugrumaka	<i>Astrocaryum sciophilum</i>	10	
1073	C2	b	t	fungu, zwart, kleinblad	<i>Licania cf. discolor</i>	40	
1074	C2	b	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	70	
1075	C2	c	t	guyave, bos, kleinblad	<i>Myrcia sylvatica</i>	19	
1076	C2	c	t	sali, rode	<i>Tetragastris altissima</i>	60	
1077	C2	c	t	letterhout, man	<i>Maquira guianensis</i>	18	
1078	C2	c	t	ingibarki, (Eugenia; lebi-tongo)	<i>Myrcia coumete</i>	19	
1079	C2	c	t	rafrunjanjan, grootblad	<i>Sloanea sp.</i>	18	
1080	C2	c	t	taja-udu, gele bloem	<i>Paypayrola guianensis</i>	13	
1081	C2	c	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	35	
1082	C2	c	t	letterhout, man	<i>Maquira guianensis</i>	14	
1083	C2	c	t	krapa, witte	<i>Carapa procera</i>	33	
1084	C2	c	t	kokriki, hoogland	<i>Ormosia couthinoi</i>	95	
1085	C2	c	t	rafrunjanjan, (grootblad)	<i>Sloanea sp.</i>	35	
1086	C2	c	t	riemhout, zwart, kleinblad	<i>Pouteria sp.</i>	21	
1087	C2	c	t	sali, rode	<i>Tetragastris altissima</i>	36	
1088	C2	c	t	bugrumaka	<i>Astrocaryum sciophilum</i>	10	
1089	C2	d	t	ingipipa, (Couratari stellata)	<i>Couratari stellata</i>	18	
1090	C2	d	t	lokus, pinto, zwarte	<i>Talisia cf. simaboides</i>	19	
1091	C2	d	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	14	
1092	C2	d	t	anaura, hoogland	<i>Couepia guianensis</i>	29	
1093	C2	d	t	ingipipa, (Couratari stellata)	<i>Couratari stellata</i>	75	
1094	C2	d	t	pikinmisiki	<i>Pseudopiptadenia suaveolens</i>	48	
1095	C2	d	t	ingipipa, (Couratari stellata)	<i>Couratari stellata</i>	70	
1096	C2	d	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	45	
1097	C2	d	t	tingimoni, harde bast	<i>Protium cf. polybotryum</i>	13	
1098	C2	d	t	barklak, uma, gewoon	<i>Lecythis corrugata</i>	55	
1099	C2	d	t	barklak, man hoogland gele bast	<i>Eschweilera pedicellata</i>	35	
1100	C2	d	t	bugrumaka	<i>Astrocaryum sciophilum</i>	11	

Notes:

a) Habitus = growth form:

t = mature tree

l = mature liana

y = immature tree or liana

h = mature herbaceous

u = other mature understory plant with woody stem

e = epiphyte in understory

s = mature shrub in a non-forest setting

x = recently felled tree

b) Abund. = % of segment covered by plant (measure of abundance)

1 = no more than 5%

2 = ca. 10%

3 = ca. 25%

4 = more

= record number; Plot = plot code; % = percent; DBH = diameter (of stem) at breast height.

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-4 Relative Abundance of Mature Tree Families in 14 Plots Inventoried by ESS in the Sabajo Study Area in 2017

Family	Total	Plots													
		0.1 ha								0.025 ha					
		A/F1	A1	C1	C2	F1	F7	F5	E1	F8	F9	F6	F4	F3	F2
Areaceae	91	29	8	16	10	4	5	7	11	1	0	0	0	0	0
Lecythidaceae	91	6	12	10	15	20	12	4	12	0	0	0	0	0	0
Chrysobalanaceae	43	1	3	9	5	7	0	7	11	0	0	0	0	0	0
Papilionaceae*	41	4	5	2	1	2	3	10	14	0	0	0	0	0	0
Caesalpiniaceae*	33	3	5	5	2	4	3	0	11	0	0	0	0	0	0
Violaceae	20	0	10	1	1	2	2	0	4	0	0	0	0	0	0
Euphorbiaceae	19	1	6	0	2	1	3	1	3	0	2	0	0	0	0
Mimosaceae*	16	1	0	2	4	3	0	1	3	2	0	0	0	0	0
Sapotaceae	16	0	1	3	6	1	2	1	2	0	0	0	0	0	0
Meliaceae	13	0	2	6	3	0	1	1	0	0	0	0	0	0	0
Lauraceae	12	0	1	0	0	2	2	4	3	0	0	0	0	0	0
Annonaceae	8	1	0	0	0	0	0	6	1	0	0	0	0	0	0
Bignoniaceae	8	5	0	2	0	0	0	0	1	0	0	0	0	0	0
Sapindaceae	8	0	1	0	2	0	2	3	0	0	0	0	0	0	0
Burseraceae	7	0	0	0	3	1	2	0	1	0	0	0	0	0	0
Myristicaceae	7	0	0	0	0	1	0	2	4	0	0	0	0	0	0
Salicaceae	6	0	0	0	2	0	1	3	0	0	0	0	0	0	0
Goupiaceae	5	0	0	4	0	0	0	1	0	0	0	0	0	0	0
Clusiaceae	4	1	1	0	0	0	0	1	1	0	0	0	0	0	0
Elaeocarpaceae	4	0	0	0	2	1	0	1	0	0	0	0	0	0	0
Malvaceae	4	0	1	0	0	1	0	0	2	0	0	0	0	0	0
Moraceae	4	0	0	0	2	0	1	0	1	0	0	0	0	0	0
Boraginaceae	3	0	0	1	1	0	0	0	1	0	0	0	0	0	0
Icacinaceae	3	0	0	0	0	2	1	0	0	0	0	0	0	0	0
Melastomataceae	3	0	1	0	1	0	0	0	0	1	0	0	0	0	0
Myrtaceae	3	0	0	0	2	0	1	0	0	0	0	0	0	0	0
Anacardiaceae	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0
Apocynaceae	2	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Cecropiaceae	2	0	0	0	1	0	0	0	0	0	1	0	0	0	0
Rubiaceae	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Sterculiaceae	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Caryocaraceae	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Celastraceae	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Combretaceae	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Dichapetaceae	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Humiriaceae	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Icanicaceae	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Linaceae	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Menispermaceae	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Nyctaginaceae	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Olacaceae	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Vochysiaceae	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Total	493	54	60	61	68	54	44	55	89	5	3	0	0	0	0
Total Families	42	12	17	12	22	17	18	18	21	4	2	0	0	0	0

Notes:

Trees with stems of DBH of at least 10 cm (Figures are no. of stems in plots of 0.1 ha or 0.025 ha, except bottom row).

* Identifies 3 traditionally distinguished groups currently all considered Fabaceae

ha = hectare; cm = centimeter; ESS = ESS Environment; DBH = diameter (of stem) at breast height.

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-5 Relative Abundance of Mature Liana Families in 14 Plots Inventoried by ESS in the Sabajo Study Area in 2017

Family	Total	Plots													
		0.1 ha								0.025 ha					
		A/F1	A1	C1	C2	F1	F7	F5	E1	F8	F9	F6	F4	F3	F2
Bignoniaceae	32	1	2	6	-	4	8	4	4	3	0	0	0	0	0
Papilionaceae*	27	4	4	8	-	4	1	3	1	0	2	0	0	0	0
Dilleniaceae	19	1	4	1	-	4	1	4	4	0	0	0	0	0	0
Menispermaceae	17	2	3	3	-	5	1	2	1	0	0	0	0	0	0
Connaraceae	15	1	1	2	-	3	4	2	2	0	0	0	0	0	0
Clusiaceae	13	0	8	2	-	3	0	0	0	0	0	0	0	0	0
Polygonaceae	12	0	4	2	-	6	0	0	0	0	0	0	0	0	0
Verbenaceae	9	5	0	0	-	0	2	0	0	2	0	0	0	0	0
Apocynaceae	6	1	1	1	-	0	2	0	0	0	1	0	0	0	0
Loganiaceae	6	0	1	0	-	0	0	3	1	1	0	0	0	0	0
Caesalpiniaceae*	4	0	0	3	-	1	0	0	0	0	0	0	0	0	0
Linaceae	4	0	3	1	-	0	0	0	0	0	0	0	0	0	0
Urticaceae	3	2	0	0	-	0	0	1	0	0	0	0	0	0	0
Annonaceae	1	0	0	0	-	0	1	0	0	0	0	0	0	0	0
Celastraceae	1	0	0	0	-	0	0	0	1	0	0	0	0	0	0
Combretaceae	1	0	0	0	-	1	0	0	0	0	0	0	0	0	0
Convolvulaceae	1	0	0	0	-	0	1	0	0	0	0	0	0	0	0
Malpighiaceae	1	0	0	0	-	1	0	0	0	0	0	0	0	0	0
Marcgraviaceae	1	0	1	0	-	0	0	0	0	0	0	0	0	0	0
n.d. (unidentified)	1	0	0	1	-	0	0	0	0	0	0	0	0	0	0
Solanaceae	1	0	0	0	-	0	0	0	0	0	1	0	0	0	0
Trigoniaceae	1	0	1	0	-	0	0	0	0	0	0	0	0	0	0
Total	176	17	33	30	-	32	21	19	14	6	4	0	0	0	0
Total Families	22	8	12	11	-	10	9	7	7	3	3	0	0	0	0

Notes:

lianas with stems of DBH of at least 2 cm (Figures are no. of stems in plots of 0.1 ha or 0.025 ha, except bottom row).

* Identifies 2 traditionally distinguished groups currently both considered Fabaceae

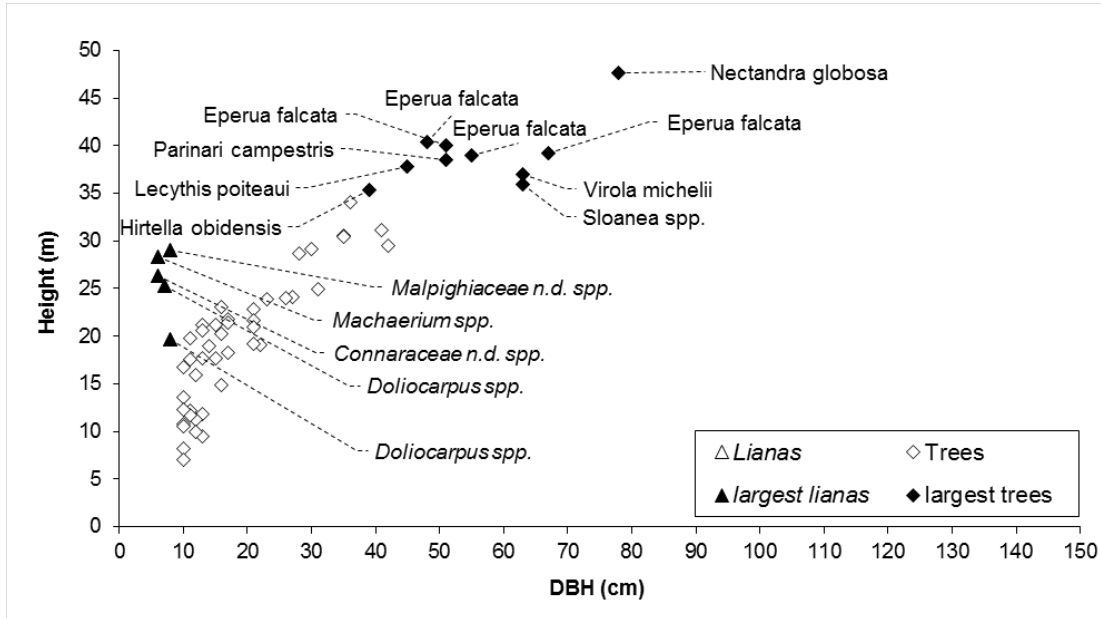
ha = hectare; cm = centimeter; ESS = ESS Environment; DBH = diameter (of stem) at breast height.

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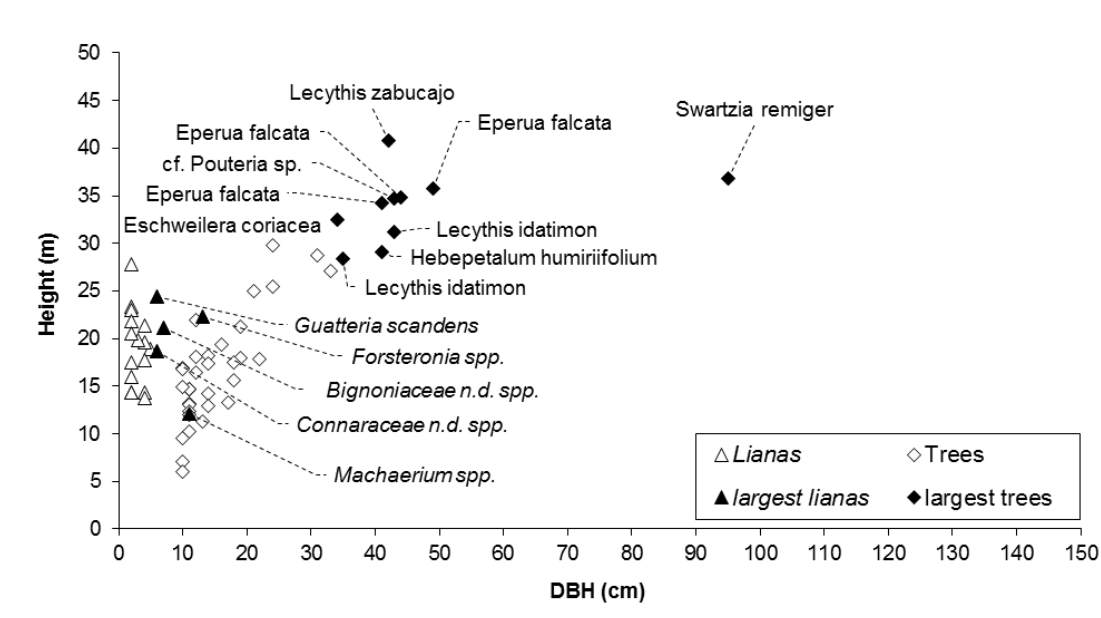
Figure 4A-2 Vegetation Profiles of Habitat/Vegetation Types Based on Large Trees and Lianas

A. High dryland forest on deeper soil (Type F). Location F1



m = meter; cm = centimeter; DBH = diameter (of stem) at breast height.

B. High dryland forest on deeper soil (Type F). Location F7



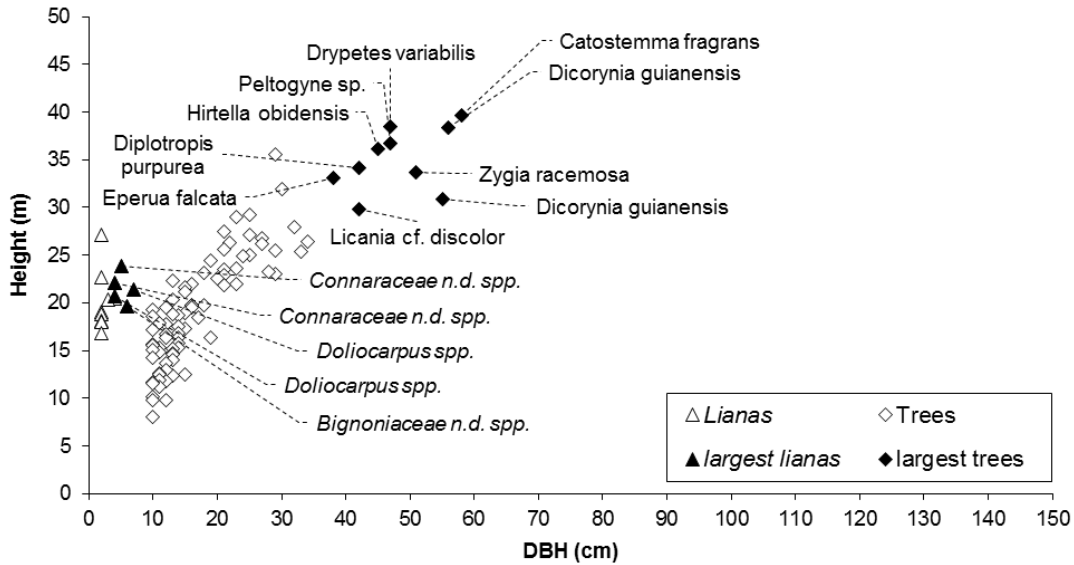
m = meter; cm = centimeter; DBH = diameter (of stem) at breast height.

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Appendix 4A, Supporting Information for Vegetation Baseline Study

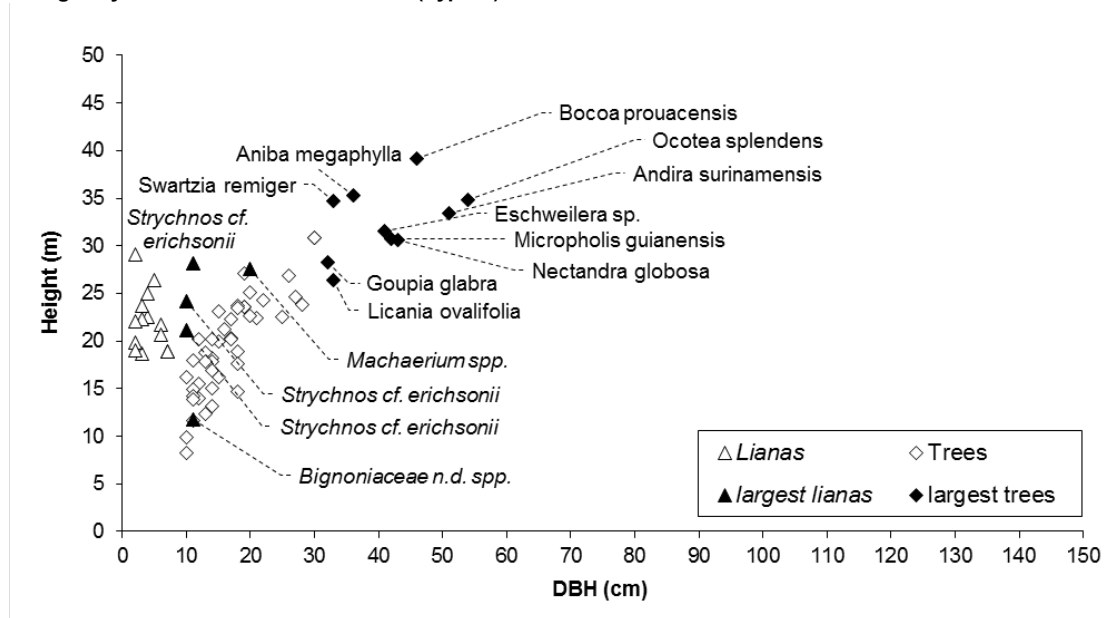
Figure 4A-2 Vegetation Profiles of Habitat/Vegetation Types Based on Large Trees and Lianas

C. High dryland forest on shallower soil (Type E). Locations E1.



m = meter; cm = centimeter; DBH = diameter (of stem) at breast height.

D. High dryland forest on shallower soil (Type E). Locations F5.



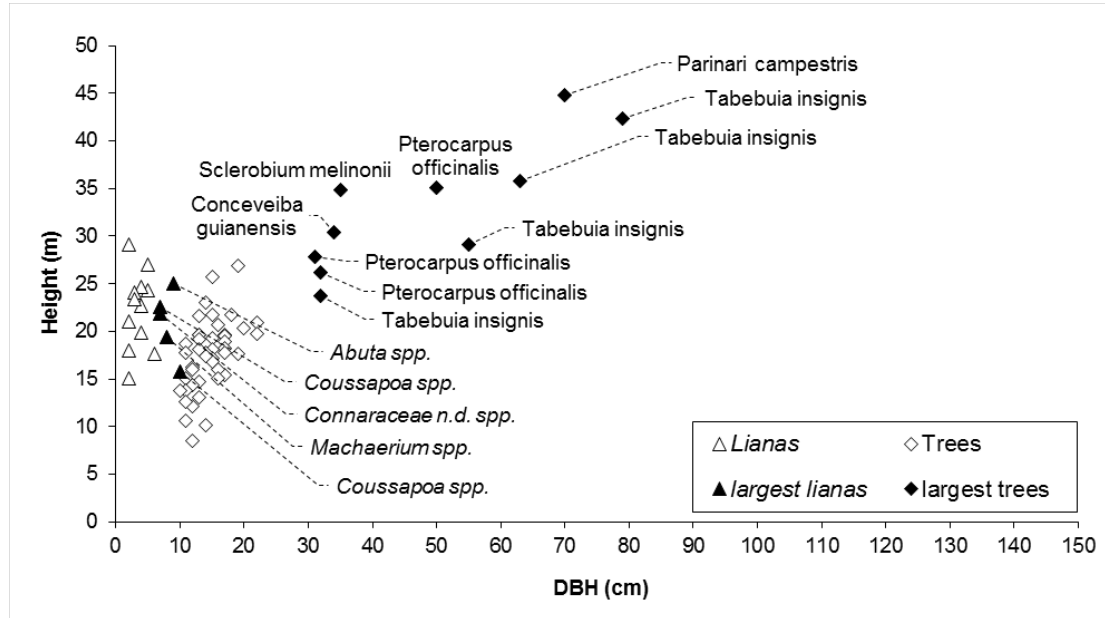
m = meter; cm = centimeter; DBH = diameter (of stem) at breast height.

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Appendix 4A, Supporting Information for Vegetation Baseline Study

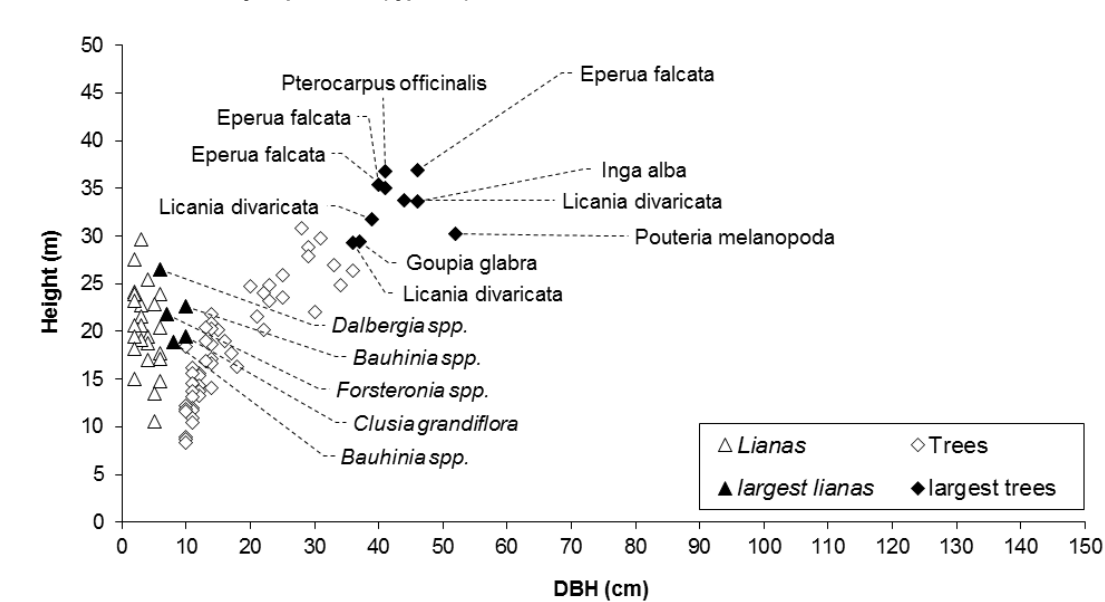
Figure 4A-2 Vegetation Profiles of Habitat/Vegetation Types Based on Large Trees and Lianas

D. Creek forest. Locations A/F1.



m = meter; cm = centimeter; DBH = diameter (of stem) at breast height.

E. Marsh forest in sandy depression (type C1). Location C1.



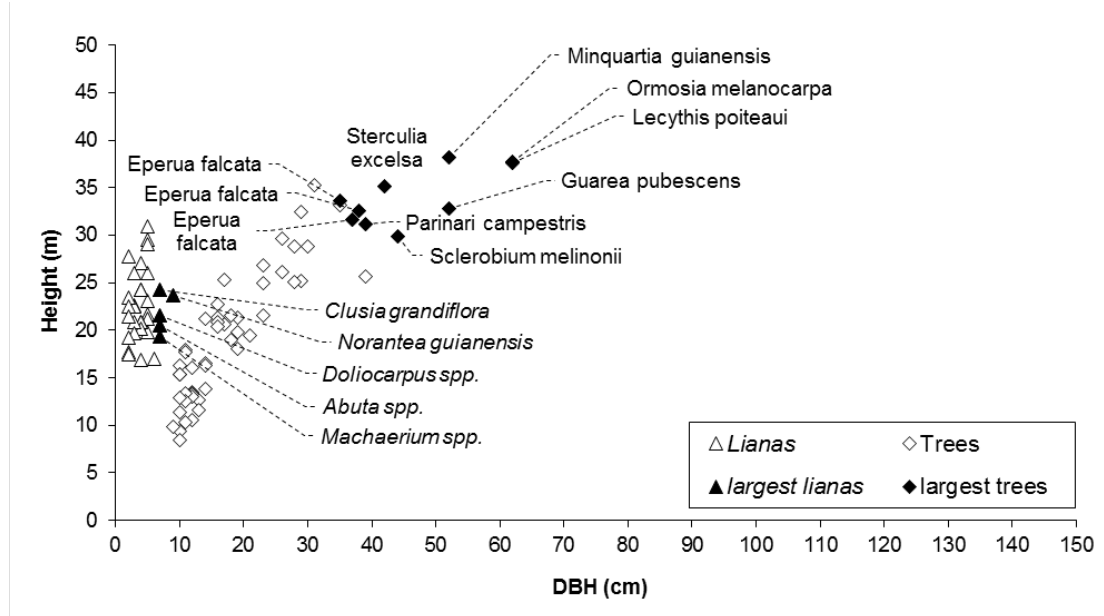
m = meter; cm = centimeter; DBH = diameter (of stem) at breast height.

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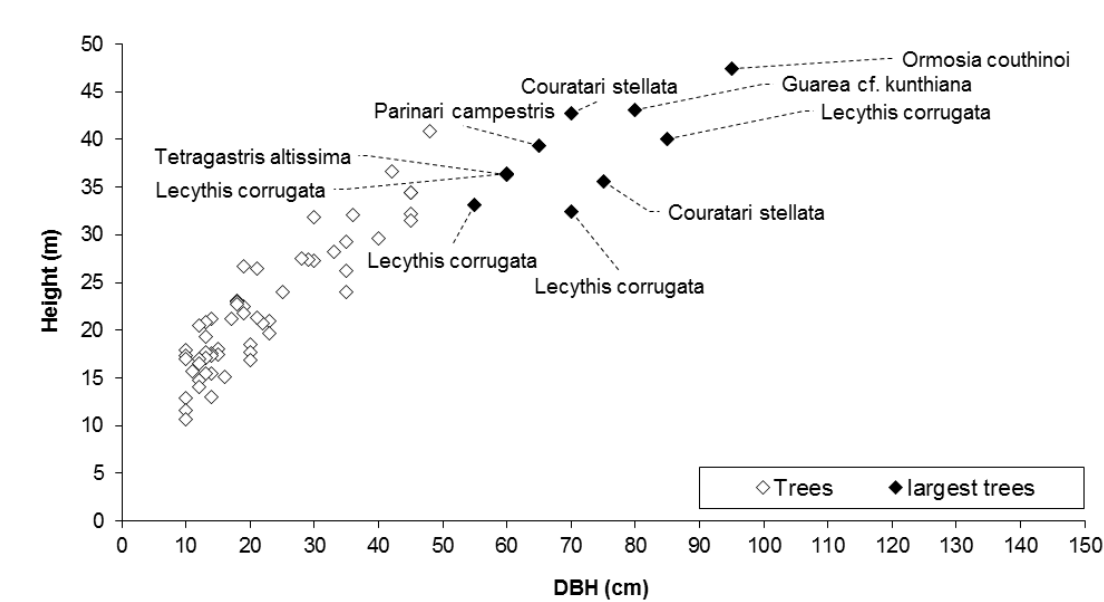
Figure 4A-2 Vegetation Profiles of Habitat/Vegetation Types Based on Large Trees and Lianas

F. Marsh forest in loamy depression (type A). Location A1.



m = meter; cm = centimeter; DBH = diameter (of stem) at breast height.

G. Marsh forest in the Kleine Commewijne floodplain. Location C2. (Large trees only)



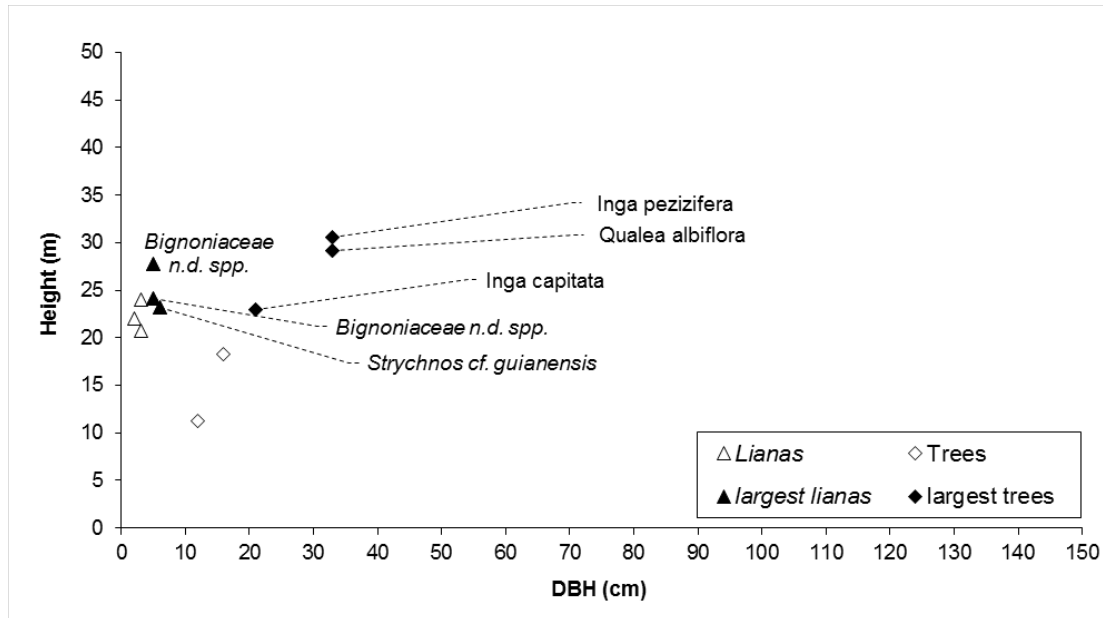
m = meter; cm = centimeter; DBH = diameter (of stem) at breast height.

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Figure 4A-2 Vegetation Profiles of Habitat/Vegetation Types Based on Large Trees and Lianas

H. Older secondary forest. Location F8.



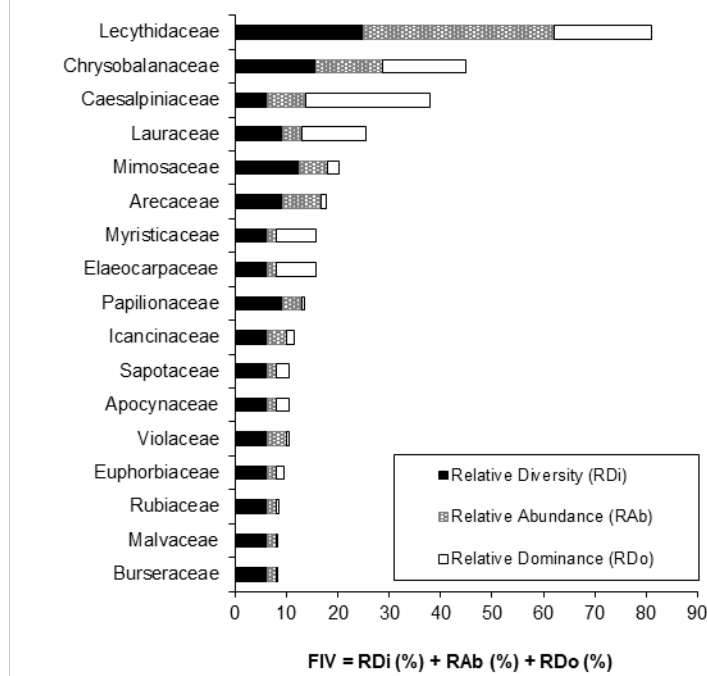
m = meter; cm = centimeter; DBH = diameter (of stem) at breast height.

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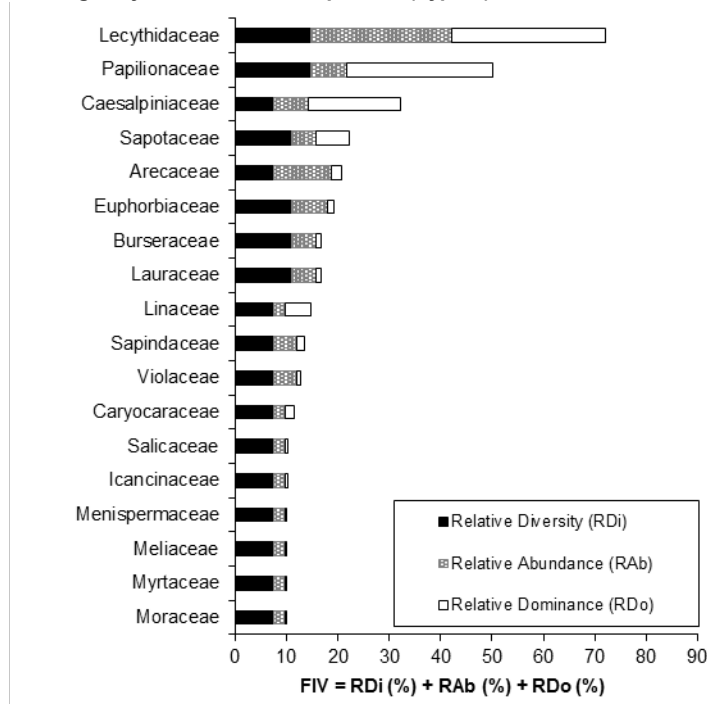
Appendix 4A, Supporting Information for Vegetation Baseline Study

Figure 4A-3 Relative Importance of Tree Families for Different Habitat/Vegetation Types

A. High dryland forest on deeper soil (Type F). Location F1



B. High dryland forest on deeper soil (Type F). Location F7

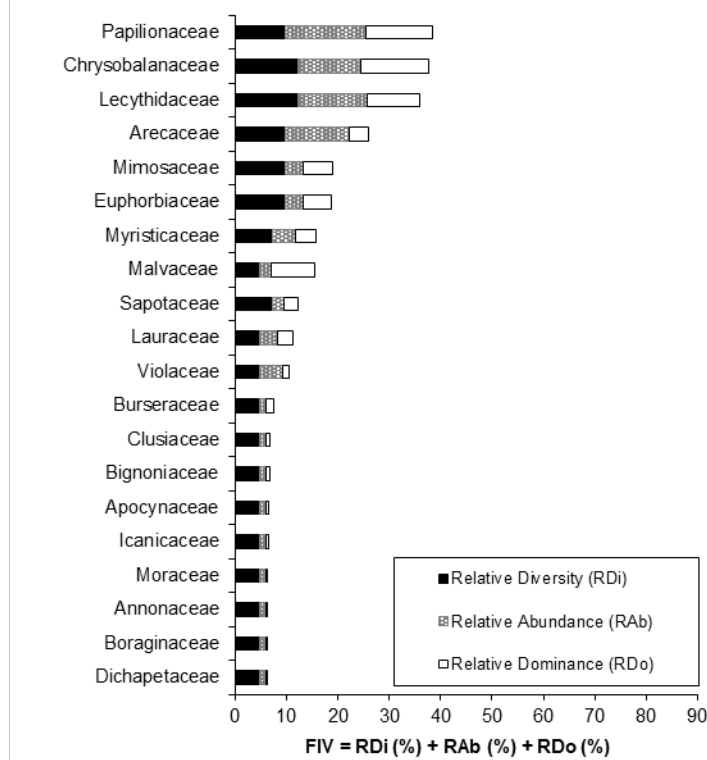


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Appendix 4A, Supporting Information for Vegetation Baseline Study

Figure 4A-3 Relative Importance of Tree Families for Different Habitat/Vegetation Types

C. High dryland forest on shallower soil (Type E). Locations E1.



D. High dryland forest on shallower soil (Type E). Locations F5.

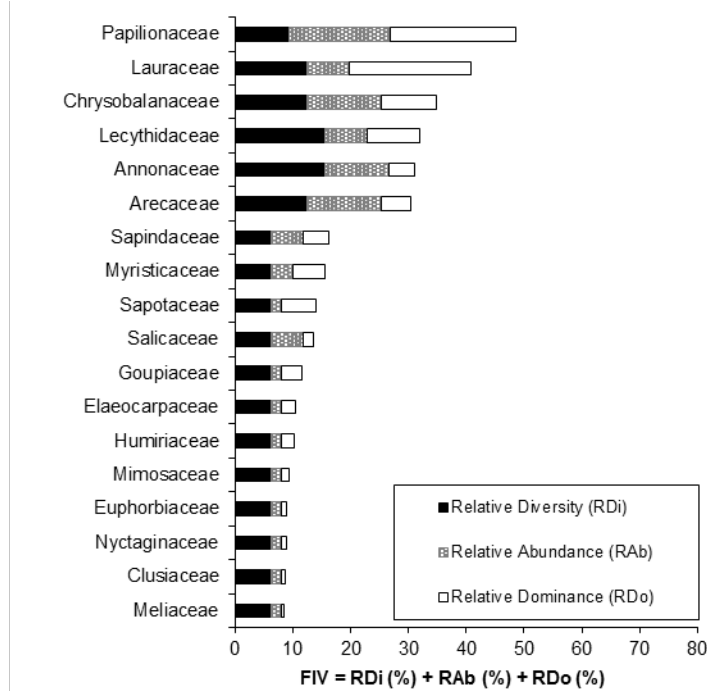
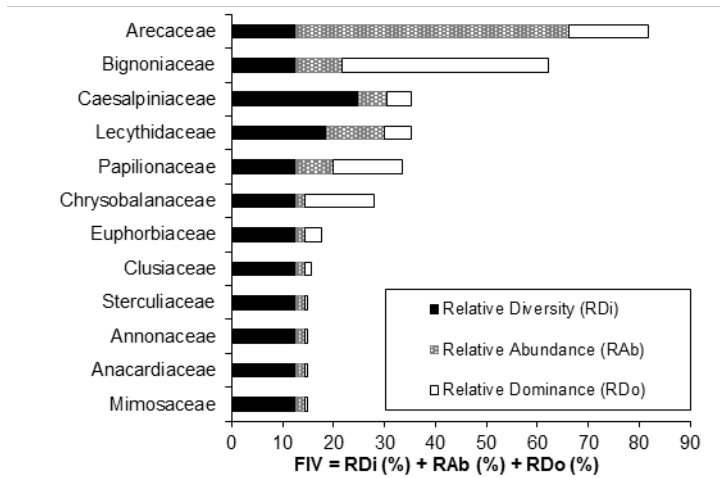


Figure 4A-3 Relative Importance of Tree Families for Different Habitat/Vegetation Types

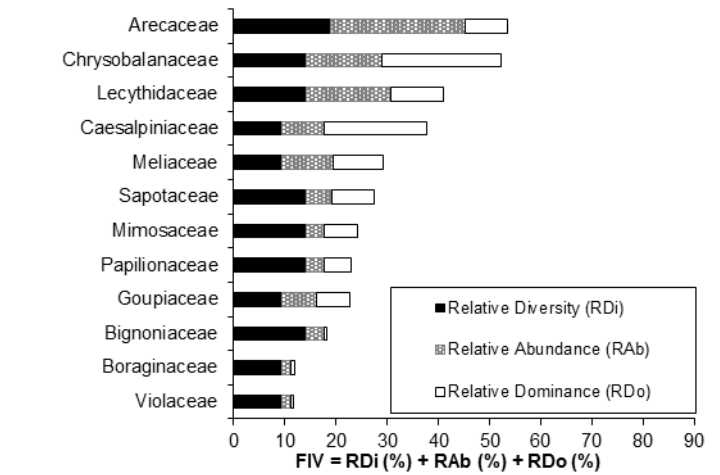
E. Creek forest. Locations A/F1.

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Appendix 4A, Supporting Information for Vegetation Baseline Study



F. Marsh forest in sandy depression (type C1). Location C1.

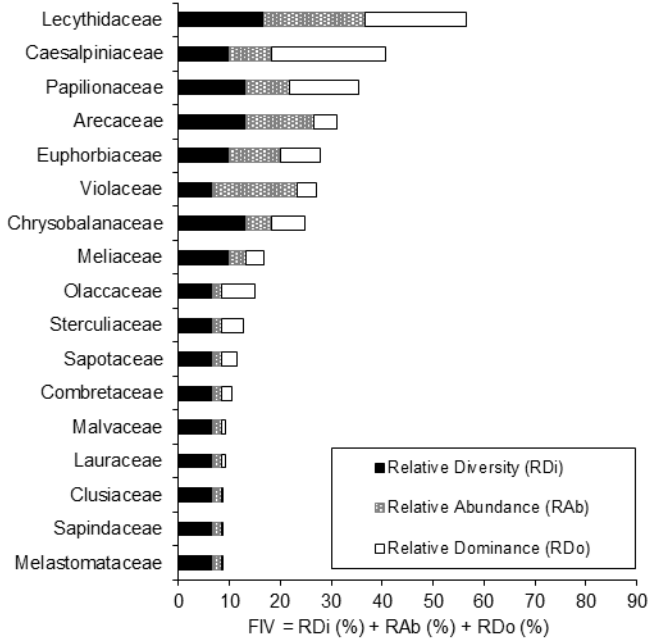


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Appendix 4A, Supporting Information for Vegetation Baseline Study

Figure 4A-3 Relative Importance of Tree Families for Different Habitat/Vegetation Types

G. Marsh forest in loamy depression (type A). Location A1.



H. Marsh forest in the Kleine Commewijne floodplain. Location C2. (Large trees only)

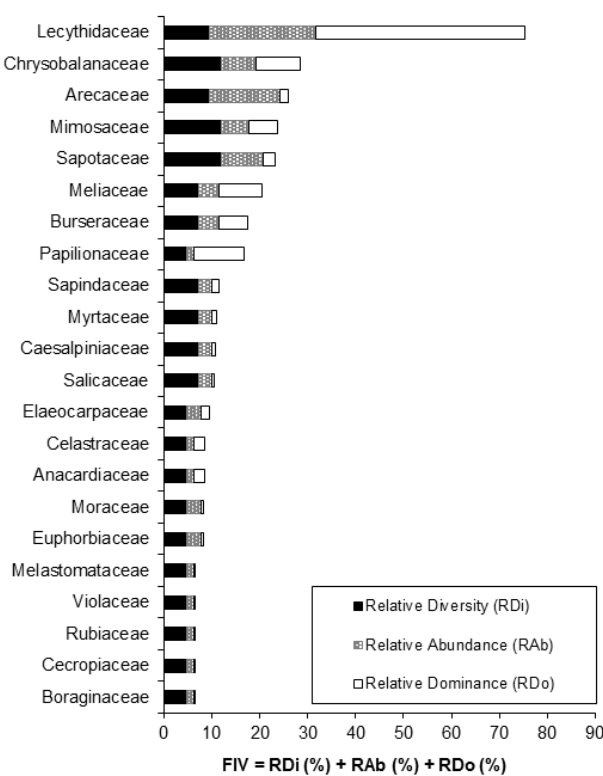
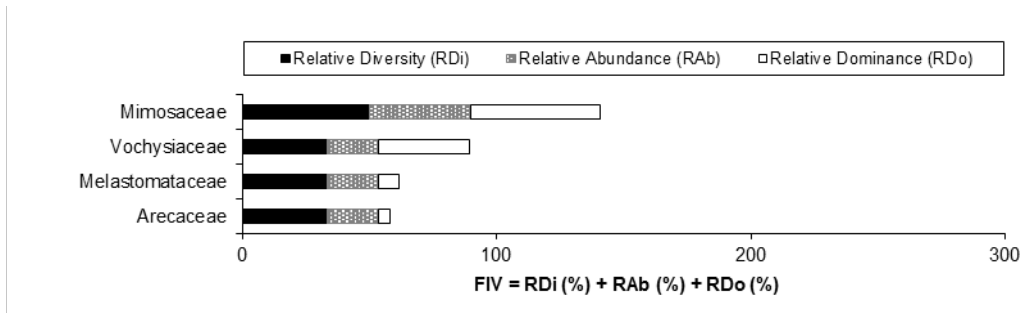


Figure 4A-3 Relative Importance of Tree Families for Different Habitat/Vegetation Types

I. Older secondary forest. Location F8.

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Appendix 4A, Supporting Information for Vegetation Baseline Study



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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-6 Number Liana Stems, per Taxon, per Plot

Scientific name	A/F1	A1	C1	C2	E1	F1	F2	F3	F4	F5	F6	F7	F8	F9	Total
<i>Abuta spp.</i>	2	3	3		1	5				2		1			17
<i>Apocynaceae n.d. spp.</i>		1													1
<i>Bauhinia spp.</i>		1	3			1									5
<i>Bignoniaceae n.d. spp.</i>	1	1	2		3	4				4		8	3		26
<i>Clusia grandiflora</i>		8	2			3									13
<i>Coccoloba spp.</i>		4	2			6									12
<i>Combretaceae n.d. spp.</i>						1									1
<i>Connaraceae n.d. spp.</i>	1	1	2		2	3				2		4			15
<i>Coussapoa spp.</i>	2									1					3
<i>Cydista cf. aequinoctialis</i>			1												1
<i>Dalbergia spp.</i>	1		6							1					8
<i>Dichapetala spp.</i>		3	1												4
<i>Dolioscarpus spp.</i>	1	4	1		4	4				4		1			19
<i>Forsteronia spp.</i>			1									2		1	4
<i>Guatteria scandens</i>												1			1
<i>Machaerium spp.</i>	3	4	1		1	4				2		1		2	18
<i>Malpighiaceae n.d. spp.</i>						1									1
<i>Maripa spp.</i>												1			1
<i>Maytenus spp.</i>					1										1
<i>Memora spp.</i>			3		1										4
<i>Mucuna spp.</i>			1												1
<i>n.d. n.d. sp.</i>			1												1
<i>Norantea guianensis</i>		1													1
<i>Odontadenia cf. macrantha</i>	1														1
<i>Petrea spp.</i>	5											2	2		9
<i>Solanaceae n.d. sp.</i>														1	1
<i>Strychnos cf. erichsonii</i>		1			1					3					5
<i>Strychnos cf. guianensis</i>													1		1
<i>Trigonias spp.</i>		1													1
Total	17	33	30	0	14	32	0	0	0	19	0	21	6	4	176
Total number taxa/species	9	13	15	0	8	10	0	0	0	8	0	9	3	3	29

Table 4A-7 Number Tree Stems, per Species, per Plot

Scientific name	A/F1	A1	C1	C2	E1	F1	F2	F3	F4	F5	F6	F7	F8	F9	Total
<i>Andira surinamensis</i>										1					1
<i>Aniba megaphylla</i>					3					2		1			6
<i>Aspidosperma megalocarpon</i>					1										1
<i>Astrocaryum sciophilum</i>		4	4	4	8	3				2		5	1		31
<i>Attalea maripa</i>		1	1												2
<i>Bocoa prouacensis</i>		1			12	1				8		1			23
<i>Carapa procera</i>		1	6	2								1			10
<i>Caryocar sp.</i>												1			1
<i>Casearia javitensis</i>										3		1			4
<i>Casearia pitumba</i>				1											1
<i>Catostemma fragrans</i>					2	1									3
<i>Cecropia cf. peltata</i>														1	1
<i>cf. Calycalolpus revolutus</i>												1			1
<i>cf. Neea floribunda</i>										1					1

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Table 4A-7 Number Tree Stems, per Species, per Plot

Scientific name	A/F1	A1	C1	C2	E1	F1	F2	F3	F4	F5	F6	F7	F8	F9	Total
<i>cf. Oxandra asbeckii</i>					1					3					4
<i>cf. Pouteria sp.</i>												1			1
<i>Chaetocarpus schomburgkianus</i>		4			1	1									6
<i>Chrysophyllum cuneifolium</i>			1												1
<i>Conceveiba guianensis</i>	1														1
<i>Copaifera guyanensis</i>	1														1
<i>Cordia sagotii</i>			1												1
<i>Cordia sp.</i>					1										1
<i>Cordia tetrandra</i>				1											1
<i>Couepia guianensis</i>				2	2					1					5
<i>Couratari gloriosa</i>	4														4
<i>Couratari stellata</i>				3											3
<i>Croton matourensis</i>														2	2
<i>Crudia glaberrima</i>				1											1
<i>Cupania cf. scrobiculata</i>				1											1
<i>Dendrobanzia boliviana</i>					1										1
<i>Dicorynia guianensis</i>					5										5
<i>Diploporis purpurea</i>					1										1
<i>Discophora guianensis</i>						2						1			3
<i>Drypetes variabilis</i>		2			1					1		1			5
<i>Eperua falcata</i>	1	4	5	1	4	4						3			22
<i>Ephedranthus guianensis</i>										1					1
<i>Eriotheca surinamensis</i>		1													1
<i>Eschweilera cf. micrantha</i>					1										1
<i>Eschweilera coriacea</i>						1				1		6			8
<i>Eschweilera pedicellata</i>		2	3	3	1	1				1					11
<i>Eschweilera simiorum</i>						1									1
<i>Eschweilera sp.</i>					4	4				1					9
<i>Euterpe oleracea</i>	29	3	11	2											45
<i>Excellodendron barbatum</i>					5	1									6
<i>Geissospermum laeve</i>						1									1
<i>Goupia glabra</i>			4							1					5
<i>Guarea cf. kunthiana</i>				1											1
<i>Guarea pubescens</i>		1								1					2
<i>Gustavia hexapetala</i>		1													1
<i>Hebepetalum humiriifolium</i>												1			1
<i>Henriettea sp.</i>													1		1
<i>Hirtella obidensis</i>					3	3				2					8
<i>Inga alba</i>			1	1		1									3
<i>Inga bourgonii</i>				1											1
<i>Inga capitata</i>					1	1							1		3
<i>Inga pezizifera</i>					1								1		2
<i>Inga rubiginosa</i>			1												1
<i>Iryanthera sagotiana</i>					2					2					4
<i>Isertia cf. spiciformis</i>				1											1
<i>Jacaranda copaia</i>			1		1										2
<i>Lecythis corrugata</i>	2	8	7	9		1				1					28
<i>Lecythis idatimon</i>					6	10						5			21
<i>Lecythis poiteaui</i>		1				2									3
<i>Lecythis zabucajo</i>												1			1
<i>Licania apetala</i>		1	2	1											4

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Table 4A-7 Number Tree Stems, per Species, per Plot

Scientific name	A/F1	A1	C1	C2	E1	F1	F2	F3	F4	F5	F6	F7	F8	F9	Total
<i>Licania cf. discolor</i>				1	1										2
<i>Licania densiflora</i>		1													1
<i>Licania divaricata</i>			7												7
<i>Licania majuscula</i>						2									2
<i>Licania ovalifolia</i>										4					4
<i>Lonchocarpus heptaphyllus</i>			1												1
<i>Mabea cf. piriri</i>				2											2
<i>Maquira guianensis</i>				2	1							1			4
<i>Maytenus myrsinoides</i>				1											1
<i>Menispermaceae n.d. sp.</i>												1			1
<i>Micropholis guianensis</i>										1					1
<i>Micropholis sp.</i>					1										1
<i>Minquartia guianensis</i>		1													1
<i>Mouriri grandiflora</i>				1											1
<i>Mouriri sp.</i>		1													1
<i>Myrcia coumete</i>				1											1
<i>Myrcia sylvatica</i>				1											1
<i>Nectandra globosa</i>		1				1				1		1			4
<i>Ocotea petalentera</i>						1									1
<i>Ocotea splendens</i>										1					1
<i>Oenocarpus bacaba</i>					1	1				2					4
<i>Oenocarpus sp.</i>					2					3					5
<i>Ormosia cf. paraensis</i>					1										1
<i>Ormosia couthinoides</i>				1											1
<i>Ormosia melanocarpa</i>		1													1
<i>Palicourea guianensis</i>						1									1
<i>Parinari campestris</i>	1	1		1		1									4
<i>Paypayrola guianensis</i>		10	1	1	4	2						2			20
<i>Peltogyne sp.</i>					1										1
<i>Pithecellobium sp.</i>	1														1
<i>Pogonophora schomburgkiana</i>					1							2			3
<i>Pourouma sp.</i>				1											1
<i>Pouteria gonggrijpii</i>				1											1
<i>Pouteria guianensis</i>				1	1	1									3
<i>Pouteria melanopoda</i>			2												2
<i>Pouteria sagotiana</i>		1										1			2
<i>Pouteria sp.</i>				1											1
<i>Protium cf. polybotryum</i>				1											1
<i>Protium heptaphyllum</i>												1			1
<i>Pseudopiptadenia suaveolens</i>				1											1
<i>Pterocarpus officinalis</i>	4		1												5
<i>Qualea albiflora</i>													1		1
<i>Rheedia cf. macrophylla</i>					1					1					2
<i>Ryania sp.</i>				1											1
<i>Sacoglottis guianensis</i>										1					1
<i>Sarcaulus brasiliensis</i>				3											3
<i>Sclerobium melinonii</i>	1	1													2
<i>Sloanea sp.</i>				2						1					3
<i>Sloanea spp.</i>						1									1
<i>Socratea exorrhiza</i>				4											4

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-7 Number Tree Stems, per Species, per Plot

Scientific name	A/F1	A1	C1	C2	E1	F1	F2	F3	F4	F5	F6	F7	F8	F9	Total
<i>Sterculia excelsa</i>	1	1													2
<i>Swartzia benthamiana</i>						1						1			2
<i>Swartzia remiger</i>		3								1		1			5
<i>Symphonia globulifera</i>	1														1
<i>Tabebuia insignis</i>	5		1												6
<i>Talisia cf. micrantha</i>		1													1
<i>Talisia cf. simaboides</i>				1						3		2			6
<i>Tapirira guianensis</i>	1			1											2
<i>Tapura capitulifera</i>					1										1
<i>Terminalia sp.</i>		1													1
<i>Tetragastris altissima</i>				2											2
<i>Tetragastris hostmannii</i>					1							1			2
<i>Tetragastris panamensis</i>						1									1
<i>Thyrsodium sp.</i>										1					1
<i>Tovomita sp.</i>		1													1
<i>Unonopsis glaucopetala</i>	1									1					2
<i>Virola michelii</i>					2	1									3
<i>Vouacapoua americana</i>					1										1
<i>Zygia inequalis</i>				1											1
<i>Zygia racemosa</i>					1	1				1					3
Total	54	60	61	68	89	54	0	0	0	55	0	44	5	3	493
Total taxa / species	15	29	20	41	40	31	0	0	0	32	0	26	5	2	135

Table 4A-8 Number of Segments in which Understory Plant or Plant of Open / Non-forest Vegetation was Present, per Species / Taxon, per Plot

Scientific name	A/F1	A1	C1	C2	E1	F1	F2	F3	F4	F5	F6	F7	F8	F9	Total
<i>Araceae n.d. spp.</i>	2														2
<i>Cyclanthaceae n.d. spp.</i>	2														2
<i>Lindsea sp. 1</i>													1		1
<i>Loranthaceae n.d. sp.</i>							1								1
<i>Paradrymonia campostyla</i>	1														1
<i>Philodendron insigne</i>	3												1		4
<i>Achetaria guianensis</i>							1	1	1						3
<i>Adiantum fuliginosum</i>						1						2			3
<i>Adiantum terminatum</i>										1					1
<i>Andropogon bicornis</i>							1		1						2
<i>Bellucia grossularioides</i>											1				1
<i>Bisboeckleria microcephala</i>		3			2					1		1			7
<i>Blechnum serrulatum</i>									1						1
<i>Burmannia sp.</i>		1													1
<i>Calathea elliptica</i>	1	3			1							3	1		9
<i>Calyptrocarya glomerulata</i>		2	2		1										5
<i>Centrosema sp.</i>											1				1
<i>cf. Aeschinomene sp.</i>									1						1
<i>cf. Bromelia alta</i>										1		1			2
<i>cf. Hyptis sp.</i>											1				1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-8 Number of Segments in which Understory Plant or Plant of Open / Non-forest Vegetation was Present, per Species / Taxon, per Plot

Scientific name	A/F1	A1	C1	C2	E1	F1	F2	F3	F4	F5	F6	F7	F8	F9	Total
<i>cf. Miconia spp.</i>					2							1			3
<i>cf. Monotagma sp.</i>		1	1			1									3
<i>cf. Murdannia sp.</i>									1						1
<i>cf. Paepalanthus sp.</i>									1						1
<i>Chamaecrista cf. nictitans</i>											1				1
<i>Chelonanthus alatus</i>							1		1		1			1	4
<i>Clibadium cf. surinamense</i>							1								1
<i>Clidemia conglomerata</i>		3													3
<i>Clidemia dentata</i>	2						1								3
<i>Comolia sp.</i>							1	1			1			1	4
<i>Costus cf. claviger</i>													1		1
<i>Cyclanthaceae n.d. sp.</i>	1														1
<i>Cyclodium mensicioides</i>	3														3
<i>Cyperus giganteus</i>									1						1
<i>Cyperus luzulae</i>														1	1
<i>Desmodium canum</i>									1		1				2
<i>Diplasia karataefolia</i>		2	1		2	1									6
<i>Emilia sonchifolia</i>									1						1
<i>Euphorbia hirta</i>							1								1
<i>Fimbristylis sp.</i>								1	1					1	3
<i>Fuirena umbellata</i>									1					1	2
<i>Gleichenia remota</i>											1				1
<i>Gurania spp.</i>	1														1
<i>Heliconia cf. acuminata</i>		2			3	1						3	1		10
<i>Heliconia cf. richardiana</i>	2														2
<i>Hymenocallis tubiflora</i>			1												1
<i>Hyptis lanceolata</i>								1	1		1			1	4
<i>Ichnanthus panicoides</i>												1			1
<i>Ipomoea cf. tiliaceae</i>									1						1
<i>Ischnosiphon arouma</i>		3	1												4
<i>Ischnosiphon cf. gracilis</i>	1	3	3			1									8
<i>Ischnosiphon obliquus</i>	2														2
<i>Lindernia sp.</i>									1		1			1	3
<i>Lindsea lancea</i>	1	3	1												5
<i>Lindsea sp. 2</i>					1										1
<i>Lindsea sp. 3</i>					1										1
<i>Ludwigia affinis</i>								1							1
<i>Ludwigia octovalvis</i>								1	1					1	3
<i>Lycopodiella cernua</i>							1	1			1			1	4
<i>Maetia guianensis</i>	1														1
<i>Mapania sylvatica</i>						1									1
<i>Marantaceae n.d. sp.</i>		1													1
<i>Melastomataceae n.d. sp. 1</i>		1													1
<i>Melastomataceae n.d. sp. 2</i>													1		1
<i>Metaxya spp.</i>	3				3	2				1		2	1		12
<i>Miconia ceramicarpa</i>													1		1
<i>Miconia racemosa</i>							1		1		1			1	4
<i>Mikania micrantha</i>							1	1							2

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-8 Number of Segments in which Understory Plant or Plant of Open / Non-forest Vegetation was Present, per Species / Taxon, per Plot

Scientific name	A/F1	A1	C1	C2	E1	F1	F2	F3	F4	F5	F6	F7	F8	F9	Total
<i>Monotagma spicatum</i>	3	2	2							1	1				9
<i>Nephrolepis rivularis</i>													1		1
<i>Olyra spp.</i>		3	2		1	3						1			10
<i>Panicum sp.</i>														1	2
<i>Passiflora foetida</i>														1	1
<i>Phyllanthus amarus</i>							1		1						2
<i>Piper spp.</i>							1					3	1		5
<i>Piper trichoneuron</i>													1		1
<i>Piresia goeldii</i>						1									1
<i>Pityrogramma calomelanos</i>							1	1	1					1	4
<i>Poaceae n.d. sp.</i>											1				1
<i>Psychotria apoda</i>			2												2
<i>Psychotria officinalis</i>					1								1		2
<i>Pterolepis glomerata</i>														1	1
<i>Raddiella esenbeckii</i>												4			4
<i>Renealmia spp.</i>	2	2				1						2			7
<i>Rhynchospora cf. barbata</i>								1			1			1	3
<i>Sauvagesia sp.</i>								1	1						2
<i>Scleria spp.</i>							1			1	1				3
<i>Scrophulariaceae n.d. sp.</i>									1						1
<i>Selaginella parkeri</i>			1			1									2
<i>Solanum jamaicense</i>									1		1			1	3
<i>Solanum sp.</i>													1		1
<i>Solanum stramonifolium</i>														1	1
<i>Solanum subinerme</i>							1				1			1	3
<i>Soridium spruceanum</i>					1	2									3
<i>Spathanthus unilateralis</i>		4	3								1				8
<i>Spermacoce cf. latifolia</i>							1							1	2
<i>Spermacoce cf. ocymifolia</i>											1				1
<i>Spermacoce cf. oligodontha</i>								1	1		1				3
<i>Stigmaphyllon sp.</i>									1						1
<i>Tococa cf. guianensis</i>	3	1													4
<i>Tonina fluviatilis</i>											1				1
<i>Trichomanes pinnatum</i>	1					1				1		3			6
<i>Trichomanes tuerckheimii</i>					1										1
<i>Triplophyllum dicksonioides</i>					2							2			4
<i>Triplophyllum hirsutum</i>						2									2
<i>Voyria rosea</i>		1										1			2
<i>Xyris fallax</i>								1	1					1	3
<i>Allamanda cathartica</i>									1						1
<i>Apocynaceae n.d. spp.</i>								1							1
<i>Forsteronia spp.</i>						1									1
<i>Mimosa myriadenia</i>									1		1				2
<i>Odontadenia cf. macrantha</i>											1				1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-8 Number of Segments in which Understory Plant or Plant of Open / Non-forest Vegetation was Present, per Species / Taxon, per Plot

Scientific name	A/F1	A1	C1	C2	E1	F1	F2	F3	F4	F5	F6	F7	F8	F9	Total
<i>Passiflora amoena</i>											1				1
<i>Passiflora coccinea</i>							1		1						2
<i>Passiflora vespertilio</i>														1	1
<i>Sabicea spp.</i>						1					1			1	3
<i>Clusia sp.</i>						1									1
<i>Senna chrysocarpa</i>														1	1
<i>Solanum leucocarpon</i>											1				1
<i>Astrocaryum paramaca</i>					2	1				3		3	1		10
<i>Attalea microcarpa</i>					1					2		2			5
<i>Bactris brongniartii</i>	1														1
<i>Bactris cf. acanthocarpa</i>			1			1									2
<i>Bactris cf. acanthocarpoides</i>												1			1
<i>Bactris cf. maraja</i>													1		1
<i>cf. Miconia sp. 1</i>													1		1
<i>cf. Miconia sp. 2</i>													1		1
<i>Cordia nodosa</i>					1					1					2
<i>Cyathea cyatheoides</i>	1					1									2
<i>Elaeis oleifera</i>			4												4
<i>Faramea quadricostata</i>										2					2
<i>Geonoma baculifera</i>	1		3												4
<i>Hienriettella caudata</i>													1		1
<i>Hymenocallis tubiflora</i>			1												1
<i>Palicourea sp.</i>	1														1
<i>Rinorea sp.</i>												1			1
<i>Solanum rugosum</i>													1		1
<i>Apeiba echinata</i>							1								1
<i>Astrocaryum paramaca</i>		3			1	4				1					9
<i>Astrocaryum sciophilum</i>		3	4		1	3				2		3			16
<i>Attalea maripa</i>	1	2	3												6
<i>Attalea microcarpa</i>		1			1	1									3
<i>Bellucia grossularioides</i>							1								1
<i>Cecropia cf. peltata</i>							1		1		1			1	4
<i>Cecropia sciadophylla</i>							1				1			1	3
<i>Clusia grandiflora</i>														1	1
<i>Desmoncus spp.</i>		1													1
<i>Elaeis oleifera</i>			1											1	2
<i>Euterpe oleracea</i>	3		2										1		6
<i>Goupia glabra</i>							1				1			1	3
<i>Isertia cf. spiciformis</i>											1				1
<i>Maprounea guianensis</i>							1								1
<i>Melastomataceae n.d. sp. 3</i>							1								1
<i>Oenocarpus bacaba</i>		1			2	2									5
<i>Oenocarpus bataua</i>					1					1					2
<i>Oenocarpus spp.</i>					3	1				3					7
<i>Palicourea guianensis</i>							1							1	2
<i>Parinari campestris</i>											1				1
<i>Paullinia cf. pinnata</i>							1								1
<i>Pourouma spp.</i>													1		1
<i>Solanum rubiginosum</i>													1		1
<i>Tabebuia insignis</i>														1	1

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Appendix 4A, Supporting Information for Vegetation Baseline Study

Table 4A-8 Number of Segments in which Understory Plant or Plant of Open / Non-forest Vegetation was Present, per Species / Taxon, per Plot

Scientific name	A/F1	A1	C1	C2	E1	F1	F2	F3	F4	F5	F6	F7	F8	F9	Total
<i>Vismia cayennensis</i>														1	1
<i>Vismia cayennensis</i>											1				1
<i>Vismia cf. guianensis</i>							1								1
<i>Vismia cf. japurensis</i>							1								1
<i>Vismia sp.</i>							1		1						2
Total	43	52	39	0	35	34	32	14	30	22	33	40	22	31	428
Total taxa / species	25	25	20	0	23	23	32	14	30	15	33	20	22	31	167

March 2018

SABAJO PROJECT

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

Appendix 4B

Supporting Information for Aquatic Baseline Study

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Appendix 4B, Supporting Information for Aquatic Baseline Study

Figure 4B-1 Diversity in Sites and Sampling Conditions During Sabajo ESIA Aquatic Ecology Studies



Notes:

- A. Shallow Upper Tempati Creek (TEM2) in the dry season (September 2017)
- B. Middle Tempati Creek (TEM1) in the high-water season (July 2017)
- C. An undisturbed, ephemeral forest creek (SAB3) in July (in September this stream had dried up completely)
- D. Seining the inundated banks of the large stream SAB5 during high-water conditions
- E. Large quantities of woody debris and high shores at SAB6 in the low-water season (September)
- F. The Upper Kleine Commewijne River (KC) is colored white-grey by suspended sediments from upstream gold mining (September 2017).

ESIA = Environmental and Social Impact Assessment.

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Appendix 4B, Supporting Information for Aquatic Baseline Study

Table 4B-1 Stream Habitat Characteristics and Basic Water Quality of the Tempati, Kleine Commewijne and Other Streams in the Commewijne River Catchment in Relation to Newmont Suriname's Sabajo Concession and Sabajo-Merian Haul Road (11-16 July, and 20-27 September)

Sample code	TEM1	TEM2	KC	SAB1	SAB3	SAB5	SAB5u	SAB6	SAB6u	SAB11										
GPS coordinates	05.30447N, 54.61958W	05.09.002N, 54.36.501W	05.10.554N, 54.47.756W	05.08.999N, 54.36.494W	05.10300N, 54.80638W	05.10671N, 54.79928W	05.05.052N, 54.48.144W	05.11019N, 54.78188W	05.08898N, 54.75888W	05.08809N, 54.78025										
Locality	Middle Tempati	Upper Tempati near Merian	Kleine Commewijne at TAKT NV	Small creek at road crossing near camp	Seasonal / ephemeral forest creek	Medium stream at northern road crossing	SAB5 upstream at southern road	2nd stream crossing northern road	SAB6 upstream at southern road crossing	Small stream crossing southern road										
Ecological habitat	Small river	Large stream	Small river	Small stream	Very small, ephemeral forest creek	Large stream	Large to medium-sized stream	Medium-sized stream	Medium-sized stream	Small forest creek										
Disturbance	Moderate (upstream)	Gold miners in tributaries	Upstream gold mining (S. Barabara)	Upstream gold miners	No	Goldminers	Goldminers	Goldminers	Goldminers	Down and ?upstream gold miners										
Aquatic vegetation	<i>Montrichardia</i> stands along shore-	-	-	<i>Nitella</i> sp. & filamentous slimy algae	Downstream in open gap area	-	Filamentous algae	-	-	Water lilies										
Bottom substrate	Sand, clay	Sand, gravel, clay, woody debris	Sand, mud	Sand, clay woody debris, gravel	Sand, bedrock	Fine clay, sand, woody debris	Sand, gravel, fine sediment	Clay, lots of woody debris	Gravel, sand	Sand, mud, leaves, woody debris										
Shore vegetation	<i>Terra firme</i> rainforest & floodplain forest	<i>Terra firme</i> rainforest	<i>Terra firme</i> rainforest	Disturbed <i>terra firme</i> forest	<i>Terra firme</i> rainforest	Secondary forest or kapuweri*	Mainly kapuweri, <i>terra firme</i> rainforest	Kapuweri	<i>Terra firme</i> rainforest, kapuweri	<i>Terra firme</i> rainforest, kapuweri										
Canopy cover (%)	40	50	70	40-100	100	50	0-80	10-50	70-100											
Date	11/7	-	-	20/9	-	25/9	-	23/9	13/7	23/9	13/7	23/9	-	26/9	14/7	24/9	14/7	24/9	15/7	26/9
Time	1315			1450		0850		1300	1430	1500	1330	1530		1355	0845	0810	1430	1330	1410	1345
Stream width (m)	50			20-30		30		2-5	2-3	Dry	30	20		10-15	15	5	5	3-4	3	1
Water depth (m)	>2			1-1.5		2		0.2-2	0.5	-	>2	1.7		0.05-1	>2	1.2	2	1	3	0.5
Current	moderate			strong		moderate			weak	-	strong	moderate		strong at culverts	strong	moderate	weak	very weak	weak	-
Weather	Sun/rain			Sun		Sun		Sun/rain	Sun	Sun	Rain	Clouded		Sun	Clouded	Sun	Sun	Clouded	Sun	Sun
Conductivity (µS/cm)	-			49.1		47.2		36.0	-	-	-	54		40	-	56.5	-	48.2	-	40
pH	6.35			7.0		7.1		6.3	4.53	-	6.8	7.2		7.3	5.9	7.1	6.0	6.9	6.2	7.1
DO (mg/L)	6.6			6.5		6.7		2.1	2.9	-	6.5	6.4		6.1	7.2	5.6	5.5	5.4	5.5	5.7
DO (% sat)	80			81.5		82		26.3	37	-	78	80		78	84	70	66	68	71	76
Secchi depth (cm)	30			25		11		50	>50	-	10	25		23	10	35	50	100	50	>50
Turbidity (NTU)	25.7			65.8		141		3.54	1.33	-	103	50		44.2	113	3.5	29.1	1.1	13.6	7.8
Water temp (°C)	25.8			28.2		26.2		26.4	26.2	-	26.2	27.5		27.4	25.3	26.0	26.0	26.8	28.8	31.5
Color	Light brown	Grey brown	Muddy grey	Transparent	Transparent brown	Grey		Muddy – transparent brown	Muddy grey	Transparent light brown	Transparent, brownish									
Remarks	1 tributary sampled	Gravel substrate is from past gold mining, 1 tributary sampled	Strong current, water level low during 2 nd survey	Green <i>Pomacea</i> eggs; fine sediment indicates disturbance	Dry during September survey	SAB5 drains Sabajo mine pit; 2 swamp otters <i>Lutra longicaudis</i> observed		Artificial rapid created by road overflow in July	Bank inundated in July survey	Two fighting male needle fish <i>P. guianensis</i> during July survey										

*Kapuweri is secondary, mostly bush/shrub vegetation which replaces (riparian) forest in areas where gold miners were active.

N = north; W = west; GPS = Global Positioning System; % = percent; m = meter; > = greater than; µS/cm = microsiemens per centimeter; mg/L = milligrams per liter; %sat = percent saturation; cm = centimetre; NTU = nephelometric turbidity units; °C = degrees Celsius; sp. = species.

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Table 4B-2 Qualitative and Quantitative Composition of Phytoplankton Communities of Streams in and Near Newmont Suriname's Sabajo Concession and Projected Sabajo-Merian Haul Road, 20 to 27 September 2017

Taxon		Habitat	TEM2	SAB1	SAB5	SAB5u	SAB6	SAB11
PHYTOPLANKTON								
CYANOBACTERIA								
<i>Osillatoria sp 1.</i>		Eutrophic			B			B
<i>Osillatoria sp 2.</i>		Eutrophic		B				
<i>Chroococcus sp.</i>		Eutrophic			A			
CHLOROPHYTA								
<i>Actinotaenium globosum var. ornatum</i>	Desmid				A			
<i>Coelastrum sphaericum</i>					A			
<i>Cosmarium bostrytis</i>	Desmid			A	A			
<i>Cosmarium weberi</i>	Desmid			A				
<i>Cosmarium sp.</i>	Desmid				A			
<i>Crucigenia caudata</i>					A			
<i>Eudorina elegans</i>					A			
<i>Scenedesmus quadricauda</i>					A			
<i>Staurastrum minnesotense</i>	Desmid					A		
<i>Spirogyra weberi</i>	Desmid	Mesotroph		B		D		
<i>Closterium moniliferum</i>	Desmid			B				
<i>Closterium parvulum</i>	Desmid				A			
<i>Closterium sp.</i>	Desmid			B				
<i>Euastrum securiformiceps var. punctulatum</i>	Desmid			A				
<i>Mougeotia sp.</i>	Desmid	Mesotroph		A				
CHAROPHYTA								
<i>Nitella tenuissima</i>				X				
BACILLARIOPHYTA								
<i>Gomphonema gracile</i>				B	B	B		
<i>Navicula sp 1.</i>					A	A		
<i>Navicula sp 2.</i>				D				
<i>Navicula sp 3.</i>				C				
<i>Pinnularia gibba</i>				A		A		
<i>Pinnularia microstaurum</i>				A				
<i>Surirella gradifera</i>				A				
<i>Nizschia ignorata</i>				A				
<i>Eunotia pectinalis</i>				C				
<i>Cymbella rupicola</i>				C				
<i>Diatoma vulgare</i>				B				
<i>Diatoma elongatum</i>				B				
<i>Frustulia weinholdii</i>				B				
<i>Frustulia rhomboides</i>				B				
RHODOPHYTA								
<i>Batrachospermum sp.</i>				B				
<i>Hildenbrandia sp.</i>			D					
EUGLENOPHYTA								
<i>Colacium gojdiscae</i>					A			
<i>Euglena acus</i>		Eutrophic			A			
<i>Euglena sp</i>		Eutrophic			A			
<i>Trachelomonas volvocina</i>		Eutrophic			A		A	
<i>Trachelomonas sp.</i>				A	A			
ZOOPLANKTON								
ROTIFIRA								
<i>Anuaeropsis fissa</i>					A			A
<i>Trichocerca sp.</i>								A

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Appendix 4B, Supporting Information for Aquatic Baseline Study

Table 4B-2 Qualitative and Quantitative Composition of Phytoplankton Communities of Streams in and Near Newmont Suriname’s Sabajo Concession and Projected Sabajo-Merian Haul Road, 20 to 27 September 2017

Taxon		Habitat	TEM2	SAB1	SAB5	SAB5u	SAB6	SAB11
<i>Lecane sp.</i>				A				
RHIZOPODA								
<i>Wailesella eboracensis</i>				A				
BACTERIA								
<i>Streptococcus margaritaceum</i>					A			

Note: Phytoplankton abundance categories are: A = 0 - 5, B = 6 - 20, C = 21 - 50, D = 51 - 100, E > 100 individuals/liter; X are clusters. TEM2 = Upper Tempati Creek and SAB1 = small creek near Sabajo Camp. No algae were observed in the Kleine Commewijne River and SAB6 upstream, while the ephemeral forest creek SAB3 was dry during the survey.

> = greater than.

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Table 4B-3 Aquatic Invertebrate Communities of the Middle and Upper Tempati Creek, Kleine Commewijne River, and Streams in and near the Sabajo Concession of Newmont Suriname

Taxon	TEM1	TEM2	KC	SAB1	SAB3	SAB5			SAB5u	SAB6			SAB6u			SAB11	SAB7
Sampling period	J	S	S	S	J	J	S	J+S	S	J	S	J+S	J	S	J+S	J	J
MOLLUSCA																	
GASTROPODA																	
Ampullariidae																	
<i>Pomacea difussa</i>		1					1	1			1	1					
<i>Pomacea glauca</i>		1	1			4		4					4		4		
<i>Pomacea cf. granulosa</i>														4	4		
Pachychilidae																	
<i>Doryssa sp.1</i>							1	1									
ARTHROPODA																	
CRUSTACEA																	
Arguloidea																	
Argulidae																	
<i>Argulus sp.1</i>							4	4									
Decapoda																	
Euryrhynchidae																	
<i>Euryrhynchus wrzesniowski</i>																	4
Palaemonidae																	
<i>Macrobrachium brasiliense</i>	1	12		9					9				4	13	17		
<i>Palaemonetes carteri</i>	16	6	2	12	15					5	3	8	4		4	7	30
Potamonidae (Trichodactylidae)																	
<i>Potamocarcinus latifrons</i>		3															
<i>Trichodactylus serratus</i>			1														2
<i>Trichodactylus spinifer</i>													3	3			
INSECTA																	
Diptera																	
Chironomidae																	
<i>Chironomidae larvae</i>					1											1	
Culicidae																	
<i>Culex sp.1</i>										1		1				1	
Ephemeroptera																	
Neophemeridae																	
<i>Neophemera sp.1</i>													2	2			

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Table 4B-3 Aquatic Invertebrate Communities of the Middle and Upper Tempati Creek, Kleine Commewijne River, and Streams in and near the Sabajo Concession of Newmont Suriname

Taxon	TEM1	TEM2	KC	SAB1	SAB3	SAB5			SAB5u	SAB6			SAB6u			SAB11	SAB7
Sampling period	J	S	S	S	J	J	S	J+S	S	J	S	J+S	J	S	J+S	J	J
<i>Tricorythidae</i>																	
<i>Tricorythidae</i> sp.1				1									1		2		
Hemiptera																	
<i>Belostomatidae</i>																	
<i>Belostoma</i> sp.1	2	1			1	1		1		2	1	3	3	4	7		
<i>Corixidae</i>																	
<i>Tenagobia</i> sp.1						1		1									1
<i>Tenagobia</i> sp.2									1								
<i>Gerridae</i>																	
<i>Brachymetra</i> sp.1																	5
<i>Cylindrostethus</i> sp.1									3								3
<i>Gerris</i> sp.1									1								
<i>Limnogonus</i> sp.1										2	2	1		1			9
<i>Neogerris</i> sp.1	1				2												
<i>Ovatametra</i> sp.1										11		11				2	
<i>Ovatametra</i> sp.2									2								
<i>Rheumatobates</i> sp.1													3	3			48
<i>Tachygerris</i> sp.1					5												
<i>Tachygerris</i> sp.2													1	1			
<i>Hydrometridae</i>																	
<i>Hydrometra</i> sp.1													2	2			1
<i>Naucoridae</i>																	
<i>Ambrysus</i> sp.1				1	1								2	2			
<i>Ambrysus</i> sp.2													3	3			
<i>Limnocoris</i> sp.1		25															
<i>Naucoridae</i> sp.1						2		2									
<i>Nepidae</i>																	
<i>Ranatra</i> sp.1				1													
<i>Notonectidae</i>																	
<i>Martarega</i> sp. 1																	2
<i>Martarega</i> sp. 2																	1
<i>Notonecta</i> sp.1					2												6

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Table 4B-3 Aquatic Invertebrate Communities of the Middle and Upper Tempati Creek, Kleine Commewijne River, and Streams in and near the Sabajo Concession of Newmont Suriname

Taxon	TEM1	TEM2	KC	SAB1	SAB3	SAB5			SAB5u	SAB6			SAB6u			SAB11	SAB7
Sampling period	J	S	S	S	J	J	S	J+S	S	J	S	J+S	J	S	J+S	J	J
<i>Veliidae</i>																	
<i>Mesovelgia</i> sp.1										2		2					1
<i>Microvelia reticulata</i>					16								1		1		18
<i>Microvelia</i> sp.1														6	6		2
<i>Microvelia</i> sp.2														1	1		
<i>Rhagovelia</i> sp.1		34		5		6	2	8	38				25		25	22	1
Coleoptera																	
<i>Dytiscidae</i>																	
<i>Anodocheilus</i> sp.1										1		1					
<i>Copelatus</i> sp.1														1	1		
<i>Desmopachria</i> sp.1										1		1					
<i>Laccophilus</i> sp.1										1		1					
<i>Laccophilus</i> sp.2						1		1									
<i>Laccophilus</i> sp.3	2													1	1		
<i>Laccophilus</i> sp.4														4	4		
<i>Gyrinidae</i>																	
<i>Gyretes</i> sp.1																	1
<i>Gyretes</i> sp.2										9		9					
<i>Gyretes</i> sp.3		41							28								
<i>Gyretes</i> sp.4		92															
<i>Hydrophilidae</i>																	
<i>Notionotus shorti</i>						1		1									
<i>Tropisternis</i> sp.1						1		1									
<i>Tropisternis</i> larvae										1		1					
<i>Noteridae</i>																	
<i>Suphisellus</i> sp.1	1																
Megaloptera																	
<i>Corydalidae</i>																	
<i>Corydalus</i> sp.1				1													
Plecoptera																	
<i>Perlidae</i>																	
<i>Perlidae</i> sp.1		1															

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Table 4B-3 Aquatic Invertebrate Communities of the Middle and Upper Tempati Creek, Kleine Commewijne River, and Streams in and near the Sabajo Concession of Newmont Suriname

Taxon	TEM1	TEM2	KC	SAB1	SAB3	SAB5			SAB5u	SAB6			SAB6u			SAB11	SAB7
Sampling period	J	S	S	S	J	J	S	J+S	S	J	S	J+S	J	S	J+S	J	J
Trichoptera																	
<i>Hydropsychidae</i>																	
<i>Hydropsychidae larvae</i>																	5
<i>Trichoptera sp.1</i>		29															
Odonata																	
Anisoptera																	
<i>Aeshnidae</i>																	
<i>Aeshnidae sp.1</i>	1				2												
<i>Aeshnidae sp.2</i>		1															
<i>Aeshna cf verticalis</i>		2															
<i>Corduliidae</i>																	
<i>Corduliidae sp.1</i>									1								
<i>Gomphidae</i>																	
<i>Agriogomphus sp.1</i>	1												1		1		
<i>Arigomphus sp.1</i>																	1
<i>Gomphurus fraternus</i>		1												1	1		
<i>Gomphidae sp.1</i>					1												
<i>Hagenius brevistylus</i>		2												1	1		
<i>Ophiogomphus cf aspersus</i>													1		1		
<i>Libellulidae</i>																	
<i>Dythemis sp.1</i>	1																
<i>Libellula sp.1</i>				1													2
<i>Libellula sp.2</i>													1		1		
<i>Plathemis lydia</i>	2					1		1						1	1		
<i>Plathemis sp.1</i>						5		5									
<i>Plathemis sp.2</i>		1												1	1		
Zygoptera																	
<i>Coenagrionidae</i>																	
<i>Coenagrionidae sp.1</i>										2		2					3
<i>Calopterygidae</i>																	
<i>Calopteryx sp.1</i>																	1
<i>Megapodagrionidae</i>																	

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Table 4B-3 Aquatic Invertebrate Communities of the Middle and Upper Tempati Creek, Kleine Commewijne River, and Streams in and near the Sabajo Concession of Newmont Suriname

Taxon	TEM1	TEM2	KC	SAB1	SAB3	SAB5			SAB5u	SAB6			SAB6u			SAB11	SAB7
Sampling period	J	S	S	S	J	J	S	J+S	S	J	S	J+S	J	S	J+S	J	J
<i>Heteragrion</i> sp.1				1													1
Total number of specimens collected	27	253	4	32	46	23	8	31	83	36	7	43	46	54	101	33	148
Number of species	10	17	3	9	10	10	4	13	8	11	4	13	11	19	27	5	23
Species diversity (<i>H</i>)	1.6	1.9	1.	1.7	1.7	2.1	1.2	2.2	1.3	2.0	1.3	2.1	1.7	2.6	2.7	1.0	2.3

Note: Site SAB7 is a small stream near SAB11 that yielded high invertebrate diversity. Numbers of collected individuals per site are given. Also given is the total number of species and specimens, and diversity.

TEM = Tempati Creek; KC = Kleine Commewijne River; SAB = streams in and near the Sabajo Concession of Newmont Suriname; J = July 2017; S = September 2017.

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Appendix 4B, Supporting Information for Aquatic Baseline Study

Table 4B-4 Fish Communities of the Middle and Upper Tempati, Kleine Commewijne and Streams in and near the Sabajo Concession of Newmont Suriname

Order, Family, Species	TEM1		TEM2		KC		SAB1		SAB3		SAB5		SAB5upstr		SAB6		SAB6upstr		SAB11	
	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M
Clupeiformes																				
Engraulidae																				
<i>Anchovia surinamensis</i>	2.65	0.38																		
<i>Characiformes</i>																				
Anostomidae																				
<i>Anostomus anostomus</i>	0.88	0.01																		
<i>Hypomasticus megalepis</i>					0.67	0.01														
<i>Leporinus friderici</i>	2.21	11.42	1.12	0.27																
<i>Leporinus sp (juv)</i>	2.21	0.04									1.41	0.02						1.11	1.15	
<i>Schizodon fasciatus</i>	0.44	3.25																		
Acestrorhynchidae																				
<i>Acestrorhynchus falcatus</i>	2.65	3.38	0.56	0.18	0.34	0.04									0.61	5.52	0.83	5.63		
<i>Acestrorhynchus microlepis</i>	1.77	0.79	0.56	0.18																
<i>Acestrorhynchus sp (juv)</i>	1.33	0.01																		
Characidae																				
<i>Astyanax bimaculatus</i>			0.56	0.21									1.563	3.49	0.61	0.69				
<i>Bryconops melanurus</i>	4.87	0.61	0.56	0.02	0.34	0.01	3.57	3.8			4.23	0.34	1.563	2.33	2.42	1.38	23.14	22.54	10	20.69
<i>Charax gibbosus</i>	6.19	0.99	5.03	1.16	0.67	0.49					0.7	0.43			1.82	1.38				
<i>Hemigrammus boesemani</i>	3.54	0.02	1.68	0.02	1.35	0.01					19.72	0.08	15.63	1.16	40	8.28	4.96	0.7	21.11	6.9
<i>Hemigrammus ocellifer</i>	1.33	0.01	0.56	0.02	3.37	0.02	10.71	2.28							5.45	0.69	2.48	0.7	4.444	2.3
<i>Hemigrammus unilineatus</i>							4.29	0.38	23.68	10					1.21	1.38	0.83	0.35	2.22	1.15
<i>Hyphessobrycon simulates</i>	3.1	0.01	2.23	0.02	18.52	0.11	17.86	3.04			1.41	0.02			4.24	2.07				
<i>Jupiaba polylepis</i>	4.42	0.14	12.85	0.49	10.77	0.61	5.71	6.84			30.99	0.95	18.75	6.98	15.15	22.07	2.48	0.7	32.22	34.48
<i>Jupiaba abramoides</i>					3.37	0.29			7.89	40					1.21	4.14			2.22	2.3
<i>Moenkhausia chrysargyrea</i>					1.35	0.09					0.7	0.09	3.13	3.49						

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Appendix 4B, Supporting Information for Aquatic Baseline Study

Table 4B-4 Fish Communities of the Middle and Upper Tempati, Kleine Commewijne and Streams in and near the Sabajo Concession of Newmont Suriname

Order, Family, Species	TEM1		TEM2		KC		SAB1		SAB3		SAB5		SAB5upstr		SAB6		SAB6upstr		SAB11	
	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M
<i>Moenkhausia grandisquamis</i>	0.44	0.05	0.56	0.03																
<i>Moenkhausia hemigrammoides</i>	0.44	0.01	0.56	0.02	13.8		3.57	0.76			4.93	0.08	6.25	0.58	3.03	2.07	4.96	1.41	6.67	4.6
<i>Moenkhausia oligolepis</i>	4.42	0.23	1.68	0.08	14.81	0.61					4.23	0.17			0.61	0.69	2.48	2.82		
<i>Moenkhausia surinamensis</i>															0.61	1.38	0.83	1.41		
<i>Phenacogaster microstictus</i>	15.93	0.09	3.91	0.03	3.7	0.02	2.14	0.38			11.27	0.11			6.67	3.45	24.79	6.34	2.22	2.3
<i>Piabucus dentatus</i>			0.56	0.21							1.41	0.12			0.61	8.28				
<i>Poptella brevispina</i>	6.64	0.56	10.06	1.22	0.67	0.02	1.43	2.28			1.41	0.09	9.38	17.44			18.18	43.66	4.44	13.79
<i>Pristella maxillaris</i>																	0.83	0.35		
<i>Tetragonopterus chalceus</i>	3.54	0.22			0.67	0.03									0.61	1.38				
<i>Triportheus brachipomus</i>	3.54	6.52																		
Serrasalminae																				
<i>Serrasalmus rhombeus</i>	0.88	1.67																		
Crenuchidae																				
<i>Melanocharacidium dispilomma</i>			11.73	0.06									3.13	0.58						
<i>Microcharacidium electrioides</i>									5.26	10										
Curimatidae																				
<i>Curimata cyprinoides</i>	2.65	5.77	2.23	1.1																
<i>Cyphocharax helleri</i>															0.61	12.41				
<i>Cyphocharax spilurus</i>	6.19	0.23	10.06	1.68	6.06	0.67	17.14	65.4			8.45	0.4	10.94	38.37	4.24	5.52			1.11	1.15
<i>Cyphocharax microcephalus</i>	0.88	0.66			1.01	0.05														
Erythrinidae																				
<i>Hoplias aimara</i>			1.68	45.7	0.67	81.04					0.7	92.38								
<i>Hoplias malabaricus</i>	0.44	2.8			0.67	5.74					0.7	0.37								

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Appendix 4B, Supporting Information for Aquatic Baseline Study

Table 4B-4 Fish Communities of the Middle and Upper Tempati, Kleine Commewijne and Streams in and near the Sabajo Concession of Newmont Suriname

Order, Family, Species	TEM1		TEM2		KC		SAB1		SAB3		SAB5		SAB5upstr		SAB6		SAB6upstr		SAB11		
	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	
Gasteropelecidae																					
<i>Gasteropelecus sternicla</i>	0.88	0.04			2.69	0.11	7.86	5.32			1.41	0.03	7.81	2.33	5.45	6.21	0.83	0.7	1.11	1.15	
Lebiasinidae																					
<i>Copella arnoldi</i>							7.14	0.38	10.53	10							0.83	0.35			
<i>Nannostomus bifasciatus</i>	0.44	0.01			2.36	0.02	7.14	1.52									2.48	1.06			
<i>Pyrrhulina filamentosa</i>			0.56	0.02					42.11	20									3.33	1.15	
Gymnotiformes																					
Gymnotidae																					
<i>Gymnotus carapo</i>	0.44	0.01															0.83	0.35			
Sternopygidae																					
<i>Eigenmannia sp. 1</i>	0.88	0.18													0.61	1.38					
<i>Eigenmannia sp. 2</i>	0.44	0.13	1.12	0.27	6.06	0.81					0.7	0.12			0.61	0.69					
<i>Sternopygus macrurus</i>	0.44	1.53	0.56	0.18	0.34	0.05					1.41	4									
Siluriformes																					
Auchenipteridae																					
<i>Ageneiosus inermis</i>	3.1	27.59	3.35	44.73	1.01	8.48															
<i>Ageneiosus ucayalensis</i>	0.88	1.65																			
<i>Auchenipterus dentatus</i>	1.77	0.56																			
<i>Pseudauchenipterus nodosus</i>	0.44	1.44																			
<i>Trachelyopterus galeatus</i>	0.44	0.07																			
Trichomycteridae																					
<i>Ochmacanthus aff. flabelliferus</i>					1.01	0.02							1.56	0.58							
Callichthyidae																					
<i>Corydoras punctatus</i>	0.88	0.01	7.26	0.18	1.35	0.05							7.81	5.81	0.61	2.07					
<i>Corydoras oxyrhynchus</i>			0.56	0.03																	
Doradidae																					
<i>Platydoras costatus</i>	0.44	1.2																			
Loricariidae																					

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Appendix 4B, Supporting Information for Aquatic Baseline Study

Table 4B-4 Fish Communities of the Middle and Upper Tempati, Kleine Commewijne and Streams in and near the Sabajo Concession of Newmont Suriname

Order, Family, Species	TEM1		TEM2		KC		SAB1		SAB3		SAB5		SAB5upstr		SAB6		SAB6upstr		SAB11	
	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M
<i>Hypostomus plecostomus</i>			4.47	0.67							0.7	0.02	1.56	2.33					3.33	1.15
<i>Lithoxus pallidimaculatus</i>			2.23	0.03									4.69	0.58						
<i>Loricariichthys maculatus</i>	0.44	0.29			0.34	0.11														
<i>Loricaria nickeriensis</i>			0.56	0.03																
<i>Rineloricaria cf stewarti</i>													3.13	0.58						
Heptapteridae																				
<i>Pimelodella megalops</i>			0.56	0.09																
<i>Pimelodella cristata</i>			2.79	0.64									1.56	0.58						
<i>Pseudopimelodidae</i>																				
<i>Microglanis poecilus</i>					0.34	0.01														
<i>Microglanis secundus</i>			1.12	0.02																
Pimelodidae																				
<i>Pimelodus ornatus</i>			0.56	0.09																
Cichliformes																				
Cichlidae																				
<i>Crenicichla saxatilis</i>			2.23	0.3			2.14	1.52					1.56	12.79	0.61	1.38	0.83	2.82		
<i>Krobia guianensis</i>	0.88	0.04			1.35	0.14	2.14	5.32							2.42	5.52	2.48	0.35	2.22	4.6
Miscellaneous group																				
Polycentridae																				
<i>Polycentrus schomburgkii</i>							1.43	0.38				2.11	0.02							
Sciaenidae																				
<i>Plagioscion squamosissimus</i>	1.33	25.4																		
Poeciliidae																				
<i>Micropoecilia bifurca</i>	2.21	0.01	1.12	0.02	0.34	0.01	5.71	0.38			0.7	0.02					2.48	0.7	2.22	1.15
Rivulidae																				
<i>Rivulus agilae</i>									10.53	10										
<i>Rivulus cf urophthalmus</i>			2.23	0.02																
Belonidae																				

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Table 4B-4 Fish Communities of the Middle and Upper Tempati, Kleine Commewijne and Streams in and near the Sabajo Concession of Newmont Suriname

Order, Family, Species	TEM1		TEM2		KC		SAB1		SAB3		SAB5		SAB5upstr		SAB6		SAB6upstr		SAB11	
	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M	N	M
<i>Potamorhaphis guianensis</i>											0.7	0.15					2.48	7.04		
Total number / wet mass (g)	226	11135	179	6564	297	11106	140	263	38	10	142	6495	64	172	165	145	121	284	90	87
Number of species	43		36		30		16		6		22		17		24		20		16	
Diversity (H)	3.29	2.282	3.034	1.202	2.673	0.808	2.495	1.44	1.535	1.6	2.275	0.41	2.498	2.014	2.225	2.696	2.251	1.865	2.181	2.053
Evenness (J)	0.875	0.607	0.847	0.335	0.786	0.238	0.9	0.52	0.857	0.9	0.736	0.133	0.882	0.711	0.7	0.848	0.751	0.623	0.787	0.74

Notes:

Species composition in numbers (N, %) and wet mass (M, %), total number of species, number of specimens, wet mass (g), diversity (H) and evenness (J). Species representing > 10% of mass or numbers in a fish community of a stream are highlighted in yellow.

% = percent; TEM = Tempati Creek; KC = Kleine Commewijne; SAB = Sabajo Concession; J = July 2017; S = September 2017.

March 2018

SABAJO PROJECT

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

Appendix 4C

Supporting Information for Flora Baseline Study

Report No. 1669326-7000

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Figure 4C-1 Cumulative Number of Species Over Time for the Two Field Surveys

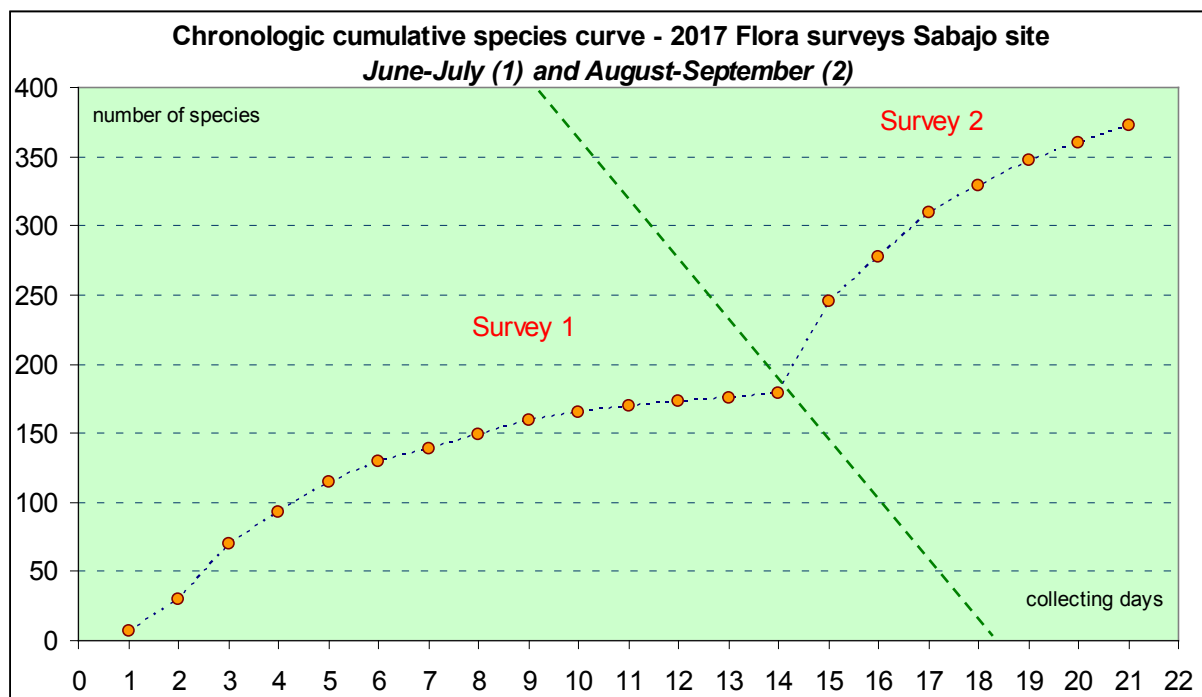


Table 4C-1 Species List from the 2017 Flora Surveys in the Study Area

Family	Taxon	LF	Site	HAB1	HAB2
ACANTHACEAE	<i>Lepidagathis alopecuroidea</i> (Vahl) R. Br.	S	E1	TDF	crest/dol
ACANTHACEAE	<i>Ruellia rubra</i> Aubl.	S	C1	TFS	w sand
ACHARIACEAE	<i>Carpotroche longifolia</i> (Poepp.) Benth.	TL	T1	TFF	river
ADIANTACEAE	<i>Adiantum argutum</i> Splitg.	H	KC1	TDF	
ADIANTACEAE	<i>Pityrogramma calomelanos</i> (L.) Link	H	C1	TFF	flat
ANACARDIACEAE	<i>Thyrsodium cf. guianense</i> Sagot	T	A1	TDF	
ANNONACEAE	<i>Annona sericea</i> Dunal	T	E1	TDF	foothill
ANNONACEAE	<i>Guatteria scandens</i> Ducke	L	AF1	TDF	flat
APOCYNACEAE	<i>Allamanda cathartica</i> L.	L	T1	TFF	river
APOCYNACEAE	<i>Aspidosperma oblongum</i> A. DC.	T	F1	TDF	
APOCYNACEAE	<i>Aspidosperma sp. BGB nc 47</i>	T	E1	TDF	crest/dol
APOCYNACEAE	<i>Geissospermum cf. laeve</i> (Thunb.) Miers	T	F1	TDF	
APOCYNACEAE	<i>Markea coccinea</i> Rich.	L	C1	TFS	flat
APOCYNACEAE	<i>Odontadenia macrantha</i> (R. & S.) Markgr.	L	T1	TFF	river
ARACEAE	<i>Anthurium thrinax</i> Madison	EC	F5-3	TFF	w sand
ARACEAE	<i>Dieffenbachia seguine</i> (Jacq.) Schott	H	KC1	TFF	river
ARACEAE	<i>Philodendron insigne</i> Schott	EC	F1	TDF	
ARECACEAE	<i>Astrocaryum gynacanthum</i> Mart.	TP	C1	TDF	
ARECACEAE	<i>Astrocaryum paramaca</i> Mart.	SP	A1	TDF	foothill
ARECACEAE	<i>Astrocaryum sciophilum</i> (Miq.) Pulle	SP	KC2 E1 A1 FA F5-2 C1	TDF	
ARECACEAE	<i>Attalea maripa</i> (Aubl.) Mart.	AP	C1 F5	TS/FF	flat
ARECACEAE	<i>Attalea microcarpa</i> Mart.	AP	KC1 E1 A1 F1 F5-3 C1 F7	TFF	river
ARECACEAE	<i>Bactris acanthocarpa</i> Mart.	SP	F1 F5-2	TDF	

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Table 4C-1 Species List from the 2017 Flora Surveys in the Study Area

Family	Taxon	LF	Site	HAB1	HAB2
ARECACEAE	<i>Bactris acanthocarpoides</i> Barb. Rodr.	SP	F5 A1 AF1 KC1	TDF	disturb
ARECACEAE	<i>Bactris cf. aubletiana</i> Trail	SP	AF1	TFF	foothill
ARECACEAE	<i>Bactris cf. brongniartii</i> Mart.	S	C1	TFS	flat
ARECACEAE	<i>Bactris oligocarpa</i> Barb. Rodr. & Trail	SP	A1 F5-3 C1	TFF	foothill
ARECACEAE	<i>Bactris pliniana</i> Granv. & Anders.	SP	A1	TFF	foothill
ARECACEAE	<i>Bactris simplicifrons</i> Mart.	S	E1 C1 F7 AF1 G2	TD/FF	crest/dol
ARECACEAE	<i>Desmoncus macroacanthos</i> Mart.	LP	F5-2	TDF	
ARECACEAE	<i>Elaeis aff. oleifera</i> (Kunth) Cortés	AP	C1 G1	TFS	w sand
ARECACEAE	<i>Euterpe oleracea</i> Mart.	TP	KC1 C1	TS/FF	river/flat
ARECACEAE	<i>Geonoma baculifera</i> (Poit.) Kunth	SP	KC1 A1 F5-3 T1 C1	TS/FF SV	river
ARECACEAE	<i>Geonoma deversa</i> (Poit.) Kunth	SP	KC1-2 AF1 C1 E1 T1 F5-2	TD/FS	
ARECACEAE	<i>Geonoma stricta</i> (Poit.) Kunth	S	E1 A1 F1 T1	TD/FF	crest/dol
ARECACEAE	<i>Oenocarpus bacaba</i> Mart.	TP	F1 F5 G1	TD/FS	
ARECACEAE	<i>Oenocarpus sp. nov.</i>	TP	F5	TDF	crest
ARECACEAE	<i>Socratea exorrhiza</i> (Mart.) H. Wendl.	TP	KC1 A1 F5-2 F5	TD/FF	river
ARISTOLOCHIACEAE	<i>Aristolochia sp. BGB nc 161</i>	L	AF1	TFF	foothill
ASPLENIACEAE	<i>Asplenium juglandifolium</i> Lam.	EH	G3	TFS	w sand
ASPLENIACEAE	<i>Asplenium serratum</i> L.	EH	T1 KC F5-2	TFF	river
ASTERACEAE	<i>Mikania micrantha</i> Kunth	V	F3	SV	open
ASTERACEAE	<i>Struchium sparganophorum</i> (L.) Kunze	T	C1	TFS	w sand
BIGNONIACEAE	<i>Adenocalymma racemosa</i> (Gentry) Lohmann	L	F5	SV	sv/tdf
BIGNONIACEAE	<i>Amphilophium granulatum</i> (Klotzsch) L.G. Lohmann	L	F5 E1 Camp	SV	
BIGNONIACEAE	<i>Fridericia dichotoma</i> (Jacq.) L.G. Lohmann	L	C1Road	SV	sv/tdf
BIGNONIACEAE	<i>Lundia aff. densiflora</i> DC.	L	F5	TFS	w sand
BIGNONIACEAE	<i>Tabebuia serratifolia</i> (Vahl) G. Nicholson	T	A1	TD/FF	
BLECHNACEAE	<i>Salpichlaena volubilis</i> (Kaulf.) J. Sm.	T	F1	TDF	slope
BLECHNACEAE	<i>Telmatoblechnum serrulatum</i> (Rich.) Perrie, D.J. Ohlsen & Brownsey	T	G3	TS	w sand
BOMBACACEAE	<i>Bombax cf. crassum</i> Uitt.	T	F1	TDF	
BOMBACACEAE	<i>Bombax nervosum</i> Uitt.	T	A1	TDF	
BOMBACACEAE	<i>Catostemma fragrans</i> Benth.	T	E1 A1	TDF	crest/dol
BORAGINACEAE	<i>Cordia nodosa</i> Lam.	S	KC2	TDF	
BROMELIACEAE	<i>Bromelia cf. agavifolia</i> Brongn. Ex Houllett	H	C1 A1	TFF	flat
BROMELIACEAE	<i>Bromelia sp. BGB 10341</i>	H	A1	TDF	
BROMELIACEAE	<i>Guzmania lingulata</i> (L.) Mez	EH	T1 F5-3	TS	w sand
BURSERACEAE	<i>Protium sagotianum</i> March.	T	F1	TDF	
BURSERACEAE	<i>Tetragastris cf. panamensis</i> (Engl.) Kuntze	T	E1	TDF	crest/dol
CARYOCARACEAE	<i>Caryocar glabrum</i> (Aubl.) Pers.	T	F1	TDF	
CARYOCARACEAE	<i>Caryocar microcarpum</i> Ducke	T	F5-2	TDF	
CECROPIACEAE	<i>Cecropia sciadophylla</i> Mart.	T	F1	TDF SV	
CECROPIACEAE	<i>Pourouma bicolor</i> Mart.	T	C1	TDF	
CECROPIACEAE	<i>Pourouma minor</i> Benoist	T	KC2	TDF	
CELASTRACEAE	<i>Goupia glabra</i> Aubl.	T	A1 CA	TDF	
CHRYSOBALANACEAE	<i>Couepia guianensis</i> Aubl.	T	E1	TDF	crest/dol
CHRYSOBALANACEAE	<i>Licania cf. heteromorpha</i> Benth.	T	G1	TFS	flat

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Appendix 4C, Supporting Information for Flora Baseline Study

Table 4C-1 Species List from the 2017 Flora Surveys in the Study Area

Family	Taxon	LF	Site	HAB1	HAB2
CHRYSOBALANACEAE	<i>Licania divaricata</i> Benth.	T	F5-2	TDF	
CHRYSOBALANACEAE	<i>Parinari campestris</i> Aubl.	T	A1 CA	TFF	foothill
CLUSIACEAE	<i>Clusia cf. grandiflora</i> Splitg	L	E1	TDF	crest/dol
CLUSIACEAE	<i>Moronobea coccinea</i> Aubl.	T	A1	TDF	
CLUSIACEAE	<i>Symphonia globulifera</i> L. f.	T	C1	TFS	flat
CLUSIACEAE	<i>Vismia cayennensis</i> (Jacq.) Pers.	TL	F3 F5	SV	open
CLUSIACEAE	<i>Vismia ramuliflora</i> Miq.	TL	F1	TFF SV	sv/tff
COMBRETACEAE	<i>Buchenavia capitata</i> (Vahl.) Eischl.	T	F5-3	TFS	w sand
CONVOLVULACEAE	<i>Ipomoea batatas</i> (L.) Lam.	L	C1	SV	sv/tff
CONVOLVULACEAE	<i>Ipomoea phyllomega</i> (Vell.) House		C1 Road	SV	sv/tdf
COSTACEAE	<i>Costus claviger</i> Benoist	H	C1 F5-3	TFS	
COSTACEAE	<i>Costus spiralis</i> (Jacq.) Roscoe	H	KC1 F1 F5-3 G1	TD/FF	sand river
CYATHEACEAE	<i>Cyathea cyatheoides</i> (Desv.) K.U. Kramer	TF	G2 F1	TDF	
CYATHEACEAE	<i>Cyathea microdonta</i> (Desv.) Domin	TF	A1	TDF	disturb
CYATHEACEAE	<i>Cyathea oblonga</i> (Klotzsch) Domin	TF	AF1	TDF	foothill
CYATHEACEAE	<i>Cyathea spectabilis</i> (Kunze) Domin.	TF	AF1	SV	sv/tff
CYATHEACEAE	<i>Cyathea surinamensis</i> (Miq.) Domin	TF	A1 F1 C1	TD/FF	foothill
CYCLANTHACEAE	<i>Asplundia heteranthera</i> Harling	S	KC2	TDF	
CYCLANTHACEAE	<i>Evodianthus funifer</i> (Poi.) Lindm.	EH	C1	TFS	flat
CYCLANTHACEAE	<i>Thoracocarpus bissectus</i> (Vell.) Harling	EC	KC2	TDF	
CYPERACEAE	<i>Bisboeckelera microcephala</i> (Boeck.) Koyama	H	A1 E1	TDF	disturb
CYPERACEAE	<i>Calyptrocarya glomerulata</i> (Brong.) Urb.	H	A1 E1	TD/FF	disturb
CYPERACEAE	<i>Cyperus luzulae</i> (L.) Rottb. ex Retz	H	F3 E1	TDF SV	open
CYPERACEAE	<i>Diplacrum capitatum</i> (Willd.) Boeck	H	C1	TFS	
CYPERACEAE	<i>Diplasia karatifolia</i> Rich.	H	A1 CA F5-3 F1 E1	TD/FF	
CYPERACEAE	<i>Eleocharis filiculmis</i> Kunth	H	Camp	SV	open/riv
CYPERACEAE	<i>Eleocharis interstincta</i> (Vahl) Roem. & Schult.	H	Camp	SV	open/riv
CYPERACEAE	<i>Fimbristylis littoralis</i> Gaudich.	H	F3	SV	open
CYPERACEAE	<i>Fuirena umbellata</i> Rottb.	H	F3	SV	open
CYPERACEAE	<i>Mapania macrophylla</i> (Boeck.) H. Pfeiffer	H	E1	TDF	crest/dol
CYPERACEAE	<i>Mapania sylvatica</i> Aubl.	H	F1	TDF	disturb
CYPERACEAE	<i>Rhynchospora barbata</i> (Vahl) Kunth	H	E1	TDF	crest/dol
CYPERACEAE	<i>Rhynchospora holoschoenoides</i> (Rich.) Herter	H	F3	SV	open
CYPERACEAE	<i>Rhynchospora pubera</i> Vahl subsp. <i>pubera</i> .	H	E1	TDF	disturb
CYPERACEAE	<i>Rhynchospora trispicata</i> (Nees) Schrad.	H	F3	SV	open
CYPERACEAE	<i>Scleria microcarpa</i> Nees ex Kunth	H	F3	SV	open
CYPERACEAE	<i>Scleria stipularis</i> Nees	H	F3 C1	TFS SV	
CYPERACEAE	<i>Spathanthus unilateralis</i> (Rudge) Desv.	H	E1	TDF	crest/dol
DILLENIACEAE	<i>Davilla kunthii</i> A. St.-Hil.	L	F1	TDF	
DILLENIACEAE	<i>Doliodarpus dentatus</i> (Aubl.) Standl.	L	A1	TDF	
DRYOPTERIDACEAE	<i>Cyclodium inerme</i> (Fée) A.R. Sm.	H	AF1	TDF	
DRYOPTERIDACEAE	<i>Cyclodium meniscioides</i> (Willd.) C. Presl var. <i>meniscioides</i>	H/E	AF1	TDF	flat
ELAEOCARPACEAE	<i>Sloanea grandiflora</i> Sm.	T	KC2	TDF	
ELAEOCARPACEAE	<i>Sloanea</i> sp. BGB nc 119	T	A1	TDF	
ELAEOCARPACEAE	<i>Sloanea</i> sp. BGB nc 290	T	C1	TFS	flat
ERIOCAULACEAE	<i>Tonina fluviatilis</i> Aubl.	H	F9	SV	

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Table 4C-1 Species List from the 2017 Flora Surveys in the Study Area

Family	Taxon	LF	Site	HAB1	HAB2
EUPHORBIACEAE	<i>Alchorneopsis floribunda</i> (Benth.) Müll. Arg.	T	F5-2	TDF	
EUPHORBIACEAE	<i>Amanoa guianensis</i> Aubl.	T	A1	TDF	
EUPHORBIACEAE	<i>Chaetocarpus schomburgkianus</i> (Kuntze) Pax & K. Hoffm.	T	E1	TDF	crest/dol
EUPHORBIACEAE	<i>Dalechampia</i> sp. BGB nc 13	V	KC2	TDF	
EUPHORBIACEAE	<i>Dalechampia</i> sp. BGB nc 172	L	F1	TDF	
EUPHORBIACEAE	<i>Pera schomburgkiana</i> (Bouch.) Muell. Arg.	T	E1	TDF	crest/dol
FABACEAE	<i>Abarema jupunba</i> (Willd.) Britton & Killip	T	C1	TFS	flat
FABACEAE	<i>Andira inermis</i> (W. Wright) DC.	T	F5	TDF	
FABACEAE	<i>Andira surinamensis</i> (Bondt) Splitg. ex Amshoff	T	E1	TDF	crest/dol
FABACEAE	<i>Bocoa</i> cf. <i>viridiflora</i> (Ducke) R.S. Cowan	T	F1	TDF	
FABACEAE	<i>Bocoa prouacensis</i> Aubl.	T	E1 A1 F1 F5 C1	TDF	crest/dol
FABACEAE	<i>Chamaecrista nictitans</i> (L.) Moench var. <i>disadena</i> (Steud.) Irwin & Barneby	S	F5	SV	
FABACEAE	<i>Copaifera guianensis</i> Desf.	T	F5-3	TFS	w sand
FABACEAE	<i>Desmodium barbatum</i> (L.) Benth & Oerst.	H	E1	SV	open
FABACEAE	<i>Dicorynia guianensis</i> Amshoff	T	E1 A1 F5-2 CA	TDF	crest/dol
FABACEAE	<i>Dioclea reflexa</i> J.D. Hook.	L	F5	SV	sv/tdf/flat
FABACEAE	<i>Dipteryx odorata</i> (Aubl.) Willd.	T	A1 C1 G1	TD/FS	flat
FABACEAE	<i>Enterolobium schomburgkii</i> (Benth.) Benth.	T	A1	TDF	
FABACEAE	<i>Eperua falcata</i> Aubl.	T	E1 A1 F1 F5-3 C1 G1	TD/FS	sand
FABACEAE	<i>Eperua rubiginosa</i> Miq.	T	C1	TFF	flat
FABACEAE	<i>Hymenolobium flavum</i> Kleinhoonte	T	F5-3	TFS	w sand
FABACEAE	<i>Inga alba</i> (Sw.) Willd.	T	F1 C1	TDF	
FABACEAE	<i>Inga capitata</i> Desv.	T	F3	SV	open
FABACEAE	<i>Inga edulis</i> Mart.	T	KC1	TFF	river
FABACEAE	<i>Inga heterophylla</i> Willd.	T	F5-2	TDF	
FABACEAE	<i>Inga rubiginosa</i> (Rich.) DC.	T	G1	TFS	flat
FABACEAE	<i>Inga thibaudiana</i> DC.	T	F5	SV	
FABACEAE	<i>Inga umbellifera</i> (Vahl.) Steud.	T	F1	TDF	cr/lianF
FABACEAE	<i>Machaerium</i> sp. BGB nc 210	L	F1	TDF	
FABACEAE	<i>Macrolobium</i> sp. BGB nc 241	T	F5-2	TDF	
FABACEAE	<i>Martiodendron parviflorum</i> (Amsh) Koepp.	T	A1	TDF	
FABACEAE	<i>Ormosia coccinea</i> (Aubl.) Jacks.	T	F1	TD/FF	crest
FABACEAE	<i>Parkia nitida</i> Miq.	T	G1	TFS	flat
FABACEAE	<i>Peltogyne</i> cf. <i>paniculata</i> Benth.	T	E1	TDF	crest/dol
FABACEAE	<i>Peltogyne venosa</i> (Vahl) Benth.	T	C1 G1	TD/FS	flat
FABACEAE	<i>Pithecellobium</i> sp. BGBnc315	T	C1	TDF	
FABACEAE	<i>Pseudopiptadenia</i> cf. <i>psilostachya</i> (DC.) G.P.Lewis & M.P.Lima	T	F1	TFF	
FABACEAE	<i>Sclerolobium albiflorum</i> Benoist	T	F1 C1	TDF	
FABACEAE	<i>Sclerolobium melinonii</i> Harms	T	F1 AF1	TD/FF	foothill
FABACEAE	<i>Senna quinquangulata</i> (L.C. Rich.) Irwin & Barn.	L	AF1	SV	open
FABACEAE	<i>Stylosanthes viscosa</i> Swartz	H	C1	TFS	
FABACEAE	<i>Swartzia benthamiana</i> Miq.	T	C1	TDF	
FABACEAE	<i>Swartzia panacoco</i> (Aubl.) R.S. Cowan	T	E1 F5-2	TDF	crest/dol

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Table 4C-1 Species List from the 2017 Flora Surveys in the Study Area

Family	Taxon	LF	Site	HAB1	HAB2
FABACEAE	<i>Swartzia sp. BGB nc329</i>	T	G1	TFS	flat
FABACEAE	<i>Tamarindus indica L.</i>	T	C1	TDF	
FABACEAE	<i>Vouacapoua americana Aubl.</i>	T	E1 F1 G1	TD/FS	crest/dol
FABACEAE	<i>Zygia racemosa (Ducke) Barneby & Grimes</i>	T	C1 G1	TD/FS	flat
FLACOURTIACEAE	<i>Cassearia cf. sylvestris Sw.</i>	TL	F1	TDF	
GENTIANACEAE	<i>Coutoubea ramosa Aubl.</i>	H	F5 E1	TDF SV	disturb
GENTIANACEAE	<i>Voyria corymbosa Splitg.</i>	H	G3	TFS	w sand
GENTIANACEAE	<i>Voyria rosea Aubl.</i>	H	E1 F1	TDF	crest/dol
GENTIANACEAE	<i>Voyriella parviflora (Miq.) Miq.</i>	Sap	A1	TDF	disturb
GESNERIACEAE	<i>Codonanthe crassifolia (H. Focke) C.V. Morton</i>	EH	KC1	TFF	river
GESNERIACEAE	<i>Paradrymonia campostyla (Leeuw.) Wiehler</i>	ES	AF1	SV	
GLEICHENACEAE	<i>Sticherus remotus (Kaulf.) Chrysler</i>	H	F1	SV	
HELICONIACEAE	<i>Heliconia acuminata Rich.</i>	H	A1 G1 F1 C1 E1 KC1	TD/FS	flat
HELICONIACEAE	<i>Heliconia richardiana Miq.</i>	H	T1	TFF	river
HIPPOCRATEACEAE	<i>cf. Hippocratea volubilis L.</i>	L	E1	TDF	crest/dol
HUMIRIACEAE	<i>Humiria balsamifera Aubl.</i>	T	C1 G1	TFS	flat
HYMENOPHYLLACEAE	<i>Hymenophyllum decurrens (Jacq.) Sw.</i>	EH	G3	TFS	w sand
HYMENOPHYLLACEAE	<i>Trichomanes pedicellatum Desv.</i>	HV	A1	TDF	disturb
HYMENOPHYLLACEAE	<i>Trichomanes pinnatum Hedw.</i>	H	F1	TDF	disturb
HYMENOPHYLLACEAE	<i>Trichomanes tuerckheimii H. Christ</i>	V	E1	TDF	disturb
ICACINACEAE	<i>Dendrobangia boliviana Rusby</i>	T	F1	TDF	
ICACINACEAE	<i>Discophora guianensis Miers</i>	T	F5-2	TDF	
LAMIACEAE	<i>Hyptis lanceolata Poiteau</i>	H	F3	SV	open
LAMIACEAE	<i>Marsypianthes chamaedrys (Vahl) Kunze</i>	S	Camp	SV	open
LAURACEAE	<i>Lauraceae sp. BGB nc67</i>	T	E1	TDF	crest/dol
LAURACEAE	<i>Licaria canella (Meisn.) Kosterm.</i>	T	F1	TDF	
LAURACEAE	<i>Ocotea glomerata (Nees) Mez</i>	T	C1	TDF	
LAURACEAE	<i>Sextonia rubra (Mez) van der Werff</i>	T	C1 G1	TFS	flat
LECYTHIDACEAE	<i>Couratari guianensis Aubl.</i>	T	KC2	TDF	
LECYTHIDACEAE	<i>Couratari stellata A.C. Smith</i>	T	KC2 G1	TD/FS	flat
LECYTHIDACEAE	<i>Eschweilera pedicellata (Rich.) S.A. Mori</i>	T	E1 A1 F1 F5 C1	TDF	crest/dol
LECYTHIDACEAE	<i>Eschweilera sp. BGB nc37</i>	T	E1	TDF	crest/dol
LECYTHIDACEAE	<i>Eschweilera sp. BGB nc316</i>	T	C1	TDF	
LECYTHIDACEAE	<i>Gustavia augusta L.</i>	T	KC1	TFF	river
LECYTHIDACEAE	<i>Lecythis idatimon Aubl.</i>	T	E1 A1 F1	TDF	crest/dol
LECYTHIDACEAE	<i>Lecythis poiteaui O. Berg</i>	T	F1	TDF	
LECYTHIDACEAE	<i>Lecythis zabucajo Aubl.</i>	T	AF1 F5-3	TF/FS	foothill
LENTIBULARIACEAE	<i>Utricularia pusilla M. Vahl</i>	H	E1	SV	open
LILIACEAE	<i>Hymenocallis tubiflora Salisb.</i>	H	KC1 C1	TF/FS	river
LINACEAE	<i>Hebepetalum humirifolium (Planch.) Benth.</i>	T	F1	TDF	
LINDSAEACEAE	<i>Lindsaea dubia Spreng</i>	H	E1	SV	open
LINDSAEACEAE	<i>Lindsaea lancea (L.) Bedd. var. falcata</i>	H	G3 A1 C1 E1	TD/FS	w sand
LINDSAEACEAE	<i>Lindsaea lancea (L.) Bedd. var. lancea</i>	H	G3 A1 E1	TD/FS	w sand
LOGANIACEAE	<i>Antonia ovata Pohl</i>	T	A1	TFF	foothill
LOGANIACEAE	<i>Spigelia hamelioides Kunth & Bonpland in HBK.</i>	S	AF1	SV	sv/tff

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Family	Taxon	LF	Site	HAB1	HAB2
LOGANIACEAE	<i>Strychnos erichsonii</i> M.R. Schomb. ex Progel	L	F1	TDF	
LOGANIACEAE	<i>Strychnos melinoniana</i> Baill.	L	G1	TDF	slope
LYCOPODIACEAE	<i>Lycopodiella cernua</i> (L.) Pic. Serm.	H	E1	TDF	crest/dol
MALPIGHIACEAE	<i>Stigmaphyllon convolvulifolium</i> A.Dr. Juss.	L	T1	TFF	river
MARANTACEAE	<i>Calathea cf. maasiorum</i> H. Kenn.	H	C1	TFF	flat
MARANTACEAE	<i>Calathea cf. propinqua</i> (Poepp. & Endl.) Körn.	H	E1	TDF	crest/dol
MARANTACEAE	<i>Calathea elliptica</i> (Roscoe) K. Schum.	H	T1 E1 G3	TFF	River
MARANTACEAE	<i>Calathea grandis</i> Petersen	H	KC1	TFF	river
MARANTACEAE	<i>Calathea granvillei</i> L. Andersson & H. Kenn.	H	T1	TFF	river
MARANTACEAE	<i>Calathea micans</i> (Mathieu) Körn.	H	KC2	TDF	
MARANTACEAE	<i>Calathea</i> sp. BGB nc333	H	G1	TFS	flat
MARANTACEAE	<i>Calathea squarrosa</i> Andersson & H. Kenn.	H	F5-2	TDF	
MARANTACEAE	<i>Ischnosiphon arouma</i> (Aubl.) Körn.	H	A1 F5-2	TFF	foothill
MARANTACEAE	<i>Ischnosiphon gracilis</i> (Rudge) Körn.	V	G1 A1 E1 FA F5-2	TDF	
MARANTACEAE	<i>Ischnosiphon obliquus</i> (Rudge) Körn.	H	C1	TFS	w sand
MARANTACEAE	<i>Ischnosiphon puberulus</i> Loes	S	C1	TFS	
MARANTACEAE	<i>Monotagma spicatum</i> (Aubl.) J.F. Macbr.	H	C1 T1	TS/FF	flat
MARATTIACEAE	<i>Danaea simplicifolia</i> Rudge	T	G2	TDF	
MARCGRAVIACEAE	<i>Souroubea guianensis</i> Aubl.	L	C1	TFS	flat
MELASTOMATAACEAE	<i>Aciotis ornata</i> (Miq.) Gleason	S	C1	TFS	w sand
MELASTOMATAACEAE	<i>Aciotis purpurascens</i> (Aubl.) Triana	S	C1	TFS	flat
MELASTOMATAACEAE	<i>Clidemia conglomerata</i> D.C.	S	A1 E1 KC2	TD/FF	
MELASTOMATAACEAE	<i>Clidemia dentata</i> D. Don	S	F3	SV	open
MELASTOMATAACEAE	<i>Clidemia involucrata</i> DC.	S	F1	SV	sv/tdf
MELASTOMATAACEAE	<i>Clidemia</i> sp. nov. ? (affine <i>Hirta</i> ?)	S	AF1	TDF	foothill
MELASTOMATAACEAE	<i>Henriettella caudata</i> Gleason	S	F7	TDF	disturb
MELASTOMATAACEAE	<i>Maieta guianensis</i> Aubl.	S	A1 F5-2	TD/FF	
MELASTOMATAACEAE	<i>Miconia bracteata</i> (DC.) Triana	S	AF1	TDF	foothill
MELASTOMATAACEAE	<i>Miconia ceramicarpa</i> (DC.) Cogn. var. <i>ceramicarpa</i>	H	E1	SV	open
MELASTOMATAACEAE	<i>Miconia eriodonta</i> DC.	TL	F1 A1	TFF SV	
MELASTOMATAACEAE	<i>Miconia longifolia</i> (Aubl.) DC.	S	T1	TFF	river
MELASTOMATAACEAE	<i>Miconia mirabilis</i> (Aubl.) L.O. Williams	TL	A1	SV	sv/tdf
MELASTOMATAACEAE	<i>Miconia plukenetii</i> Naudin	S	A1	TDF	
MELASTOMATAACEAE	<i>Miconia racemosa</i> (Aubl.) DC.	S	F1	TDF	
MELASTOMATAACEAE	<i>Nepsera aquatica</i> (Aubl.) Naudin	S	AF1	TDF	
MELASTOMATAACEAE	<i>Pterolepis glomerata</i> (Rottb.) Miq.	H	F9	SV	
MELIACEAE	<i>Carapa guianensis</i> Aubl.	T	C1	TDF	
MELIACEAE	<i>Carapa procera</i> DC.	T	C1	TFS	flat
MELIACEAE	<i>Guarea</i> sp. (large stipules)	T	A1	TFF	foothill
MELIACEAE	<i>Gurania guidonia</i> (L.) Sleumer	T	KC1	TFF	river
MENDONCIACEAE	<i>Mendoncia hoffmannseggiana</i> Nees	L	F5-2	TDF	
MENISPEMACEAE	<i>Abuta grandifolia</i> (Mart.) Sandwith	S	A1	TDF	
MENISPEMACEAE	<i>Abuta rufescens</i> Aubl.	S	C1	TFS	flat
MENISPEMACEAE	<i>Curarea candicans</i> (Rich. ex DC.) Barn. & Krukoff	L	F1	TDF	
METAXYACEAE	<i>Metaxya rostrata</i> (Kunth) C. Presl	H	E1 A1 F1	TD/FF	crest/dol

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Family	Taxon	LF	Site	HAB1	HAB2
METAXYACEAE	<i>Metaxya scalaris</i> Tuomisto & G.G. Cárdenas	H	A1	TDF	disturb
MOLINIACEAE	<i>Mollinedia cf. grazielae</i> Peixoto	S	E1	TDF	crest/dol
MORACEAE	<i>Pseudolmedia laevis</i> (Ruiz & Pav.) Macbr.	T	F1	TDF	
MYRISTICACEAE	<i>Virola surinamensis</i> (Rol. ex Rottb.) Warb.	T	C1 F5-2	TDF	
MYRTACEAE	<i>Calycorectes grandifolius</i> O. Berg	TL	T1	TFF	river
NEPHROLEPIDACEAE	<i>Nephrolepis rivularis</i> (Vahl) Mett. ex Krug	EH	F7	TDF	disturb
NYCTAGYNACEAE	<i>Neea floribunda</i> Poepp. Et Endl.	T	F1	TDF	
OCHNACEAE	<i>Sauvagesia erecta</i> L.	H	F5	SV	open
OLACACEAE	<i>Chaunochiton kappleri</i> (Sagot) Ducke	T	F1	TDF	
ONAGRACEAE	<i>Ludwigia affinis</i> (DC.) H. Hara	S	F3	SV	open
ONAGRACEAE	<i>Ludwigia cf. octovalvis</i> (Jacq.) Raven	H	F3	SV	open
ONAGRACEAE	<i>Ludwigia decurrens</i> Walt.	S	C1 Road	SV	sv/tdf
ONAGRACEAE	<i>Ludwigia dodecandra</i> (DC.) Zardini & Raven	H	F3	SV	open
ORCHIDACEAE	<i>Anathallis ciliolata</i> (Schltr.) Pridgeon & Chase	EH	G3	TFS	w sand
ORCHIDACEAE	<i>Heterotaxis violaceopunctata</i> (Rchb. F.) F. Barroso	EH	T1	TFF	river
ORCHIDACEAE	<i>Palmorchis prospectorum</i> Veyret	T	C1	TFS	w sand
ORCHIDACEAE	<i>Pleurothallis sp. nc SJD 355</i>	EH	T1	TFF	river
ORCHIDACEAE	<i>Sobralia sp. nc SJD 353</i>	EH	T1	TFF	river
ORCHIDACEAE	<i>Trigonidium acuminatum</i> Bateman ex Lindl.	EH	T1 F7	TD/FF	river
ORCHIDACEAE	<i>Vanilla sp. nc SJD 352</i>	EV	T1	TFF	river
PASSIFLORACEAE	<i>Passiflora glandulosa</i> Cav	L	F1	TDF	
PICRAMNIACEAE	<i>Picramnia spruceana</i> Engl.	L	T1	TFF	river
PIPERACEAE	<i>Peperomia obtusifolia</i> (L.) A. Dietr.	EH	AF1	SV	sv/tff
PIPERACEAE	<i>Peperomia rotundifolia</i> (L.) Kunth	EH	C1	TFS	w sand
PIPERACEAE	<i>Peperomia serpens</i> (Sw.) Loudon	EH	KC2 T1	TD/FF	river
PIPERACEAE	<i>Piper arboreum</i> Aubl.	S	Camp	SV	open
PIPERACEAE	<i>Piper bartlingianum</i> (Miq.) C. DC.	S	KC2	TDF	
PIPERACEAE	<i>Piper hostmannianum</i> (Miq.) C. DC.	S	E1	SV	open
PIPERACEAE	<i>Piper trichoneuron</i> (Miq.) C. DC.	S	F7	TDF	disturb
PLANTAGINACEAE	<i>Achetaria guianensis</i> Pennel	H	F3	SV	open
PLANTAGINACEAE	<i>Conobea aquatica</i> Aubl.	H	F9	SV	open
POACEAE	<i>Calyptracarya glomerulata</i> (Brongn) Urb	H	F1	TDF	
POACEAE	<i>Ichnanthus panicoides</i> P. Beauv.	H	F7	TDF	disturb
POACEAE	<i>Olyra latifolia</i> L.	H	KC1	TFF	river
POACEAE	<i>Olyra longifolia</i> Kunth	H	F3 E1	TDF SV	open
POACEAE	<i>Olyra obliquifolia</i> Steud.	H	A1 F1	TDF	
POACEAE	<i>Oplismenus hirtellus</i> (L.) P. Beauv.	H	F1	TDF	cr/lianF
POACEAE	<i>Panicum pilosum</i> Sw.	H	F3	SV	open
POACEAE	<i>Parodiolyra micrantha</i> (Kunth) Davidse & Zuloa	H	F1	SV	
POACEAE	<i>Paspalum virgatum</i> L.	H	C1	SV	sv/tff
POACEAE	<i>Pharus latifolius</i> L.	H	F1	TDF	cr/lianF
POACEAE	<i>Piresia goeldii</i> Swallen	H	E1 F5-2	TDF SV	
POACEAE	<i>Piresia sympodica</i> (Doell.) Swallen	H	F1	TDF	
POACEAE	<i>Streptogyne americana</i> C.E. Hubb.	H	KC1	TDF	
POLYGALACEAE	<i>Securidaca paniculata</i> Rich.	L	T1	TFF	river
POLYGONACEAE	<i>Coccoloba ascendens</i> Duss ex Lindau	L	F1	TDF	

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Family	Taxon	LF	Site	HAB1	HAB2
POLYGONACEAE	<i>Coccoloba</i> sp. BGB nc 60	L	E1	TDF	crest/dol
PRIMULACEAE	<i>Stylogyne</i> cf. <i>longifolia</i> (Mart. & Miq.) Mez	S	T1	TFF	river
PTERIDACEAE	<i>Adiantum cajennense</i> Willd. Ex Klotzsch	H	A1	TDF	disturb
PTERIDACEAE	<i>Adiantum</i> cf. <i>paraense</i> Hieron. (hybrid ?)	H	F1	SV	sv/tff
PTERIDACEAE	<i>Adiantum fuliginosum</i> Fée	H	F1	TDF	
PTERIDACEAE	<i>Adiantum obliquum</i> Willd.	H	F1	SV	sv/tff
PTERIDACEAE	<i>Adiantum terminatum</i> Kunze	H	F5 AF1	TDF SV	open
PTERIDACEAE	<i>Adiantum tomentosum</i> Klotzsch	H	G2	TDF	slope
PTERIDACEAE	<i>Vittaria lineata</i> (L.) Sm.	EH	G1	TDF	crest
QUIINACEAE	<i>Lacunaria crenata</i> (Tul.) A.C. Sm.	T	A1	TDF	
RAPATEACEAE	<i>Rapatea paludosa</i> Aubl.	H	A1 F5-3	TFF/S	
RAPATEACEAE	<i>Spathanthus unilateralis</i> (Rudge) Desv.	H	A1	TDF	
RUBIACEAE	<i>Capirona decorticans</i> Spruce	S	KC2	TDF	
RUBIACEAE	<i>Chomelia tenuiflora</i> Benth.	S	T1	TFF	river
RUBIACEAE	<i>Coussarea racemosa</i> A. Rich. in DC.	T	F1 A1	TDF SV	crest
RUBIACEAE	<i>Duroia eriopila</i> L. f.	T	C1	TFS	flat
RUBIACEAE	<i>Faramea quadricostata</i> Bremek. em. Steyerem.	S	F1	TDF	
RUBIACEAE	<i>Hillia illustris</i> (Vell.) K. Schum.	P	T1	TFF	river
RUBIACEAE	<i>Palicourea alba</i> (Aubl.) Delprete & J.H. Kirkbride	S	AF1	SV	sv/tff
RUBIACEAE	<i>Palicourea apoda</i> (Steyerem.) Delprete & Kirkbride	S	F1	TDF	
RUBIACEAE	<i>Palicourea crocea</i> (Sw.) Roem. & Schult.	S	G1	SV	sv/tff
RUBIACEAE	<i>Palicourea gracilentia</i> (Müll. Arg) Delprete & Kir.	S	AF1	TDF	
RUBIACEAE	<i>Palicourea longiflora</i> DC.	S	F1	SV	open
RUBIACEAE	<i>Palicourea racemosa</i> (Aubl.) Borhidi	S	E1	SV	
RUBIACEAE	<i>Palicourea tenerior</i> (Cham.) Delprete & Kirkbride	S	E1	TDF	disturb
RUBIACEAE	<i>Palicourea tomentosa</i> (Aubl.) Borhidi	S	C1 F5-2 KC2	TD/FS	w sand
RUBIACEAE	<i>Psychotria guianensis</i> (Aubl.) Clos	T	KC1 F5-3	TF/FS	w sand
RUBIACEAE	<i>Ronabea latifolia</i> Aubl.	S	F1	SV	open
RUBIACEAE	<i>Rosenbergiodendron longiflorum</i> (Ruiz & Pav.) Fagerl.	S	T1	TFF	river
RUBIACEAE	<i>Sabicea oblongifolia</i> (Miq.) Steyerem.	L	F3	SV	open
RUBIACEAE	<i>Sipanea pratensis</i> Aubl.	V	F5	SV	
RUBIACEAE	<i>Spermacoce latifolia</i> Aubl.	S	C1	SV	sv/tff
RUBIACEAE	<i>Spermacoce spicata</i> (Miq.) Delprete	S	F7	TDF	disturb
RUBIACEAE	<i>Stachyarrhena</i> cf. <i>penduliflora</i> K. Schum.	S	T1	TFF	river
SACCOLOMATACEAE	<i>Saccoloma inaequale</i> (Kunze) Mett.	H	AF1	TDF	
SALICACEAE	<i>Homalium guianense</i> (Aubl.) Oken	T	T1	TFF	river
SAPINDACEAE	<i>Pseudima frutescens</i> (Aubl.) Radlk.	T	E1	TDF	foothill
SAPINDACEAE	<i>Talisia sylvatica</i> (Aubl.) Radlk.	TL	E1	TDF	crest/dol
SAPOTAEAE	<i>Micropholis guyanensis</i> (A.DC.) Pierre	T	E1 A1 C1	TDF	crest/dol
SAPOTAEAE	<i>Micropholis venulosa</i> (Mart. & Eichler) Pierre	T	E1 A1	TDF	crest/dol
SAPOTAEAE	<i>Pouteria cuspidata</i> (A. DC.) Baehni	T	F5	TDF	
SAPOTAEAE	<i>Pouteria guianensis</i> Aubl.	T	F1	TDF	
SAPOTAEAE	<i>Pouteria sagotiana</i> (Baill.) Eyma	T	A1 F1	TDF	
SCROPHULARIACEAE	<i>Bacopa sessiliflora</i> (Benth.) Edwall	S	Camp	SV	open
SELAGINELLACEAE	<i>Selaginella conduplicata</i> Spring	H	C1 Camp	TFF SV	open/riv

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Appendix 4C, Supporting Information for Flora Baseline Study

Table 4C-1 Species List from the 2017 Flora Surveys in the Study Area

Family	Taxon	LF	Site	HAB1	HAB2
SELAGINELLACEAE	<i>Selaginella parkeri</i> (Hook. & Grev.) Spring	H	AF1	SV	sv/tdf
SELAGINELLACEAE	<i>Selaginella radiata</i> (Aubl.) Spring	H	T1	TFF	river
SELAGINELLACEAE	<i>Selaginella sp. nc BGB87</i>	H	E1	TDF	crest/dol
SIMAROUBACEAE	<i>Simaba guianensis</i> Aubl.	T	F5	SV	sv/tdf
SIMAROUBACEAE	<i>Siparuna cf. guianensis</i> Aubl.	S	F1	TDF	
SOLANACEAE	<i>Schwenkia americana</i> L.	T	Camp	SV	open
SOLANACEAE	<i>Solanum coriaceum</i> Dunal	L	C1	SV	sv/TFS
SOLANACEAE	<i>Solanum jamaicense</i> Mill.	S	C1Road	SV	sv/tdf
SOLANACEAE	<i>Solanum leucocarpon</i> Dunal	S	F5	SV	
SOLANACEAE	<i>Solanum pensile</i> Sendtn.	S	F5-2	TDF	
STERCULIACEAE	<i>Sterculia pruriens</i> (Aubl.) K. Schum.	T	F1	TDF	
STRELITZIACEAE	<i>Phenakospermum guyannense</i> (Rich.) Endl.	H	C1 F5-3	TFS	fat sand
SYMPLOCACEAE	<i>Symplocos martinicensis</i> Jacq.	T	G3	TFF	w sand
TECTARIACEAE	<i>Tectaria incisa</i> Cav.	H	KC1	TFF	river
TECTARIACEAE	<i>Tectaria incisa</i> Cav. Form vivipara	H	KC1	TFF	river
TECTARIACEAE	<i>Triplophyllum dicksonioides</i> (Fée) Holttum	H	E1 G1	TDF	disturb
TECTARIACEAE	<i>Triplophyllum funestum</i> (Kunze) Holttum	H	F5	TDF	disturb
TECTARIACEAE	<i>Triplophyllum hirsutum</i> (Holtt.) Prado & Moran	H	F1 KC1	TD/FF	
THELYPTERIDACEAE	<i>Amblovenatum opulentum</i> (Kaulf.) Roux	H	AF1 G2	TDF	slope
THELYPTERIDACEAE	<i>Goniopteris abrupta</i> (Desv.) A.R. Sm.	H	F1	TDF	cr/lianF
THEOPHRASTACEAE	<i>Clavija lancifolia</i> Desf.	S	KC2	TDF	
TRIGONIACEAE	<i>Trigonia laevis</i> Aubl. var. <i>microcarpa</i> (Sagot ex Warm.) Sagot	TL	E1	SV	open
TRIURIDACEAE	<i>Sciaphila albescens</i> Benth.	H	E1	TDF	crest/dol
TRIURIDACEAE	<i>Soridium spruceanum</i> Miers	Sap	A1	TDF	disturb
VERBENACEAE	<i>Aegephylla laevis</i> (Aubl.) J. F. Gmel.	L	C1Road	TDF	crest
VIOLACEAE	<i>Paypayrola cf. guianensis</i> Aubl.	TL	E1 A1	TDF	crest/dol
VIOLACEAE	<i>Rinorea pubiflora</i> (Benth.) Sprague & Sandw.	TL	C1	TFS	w sand
VIOLACEAE	<i>Rinorea riana</i> Kuntze	TL	F1 KC1	TD/FF	
VIOLACEAE	<i>Violaceae sp. SJD106</i>	S	E1	TDF	disturb
XYRIDACEAE	<i>Xyris jupicai</i> L.C. Rich.	H	AF1	TDF	
ZINGIBERACEAE	<i>Renealmia guianensis</i> Maas	H	E1 A1 F5-3	TD/FF/FS	
ZINGIBERACEAE	<i>Renealmia monosperma</i> Miq.	H	KC1 KC2	TD/FF	
ZINGIBERACEAE	<i>Renealmia orinocensis</i> Rusby	H	A1 F1 F5-2	TD/FF	

Notes:

LF = life form (T tree, S shrub, H herb, E epiphyte, TL treelet, L liana, AP stemless (acaulous) palm, TP tree palm, SP shrub (understory) palm, LP liana (climbing) palm, V vine, EC epiphytic climber (hemi-epiphyte), EH herbaceous epiphyte, Sap saprophyte plant,

Hab1 = main habitat (TDF tall dry forest (=High dryland forest type in habitat/vegetation classification), TFF tall floodable forest (=Marsh forest in floodplain; creek forest; and marsh forest on loamy soil types in habitat/vegetation classification), TFS tall forest on sandy alluvium (=Wet savannah forest on sandy soil type in habitat/vegetation classification), SV secondary vegetation (=Young secondary vegetation and older secondary forest types in habitat/vegetation classification), and combinations eg. TD/FS species found both in TDF and TFS),

Hab2 = notable pattern of habitat, crest, dolerite (dol), riverside (river), flatland (flat), white sand (w sand), foothill, open vegetation (open) etc.

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Table 4C-2 Priority Plant Species to Consider for Incorporation into Reclamation and Reforestation Programs

Species (FAMILY) "common name"	Description	High dryland forest	Dry mountain forest on duricrust	Wet savanna forest on sandy soil	Marsh forest Creek forest Marsh forest on loamy soil	Young secondary vegetation Secondary forest
Economically important species						
<i>Bocoa cf. viridiflora</i> (Ducke) R.S. Cowan (FABACEAE)	Canopy tree, slow growing hard wood. Extremely rare. Endemic to French Guiana, Suriname & Northern Brazil. Protected in French Guiana (2001 Ministry decree).	X				
<i>Bocoa prouacensis</i> Aubl. (FABACEAE) "Ijzerhart"	Canopy tree. Endemic to the north of the three Guianas. Among hardest woods known, grows slowly, indicator of historically undisturbed forests, the tree longevity is up to 1000 years.	X	X			
<i>Copaifera guianensis</i> Desf. (FABACEAE) "Upru-udu", "Opoli"	Canopy tree. Non-timber forest species producing the medicinal copaiba (or copahu) oil. Protected in Suriname (1992 Forestry Law).			X		
<i>Dipteryx odorata</i> (Aubl.) Willd (FABACEAE) "Tonka"	Large canopy tree. High agro-forestry value as a non-timber forest product (tonka bean/coumarine). Trees long-lived, up to 1000 years. Protected in Suriname (1992 Forestry Law).	X		X		
<i>Elaeis aff. oleifera</i> (Kunth) Cortés (ARECACEAE) "Sabana Obé"	Stemless understory palm. Endemic to forests on white sand and savanna brush. Very rare in French Guiana and Suriname, at the limit of the species distribution area with populations of a different sub-species than the Central America and Central Amazonian basin ones. Wild genetic resource of major agronomic importance (oil palm). Protected in French Guiana.			X		
<i>Peltogyne cf. paniculata</i> Benth. (FABACEAE)	Large canopy tree. Endemic to Guianas and Northern Amazon. "Purple heart" precious wood, intensively logged in Suriname. Populations threatened by overharvest in all accessible areas.	X				
<i>Peltogyne venosa</i> (Vahl) Benth. (FABACEAE)	Large canopy tree. Endemic to Guiana's and Northern Amazon. "Purple heart" precious wood, intensively logged in Suriname. Populations threatened by overharvest in all accessible areas.	X				
<i>Swartzia panacoco</i> (Aubl.) R.S. Cowan (FABACEAE) " Ijzerhart"	Large canopy tree. Endemic to the Guiana Shield. Slow-growing, precious hardwood tree. Rare. All subspecies of the genus from the Guianas listed as Vulnerable to Endangered by IUCN.	X				
<i>Virola surinamensis</i> (Rol. ex Rottb.) Warb. (MYRISTICACEAE) "Laagland babun"	Canopy tree. Valuable veneer wood resource threatened by overharvesting. Listed as Endangered by IUCN.	X			X	

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Species (FAMILY) "common name"	Description	High dryland forest	Dry mountain forest on duricrust	Wet savanna forest on sandy soil	Marsh forest Creek forest Marsh forest on loamy soil	Young secondary vegetation Secondary forest
<i>Vouacapoua americana</i> Aubl. (FABACEAE)	Endemic to Guianas and Amazon delta. Precious pest-resistant hardwood, Listed as Critically Endangered by IUCN.	X				
Rare species						
<i>Anathallis aff. ciliolata</i> (Schltr.) Pridgeon & M.W.Chase (ORCHIDACEAE)	Epiphytic herb. Extremely rare, a form related to a Peruvian species (<i>Anathallis ciliolata</i>). New to Suriname and to the Guianas region.	X				
<i>Stachyarrhena cf. penduliflora</i> K.Schum (RUBIACEAE)	Understory treelet. New to Suriname, only known from Venezuela & west Amazon basin. Very rare species.				X	
Endemic/rare species						
<i>Achetaria guianensis</i> Pennel (PLANTAGINACEAE)	Small shrub species, found in secondary vegetation. Endemic to the Guiana Shield. Rare.					X
<i>Astrocaryum sciophilum</i> (Miq.) Pulle (ARECACEAE) "Bugrumaka"	Understory palm. Endemic to the Guiana Shield, Indicator of historically undisturbed forests, may live centuries.	X	X			
<i>Calathea granvillei</i> L. Andersson & H. Kenn. (MARANTACEAE)	Understory herb. Endemic to the Guiana shield. Very rare species.				X	
<i>Calycorectes grandifolius</i> O. Berg (MYRTACEAE)	Understory tree. Endemic to Suriname and French Guiana and Northern Brazil. Very rare species.				X	
<i>Hymenolobium flavum</i> Kleinhoonte (FABACEAE)	Large canopy tree. Endemic to the Guiana Shield. Very rare species,				X	
<i>Mapania macrophylla</i> (Boeck.) H. Pfeiffer (CYPERACEAE)	Understory herb. Endemic to the Guiana shield and N-Amazon basin. Very rare species,	X				
<i>Martiodendron parviflorum</i> (Amshoff) R. Koeppen (FABACEAE)	Canopy tree. Endemic to the Guianas and Amazon basin. Rare species.	X				
<i>Metaxya scalaris</i> Tuomisto & G.G. Cárdenas (METAXYACEAE)	Understory fern. Endemic to the Guiana Shield and Northern Amazon basin. Extremely rare species.	X				
<i>Miconia eriodonta</i> DC. (MELASTOMATACEAE)	Understory shrub. Endemic to French Guiana, Brazil (states of Para and Amapa). Rare species, new for Suriname.				X	
<i>Mollinedia cf. grazielae</i> Peixoto (MOLINIACEAE)	Tree. Endemic to the Guiana Shield and Northern Amazon basin. Rare.	X				

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Appendix 4C, Supporting Information for Flora Baseline Study

Table 4C-2 Priority Plant Species to Consider for Incorporation into Reclamation and Reforestation Programs

Species (FAMILY) "common name"	Description	High dryland forest	Dry mountain forest on duricrust	Wet savanna forest on sandy soil	Marsh forest Creek forest Marsh forest on loamy soil	Young secondary vegetation Secondary forest
<i>Palmorchis prospectorum</i> Veyret (ORCHIDACEAE)	Understory ground orchid. Restricted Range Endemic to the north of French Guiana and Suriname. Rare species.			X	X	
<i>Pouteria sagotiana</i> (Baill.) Eyma (SAPOTAEAE)	Large canopy tree. Endemic to the Guiana shield. Rare tree of the Balata gum family,	X				
<i>Sciaphila albescens</i> Benth. (TRIURIDACEAE)	Understory saprophyte herb. Endemic to the Guiana shield with a disjunction in the distribution area. Uncommon.	X				
<i>Sclerolobium albiflorum</i> Benoist (FABACEAE) "Rode Djedoe"	Canopy tree. Endemic restricted to the north of Suriname and French Guiana. Very rare.	X				
<i>Sclerolobium melinonii</i> Harms (FABACEAE) "Dyadjdya"	Large canopy tree. Endemic to French Guiana, Suriname with rare occurrences in Brazil (Para) and Amazonian Peru. Rare.	X				
<i>Sextonia rubra</i> (Mez) van der Werff (LAURACEAE)	Canopy tree. Endemic to the Guiana Shield and Amazon basin. Very rare species.			X	X	
<i>Thyrsodium cf. guianense</i> Sagot ex Marchand (ANACARDIACEAE)	Large canopy tree. Endemic to the Guiana Shield and northern bank of Amazon delta. Very rare.	X				
Potentially new to science						
<i>Anathallis</i> aff. <i>ciliolata</i> (Orchidaceae)	A herbaceous epiphyte	X				
<i>Clidemia</i> sp. nov. (MELASTOMATACEAE)	Understory shrub. Possibly new to science, possibly related (Affine) to <i>Clidemia hirta</i> (L.) Don.				X	
<i>Lundia</i> sp. nov. (?) (<i>aff densiflora</i> DC.) (BIGNONIACEAE)	Canopy liana. Possibly new species for science, affinity with <i>L. densiflora</i> but distinct. Known distribution range limited to the present collection,			X		
<i>Oenocarpus</i> sp. nov. (?) (ARECACEAE) "Afa cumbu"	Canopy palm tree. Likely restricted range endemic only known from Northeast Suriname. New species or subspecies of palm of the genus.	X			X	
Important for wildlife						
<i>Diplacrum capitatum</i> (Willd.) Boeck (CYPERACEAE)	Understory sedge. Listed as 'determining species' for important wildlife areas in French Guiana. Infrequent forest species.			X		

IUCN = International Union for Conservation of Nature

March 2018

SABAJO PROJECT

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

Appendix 4D

Supporting Information for Bird Baseline Study

Report No. 1669326-7000



GOLDER

Environmental and Social Impact Assessment

Appendix 4D, Supporting Information for Bird Baseline Study

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Appendix 4D, Supporting Information for Bird Baseline Study

Table 4D-1 List of Bird Species Observed in the Sabajo Concession Area, Suriname

Scientific name	English name	IUCN	CITES	Endemic	July	October
Tinamidae	Tinamous					
<i>Tinamus major</i>	Great Tinamou	NT				X
<i>Crypturellus cinereus</i>	Cinereous Tinamou					X
<i>Crypturellus variegatus</i>	Variiegated Tinamou				X	X
Cracidae	Guans and Curassows					
<i>Penelope marail</i>	Marail Guan			X	X	X
<i>Ortalis motmot</i>	Variable Chachalaca					X
<i>Crax alector</i>	Black Curassow	VU				X
Odontophoridae	New World Quails					
<i>Odontophorus gujanensis</i>	Marbled Wood-Quail	NT			X	X
Columbidae	Pigeons					
<i>Patagioenas plumbea</i>	Plumbeous Pigeon				X	X
<i>Patagioenas subvinacea</i>	Ruddy Pigeon	VU			X	X
<i>Leptotila verreauxi</i>	White-tipped Dove					X
<i>Leptotila rufaxilla</i>	Gray-fronted Dove				X	X
<i>Columbina passerina</i>	Common Ground Dove				X	X
<i>Claravis pretiosa</i>	Blue Ground Dove					X
Cuculidae	Cuckoos					
<i>Crotophaga ani</i>	Smooth-billed Ani				X	X
<i>Coccyzua minuta</i>	Little Cuckoo				X	
<i>Piaya cayana</i>	Squirrel Cuckoo				X	X
<i>Piaya melanogaster</i>	Black-bellied Cuckoo				X	
Caprimulgidae	Nightjars					
<i>Nyctipolus nigrescens</i>	Blackish Nightjar					X
<i>Nyctidromus albicollis</i>	Common Pauraque				X	X
Apodidae	Swifts					
<i>Chaetura spinicaudus</i>	Band-rumped Swift				X	X
<i>Chaetura chapmani</i>	Chapman's Swift				X	X
<i>Chaetura brachyura</i>	Short-tailed Swift				X	X
<i>Panyptila cayennensis</i>	Lesser Swallow-tailed Swift					X
Trochilidae	Hummingbirds					
<i>Topaza pella</i>	Crimson Topaz		II	X	X	X
<i>Florisuga mellivora</i>	White-necked Jacobin		II		X	X
<i>Glaucis hirsutus</i>	Rufous-breasted Hermit		II		X	X
<i>Phaethornis ruber</i>	Reddish Hermit		II		X	X
<i>Phaethornis bourcierii</i>	Straight-billed Hermit		II		X	X
<i>Phaethornis superciliosus</i>	Long-tailed Hermit		II		X	X
<i>Phaethornis malaris</i>	Great-billed Hermit		II			X
<i>Heliostyris auritus</i>	Black-eared Fairy		II			X
<i>Polytmus theresiae</i>	Green-tailed Goldenthrout		II			X
<i>Campylopterus largipennis</i>	Gray-breasted Sabrewing		II		X	X
<i>Thalaurania furcata</i>	Fork-tailed Woodnymph		II		X	X
<i>Hylocharis sapphirina</i>	Rufous-throated Sapphire		II		X	X
Psophiidae	Trumpeters					
<i>Psophia crepitans</i>	Gray-winged Trumpeter	NT				X
Rallidae	Rails					
<i>Aramides cajaneus</i>	Gray-necked Wood-Rail					X
<i>Anurolimnas viridis</i>	Russet-crowned Crane				X	X
<i>Laterallus melanophaius</i>	Rufous-sided Crane					X
Eurypygidae	Sunbittern					
<i>Eurypyga helias</i>	Sunbittern					X
Cathartidae	New World Vultures					
<i>Cathartes melambrotus</i>	Greater Yellow-headed Vulture				X	X
<i>Sarcorampus papa</i>	King Vulture				X	X
Accipitridae	Hawks					

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Table 4D-1 List of Bird Species Observed in the Sabajo Concession Area, Suriname

Scientific name	English name	IUCN	CITES	Endemic	July	October
<i>Chondohierax uncinatus</i>	Hook-billed Kite		II			X
<i>Elanoides forficatus</i>	Swallow-tailed Kite		II		X	X
<i>Harpia harpyja</i>	Harpy Eagle	NT	I			X
<i>Spizaetus melanoleucus</i>	Black-and-white Hawk-Eagle		II		X	
<i>Harpagus bidentatus</i>	Double-toothed Kite		II		X	X
<i>Ictinia plumbea</i>	Plumbeous Kite		II		X	
<i>Pseudastur albicollis</i>	White Hawk		II		X	
<i>Buteo nitidus</i>	Gray-lined Hawk		II		X	X
<i>Buteo brachyurus</i>	Short-tailed Hawk		II		X	
Strigidae	Owls					
<i>Megascops watsonii</i>	Tawny-bellied Screech-Owl		II			X
<i>Lophostrix cristata</i>	Crested Owl		II		X	
<i>Ciccaba huhula</i>	Black-banded Owl		II		X	X
<i>Glaucidium hardyi</i>	Amazonian Pygmy-Owl		II		X	
Trogonidae	Trogons					
<i>Trogon melanurus</i>	Black-tailed Trogon				X	X
<i>Trogon viridis</i>	Green-backed Trogon				X	X
<i>Trogon violaceus</i>	Guianan Trogon			X	X	X
Alcedinidae	Kingfishers					
<i>Megaceryle torquata</i>	Ringed Kingfisher					X
<i>Chloroceryle amazona</i>	Amazon Kingfisher				X	X
<i>Chloroceryle americana</i>	Green Kingfisher				X	
<i>Chloroceryle inda</i>	Green-and-rufous Kingfisher					X
Momotidae	Motmots					
<i>Momotus momota</i>	Amazonian Motmot					X
Galbulidae	Jacamars					
<i>Brachygalba lugubris</i>	Brown Jacamar					X
<i>Galbula albirostris</i>	Yellow-billed Jacamar				X	
<i>Galbula dea</i>	Paradise Jacamar				X	X
<i>Jacamerops aureus</i>	Great Jacamar				X	X
Bucconidae	Puffbirds					
<i>Notharchus macrorhynchos</i>	Guianan Puffbird			X	X	X
<i>Notharchus tectus</i>	Pied Puffbird				X	X
<i>Bucco tamatia</i>	Spotted Puffbird				X	
<i>Bucco capensis</i>	Collared Puffbird					X
<i>Monasa atra</i>	Black Nunbird			X	X	X
<i>Chelidoptera tenebrosa</i>	Swallow-winged Puffbird				X	X
Capitonidae	New World Barbets					
<i>Capito niger</i>	Black-spotted Barbet			X	X	X
Ramphastidae	Toucans					
<i>Ramphastos tucanus</i>	White-throated Toucan	VU	II		X	X
<i>Ramphastos vitellinus</i>	Channel-billed Toucan	VU	II		X	X
<i>Selenidera piperivora</i>	Guianan Toucanet			X	X	X
<i>Pteroglossus viridis</i>	Green Aracari		II	X	X	X
<i>Pteroglossus aracari</i>	Black-necked Aracari		II		X	X
Picidae	Woodpeckers					
<i>Melanerpes cruentatus</i>	Yellow-tufted Woodpecker				X	X
<i>Veniliornis cassini</i>	Golden-collared Woodpecker			X	X	X
<i>Piculus flavigula</i>	Yellow-throated Woodpecker				X	X
<i>Colaptes rubiginosus</i>	Spot-breasted Woodpecker				X	
<i>Ceelus torquatus</i>	Ringed Woodpecker	NT				X
<i>Ceelus undatus</i>	Waved Woodpecker				X	X
<i>Ceelus flavus</i>	Cream-colored Woodpecker				X	X
<i>Ceelus elegans</i>	Chestnut Woodpecker				X	X
<i>Dryocopus lineatus</i>	Lineated Woodpecker				X	X

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Appendix 4D, Supporting Information for Bird Baseline Study

Table 4D-1 List of Bird Species Observed in the Sabajo Concession Area, Suriname

Scientific name	English name	IUCN	CITES	Endemic	July	October
<i>Campephilus rubricollis</i>	Red-necked Woodpecker				X	X
<i>Campephilus melanoleucos</i>	Crimson-crested Woodpecker				X	X
Falconidae	Falcons					
<i>Micrastur ruficollis</i>	Barred Forest-Falcon		II			X
<i>Micrastur gilvicollis</i>	Lined Forest-Falcon		II		X	X
<i>Micrastur mirandollei</i>	Slaty-backed Forest-Falcon		II			X
<i>Ibycter americanus</i>	Red-throated Caracara		II		X	X
<i>Falco ruficularis</i>	Bat Falcon		II			X
Psittacidae	Parrots					
<i>Touit batavicus</i>	Lilac-tailed Parrotlet		II		X	X
<i>Brotogeris chrysopterus</i>	Golden-winged Parakeet		II		X	X
<i>Pyrilia caica</i>	Caica Parrot	NT	II	X	X	
<i>Pionus fuscus</i>	Dusky Parrot		II	X	X	X
<i>Pionus menstruus</i>	Blue-headed Parrot		II		X	X
<i>Amazona amazonica</i>	Orange-winged Parrot		II		X	
<i>Amazona dufresniana</i>	Blue-cheeked Parrot	NT	II	X		X
<i>Amazona farinosa</i>	Mealy Parrot	NT	II			X
<i>Pionites melanocephalus</i>	Black-headed Parrot		II		X	X
<i>Derophtus accipitrinus</i>	Red-fan Parrot		II		X	X
<i>Pyrrhura picta</i>	Painted Parakeet		II		X	X
<i>Ara severus</i>	Chestnut-fronted Macaw		II		X	
Thamnophilidae	Antbirds					
<i>Euchrepomis spodioptila</i>	Ash-winged Antwren					X
<i>Cymbilaimus lineatus</i>	Fasciated Antshrike				X	X
<i>Frederickena viridis</i>	Black-throated Antshrike			X	X	X
<i>Thamnophilus doliatus</i>	Barred Antshrike					X
<i>Thamnophilus murinus</i>	Mouse-colored Antshrike				X	X
<i>Thamnophilus punctatus</i>	Northern Slaty-Antshrike				X	
<i>Thamnomanes ardesiacus</i>	Dusky-throated Antshrike				X	X
<i>Thamnomanes caesius</i>	Cinereous Antshrike				X	X
<i>Isleria guttata</i>	Rufous-bellied Antwren			X	X	X
<i>Epinecrophylla gutturalis</i>	Brown-bellied Antwren	NT		X	X	X
<i>Myrmotherula brachyura</i>	Pygmy Antwren				X	X
<i>Myrmotherula surinamensis</i>	Guianan Streaked-Antwren	VU		X	X	X
<i>Myrmotherula axillaris</i>	White-flanked Antwren				X	X
<i>Myrmotherula longipennis</i>	Long-winged Antwren				X	X
<i>Myrmotherula menetriesii</i>	Gray Antwren				X	X
<i>Herpsilochmus sticturus</i>	Spot-tailed Antwren			X	X	X
<i>Herpsilochmus stictocephalus</i>	Todd's Antwren			X	X	X
<i>Hypocnemis cantator</i>	Guianan Warbling-Antbird	NT		X	X	X
<i>Cercomacroides tyrannina</i>	Dusky Antbird				X	X
<i>Cercomacra cinerascens</i>	Gray Antbird				X	X
<i>Percnostola rufifrons</i>	Black-headed Antbird			X	X	X
<i>Myrmelastes leucostigma</i>	Spot-winged Antbird					X
<i>Myrmoderus ferrugineus</i>	Ferruginous-backed Antbird			X	X	X
<i>Myrmophylax atrothorax</i>	Black-throated Antbird				X	X
<i>Pithys albifrons</i>	White-plumed Antbird					X
<i>Gymnopithys rufigula</i>	Rufous-throated Antbird			X		X
<i>Willisornis poecilinotus</i>	Common Scale-backed Antbird				X	X
Grallariidae	Antpittas					
<i>Grallaria varia</i>	Variegated Antpitta					X
<i>Hylopezus macularius</i>	Spotted Antpitta				X	X
<i>Myrmothera campanisona</i>	Thrush-like Antpitta				X	X
Formicariidae	Antthrushes					
<i>Formicarius colma</i>	Rufous-capped Antthrush					X

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Appendix 4D, Supporting Information for Bird Baseline Study

Table 4D-1 List of Bird Species Observed in the Sabajo Concession Area, Suriname

Scientific name	English name	IUCN	CITES	Endemic	July	October
<i>Formicarius analis</i>	Black-faced Anthruth				X	X
Furnariidae		Ovenbirds and Woodcreepers				
<i>Dendrocincla fuliginosa</i>	Plain-brown Woodcreeper					X
<i>Glyphorhynchus spirurus</i>	Wedge-billed Woodcreeper				X	X
<i>Dendrexetastes rufigula</i>	Cinnamon-throated Woodcreeper				X	X
<i>Dendrocolaptes certhia</i>	Amazonian Barred-Woodcreeper				X	X
<i>Hylexetastes perrotii</i>	Red-billed Woodcreeper					X
<i>Xiphorhynchus pardalotus</i>	Chestnut-rumped Woodcreeper			X	X	X
<i>Xiphorhynchus guttatus</i>	Buff-throated Woodcreeper				X	X
<i>Lepidocolaptes albolineatus</i>	Guianan Woodcreeper			X	X	X
<i>Xenops minutus</i>	Plain Xenops				X	X
<i>Automolus rufipileatus</i>	Chestnut-crowned Foliage-gleaner					X
<i>Automolus ochrolaemus</i>	Buff-throated Foliage-gleaner				X	X
<i>Synallaxis gujanensis</i>	Plain-crowned Spinetail					X
Tyrannidae		Tyrant Flycatchers				
<i>Tyrannulus elatus</i>	Yellow-crowned Tyrannulet				X	X
<i>Myiopagis gaimardii</i>	Forest Elaenia				X	X
<i>Elaenia flavogaster</i>	Yellow-bellied Elaenia					X
<i>Ornithion inerme</i>	White-lored Tyrannulet				X	X
<i>Camptostoma obsoletum</i>	Southern Beardless-Tyrannulet				X	X
<i>Zimmerius acer</i>	Guianan Tyrannulet			X	X	X
<i>Mionectes oleagineus</i>	Ochre-bellied Flycatcher				X	
<i>Mionectes macconnelli</i>	McConnell's Flycatcher					X
<i>Myiornis ecaudatus</i>	Short-tailed Pygmy-Tyrant				X	X
<i>Lophotriccus vitiuosus</i>	Double-banded Pygmy-Tyrant				X	X
<i>Lophotriccus galeatus</i>	Helmeted Pygmy-Tyrant				X	X
<i>Poecilatriccus fumifrons</i>	Smoky-fronted Tody-Flycatcher				X	X
<i>Todirostrum cinereum</i>	Common Tody-Flycatcher					X
<i>Todirostrum pictum</i>	Painted Tody-Flycatcher			X	X	X
<i>Tolmomyias assimilis</i>	Yellow-margined Flycatcher				X	X
<i>Tolmomyias poliocephalus</i>	Gray-crowned Flycatcher				X	X
<i>Myiobius barbatus</i>	Sulphur-rumped Flycatcher				X	
<i>Terentotriccus erythrurus</i>	Ruddy-tailed Flycatcher				X	X
<i>Colonia colonus</i>	Long-tailed Tyrant					X
<i>Legatus leucophaeus</i>	Piratic Flycatcher					X
<i>Myiozetetes cayanensis</i>	Rusty-margined Flycatcher				X	X
<i>Myiozetetes luteiventris</i>	Dusky-chested Flycatcher					X
<i>Pitangus sulphuratus</i>	Great Kiskadee				X	X
<i>Pitangus lictor</i>	Lesser Kiskadee				X	X
<i>Conopias parvus</i>	Yellow-throated Flycatcher				X	X
<i>Megarynchus pitangua</i>	Boat-billed Flycatcher				X	X
<i>Tyrannus melancholicus</i>	Tropical Kingbird				X	X
<i>Rhytipterna simplex</i>	Grayish Mourner				X	X
<i>Sirystes subcanescens</i>	Todd's Sirystes			X		X
<i>Myiarchus tuberculifer</i>	Dusky-capped Flycatcher				X	X
<i>Myiarchus ferox</i>	Short-crested Flycatcher				X	X
<i>Ramphotrigon ruficauda</i>	Rufous-tailed Flatbill					X
<i>Attila cinnamomeus</i>	Cinnamon Attila				X	X
<i>Attila spadiceus</i>	Bright-rumped Attila				X	X
Oxyruncidae		Sharpbill				
<i>Oxyruncus cristatus</i>	Sharpbill				X	
Cotingidae		Cotingas				
<i>Phoenicircus carnifex</i>	Guianan Red-Cotinga			X	X	X
<i>Querula purpurata</i>	Purple-throated Fruitcrow				X	X
<i>Perissocephalus tricolor</i>	Capuchinbird			X	X	X

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Appendix 4D, Supporting Information for Bird Baseline Study

Table 4D-1 List of Bird Species Observed in the Sabajo Concession Area, Suriname

Scientific name	English name	IUCN	CITES	Endemic	July	October
<i>Cotinga cayana</i>	Spangled Cotinga				X	
<i>Lipaugus vociferans</i>	Screaming Piha				X	X
<i>Xipholena punicea</i>	Pompadour Cotinga				X	X
Pipridae	Manakins					
<i>Tyrannetes virescens</i>	Tiny Tyrant-Manakin			X	X	X
<i>Manacus manacus</i>	White-bearded Manakin				X	X
<i>Dixiphia pipra</i>	White-crowned Manakin				X	X
<i>Ceratopira erythrocephala</i>	Golden-headed Manakin				X	X
Tityridae	Tityras					
<i>Tityra cayana</i>	Black-tailed Tityra				X	X
<i>Schiffornis olivacea</i>	Olivaceous Schiffornis			X	X	X
<i>Pachyramphus polychopterus</i>	White-winged Becard				X	
<i>Pachyramphus marginatus</i>	Black-capped Becard					X
<i>Pachyramphus surinamus</i>	Glossy-backed Becard					X
<i>Pachyramphus minor</i>	Pink-throated Becard				X	X
Incertae Sedis	Taxonomy uncertain					
<i>Piprites chloris</i>	Wing-barred Piprites				X	
Vireonidae	Vireos					
<i>Cyclarhis gujanensis</i>	Rufous-browed Peppershrike				X	X
<i>Hylophilus thoracicus</i>	Lemon-chested Greenlet				X	X
<i>Vireolanius leucotis</i>	Slaty-capped Shrike-Vireo				X	
<i>Tunchiornis ochraceiceps</i>	Tawny-crowned Greenlet				X	X
<i>Pachysylvia muscicapina</i>	Buff-cheeked Greenlet				X	X
<i>Vireo olivaceus</i>	Red-eyed Vireo				X	X
Hirundinidae	Swallows					
<i>Progne chalybea</i>	Gray-breasted Martin				X	X
<i>Tachycineta albiventer</i>	White-winged Swallow					X
Troglodytidae	Wrens					
<i>Troglodytes aedon</i>	House Wren					X
<i>Pheugopedius coraya</i>	Coraya Wren				X	X
Poliotilidae	Gnatwrens and Gnatcatchers					
<i>Ramphocaenus melanurus</i>	Long-billed Gnatwren				X	X
Turdidae	Thrushes					
<i>Turdus leucomelas</i>	Pale-breasted Thrush					X
<i>Turdus albicollis</i>	White-necked Thrush					X
Thraupidae	Tanagers					
<i>Cyanicterus cyanicterus</i>	Blue-backed Tanager			X	X	X
<i>Chlorophanes spiza</i>	Green Honeycreeper				X	
<i>Volatinia jacarina</i>	Blue-black Grassquit				X	X
<i>Tachyphonus cristatus</i>	Flame-crested Tanager				X	X
<i>Tachyphonus surinamus</i>	Fulvous-crested Tanager				X	X
<i>Ramphocelus carbo</i>	Silver-beaked Tanager				X	X
<i>Cyanerpes caeruleus</i>	Purple Honeycreeper				X	X
<i>Cyanerpes cyaneus</i>	Red-legged Honeycreeper				X	X
<i>Dacnis cayana</i>	Blue Dacnis				X	X
<i>Sporophila minuta</i>	Ruddy-breasted Seedeater				X	X
<i>Sporophila americana</i>	Wing-barred Seedeater				X	
<i>Saltator maximus</i>	Buff-throated Saltator				X	X
<i>Saltator coerulescens</i>	Grayish Saltator				X	
<i>Saltator grossus</i>	Slate-colored Grosbeak				X	X
<i>Coereba flaveola</i>	Bananaquit				X	X
<i>Tangara mexicana</i>	Turquoise Tanager				X	X
<i>Tangara chilensis</i>	Paradise Tanager				X	X
<i>Tangara velia</i>	Opal-rumped Tanager				X	X
<i>Thraupis episcopus</i>	Blue-gray Tanager				X	X

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Table 4D-1 List of Bird Species Observed in the Sabajo Concession Area, Suriname

Scientific name	English name	IUCN	CITES	Endemic	July	October
<i>Thraupis palmarum</i>	Palm Tanager				X	X
<i>Lamprospiza melanoleuca</i>	Red-billed Pied Tanager				X	X
Emberizidae		Sparrows				
<i>Arremon taciturnus</i>	Pectoral Sparrow				X	
Cardinalidae		Cardinal Grosbeaks				
<i>Caryothraustes canadensis</i>	Yellow-green Grosbeak				X	X
<i>Periporphyrus erythromelas</i>	Red-and-black Grosbeak	NT		X	X	X
<i>Cyanoloxia cyanooides</i>	Blue-black Grosbeak				X	X
Parulidae		Wood-Warblers				
<i>Myiothlypis rivularis</i>	Riverbank Warbler					X
Icteridae		New World Blackbirds				
<i>Psarocolius viridis</i>	Green Oropendola				X	X
<i>Cacicus cela</i>	Yellow-rumped Cacique				X	X
<i>Cacicus haemarrhous</i>	Red-rumped Cacique				X	X
<i>Icterus cayanensis</i>	Epaulet Oriole				X	
Fringillidae		Finches				
<i>Euphonia violacea</i>	Violaceous Euphonia				X	X
<i>Euphonia chrysopasta</i>	Golden-bellied Euphonia				X	X
<i>Euphonia cayennensis</i>	Golden-sided Euphonia			X	X	X

Note: List compiled by Sean Dilrosun, Leon Moore and Brian O'Shea, 6-12 July and 10-16 October 2017. Taxonomy and nomenclature follow:

Remsen, J. V., Jr., J. I. Areta, C. D. Cadena, S. Claramunt, A. Jaramillo, J. F. Pacheco, J. Pérez-Emán, M. B. Robbins, F. G. Stiles, D. F. Stotz, and K. J. Zimmer. Version 28 April 2017. A classification of the bird species of South America. American Ornithologists' Union. <http://www.museum.lsu.edu/~Remsen/SACCBaseline.htm>.

"ENDEMIC" species are found only in lowland forests of the Guiana Shield. IUCN classifications are Vulnerable (VU) and Near-Threatened (NT); all other species are categorized as Least Concern (LC).

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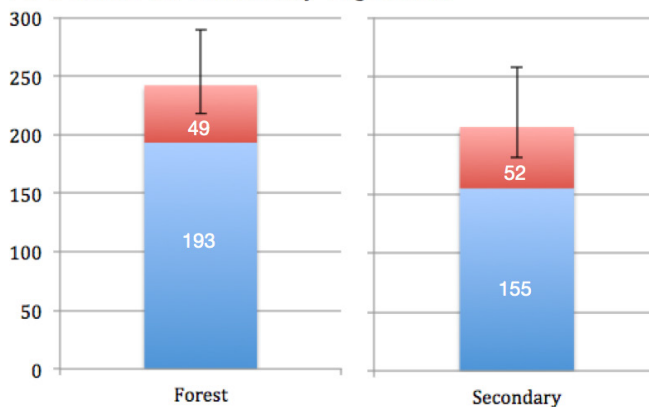
Table 4D-2 Values of Chao's Estimator for Chao's Sørensen Abundance-Based Similarity Index for Pairwise Plot Comparisons

Plot	A1	AF1	C1	E1	F1	F2+3	F4	F5	F6	F7+8
A1	-									
AF1	0.674	-								
C1	0.707	0.440	-							
E1	0.642	0.603	0.559	-						
F1	0.837	0.743	0.741	0.741	-					
F2+3	0.621	0.525	0.394	0.762	0.605	-				
F4	0.287	0.326	0.226	0.556	0.431	0.618	-			
F5	0.726	0.719	0.526	0.764	0.878	0.622	0.467	-		
F6	0.687	0.675	0.432	0.766	0.665	0.873	0.551	0.785	-	
F7+8	0.629	0.702	0.694	0.657	0.836	0.531	0.291	0.604	0.512	-
F9	0.667	0.656	0.375	0.765	0.748	0.932	0.660	0.838	0.881	0.416

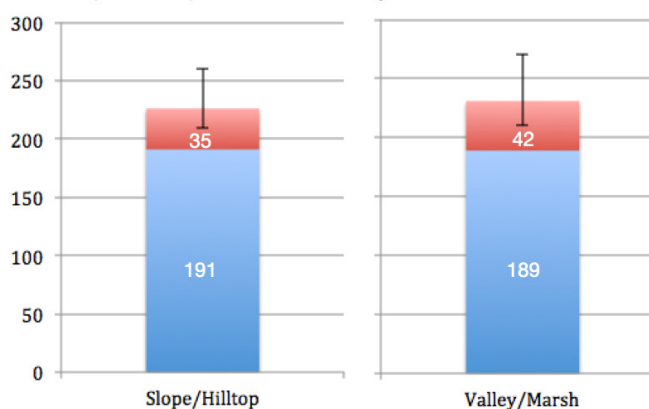
Note: Higher values indicate greater community similarity. Values of Chao's Sørensen estimator for 55 pairwise transect comparisons ranged from .226 -.932 (mean .629, SD .164) and tended to be higher for comparisons among transects sharing similar vegetation structure or landscape aspect.

Figure 4D-1 Comparisons of Bird Diversity

A. Forests vs. Secondary Vegetation



B. Slope/hilltop vs. creek valley/marsh



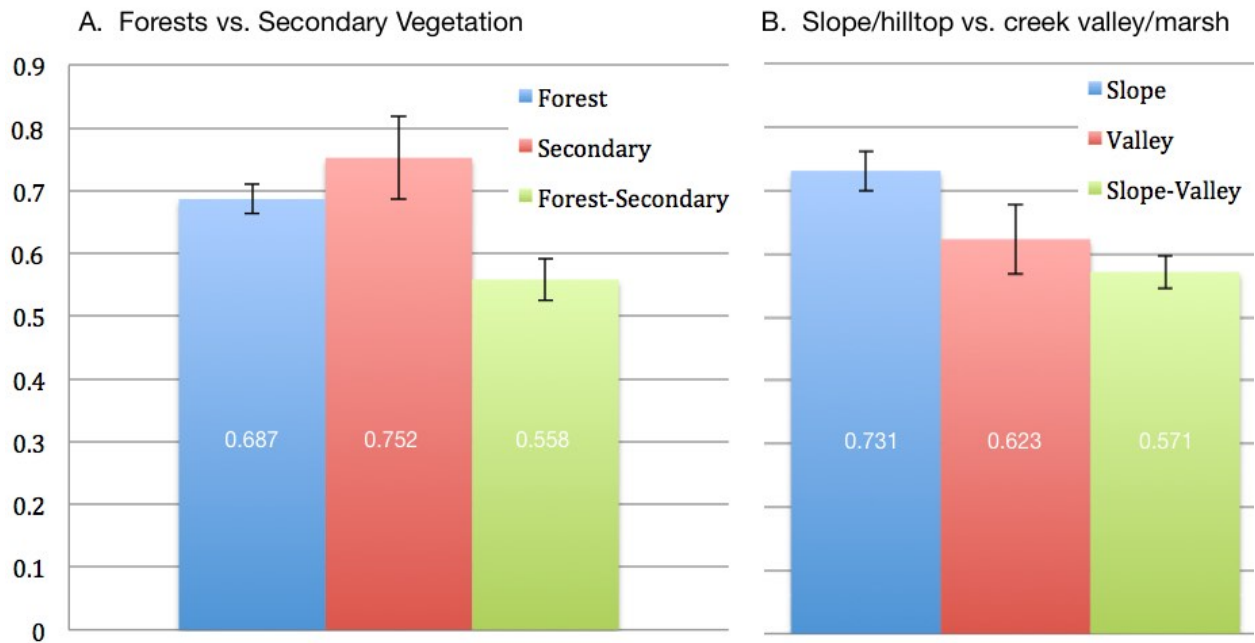
A. Observed (blue) and mean estimated (red) bird diversity in minimally-to-moderately disturbed, medium/tall forest (transects A1, AF1, C1, E1, F1, F5, F7+F8; n=98 samples) vs. more heavily disturbed secondary forest, scrub, and pioneer vegetation (transects F2+F3, F4, F6, F9; n=50 samples).

B. Observed (blue) and mean estimated (red) bird diversity slope/hilltop (dryland; transects A1, E1, F1, F5, F7+F8; n=78 samples) vs. creek valley/marsh habitats (transects AF1, C1, F2+F3, F4, F6, F9; n=70 samples). For all graphs, error bars are 95% confidence intervals for mean values of the Chao 2 incidence-based diversity estimator.

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Figure 4D-2 Mean Pairwise Values of Chao's Estimator of Chao's Sørensen Abundance-Based Similarity Index



A. Plots in forest and secondary habitats.

B. Plots on slopes and hilltops (dryland forest) and those in creek valleys and marshy areas. Error bars are standard errors of the means.

March 2018

SABAJO PROJECT

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

Appendix 4E

Supporting Information for Mammal Baseline Study

Report No. 1669326-7000

Environmental and Social Impact Assessment

Appendix 4E, Supporting Information for Mammal Baseline Study

Figures

Figure 4E-1	Randomized Species Accumulation Curves for Bats Caught at 3 Transects During the Environmental Assessment of Sabajo, Suriname	1
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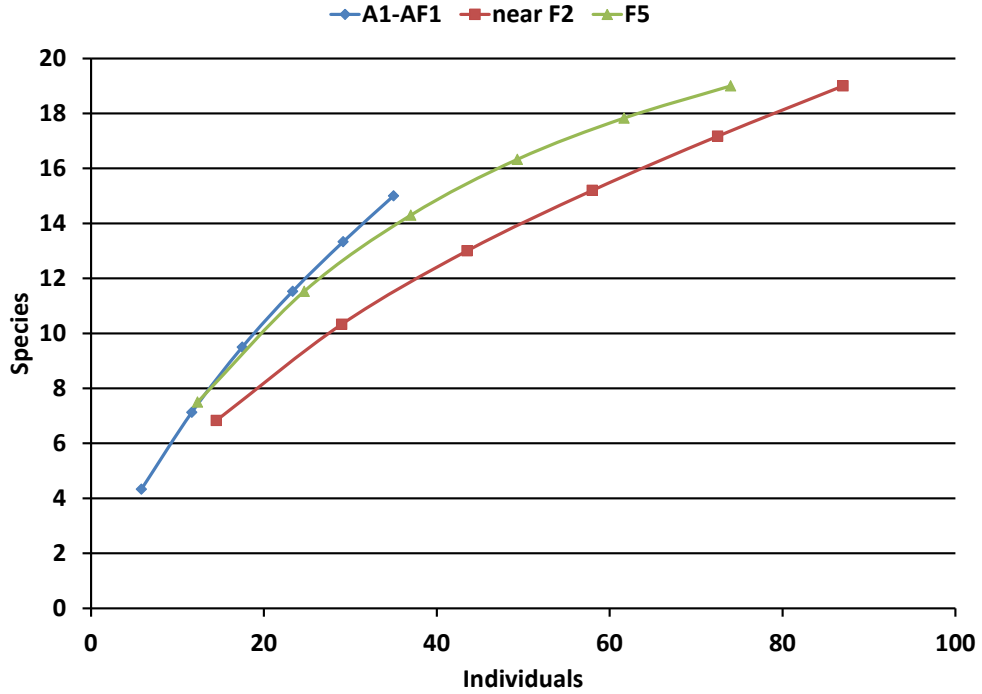
Tables

Table 4E-1	Small Mammals (Bats, Rodents, and Opossums) Captured During the Environmental Assessment Survey of Sabajo, Suriname	2
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Appendix 4E, Supporting Information for Mammal Baseline Study

Figure 4E-1 Randomized Species Accumulation Curves for Bats Caught at 3 Transects During the Environmental Assessment of Sabajo, Suriname



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Appendix 4E, Supporting Information for Mammal Baseline Study

Table 4E-1 Small Mammals (Bats, Rodents, and Opossums) Captured During the Environmental Assessment Survey of Sabajo, Suriname

Species	Transect			Total
	A1-AF1	F2	F5	
Bats				
<i>Ametrida centurio</i>	0	0	1	1
<i>Artibeus concolor</i>	0	0	1	1
<i>Artibeus lituratus</i>	0	2	2	4
<i>Artibeus obscurus</i>	1	1	8	10
<i>Artibeus planirostris</i>	0	1	9	10
<i>Carollia brevicauda</i>	0	4	4	8
<i>Carollia perspicillata</i>	13	22	19	54
<i>Chiroderma villosum</i>	0	1	0	1
<i>Cormura brevirostris</i>	1	1	1	3
<i>Cynomops paranus</i>	0	3	1	4
<i>Desmodus rotundus</i>	0	0	1	1
<i>Eptesicus chiriquinus</i>	0	1	0	1
<i>Glossophaga soricina</i>	1	0	0	1
<i>Lonchophylla thomasi</i>	3	2	2	7
<i>Lophostoma brasiliense</i>	1	0	0	1
<i>Lophostoma silvicolum</i>	0	1	2	3
<i>Mimon crenulatum</i>	1	1	3	5
<i>Phyllostomus elongatius</i>	2	0	5	7
<i>Phyllostomus hastatus</i>	0	1	0	1
<i>Plathyrrhinus helleri</i>	1	0	0	1
<i>Rhinophylla pumilio</i>	3	8	4	15
<i>Saccopteryx bilineata</i>	2	4	1	7
<i>Saccopteryx leptura</i>	0	1	0	1
<i>Sturnira lilium</i>	1	27	7	35
<i>Sturnira tildae</i>	1	5	2	8
<i>Tonatia saurophila</i>	0	0	1	1
<i>Trachops cirrhosus</i>	1	0	0	1
<i>Uroderma bilobatum</i>	3	0	0	3
<i>Vampyrum spectrum</i>	0	1	0	1
Rodents				
<i>Proechimys cuvieri</i>	1	1	5	7
Opossums				
<i>Didelphis marsupialis</i>	0	1	0	1
Total:	36	89	79	204

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Appendix 4E, Supporting Information for Mammal Baseline Study

Table 4E-2 Large Mammals Documented During the Environmental Assessment Survey of Sabajo, Suriname

Species	Cameras	Observations	Interviews	Total	CITES	IUCN
Rodents						
<i>Dasyprocta leporina</i>	23	5	6	34		
<i>Cuniculus paca</i>	5	1		6		
<i>Myoprocta acouchy</i>	1	1		2		
<i>Sciurillus pusillus</i>			1	1		DD
<i>Coendou bicolor</i>			1	1		
Armadillos						
<i>Dasyopus spp.</i>	10			10		
Anteaters						
<i>Myrmecophaga tridactyla</i>	2		1	3	II	VU
<i>Tamandua tetradactyla</i>			2	2		
Sloths						
<i>Bradypus tridactylus</i>			2	2		
<i>Choloepus didactylus</i>			1	1		
Carnivores						
<i>Nasua nasua</i>	1		2	3		
<i>Panthera onca</i>	1			1	I	NT
<i>Eira barbara</i>			3	3		
<i>Felis jagouarondi</i>			1	1	II	
<i>Puma concolor</i>			1	1	II	
<i>Potos flavus</i>		10		10		
Hoofed mammals						
<i>Tayassu tajacu</i>	9		4	13	II	
<i>Mazama gouazoubira</i>	2			2		
<i>Mazama americana</i>	2		4	6		DD
<i>Tapirus terrestris</i>	1		1	2	II	VU
Primates						
<i>Saguinus midas</i>		6	4	10	II	
<i>Saimiri sciureus</i>			3	3	II	
<i>Cebus apella</i>		3	3	6	II	
<i>Alouatta macconnelli</i>		15	3	18	II	
<i>Ateles paniscus</i>		2	4	6	II	VU

Note: Convention on the International Trade in Endangered Species (IUCN) abbreviations are for Appendix I and II listings, and International Union for the Conservation of Nature (IUCN) abbreviations for Data Deficient (DD), Vulnerable (VU), and Near Threatened (NT).

March 2018

SABAJO PROJECT

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

Appendix 4F

Supporting Information for Amphibian and Reptile Baseline Study

Report No. 1669326-7000



GOLDER

Environmental and Social Impact Assessment

Appendix 4F, Supporting Information for Amphibian and Reptile Baseline Study

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Environmental and Social Impact Assessment

Appendix 4F, Supporting Information for Amphibian and Reptile Baseline Study

Table 4F-1 Amphibian and Reptile Species Found at Sabajo Mining Area Transects and Additional Observations

	Transect 1		Transect 2		Tran-sect 3	Transect 4		Additional observations R
	R	D	R	D	R	R	D	
AMPHIBIANS								
<i>Allophryne ruthveni</i>	3		1					
<i>Allobates femoralis</i>	5		1	2				
<i>Allobates granti</i>		5	9	15				
<i>Anomaloglossus stepheni</i>			1					
<i>Anomaloglossus sp.</i>								
<i>Rhinella marina</i>	3	6						
<i>Rhinella martyi</i>			4					
<i>Rhinella merianae</i>	5	1				3		
<i>Ameerega trivittata</i>	3	5	12	12				
<i>Dendropsophus minutus</i>	2	5						
<i>Dendropsophus marmoratus</i>								
<i>Dendropsophus leucophylatus</i>								
<i>Boana boans</i>		1						
<i>Boana calcarata</i>	3							
<i>Boana cinerascens</i>						1		
<i>Boana crepitans</i>		4					1	
<i>Boana fasciata</i>						1		
<i>Boana geographica</i>								
<i>Boana multifaciata</i>	1	1				4	3	
<i>Boana punctata</i>								
<i>Osteocephalus cabrerai</i>			1					
<i>Osteocephalus leprieurii</i>	1			2				
<i>Osteocephalus oophagus</i>		3						
<i>Osteocephalus sp.</i>								
<i>Scinax boesemani</i>								
<i>Scinax ruber</i>								
<i>Scinax sp.</i>	1							
<i>Trachycephalus hadroceps</i>								
<i>Phyllomedusa hypochondrialis</i>		1						
<i>Phyllomedusa sp.</i>						2		
<i>Adenomera andreae</i>		2	2	3	3			
<i>Leptodactylus fuscus</i>								
<i>Leptodactylus guianensis</i>								
<i>Leptodactylus knudseni</i>	1		2					
<i>Leptodactylus longirostris</i>		5				1		
<i>Leptodactylus mystaceus</i>	4	6	2	2				
<i>Leptodactylus rhodomystax</i>			6					
<i>Leptodactylus petersii group</i>		3						
<i>Physalaemus ephippifer</i>	1		3	5				
<i>Pipa pipa</i>						2		
<i>Chiasmocleis shudikarensis</i>				2				
<i>Pristimantis zeuctotylus</i>								
Species number	21		14		1	8		
Shannon-Wiener Index	2.79		2.09		0	0.04		
Simpson's Diversity Index	16.62		6		1	5.88		
Simpson's Evenness	0.79		0.43			0.73		
REPTILES								
Lizards								

Environmental and Social Impact Assessment

Appendix 4F, Supporting Information for Amphibian and Reptile Baseline Study

Table 4F-1 Amphibian and Reptile Species Found at Sabajo Mining Area Transects and Additional Observations

	Transect 1		Transect 2		Tran-sect 3	Transect 4		Additional observations R
	R	D	R	D	R	R	D	
<i>Iguana iguana</i>								1
<i>Anolis nitens chrysolepus</i>				1				
<i>Chatogekko amazonicus</i>		1	3	13				
<i>Gonatodes humeralis</i>	1	1			2			
<i>Arthrosaura kockii</i>		1						
<i>Cercosaura ocellata</i>								
<i>Leposoma guianensis</i>	3		1	11				
<i>Ameiva ameiva</i>								1
<i>Cnemidophorus cf. lemniscatus</i>								1
<i>Kentropyx calcaratus</i>			2	2				1
<i>Tupinambis teguixin</i>								1
<i>Mabuya nigropunctata</i>								1
Snakes								
<i>Dipsas pavonina</i>			1					
<i>Bothrops atrox</i>	4	1	2					
Turtles								
<i>Rhinoclemys punctularia</i>								1
Crocodilians								
<i>Caiman crocodilus</i>								
<i>Paleosuchus trigonatus</i>								

R – rainy season; D – dry season.

Environmental and Social Impact Assessment

Appendix 4F, Supporting Information for Amphibian and Reptile Baseline Study

Table 4F-2 Amphibian and Reptile Species Found at Sabajo Pots

	Pot number																										
	1		2		3		4		5		6		7		7b		8&9		10		14		15		16		
	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	
AMPHIBIANS																											
<i>Allophryne ruthveni</i>																											
<i>Allobates femoralis</i>				1	3		2																				
<i>Allobates granti</i>																											
<i>Anomaloglossus stepheni</i>																											
<i>Anomaloglossus sp.</i>						2																					
<i>Rhinella marina</i>				6	5	1	1	2	5			1							1	4						1	
<i>Rhinella martyi</i>							1																				
<i>Rhinella merianae</i>	3	7	3	10	9		2	7	5			3								5						4	
<i>Ameerega trivittata</i>			1	3	2	1	4		1	1		1		1		2		1									
<i>Dendropsophus minutus</i>		1	1												1	1											
<i>Dendropsophus marmoratus</i>		2					2	4	8																		
<i>Dendropsophus leucophylatus</i>									1																		5
<i>Boana boans</i>		2		1	3	1	6	1	5	5	4		3			1	1			6							
<i>Boana calcarata</i>	1	2				2				2	4	1		1	2		1	1									2
<i>Boana cinerascens</i>		3			4		7																				1
<i>Boana crepitans</i>	1	2		2	4		3		1	1			1					1									
<i>Boana fasciata</i>				1			1	2																			
<i>Boana geographica</i>										1					6	2*	6*			5							4
<i>Boana multifasciata</i>		2		2	3	7	1	2		2									1								
<i>Boana punctata</i>															1												
<i>Osteocephalus cabrerai</i>																											
<i>Osteocephalus leprieurii</i>																											
<i>Osteocephalus oophagus</i>				1			3																				
<i>Osteocephalus sp.</i>				1																							
<i>Scinax boesemani</i>								2																			
<i>Scinax ruber</i>		5					6	2	16		2							1									3

Environmental and Social Impact Assessment

Appendix 4F, Supporting Information for Amphibian and Reptile Baseline Study

Table 4F-2 Amphibian and Reptile Species Found at Sabajo Pots

	Pot number																										
	1		2		3		4		5		6		7		7b		8&9		10		14		15		16		
	R	D	R	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	D	D	D	D	D	
<i>Scinax sp.</i>																											
<i>Trachycephalus hadroceps</i>																											3
<i>Phyllomedusa hypochondrialis</i>		1	1																								
<i>Phyllomedusa sp.</i>			2						2						2												
<i>Adenomera andreae</i>																											
<i>Leptodactylus fuscus</i>									11																		
<i>Leptodactylus guianensis</i>								1																			
<i>Leptodactylus knudseni</i>		1						1																			
<i>Leptodactylus longirostris</i>				3	4		5					1	3				2			1	6	4					
<i>Leptodactylus mystaceus</i>					2			1																			
<i>Leptodactylus rhodomystax</i>																											
<i>Leptodactylus petersii group</i>		1								9				1			1										
<i>Physalaemus ephippifer</i>				1										1													
<i>Pipa pipa</i>																											
<i>Chiasmocleis shudikarensis</i>																											
<i>Pristimantis zeuctotylus</i>	1			2	2										1												
Species number	13		5	16		18		14		8		7		9		10		3		5		2		8			
Shannon-Wiener Index	2.3		1.5	2.4		2.7		2.2		1.7		1.8		1.9		2.0		1.1		1.5		0.6		2.0			
Simpson's Diversity Index	8.9		7.0	9.0		15.1		7.9		5.2		7.6		7.2		6.1		3.0		5.1		2.0		8.6			
Simpson's Evenness	0.7		1.4	0.6		0.8		0.6		0.7		1.1		0.8		0.6		1.0		1.0		1.0		1.1			

Environmental and Social Impact Assessment

Appendix 4F, Supporting Information for Amphibian and Reptile Baseline Study

Table 4F-2 Amphibian and Reptile Species Found at Sabajo Pots

	Pot number																										
	1		2		3		4		5		6		7		7b		8&9		10		14		15		16		
	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	R	D	
REPTILES																											
Lizards																											
<i>Iguana iguana</i>																											
<i>Anolis nitens chrysolepus</i>																											
<i>Chatogekko amazonicus</i>																											
<i>Gonatodes humeralis</i>																2											
<i>Arthrosaura kockii</i>																											
<i>Cercosaura ocellata</i>											1																
<i>Leposoma guianensis</i>																											
<i>Ameiva ameiva</i>																											
<i>Cnemidophorus cf. lemniscatus</i>									1																		
<i>Kentropyx calcaratus</i>																											
<i>Tupinambis teguixin</i>																											
<i>Mabuya nigropunctata</i>										1																	
Snakes																											
<i>Dipsas pavonina</i>																											
<i>Bothrops atrox</i>		1					1											1									
Turtles																											
<i>Rhinoclemys punctularia</i>																											
Crocodilians																											
<i>Caiman crocodilus</i>											1																
<i>Paleosuchus trigonatus</i>																3									2		

R – rainy season; D – dry season.