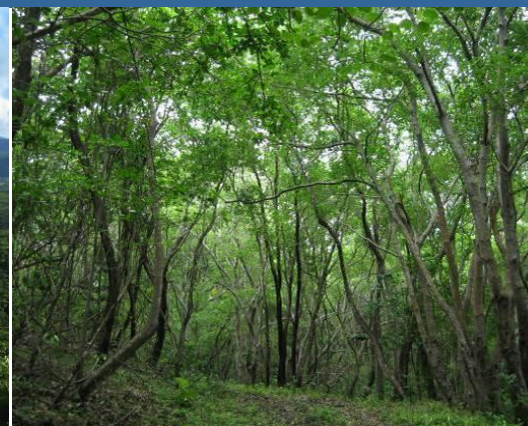


Presented to the European Commission and
Banana Industry Trust



**NATIONAL FOREST DEMARCATION AND BIO-PHYSICAL
RESOURCE INVENTORY PROJECT
CARIBBEAN – SAINT LUCIA
SFA 2003/SLU/BIT-04/0711/EMF/LC**

**THE CLASSIFICATION OF THE
VEGETATION OF SAINT LUCIA**

By
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2009



Cover illustrations: Cloud Montane Forest on Mount Gimie Range; East Coast of Saint Lucia (Roger Graveson, FCG); Deciduous Seasonal Forest at Grande Anse (Jenny Daltry, FCG-FFI).

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Executive Summary

The aim of this report was to present a vegetation classification system of Saint Lucia, based on field studies and satellite image analysis.

To guide the selection of field sites, a simple starter map was produced, dividing Saint Lucia into 24 cells and showing approximate elevational zones and known areas of botanical interest. Two hundred plots were surveyed, each 20 metres in radius, covering a wide range of elevations in all parts of the country. Both floristic and biophysical data were recorded within every plot.

The floristic data were analyzed using Two-way Indicator Species Analysis (TWINSPAN), supported with a manual floristic analysis, to assign the plots to distinct vegetation classes.

An evaluation was made of prior vegetation classification systems in the Lesser Antilles. This was used, along with the results of the data analysis, to propose the following new vegetation classification system for Saint Lucia:

Natural Forest	
Littoral Evergreen Forest and Shrubland	Semi-evergreen Seasonal Forest
Mangrove	Lower Montane Rainforest
Freshwater Swamp Forest	Montane Rainforest
Deciduous Seasonal Forest	Cloud Montane Rainforest
Semi-natural Forest	
Tree Plantations	
Non-Forest	
Elfin Shrublands	Littoral Unconsolidated Sand Vegetation
Herbaceous Swamp (seasonal or permanent)	Littoral Scrub, including Cacti
Aquatic Herbaceous Vegetation	Fumarole Vegetation
Littoral Rock and Cliff Vegetation	Grassland, with or without a few trees or shrubs

Each vegetation class is described and illustrated in some detail in this report. A map, developed with the aid of satellite imagery, has also been produced to show the locations of the major vegetation classes.

Recommendations

- The TWINSPAN data analysis revealed an apparently striking division in the Lower Montane Rainforest class into two subclasses. This should be investigated further.
- Additional plot data should be collected to help fine-tune the vegetation map. Future changes in Saint Lucia's vegetation should be monitored either at a very fine scale, by replicating the same plots, or on a large scale, by analyzing new satellite images.
- Plantation trees in the forest reserve should be culled over time to allow the indigenous forest to further regenerate in these areas.
- To protect two of Saint Lucia's most endangered forest classes, Mount Souf and Mount Parasol should be protected to conserve the rare Semi-evergreen Forest, and a 'dry forest reserve' should be created to conserve the Deciduous Seasonal Forest in the north-east of Saint Lucia.
- No alien species should be planted in or near any protected areas, and the importation of ornamentals should be strictly controlled.

1 Introduction

The aim of this report is to present a vegetation classification system of Saint Lucia, based on field studies and satellite image analysis.

It is important to have an accurate and up to date vegetation classification system, detailing the location of the classes of vegetation, their characteristics, quantity and quality. Only in that way can the Forestry Department produce a management plan that is tailor-made for each vegetation class. Combined with fauna information, it will enable important and threatened habitats to be recognized and proposals made for their protection. In addition, Saint Lucia has responsibilities on the world stage. For example, Saint Lucia has an obligation to provide information to the United Nations Framework Convention on Climate Change, and determining the extent, condition and diversity of its vegetation types will help in the calculation of Saint Lucia's carbon storage capability. In addition, Saint Lucia is required to provide forest resources information to the UN Food and Agriculture Organisation. The country also needs an accurate baseline so that changes to the vegetation can be observed and monitored.

A new classification system is required for the management of Saint Lucia's forests. There are several previous classification systems, which are discussed in this report, all of which are useful in various ways. However, most of them were based on rainfall, elevation and other environmental data, with only a small number of field studies to 'ground truth' the vegetation. Beard's (1944, 1955) classification system, still the most useful, did take into account the vegetation's physiognomy and floristics as well as environmental data, but it dealt with climactic formations only. Because much of Saint Lucia's vegetation is secondary and disturbed, Beard's classification cannot be applied to many areas. For that reason, a new classification system was required, based on detailed field studies of the vegetation that is actually present. My aim was to produce an accurate and easy-to-use vegetation classification system, using island-wide vegetation surveys to collect full species information and environmental data. After breaking down the vegetation into different types or classes, we then used remote sensing data (satellite images) to produce a complete vegetation map of Saint Lucia.

2 Methods

2.1 Summary of the steps taken

As the specialist botanist, one of my main tasks was to attempt to classify Saint Lucia's very diverse vegetation. The steps taken can be summarized as follows:

1. After quickly reviewing the existing literature, I produced, with Matthew Morton, a 'starter map' (a preliminary, simplified vegetation map), predicting where the main forest types occur. This map served as my guide to sample the vegetation in different geographical and ecological regions of Saint Lucia. This map was also used by the other project biodiversity experts to guide their stratified sampling strategies.
2. I then carried out the field work over a period of several months and collected floristic, physiognomic and habitat data.
3. I conducted a full review of existing literature relevant to classifying and mapping vegetation in Saint Lucia.

4. Dr Jenny Daltry and I analyzed the floristic plot data using TWINSpan, a software program designed to classify plant species and samples. I also performed a simple manual analysis based on the known habitats of certain species. I examined and interpreted the results of the numerical analyses.
5. I proposed a vegetation classification system, based on the analysis of my data and the review of the existing literature.
6. Mrs Rebecca Rock of the Forestry Department and I then proceeded to produce the vegetation map, with the aid of satellite imagery and GIS.
7. I then proposed this classification system to the Forestry Department for final adjustments to be made.

These steps are described in more detail below. I received help from Dr Jenny Daltry, Conservation Biologist, Dr Bob Tennent, Project Leader, Vijay Datadin, GIS & Data Management Specialist, and Matthew Morton, Critical Habitats Specialist. When I use the word *we*, it means that I was working with one or more of these consultants. For the field work, I employed a very experienced field assistant, Melvin Smith.

2.2 Review of previous vegetation classifications in this region

2.2.1 Forest types of the Caribbean islands (Henri Stehlé)

An early classification system was developed by Henri Stehlé in 1945 based on studies in the neighbouring islands of Martinique and Guadeloupe. His system had 15 forest classes determined by elevation, rainfall and soil. There were five major forest classes; mangrove, xerophytic, mesophytic, hygrophytic and altitudinal. Xerophytic refers to the dry forest, mesophytic to the moist forest (mainly now the agricultural zone) and hygrophytic to the rainforest. Although the terms are now out of fashion, this system has the virtue of simplicity and I used it in our simple ‘starter’ map (section 2.3).

2.2.2 Climactic natural vegetation types (John Beard)

John Beard’s work in the 1940s and 1950s produced a system of classification of vegetation for South America and the Caribbean. Today it is still widely used and respected.

Beard’s system used climactic physiognomy, floristics and habitat to classify vegetation into various formations. Of these, physiognomy - the overall general appearance and structure of a climactic vegetation type - is the most important. Each formation is put into a formation series whose name reflects a single major habitat, for example, the seasonal forest formation series, which is made up of five formations. These formations show a gradient from the highest elevation/wettest habitat to the lowest elevation/driest as shown in Figure 1 below.

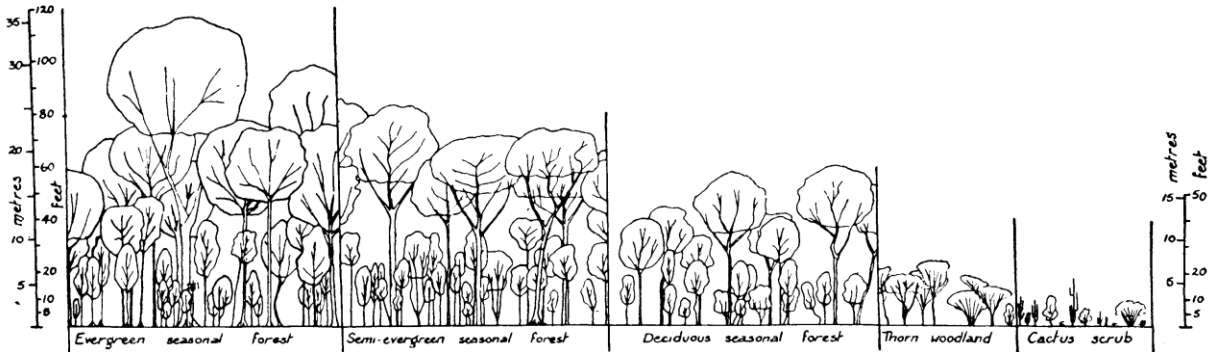
Beard considered only climactic natural types of vegetation, and related all to an optimum formation, rainforest, which, he said, was not found in Saint Lucia. In Figure 1, evergreen seasonal forest would be the closest to the optimum formation, thorn woodland furthest from the optimum. Each can be divided into floristic associations, for example the *Dacyrodes-Sloanea* association of our Lower Montane Rainforest.

Beard’s approach is very useful because it reveals approximately how the natural vegetation would have looked before humans arrived, and the relationships between various vegetation types. It also enables comparisons to be made between different islands and countries because of its stress on physiognomy. For example, evergreen

seasonal woodland could be recognized by its structure in different countries, even though the species composition may vary because of geographical separation.

Figure 1. Physiognomy of a seasonal formation series along an environmental gradient.

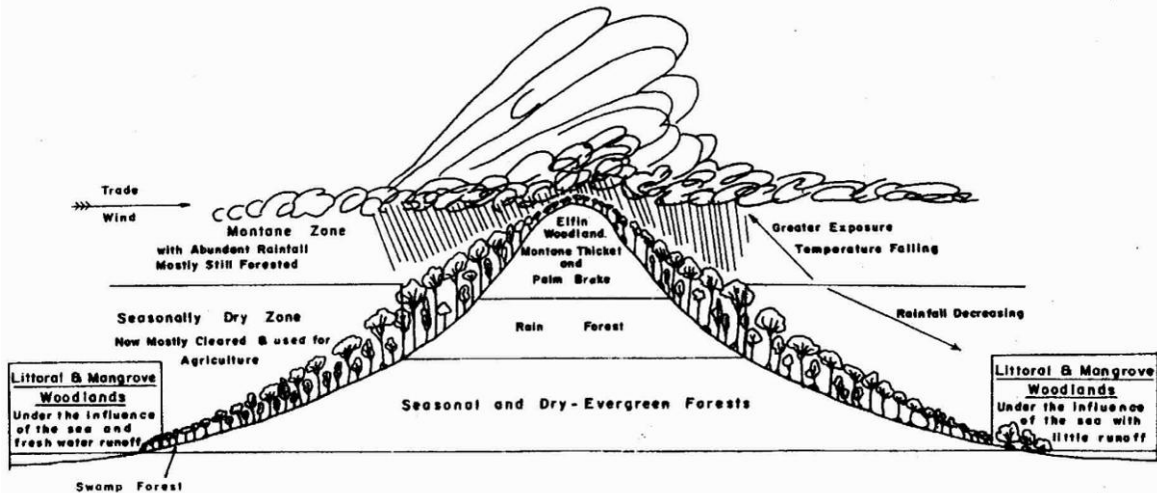
(from Beard, 1944)



The problem in using Beard's system for our present purpose is that only a small percentage of the vegetation of Saint Lucia is climactic. Human activities, such as forest clearance, and natural disturbances such as landslides, fallen trees, and wind-damaged canopies, have resulted in a complex mix of mainly secondary and modified vegetation. Many of the formation names used by Beard are still commonly used, but they are often applied to non-climactic vegetation to describe how they might appear if left undisturbed. The clear-cut definitions in terms of story structure and height, degree of openness of canopy, amount of ground cover, abundance of vines and epiphytes are difficult to apply where there has been human and natural disturbance, especially in the seasonal forests. Even in relatively undisturbed Lower Montane Rainforest, it is often difficult to relate what is observed to Beard's formation description, especially on ridges, steep slopes and ravines.

Nevertheless, the vegetation classification system I propose will be closely related to the climactic vegetation types shown in Beard's diagram (Figure 2) and his simple, but incomplete vegetation map (Figure 3).

Figure 2. A transect across a Caribbean island (from Beard, 1949).



2.2.3 International Vegetation Classification System

A more practical approach is used in Areces-Mallea *et al.*'s (1999) *A Guide to Caribbean Vegetation Types*, which uses the International Vegetation Classification System (IVC). This system has been used in the Caribbean quite extensively, especially in the Greater Antilles. One hundred and four natural/semi-natural formations, and many more species-based alliances, have been described for the various formations. The formations are grouped according to whether they are tree-, shrub- or herb-dominated, so Elfin Shrublands would be grouped in the same class as, for example, the Herbaceous Swamp (e.g. Cul De Sac).

The hierarchical organization is shown below with an example from Martinique (Kimble, 1988), which is presented in more detail in Appendix 1.

Order:	Tree dominated
Class:	1, Closed Tree Canopy
Subclass:	1A, Evergreen Forest
Group:	I.A.3, Tropical and subtropical seasonal evergreen forest (mainly broad-leaved evergreen trees with some foliage reduction in the dry season)
Subgroup:	I.A.3.N, Natural/Semi-natural
Formation:	I.A.3.N.a. Lowland tropical or subtropical seasonal evergreen forest
Alliance:	<i>Cedrela mexicana</i> - <i>Andira inermis</i> - <i>Hymenaea courbaril</i> Forest Alliance

This approach deals with the vegetation as it is and not how it might become. Being very complete, it is always possible to put an observed vegetation type into a formation, but on some occasions, vegetation types appear to fit into more than one formation.

To take this approach in Saint Lucia, alliances would have to be described, presumably hundreds. Even the alliances described for Martinique in Appendix 1 would need to be substantially modified for Saint Lucia. This would be a project into which much greater resources would have to be put. I would also have a concern that the number of alliances might be too numerous to be of practical use.

The resulting classes are identified and described purely in term of their species composition, and, as such, are unrecognizable to anyone who cannot identify all these species. This system is therefore difficult for non-botanists to use.

2.2.4 Life Zones

A research paper was published by Cornelius Isaac and Charles P.-A. Bourque (2001) with the aim of developing an improved ecological classification using Holdridge's (1967) system of natural life zones (Figure 4). The resulting vegetation map is shown in Figure 5.

Areces-Mallea *et al.* (1999) discussed the Holdridge system as follows:

“Holdridge (1967) proposed a classification of the world's plant formations (now more correctly termed “life zones”) based solely on climate. He considered temperature and rainfall to prevail over other environmental factors in determining vegetation. Although the Holdridge system of bioclimatic units has been used in the West Indies [e.g. in the Dominican Republic (Tasaico 1967) and Puerto Rico (Tosi 1959, Kumme and Briscoe 1963, Ewel and Whitmore 1973)], it has never been applied extensively in the region to make it a useful tool for comparing different islands. Actually, the Holdridge model has not been shown to be very practical in the Caribbean where different types of soil, exposure, relief, and many other geological and geographical factors strongly influence its plant

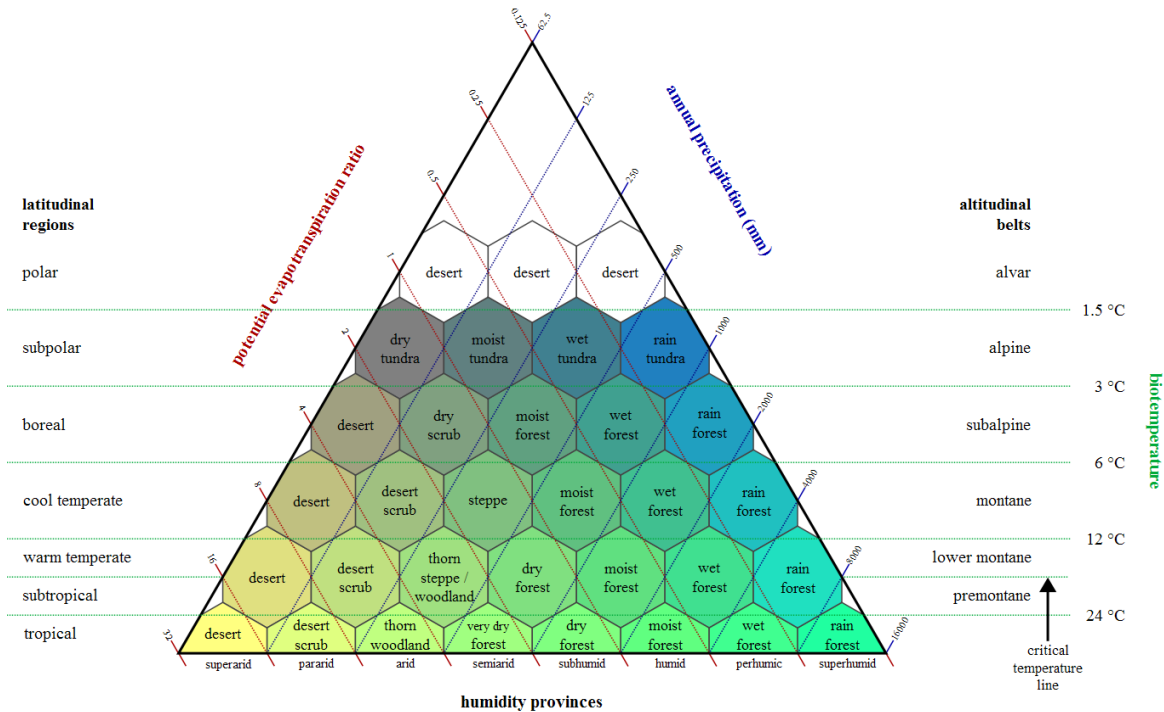
communities. Notwithstanding, it could be very useful as a baseline model for the main categories of an integrated system of mapping units for the Caribbean.”

This view was supported by Dr Franklin Axelrod, curator of the Herbarium of the University of Rio Pedras, Puerto Rico (pers. comm.). He told me that the complex topography in Puerto Rico made it difficult to relate the Holdridge map to what he observed in the field.

The complex topography of Saint Lucia, and the influence of exposure to the prevailing East-North-East winds would make this model difficult to apply here. For example, three distinct Life Zones are shown along the Atlantic coast by Isaac & Bourque (2001), but my data reveal a relatively uniform coastal vegetation, with most of the observed variation resulting from human disturbance and the degree of exposure to the prevailing wind.

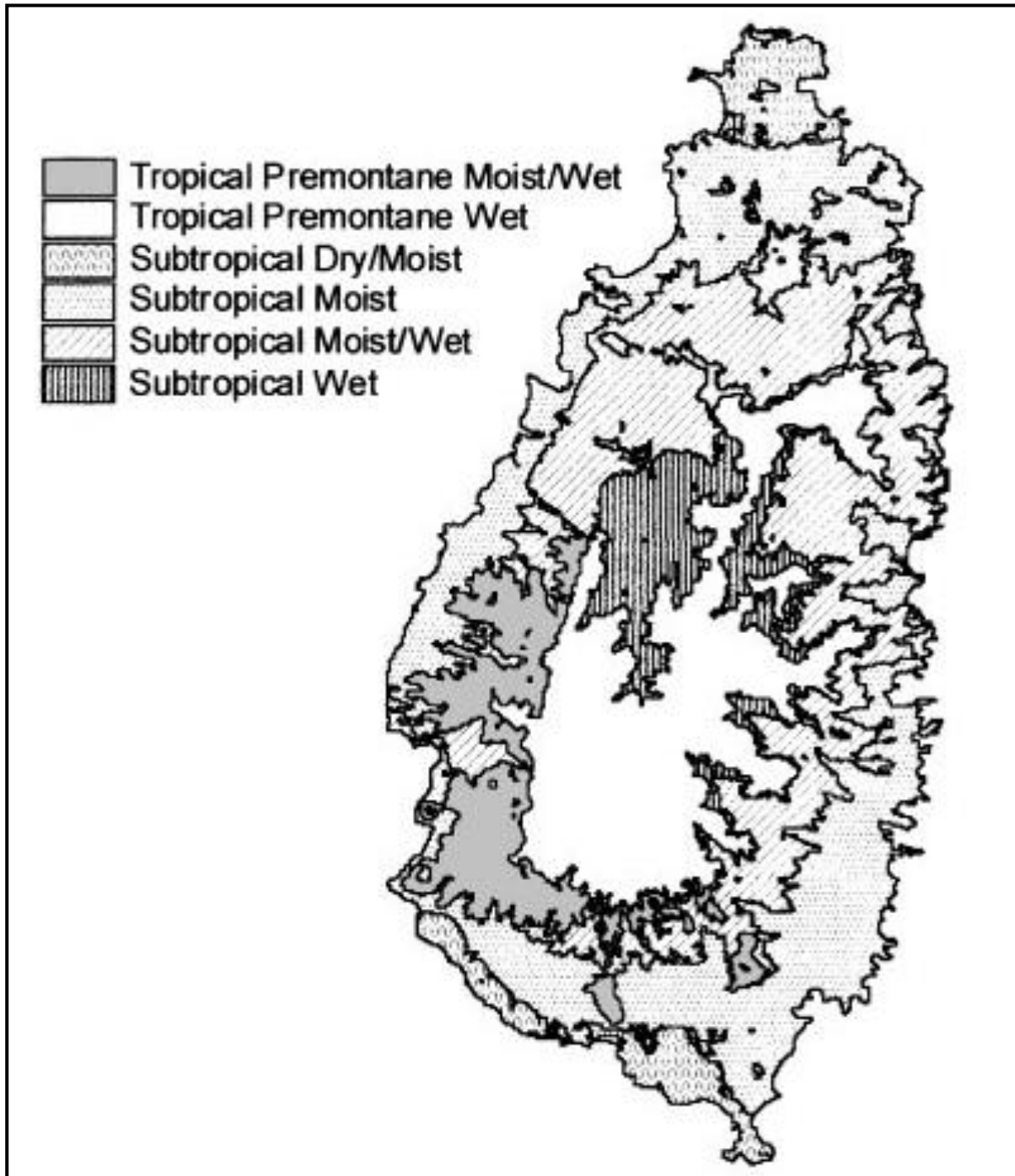
Figure 4. Holdridge Life Zone Classification scheme.

Potential evapotranspiration is the amount of evaporation that would occur if water were not limited. Annual precipitation is rain or snow. (Permission for reusing this image: Creative Commons BY SA, any version)



Isaac & Bourque (2001) also discussed a prior life zones map, the Organization of American States’ (1984a) *Map of Saint Lucia*. They argued that some of the data used were incorrect, thus resulting in a somewhat different map.

Figure 5. Ecological Life Zones of Saint Lucia
(Isaac & Bourque, 2001).

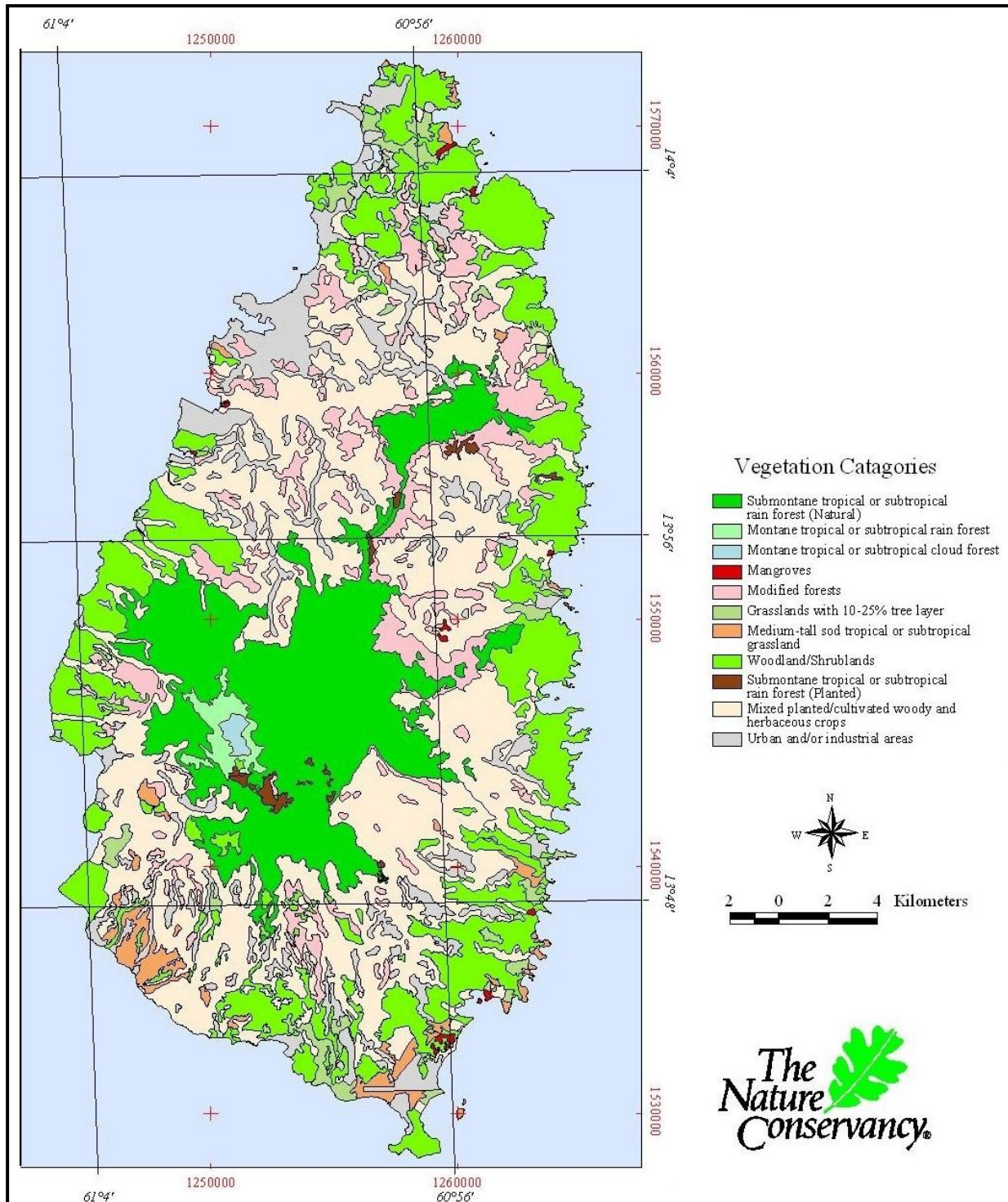


2.2.5 *The Nature Conservancy vegetation map of Saint Lucia*

This was an ambitious attempt to map vegetation classes in Saint Lucia. Its main weakness seems to be that a single woodlands/shrublands vegetation class reaches right from the coast to the lower montane tropical rain forest. No other vegetation classification system I have surveyed, nor indeed my observations in the field in

Saint Lucia, suggest that this is true. Also, much of the purported medium tall sod tropical grassland in the Choiseul-Lapointe area (Southwest) is either occasionally cultivated or is grassland with 10-25% tree layer.

Figure 6. The Nature Conservancy’s vegetation map of Saint Lucia (undated)



2.3 Production of a “Starter Map”

After meetings with other consultants involved in the biodiversity component of the project, we agreed that an initial map was needed for all specialists to work from. This map would show some basic vegetation zones, primarily based on elevation, along with ‘anomalous’ areas. These ‘anomalous’ areas were identified from my previous research as not having the vegetation readily predicted from their elevation.

To decide on an initial classification, I made a quick survey of previous proposed vegetation classification systems of the Lesser Antilles (including those summarized above). They vary in complexity and terminology, but broadly agree. I decided to use Stehlé’s (1945) system as a starting point (section 2.2.1), partly because it was designed to be applied to the French islands of Guadeloupe and Martinique, which are ecologically similar to Saint Lucia, and partly because it is the simplest.

Stehlé’s system refers to natural forest types only, as follows (with his original French terms in brackets):

Mangrove (*mangrove*) Forest
 Xeric or dry (*xerophytique*) Woodland
 Mesic (*mesophytique*) Forest
 Rain or wet (*hygrophytique*) Forest
 Altitudinal (*altitudinal*) Forest

I will not define these types in detail, but in general, the xeric areas receive 180cm rain or less per year, mesic areas 180–300cm, and rainforests more than 300cm, approximately.

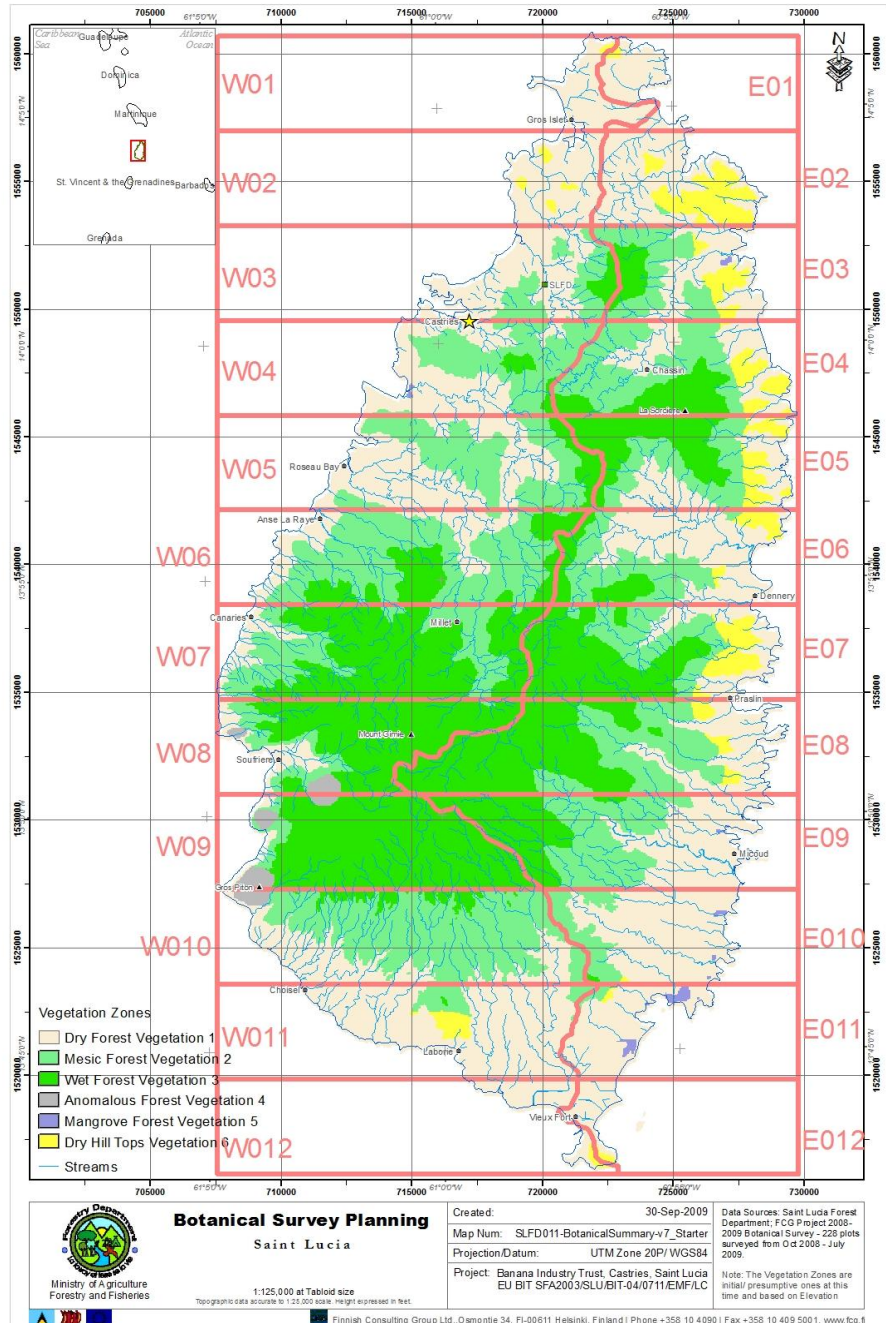
We used elevation to delineate the vegetation zones because detailed rainfall figures were not available, but rainfall broadly increases with elevation. After several trial attempts, we agreed that xeric areas were up to 150m elevation, mesic 150-220m elevation and rainforest 220m and above. This produced a map with the rainforest reasonably accurately delineated. The high altitude forest forms an irregular narrow band on the Mount Gimie range summits and was not marked on the map, but the other biodiversity consultants were informed of this vegetation type and how to reach it.

We raised the elevation of the boundary between mesic and xeric in the north and south of the island, where the rainfall is less, and also marked some high hills close to the coast as ‘dry hills tops’ and certain hills as ‘anomalous forest’. One of these anomalies is Petit Piton, which has almost entirely xeric vegetation and yet reaches a high elevation. These modifications ensured the botanical and zoological teams gave attention to these spots during the biological surveys in 2009. In addition, we marked the backbone watershed (drainage divide) of the island, thus dividing the leeward and windward sides, and divided the island into 12 evenly-spaced leeward and 12 windward cells. The aim of this was to ensure that the biodiversity surveys covered many different geographical areas of the island as well as different vegetation zones.

The starter map was merely intended to serve as a rough guide to the distribution of different vegetation types on Saint Lucia, and not to prejudge what we would find. We correctly expected the final vegetation map to be substantially modified as a result of my field surveys.

Figure 7. The ‘Starter Map’, showing the provisional forest classes.

See text for details.



2.4 Sampling vegetation plots in the field

We developed a simple method to sample quite rapidly the vegetation, the physiognomy and the habitats throughout the cells and vegetation zones on the starting map. One challenge was that we required a standardized method that could be applied to all types of forest, from secondary xeric woodland with small tightly packed trees, to rainforest where some tree trunks are extremely wide. After preliminary trials in contrasting xeric and wet forest types, we decided upon a 20-metre radius circular plot with a 7m radius subplot in the centre. The prime focus of the standardized survey was the 7m subplot.

Table 1. The biophysical and floristic information recorded from every plot

<i>Plot measurements</i>	<i>Description</i>
Plot	Plot number.
Date	Date of survey.
Location	Name of area plot is located in.
Team	Initials of surveyors present on this plot survey.
Description	Simple habitat type: e.g. river valley, degraded dry woodland, rainforest.
GPS N	Northing (UTM) of plot centre point as read from GPS.
GPS E	Easting (UTM) of plot centre point as read from GPS.
Rockiness	1=1-10% of ground covered by rocks; 2=10-30% of ground covered by rocks; 3=>30% of ground covered by rocks.
Canopy (m)	Measured using a clinometer.
Canopy (%)	Estimated visually, using a mirror to reflect the canopy.
Number of stumps ≥5cm	0=no stumps of ≥5cm diameter found in plot; 1=1-4 stumps of ≥5cm diameter found in plot; 2=more than 4 stumps of ≥5cm diameter in plot.
Number of logs ≥5cm	0=no logs of ≥5cm diameter on ground; 1=1-4 logs ≥5cm diameter on ground; 2=more than 4 logs of ≥5cm diameter on ground.
Wind	Assessment based on canopy wind noise and sculpturing of vegetation. 0=no wind noise; 1=slight wind noise; 2=moderate wind noise; 3=full exposure - sculptured vegetation.
Slope (%)	Measured using a clinometer.
Direction (°)	Slope aspect. Measured using a compass.
Elevation (m)	As read from GPS, occasionally with later corrections from map.
Vines	1=1-30% of trees in plot have vines; 2=31-70% of trees in plot have vines; 3>70% of trees in plot have vines.
Epiphytes, including ferns	1=1-30% of tree have epiphytes; 2=31-70% of tree have epiphytes; 3>70% of tree have epiphytes.
Herbs (%)	% ground cover, visually estimated to nearest 5%.
Ferns terrestrial (%)	% ground cover of non-arborescent ferns, visually estimated to nearest 5%.
Mosses/filmy ferns	0 = absent from trees; 1=surface cover present on most trees; 2=cover with depth on some trees; 3=surface cover with depth on most trees; 4=depths of 2cm present.
DBH1 (cm)	Measurement of the diameter at breast height of the widest trunk in the 7m subplot.
DBH2 (cm)	Measurement of the diameter at breast height of the second widest trunk in the 7m subplot.
Notes	Notes possibly useful for analysis, including details if the plot survey was not standard.
Species names of all trees DBH ≥5cm	Genus and species name for woody species with stem DBH≥5cm.
Number of trees	Number of individuals of every species with stem DBH≥5 cm (including arborescent herbs with trunks ≥5cm).
Species names of all saplings, herbs, vines and terrestrial ferns	Genus and species names.
Species names of all epiphytes	Genus and species names (dry forest areas only).
Other tree species	Additional tree species in the area, within the 20m plot radius.

All of the plot measurements shown in Table 1 were made in the 7m subplot, with the exception of the “*other tree species*”, which were recorded throughout the 20m plot. These additional data enabled us to capture much more of the floral biodiversity, given that we had a limited time to cover the whole island.

Melvin Smith and I used a Suunto™ compass to measure the direction of the slope, a Suunto™ PM5 clinometer to measure canopy height and the slope, and a KDS™ F10-02DM tape to measure trunk size (diameter at breast height, DBH). We took digital images of each plot. We used a Garmin™ etrex to record location (using the universal transverse mercator system, UTM) and elevation in metres.

We used a stratified sampling approach to decide where to conduct the plots, guided by the zones shown on the starter map to ensure we would not miss any rare vegetation types. To make more efficient use of our driving and walking time, several plots were assessed at every destination. Plots were not chosen randomly, but selected to illustrate the variety within each destination. Thus in rainforest area, a steep slope, a gentle slope, a ridge top, a gully, exposed positions, and/or sheltered positions might be chosen.

I entered the data into an Excel file. An example of the species data recorded on one plot is shown in Table 2.

Table 2. Plant species recorded in Plot 167, Raillon south, Mon Repos

Trees		No.	Saplings	Vines		Ferns	Other Trees	
<i>Ixora</i>	<i>ferrea</i>	1	<i>Aiphanes minima</i>	<i>Anthurium</i>	<i>palmatum</i>	<i>Adiantum</i>	<i>tetraphyllum</i>	<i>Chione venosa</i>
<i>Daphnopsis</i>	<i>macrocarpa</i>	2		<i>Schradera</i>	<i>exotica</i>	<i>Selaginella</i>	<i>flabellata</i>	
<i>Guarea</i>	<i>glabra</i>	1		<i>Marcgravia</i>	<i>umbellata</i>			
<i>Pouteria</i>	<i>multiflora</i>	1		<i>Philodendron</i>	<i>lingulatum</i>			
<i>Dacyrodes</i>	<i>excelsa</i>	3		<i>Smilax</i>	<i>oblongata</i>			
<i>Alsophila</i>	<i>muricata</i>	1						
<i>Aniba</i>	<i>bracteata</i>	1						
<i>Guarea</i>	<i>macrophylla</i>	2						
<i>Licania</i>	<i>ternatensis</i>	2						
<i>Micropholis</i>	<i>guyanensis</i>	1						
<i>Myrcia</i>	<i>antillana</i>	1						
<i>Ocotea</i>	<i>eggersiana</i>	1						
<i>Quararibaea</i>	<i>turbinata</i>	1						
<i>Rudgea</i>	<i>citrifolia</i>	1						
<i>Sterculia</i>	<i>caribaea</i>	7						
<i>Swartzia</i>	<i>caribaea</i>	1						
<i>Tapura</i>	<i>latifolia</i>	1						

Melvin Smith and I carried out the field work over a period of several months, twice weekly. We were able to identify all 502 species of plants we came across in 204 plots, producing over 6,200 records in total, with the exception of one grass (subsequently identified as *Paspalum urvillea*). In addition, we recorded 30 species lists in places where a plot could not be conducted, usually mesic spots on private land or narrow roadside remnants. Our ability to identify species even when sterile is based on the experience of about 600 full-day field trips with Melvin Smith over a period of 11 years to all parts of Saint Lucia. During this time, we have collected about 2,000 vouchered herbarium specimens (prepared with the help of Chris Sealys), and added about 250 species to the known flora of Saint Lucia.

Figure 8. The plant survey team in the field.



(a) Melvin Smith using clinometer (R. Graveson, FCG).



(b) Chris Sealys, Melvin Smith and Roger Graveson in Raillon Forest (J. Daltry, FCG-FFI).



(c) Melvin using a GPS (R. Graveson, FCG).



(d) Chris measuring tree girth (R. Graveson, FCG).



(e) Melvin identifying trees (R. Graveson, FCG)



(f) Compass to measure slope aspect (R. Graveson).

Occasional new species were found during the present survey, as well as some species that had not been collected since 1939 (before John Beard's first visit). Specimens were prepared by Chris Sealys, herbarium assistant in the Forestry Department. Mr Sealys also accompanied us on some trips and made herbarium collections and helped to record data, as part of his herbarium training. I also made additional collections when Chris was not present. (Details are in my *Herbarium and Training* report, Graveson 2009).

We decided to be inclusive of information rather than exclusive. Given the often difficult terrain and time constraints, it was sometimes difficult to exactly determine if a tree was in or outside of the plot, partially or totally. In such cases the tree was included in the plot. Some slopes were so steep that it was virtually impossible to enter them. Rather than ignore a quite common habitat, I decided to survey them as best as possible by dropping a rope down and visually assessing the plot from a distance. Some data were omitted from such plots, such as tree girth (DBH) and ground cover.

The plot locations are shown on Figure 9, and the raw data from all plots are shown in Appendix 2 a and b.

2.5 Analysis of field plot data

We used two methods to compare the species found in different plots (1) Two-way Indicator Species Analysis (TWINSpan), using a computer program, and (2) a manual floristic association analysis based on the known habitats of certain species. The second method was used as a means of corroborating and interpreting the vegetation classes identified using the first.

2.5.1 Two-way Indicator Species Analysis (TWINSpan) of tree presence and absence

TWINSpan was originally devised as a Fortran program by Hill (1979). It has become one of the most popular hierarchical clustering techniques for classifying species and samples (plots), organising them into an ordered two-way table or dendrogram (tree diagram). We used the TWINSpan program of the Community Analysis Package 4.0 (PISCES Conservation Ltd, Lympington, UK), which uses an MS Windows interface and can upload data prepared using MS Excel.

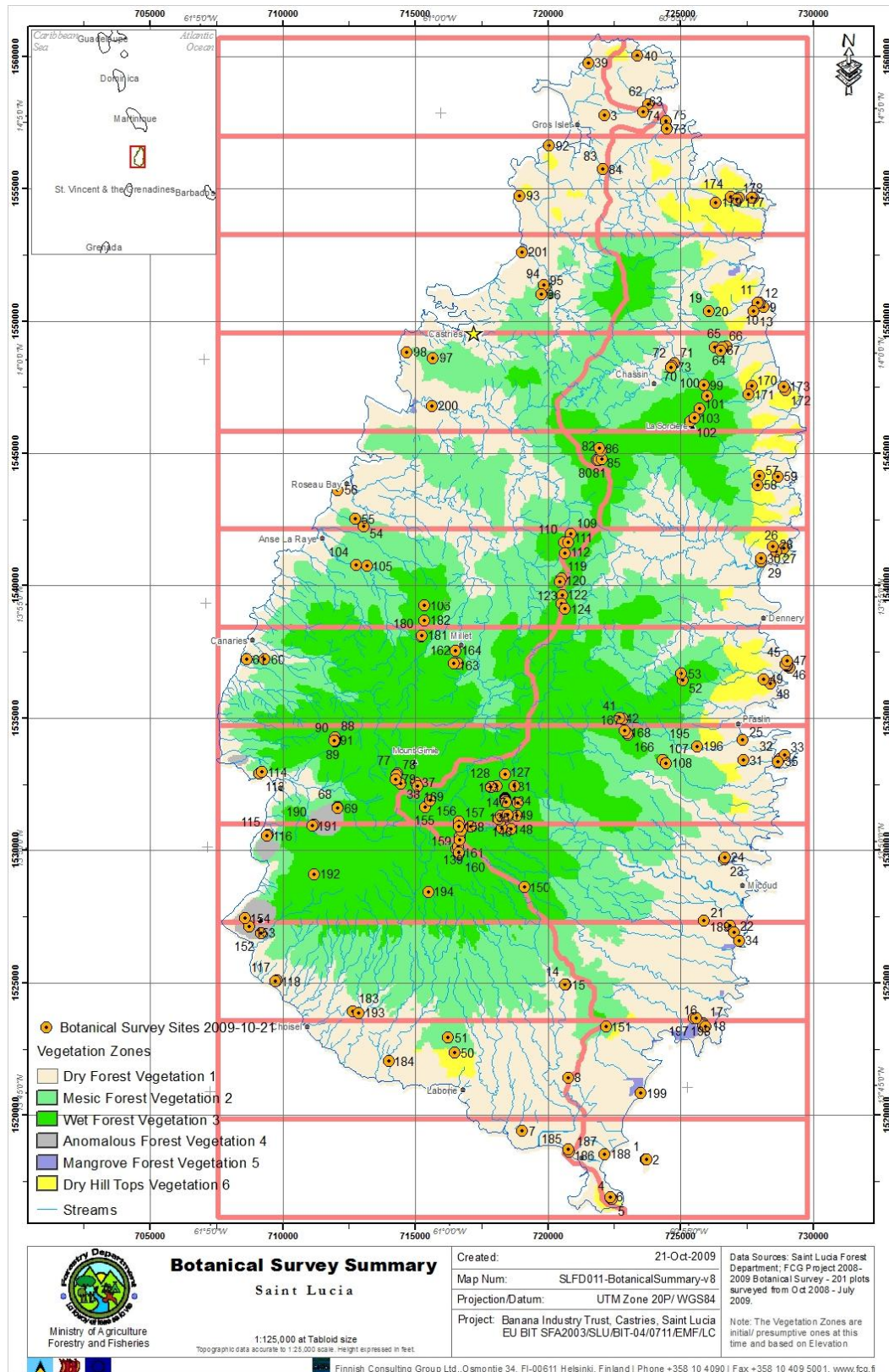
In this analysis, samples (plots) are first ordinated using Reciprocal Averaging (also called Correspondence Analysis) to show the relationship between both species and plots in a reduced space. Plots that share many species in common will appear closer to one another than to those that have very different species. The TWINSpan program then uses the centroid line to divide the samples into two groups, negative and positive. The two groups are then further subdivided into four groups, eight groups and so on using an iterative procedure. The final groups, or vegetation classes, will not necessarily be equal in size, with some rare classes having as few as a single plot, while others may contain a cluster of similar plots. These vegetation classes are then ordered so that similar classes are placed near each other. After classifying the plots, TWINSpan can then classify the plant species according to which vegetation type they belong to. As the name of this analysis suggests, TWINSpan can also identify indicator species, whose presence can be used to separate classes. See Kent & Coker (1992) for more details.

Despite its complex theory, TWINSpan has many advantages, including the ability to handle large numbers of species and plots simultaneously and the ability to avoid recognising plots as similar based on the shared absence of species (a common problem of many other forms of analysis). TWINSpan also removes the need to interpret ordination graphs by eye, and the final outputs – a two-way table or tree diagram – are relatively simple and easy to understand.

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Figure 9. The locations of plant survey plots.

Note the vegetation classes on the base map were taken from the ‘starter map’ (Figure 7)



Notable disadvantages of TWINSpan include the fact it requires a large data set to work effectively, the results may be overly biased by very rare species, and it may continue to subdivide plot groups that rightly belong in the same class (because no two plots in a natural forest will ever be identical). Like all computerized classifications, the outputs must be scrutinized by an expert plant ecologist to verify whether the classes are meaningful.

TWINSpan can be applied to presence/absence data and quantitative data. In our case, we used presence/absence data, and left all other default settings unchanged. Drawing on the raw plot data shown in Appendix 2b, we prepared our data in MS Excel with a single table showing the distribution of plant species (rows) against each plot (columns). The data entry table thus appeared as shown in the extract in Table 3.

We used only the large plants and tree sapling species presence-absence data for the TWINSpan analysis (i.e., the data shown in Appendix 2b under columns “Trees & other plants $\geq 5\text{cm DBH}$ ” and “Saplings” within the 7m subplots and “Other tree species” in the 20m plots).

Table 3. An example section of the plot species ‘presence/ absence’ data prepared for TWINSpan.

‘1’ indicates species recorded as present in the plot, ‘0’ indicates the species was not found. (The complete table showed all 300 tree species recorded in 177 plots - the total number of plots containing one or more tree species).

Species	Plot No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
<i>Canella winterana</i>		0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0
<i>Capparis baducca</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Capparis cyanophallophora</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Capparis flexuosa</i>		1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
<i>Capparis hastata</i>		0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
<i>Capparis indica</i>		1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Carapa guianensis</i>		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<i>Casearia decandra</i>		0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0

2.5.2 Manual Species and Forest Association Analysis

To corroborate and interpret the TWINSpan outputs, I used my knowledge of the local flora to classify plots based on species that I know to be associated with particular major forest classes on Saint Lucia. I was unable to find suitable method already in use so devised a simple analysis described below.

Anyone with any knowledge of our flora will recognize that most species are found in certain habitats, although they may be found in smaller numbers outside their main habitat. No forestry officer or worker would expect to find a bwa dimas growing at Grande Anse, or a white cedar on Mount Gimie. The more knowledge one acquires, the more of these distinctions one can make. After 15 years in the field, I have a good idea of what is found where. Jacques Fournet, after 30 years in the field in Guadeloupe, has a good idea too. He gives field notes in his flora: for example *Capparis indica* habitat he describes as “dry, rocky coastal woodland”; *Plinia pinnata* as “upper level of rainforest”. These field notes would apply to Saint Lucia as well.

I followed Stehle’s (1945) major forest classes for this analysis (section 2.2.1). I assigned a Forest Class Value to each major forest class (Table 4). For example, some species are typically found in the Deciduous Seasonal Forest where the upper canopy tends to lose its leaves in the dry season. I assigned these species a value of 1. Other species are typically found in moister environments, e.g. by rivers, and the trees lose some leaves during

the dry season in proportion to the severity of the drought. I assigned these Semi-evergreen Seasonal Forest species a value of 2. Some species are typically found in the forest reserve and rarely outside, and do not have a seasonal leaf fall. I assigned these Lower Montane Rainforest trees a value of 3. Plants typically only found in Cloud Montane Rainforest were assigned a value of 4.

Table 4. Assigned Forest Class Values

(Stehlé's 1945 classes in brackets)

Forest class	Forest Class Value (species)
Deciduous Seasonal Forest (xeric forest)	1
Semi-evergreen Seasonal Forest (mesic forest)	2
Lower Montane Rainforest (rain/wet forest)	3
Cloud Montane Rainforest (altitudinal forest)	4

Table 5. An example of the assigned Forest Class Values of plants recorded in Piton Flore.

Plot Number	Genus	species	Forest Class Value
84	<i>Aniba</i>	<i>bracteata</i>	3.0
84	<i>Anthurium</i>	<i>gouldingii</i>	3.0
84	<i>Boehmeria</i>	<i>ramiflora</i>	n/a
84	<i>Ficus</i>	<i>insipida</i>	2.5
84	<i>Geonema</i>	<i>interrupta</i>	3.0
84	<i>Heliconia</i>	<i>bihai</i>	n/a
84	<i>Inga</i>	<i>ingoides</i>	2.0
84	<i>Miconia</i>	<i>luciana</i>	3.0
84	<i>Miconia</i>	<i>mirabilis</i>	3.0
84	<i>Micropholis</i>	<i>guyanensis</i>	3.0
84	<i>Myrcia</i>	<i>fallax</i>	2.5
84	<i>Odontonema</i>	<i>nitidum</i>	n/a
84	<i>Olfersia</i>	<i>cervina</i>	3.0
84	<i>Ormosia</i>	<i>monosperma</i>	n/a
84	<i>Pithecellobium</i>	<i>jupunba</i>	2.5
84	<i>Protium</i>	<i>attenuatum</i>	2.5
84	<i>Sloanea</i>	<i>caribaea</i>	3.0
84	<i>Sterculia</i>	<i>caribaea</i>	3.0
84	<i>Swartzia</i>	<i>caribaea</i>	3.0
84	<i>Trichilia</i>	<i>pallida</i>	3.0
Mean Forest Class Value (plot no. 84)			2.81

Some species span two zones more or less equally and I gave these an intermediate value: e.g. 1.5 (found in both Classes 1 and 2); 2.5 (found in both Classes 2 and 3); or 3.5 (found in both Classes 3 and 4). Some species were too widespread to be given a diagnostic value. *Guapira fragrans* (mapou), for example, is found from the coast to the rainforest reserves. These generalist plants were omitted from my analysis, as were species for which I had insufficient information. See Appendix 3 for list of species with assigned forest class values. Based on the trees recorded in each plot and their Forest Class Value, I worked out the Mean Forest Class Value of the plot, by summing the plant class values and calculating their mean (see Table 5).

An obvious advantage of this simple manual classification system is that anyone recognizing a few species in the field can determine what sort of forest they are in. No computer or expensive software is required. It also provides a way to evaluate plots in intermediate zones, which have a mix of species from more than one class. This approach can be applied to only a small number of distinct classes, however, and the assignment of values to the species presupposes we know which vegetation classes they belong to.

Table 6. Relationship between forest class (Stehlé's 1945 classes in brackets) and the mean assigned forest class values of the plots.

Forest class	Mean Forest Class Value (plots)
Deciduous Seasonal Forest (xeric forest)	1-1.5
Semi-evergreen Seasonal Forest (mesic forest)	1-.51-2.5
Lower Montane and Montane Rainforest (rainforest)	2.51-3
Cloud Montane Rainforest (altitudinal forest)	More than 3

2.6 Mapping the vegetation classes

In the manner described in section 3, every plot was placed in a specific vegetation class. These plot points were then overlaid on a high resolution satellite image. I then manually drew boundaries between vegetation classes using the detailed visual appearance of the image, using both the plots as reference points and my detailed knowledge of Saint Lucia.

Mrs Rock of the Forestry Department manually delineated inhabited and industrial areas which would be not be allocated a vegetation class. She then painstakingly used my hand-drawn map to transcribe with more accuracy the vegetation class boundaries. Between Anse la Raye and Canaries, the very steep and inaccessible slopes presented a problem, but our plot and non-plot data enabled us to use elevation to delineate the main forest classes. Some of the image was under cloud or in shadow but in most cases it was possible to confidently allocate a vegetation class because of ground knowledge.

The littoral vegetation classes (Littoral Rock and Cliff Vegetation, Littoral Unconsolidated Sand Vegetation, Littoral Scrub, including Cacti and Littoral Evergreen Forest and Shrubland) were combined because they form very narrow bands and change from one to another over a short distances. Grassland areas often have pockets of Deciduous Seasonal Forest in the hollows so again, a combined class was mapped.

The result shown in section 4.20 a good first version. We intend to continue fine-tuning the map and hopefully use mapping software to give a more detailed picture, particularly of forest cover within the less-densely farmed areas.

3 Results

201 plots were surveyed, of which 177 contained at least one tree, sapling or other large, arborescent plant. I considered it critical to include all species with a tree-like form, whether they are technically trees or not: tree ferns and *Heliconia bihai* (and to some extent *H. caribaea*) become the dominant vegetation on very steep slopes, at all elevations in rainforest, but especially at high elevations and in disturbed areas, such as landslides. I could have included these in a separate category (*arborescent herbs*) with the same result. The only other ‘honorary tree’ is the tree-like cactus *Pilosocereus royenii*, which is found in Deciduous Seasonal Forest.

The TWINSpan analysis of the 177 plots identified the groups shown in Figure 10. We assigned a reference code to each group of plots in the dendrogram: plots 36, 165, and 169 were Group A1; 37 and 88 were Group A2; and so on. The plant names shown at every node or division on the dendrogram are the species that TWINSpan determined to be the most reliable “indicator species” for every pair of groups. These species are fairly consistently present [+] or absent [-] from the groups to the right of the division. For example, the highest order division on the tree, which splits Group P (Mangrove) from all other groups, gives the presence of *Avicennia germinans* as the best indicator species of Group P.

We condensed the groups produced by TWINSpan to a smaller number of distinct vegetation classes that would be easily recognizable on the ground and thus of more practical use for forest management. To do this, we gave greater weighting to groups separated by high order divisions (i.e., separated during the earliest TWINSpan divisions), signifying strong botanical differences between them, and merged many of the low-order groups (separated during the final TWINSpan divisions).

The TWINSpan dendrogram (Figure 10) revealed a strong elevational and moisture gradient, starting at the left with Cloud Montane Rainforest and descending towards the right through the Montane Rainforest and Lower Montane Rainforest. The right-hand part of the dendrogram contains the seasonal Semi-evergreen Seasonal Forest, Seasonal Deciduous Forest and coastal forest types. All these groups represent distinct classes.

Appendix 4 shows the results of the floristic average value analysis for all 201 plots, and the TWINSpan analysis of 177 plots. The overall correlation between the assigned forest class value analysis and the TWINSpan analysis was remarkably close. Of the 177 plots that contained trees, saplings or other large plants, 176 plots were classified into the same broad class of forest by both analyses. Only one plot (no. 124, a very steep, very windy rocky slope facing the Atlantic on Mount La Combe summit) produced differing results: TWINSpan placed it into Lower Montane Rainforest whereas my forest class value was 2.41, just into seasonal semi-evergreen forest class (2.5 would be rainforest, according to table 6). I decided to follow TWINSpan and assigned this plot to Lower Montane Rainforest.

I identified a further three high order divisions in the dendrogram (Figure 10). The deepest division was between TWINSpan groups B, C versus D, E, F, G, and split the Lower Montane Rainforest class into Lower Montane Rainforest 2 and Lower Montane Rainforest 1. The other two divisions were between TWINSpan groups M and N, which split the deciduous class into two (labelled Deciduous Seasonal Forest 1 and Deciduous Seasonal Forest 2), and between TWINSpan groups I and J.

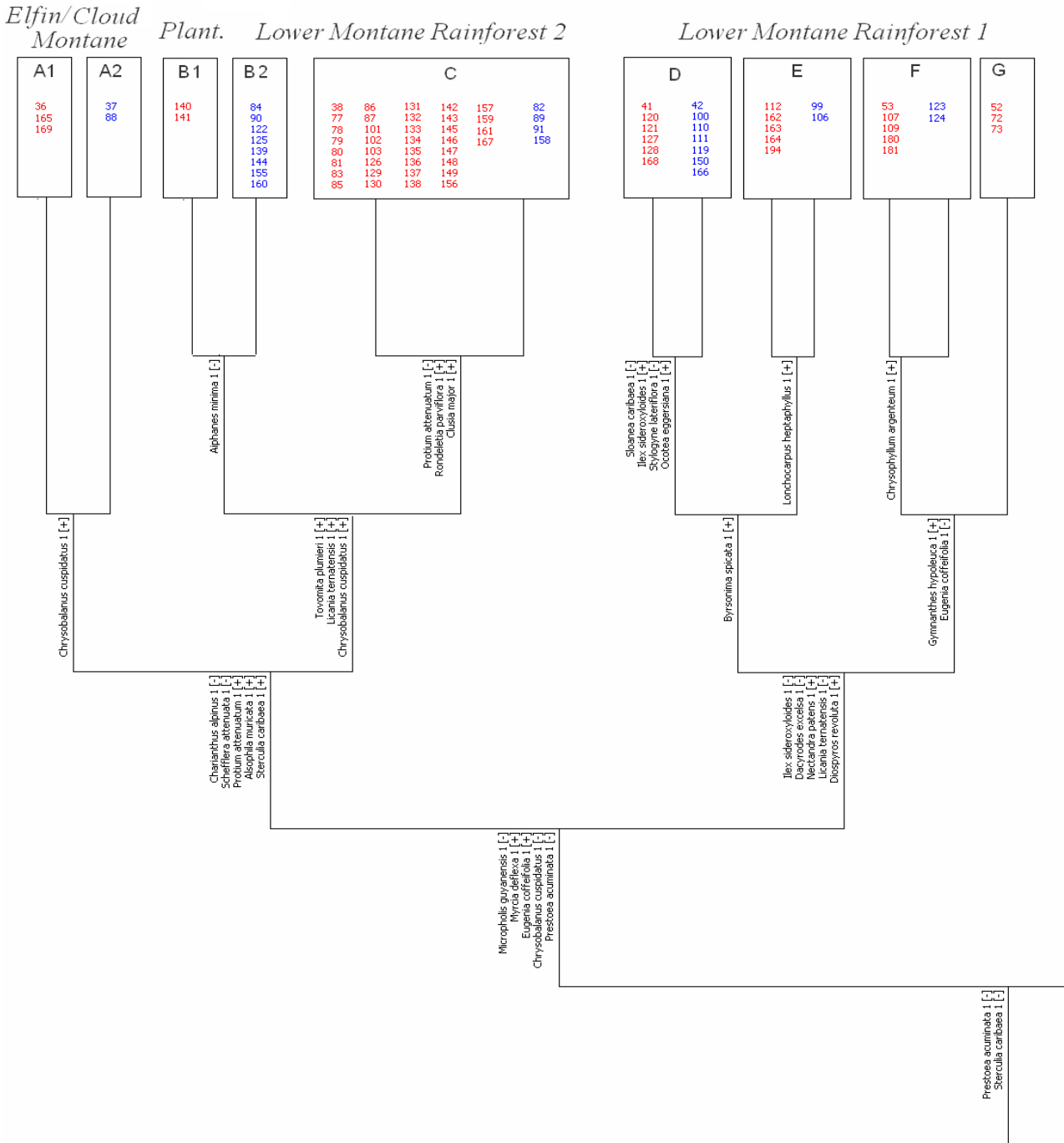
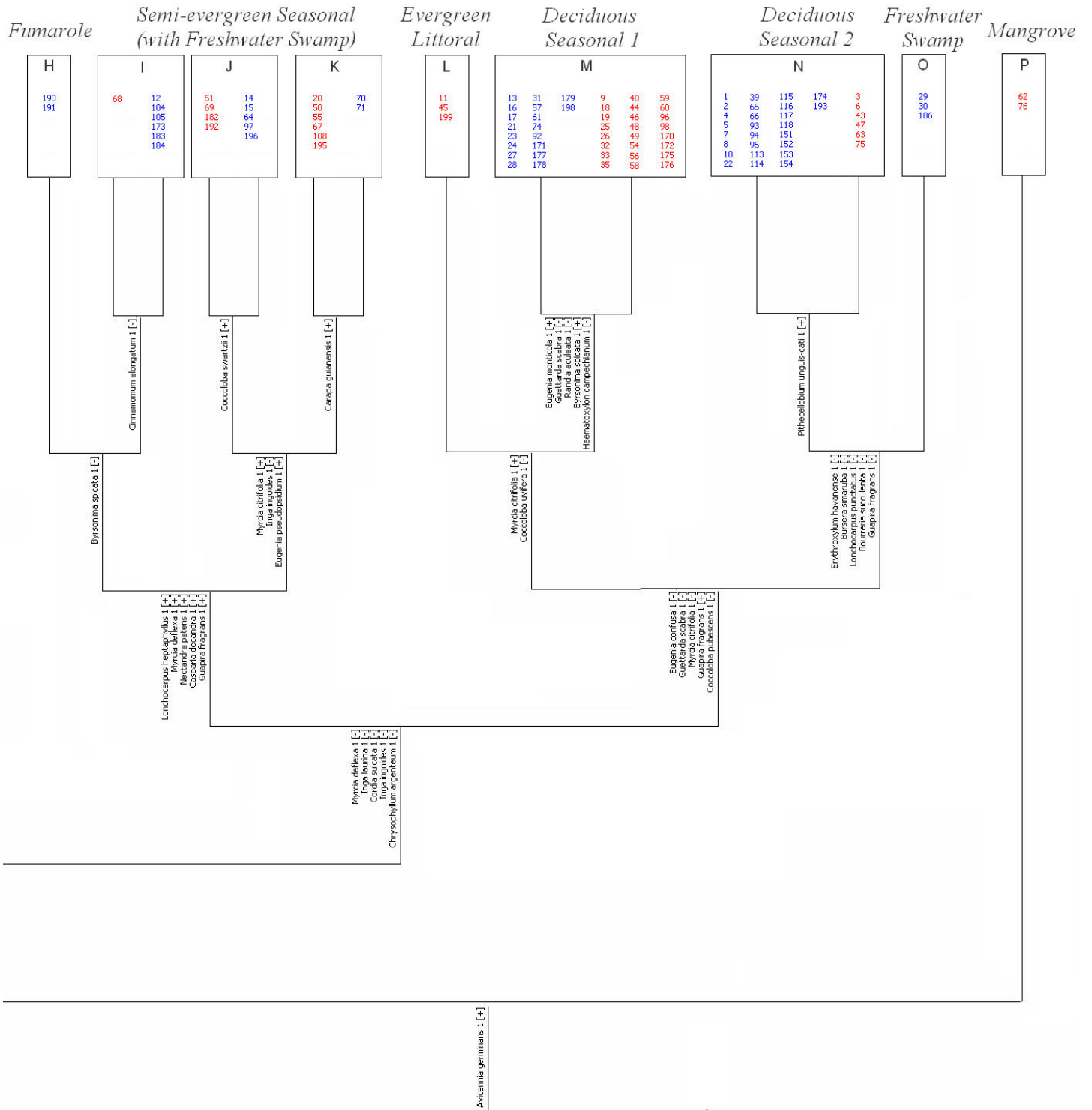


Figure 10. Dendrogram produced by TWINSpan analysis.

Analysis was conducted on the presence and absence of trees (including saplings) and other large plants in the survey plots. Plot numbers are shown in red or blue font. Groups on this left side of the dendrogram are mainly wet forest types.

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Groups on the right side of the dendrogram are increasingly xerophytic from right to left. Species names at the nodes are those identified by TWINSpan to be good indicator species. The plus or minus sign indicates their presence or absence from groups to the right of each node.

I examined the Lower Montane Rainforest class using the additional biophysical plot data we had collected (Table 7). The biophysical attributes reveal some striking differences between the two subclasses, including a statistically significant tendency for the Lower Montane Rainforest 1 to be at lower elevation (Wilcoxon-Mann-Whitney Test $z = -5.09$; $p = <0.001$), have fewer vines ($z = -2.53$; $p = <0.006$), fewer other epiphytes ($z = -3.24$; $p = <0.001$), fewer ferns on the forest floor ($z = -3.16$; $p = <0.001$) and less moss on the trees ($z = -3.82$; $p = <0.001$) than Lower Montane Rainforest subclass 2.

Table 7. Plot biophysical attributes of Lower Montane Rainforest subclasses 1 and 2.

Differences in elevation, vines, other epiphytes and mosses are statistically significant: see text.

Attributes	Lower Montane Rainforest 1 (n = 29)	Lower Montane Rainforest 2 (n = 46)
Mean Forest Class Average	2.77	2.93
Mean Number of Trees DBH \geq 5cm	32	29
Mean Rocks Score (0-3)	0.52	0.35
Mean Canopy Height (m)	30	26
Mean Canopy (%)	63	64
Mean Stumps Score (0-2)	0.93	1.16
Mean Logs Score (0-2)	1.46	1.36
Mean Wind Score (0-3)	1.38	1.07
Mean Slope (%)	22	29
Mean Elevation (m)	321	524
Highest Elevation (m)	466	680
Lowest Elevation (m)	102	342
Median Elevation (m)	322	530
Mean Vines Score (0-3)	0.97	1.63
Mean Epiphytes Score (0-3)	0.34	1.22
Mean Herbaceous (non-fern) ground cover (%)	4	4
Mean Ferns Ground Cover (%)	5	23
Mean Moss Score (0-4)	0.14	1.16
Mean DBH 1 and 2 (cm)	38	38

I also looked at the tree species with DBH \geq 5cm in the 7-m radius plots. For every important species, I calculated the mean number of individuals found per plot in each subclass, and calculated the ratio of each pair of means (Table 8). It is clear that some species are more strongly associated with Lower Montane Rainforest 1 or Lower Montane Rainforest 2. Many trees are present in both subclasses, however, including all four species associated with the important *Dacryodes-Sloanea* alliance (see section 4.11

To summarise, the deep division revealed by the TWINSpan analysis (which considered only the presence or absence of species of trees, saplings and other large plants) is indicative of strong floristic differences between the two classes. This is corroborated by statistically significant differences in

some of the biophysical data and by marked differences in the relative abundance of many species in the two subclasses. Further plot studies are essential to see if this division is maintained, and to gain deeper insight into the floristic differences.

Table 8. Important tree species of Lower Montane Rainforest subclasses 1 and 2

Showing the mean number of individuals of each species per plot (7-m radius)

Attributes	Lower Montane Rainforest 1 (n = 29)	Lower Montane Rainforest 2 (n = 46)	Ratio
Species less abundant in LMR 1			
<i>Chrysobalanus cuspidatus</i>	0.00	0.91	n/a
<i>Chrysochlamys caribaea</i>	0.04	0.74	1 : 19.3
<i>Prestoea acuminata</i>	0.42	4.11	1 : 9.7
<i>Micropholis guyanensis</i>	0.19	1.51	1 : 7.9
<i>Erythroxylum squamatum</i>	0.08	0.53	1 : 6.9
<i>Byrsonima trinitensis</i>	0.12	0.63	1 : 5.4
<i>Clusia major</i>	0.08	0.30	1 : 3.9
Species approximately equally abundant in both subclasses			
<i>Tovomita plumieri</i>	0.31	0.60	1 : 2.0
<i>Swartzia caribaea</i>	0.35	0.44	1 : 1.3
<i>Sloanea caribaea</i>	0.54	0.56	1 : 1
<i>Tapura latifolia</i>	0.26	0.21	1.1 : 1
<i>Sterculia caribaea</i>	3.60	2.44	1.5 : 1
<i>Simarouba amara</i>	0.35	0.23	1.5 : 1
<i>Cordia reticulata</i>	0.38	0.23	1.7 : 1
<i>Dacyrodes excelsa</i>	0.50	0.28	1.8 : 1
<i>Licania ternatensis</i>	1.65	0.81	2.0 : 1
<i>Symplocos martinicensis</i>	0.5	0.21	2.3 : 1
<i>Pouteria pallida</i>	1.27	0.49	2.6 : 1
Species more abundant in LMR 1			
<i>Protium attenuatum</i>	3.84	0.88	4.4 : 1
<i>Micropholis crotonioides</i>	0.54	0.12	4.6 : 1
<i>Eugenia coffeifolia</i>	0.57	0.09	6.2 : 1
<i>Ormosia monosperma</i>	1.46	0.19	7.9 : 1
<i>Myrcia deflexa</i>	0.96	0.05	20.7 : 1
<i>Ocotea eggersiana</i>	1.30	0.05	28.1 : 1
<i>Gymnanthes hypoleuca</i>	1.15	0.02	49.6 : 1
<i>Faramea occidentalis</i>	0.38	0.00	n/a

I also looked more closely at the Deciduous Seasonal Forest groups using the plot biophysical data (Table 9). The attributes table revealed some differences between the subclasses, notably a significant tendency for the Deciduous Seasonal Forest 2 to be at a higher elevation (Wilcoxon-Mann-Whitney Test $z = 2.02$; $p = <0.018$), be on steeper slopes ($z = 2.06$; $p = <0.018$), and have a significantly taller canopy ($z = 2.78$; $p = <0.003$) than Deciduous Seasonal Forest 1. It appears that Deciduous Seasonal Forest 2 is, in general, less disturbed than Deciduous Seasonal Forest 1 (see Appendix 4, Descriptions column). I suspect the floristic differences detected by TWINSpan do not signify a natural ecological distinction, rather a matter of the degree of human disturbance in an area, possibly over a very long period of time.

Table 9. Plot biophysical attributes of Deciduous Seasonal Forest subclasses 1 and 2.

Differences in canopy height, slope and elevation are statistically significant: see text.

Attributes	Deciduous Seasonal Forest 1 (n = 41)	Deciduous Seasonal Forest 2 (n = 31)
Mean Forest Class Average	1.11	1.06
Mean Number of Trees DBH≥5cm	19	20
Mean Rocks Score (0-3)	1.27	1.42
Mean Canopy Height (m)	9	14
Mean Canopy (%)	50	42
Mean Stumps Score (0-2)	0.80	0.79
Mean Logs Score (0-2)	0.95	1.00
Mean Wind Score (0-3)	1.4	0.9
Mean Slope (%)	12	22
Mean Elevation (m)	96	111
Highest Elevation (m)	250	413
Lowest Elevation (m)	4	5
Median Elevation (m)	73	91
Mean Vines Score (0-3)	1.0	1.1
Mean Epiphytes Score (0-3)	0.29	0.52
Mean Herbaceous (non-fern) ground cover (%)	15	11
Mean Ferns Ground Cover (%)	0	0
Mean Moss Score (0-4)	0	0
Mean DBH 1 and 2 (cm)	18	25

The third notable subdivision within a class was between groups I and J, in the Semi-evergreen Seasonal Forest class. Class I also includes two plots of seasonal Littoral Evergreen Forest and the remaining four plots are river valleys along the Caribbean coast. There are insufficient data to draw firm conclusions about this split. Further plot studies are needed to see whether river valleys on the Caribbean side have a significantly different type of Semi-evergreen Seasonal Forest.

Based on these analyses of the plots, my prior fieldwork and a survey of the existing literature, I propose a simple vegetation classification system, as set out in section 4. This proposed classification system, summarized on Table 9, was submitted to the Forestry Department for their comments and approval.

Note that in naming these vegetation types, any wooded area is called *forest*. I avoided the word *woodland*. I have not used the word *tropical*, which if used, would have to be included in virtually all the vegetation class names. I have not recognised a separate *evergreen seasonal forest* class, and have included this formation in *Semi-evergreen Seasonal Forest*, because neither the TWINSPAN nor the manual floristic association analysis supported a clear division between the two. (Beard's definitions are clear, but refer to a climactic form of which there is almost none. What "semi-evergreen seasonal forests" remain are often strips by rivers, by roads, and between fields. All of this form is secondary, except perhaps the flat summit of Gros Piton).

4 Proposed Vegetation Classification for Saint Lucia

4.1 Vegetation Classes

In this section, I will describe and illustrate the different vegetation classes found in Saint Lucia in approximate order of elevation, starting at the coast. Four classes that do not fit into a clear elevational pattern are dealt with at the end: Herbaceous Swamp, Aquatic Herbaceous Vegetation, Fumarole Vegetation and Tree Plantations. In theory, these could be found at any elevation, although in Saint Lucia they are restricted in area. I will refer to Appendix 5, which summarizes some of the biophysical data collected during the plot surveys.

Table 10. Proposed vegetation classes.

Natural Forest	
Littoral Evergreen Forest and Shrubland	Semi-evergreen Seasonal Forest
Mangrove	Lower Montane Rainforest
Freshwater Swamp Forest	Montane Rainforest
Deciduous Seasonal Forest	Cloud Montane Rainforest
Non-natural Forest	
Tree Plantations	
Non-Forest	
Elfin Shrublands	Littoral Unconsolidated Sand Vegetation
Herbaceous Swamp (seasonal or permanent)	Littoral Scrub, including Cacti
Aquatic Herbaceous Vegetation	Fumarole Vegetation
Littoral Rock and Cliff Vegetation	Grassland, with or without a few trees or shrubs

Each description is accompanied with a brief synopsis to describe the overall characteristics of a class. Some classes also have an introductory section, if there is a particular problem that needs discussing.

The images below are the property of the author, apart from those that refer to a plot number, which were photographed during the present consultancy and therefore belong to the Banana Industry Trust.

4.2 Littoral Rock and Cliff Vegetation

Synopsis

Mainly herbaceous, often succulent, low vegetation found on coastal cliffs and the flatter rocky areas behind them.

Description

More common on the Atlantic coast, where conditions are extreme with strong winds, long periods of drought, fierce sunshine and very little or no soil. These areas are home to a quite varied, special flora of low herbs, often interspersed with the Turk's Cap cactus *Melocactus intortus* (Figure 11a).

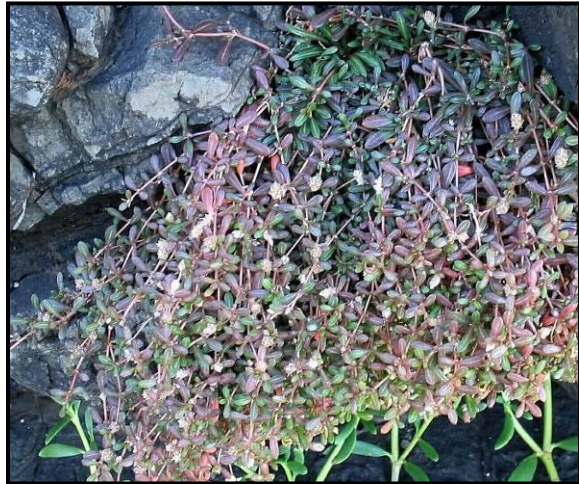


Figure 11. Littoral Rock and Cliff Vegetation

(a) Cacti and prostrate herbs, Mon Repos.



(b) *Evolvulus antillanus*, a Lesser Antillean endemic.



(c) *Lithophila muscoides* growing on a cliff.

4.3 Littoral Unconsolidated Sand Vegetation

Synopsis

Mainly herbaceous, salt-tolerant vegetation, growing on loose sand on beaches and adjacent low dunes. The pioneer species are trailing rooting herbs, with succulent species slightly further inland. In some locations, shrubs appear on low sand dunes a few metres inland of high tide.

Description

Sporobolus virginicus and *Ipomoea pes-caprae* are the most common of the pioneer plants. *Blutaparon vermiculare* is a succulent (Figure 12a,b,c). Shrubs may develop a few metres above the high tide mark, where the sand is still more or less loose or slightly consolidated in small dunes. This is best observed on the southern half of Anse des Sables, Vieux Fort (Figure 12d). Some rare species, such as *Corchorus hirsutus* and *Sophora tomentosa*, are also found here.

Figure 12. Littoral Unconsolidated Sand Vegetation



(a) *Sporobolus virginicus* colonizing loose sand.



(b) *Ipomoea pes-caprae* (patat bòd lanmè).



(c) The beach succulent *Blutaparon vermiculare* with some *Heliotropium curassavicum*.



(d) Shrubs on loose sand in foreground, Vieux Fort.

4.4 Littoral Scrub, With or Without Cacti

Synopsis

This type of vegetation is found in a narrow zone between littoral rock and cliff vegetation and Deciduous Seasonal Forest or Littoral Evergreen Forest. It consists of shrubs, cacti and sometimes grassy spaces.

Description

A typical view, close to Donkey Beach, Cap Estate, is shown in Figure 13.



Figure 13. Littoral Scrub, With or Without Cacti

Pilosocereus royennii (column cactus) and *Opuntia dillenii* (prickly pear, watjèt) with shrubs and grass.

4.5 Littoral Evergreen Forest and Shrubland

Synopsis

Behind sandy beaches, rocky cliffs and pavements, an evergreen forest or shrubland is found, especially on the Atlantic coast. The harsh conditions caused by wind, salt-spray, often a thin soil and a water deficit even during most of the wet season, favour an evergreen arborescent flora with thick leathery leaves. *Coccoloba uvifera* (wézen, siwiz, sea grape) is commonly present in this vegetation class.

Description

On rocky slopes exposed to the full force of the prevailing East-North-East winds, this vegetation class takes the form of wind-sculptured low shrubland, sometimes reaching 100 metres inland. Although often one metre tall or less, it may contain dwarfed trees with substantial trunks. Typical species include *Tabebuia pallida* / *heterophylla* (white cedar, poyé) (Figure 14a,c).

In locations less exposed to the prevailing wind, taller, more species-rich Littoral Evergreen Forest develops, often with an understory of shrubs (Figure 14b).

Behind sheltered beaches, a more lush Littoral Evergreen Forest is often found on the sandy soil (Figure 14d). Despite the high water table, the species must be tolerant of salt-spray. These sandy areas often become muddy inland from the beach and merge with Mangrove (section 4.6) and associated species (see also Freshwater Swamp Forest section 4.7).

In some areas, this evergreen woodland has clearly been degraded by charcoal production and also by subsequent grazing by goats and fires. The result can be Grassland with clumps of trees and shrubs. This is not a natural savanna in Saint Lucia, but man-made. Carpets of grasses probably would not have existed naturally (Figure 14e).



(a) Wind-swept Evergreen Shrubland, Cap Estate.



(b) Plot 46, Praslin: *Coccoloba uvifera* trees up to 8m tall. This plot was only 20m from plot 45 and equally stony, but sheltered from the wind. There is a much greater variety of trees and shrubs.

Figure 14. Littoral Evergreen Forest and Shrubland



(c) Plot 45, Praslin: *Coccoloba uvifera* in the left foreground, *Coccoloba pubescens* (fey gwan fey) in the background, *Tabebuia pallida* the leafless dwarfed tree.



(d) *Coccoloba uvifera*, *Thespesia populnea* (maho bòd lanmè), *Jacquinea arborea* and *Pithecellobium unguis-cati* (bebel) line a sandy beach.



(e) Grassy (*Sporobolus jacquinii*) patches between Littoral Evergreen Shrubland patches, probably caused and maintained by human activities.

4.6 Mangrove

Synopsis

Mangrove is an evergreen forest of brackish water. This well-known vegetation class contains only a few widely distributed, salt-tolerant species. In Saint Lucia, Mangroves contain four tree species and are mainly on the Atlantic coast. The characteristics of each species are described below

Figure 15. Mangrove: dominant trees



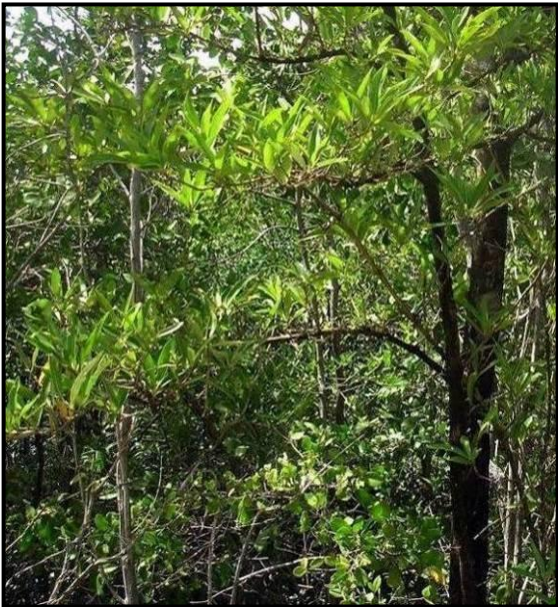
(a) Mangrove forest



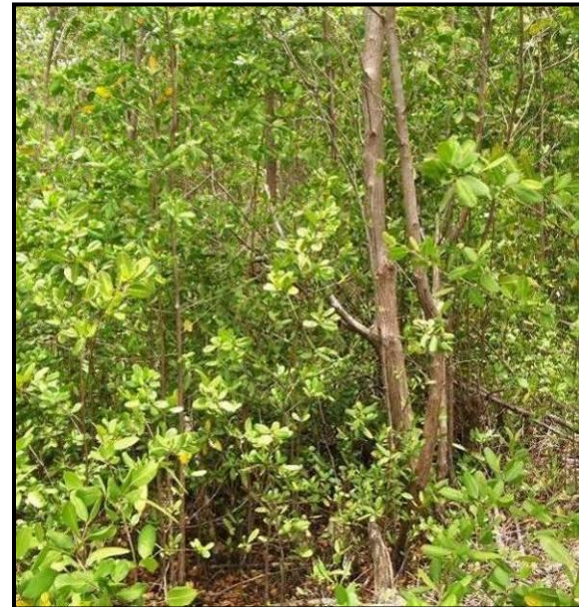
(a) *Rhizophora mangle* (manng wouj, red mangrove).



(b) *Avicennia germinans* pneumatophores protruding from the ground.



(c) *Avicennia germinans* (manng salé, black mangrove).



(d) *Laguncularia racemosa* (manng blan, paltivyé, white mangrove).

Description

Rhizophora mangle (manng wouj, red mangrove) is found usually in standing brackish water in the Mangrove (Figure 15a) and sends out ‘prop roots’ from its trunk and branches which arch down to the ground. *Avicennia germinans* (manng salé, black mangrove), is found in muddy areas or shallow surface brackish water, often in quite extensive stands (Figure 15c). (*A. schaueriana* is much rarer, but occupies a similar habitat). The ground beneath *Avicennia* trees has clusters of upward-pointing aerial roots (pneumatophores) (Figure 15b). *Laguncularia racemosa* (manng blan, paltivyé, white mangrove) also forms extensive stands, usually further inland than *Avicennia germinans* (Figure 15c). Close to the beach, all three species can often be found together. On the edge of the Mangrove, several mangrove-associated species are found. The most important are *Conocarpus erectus* (paltivyé wouj, button wood) and the shrubby vine *Dalbergia ecastaphyllum* (Figure 16a,b).

Figure 16. Mangrove: other associated species



(a) *Conocarpus erectus*.



(b) *Dalbergia ecastaphyllum*.

Much of Saint Lucia’s Mangroves have disappeared and the rest are still being damaged, sometimes by clearing, more often by drainage (Figure 17a). Even a slight drying out makes it easier for charcoal makers to move into the area, exacerbating the Mangrove’s destruction. A final stage is a seasonally muddy open area, often burnt during the dry season (Figure 17b). This creates a type of Herbaceous Swamp (see section 4.15).

Figure 17. Degraded Mangroves.



(a) Mangrove dying, probably because of a man-made change to the natural drainage system



(b) Single *Avicennia* tree remaining among sedges and succulents.

4.7 Freshwater Swamp Forest

Introduction

I have not divided this diverse vegetation class into seasonal and permanent subclasses because of the great variation in yearly rainfall. For example, a flat area inland of Cas en Bas beach becomes muddy for at least part of each wet season, but on three occasions in twenty years flash floods from seasonal creeks have caused it to retain surface water for up to six months. Even in the fiercest of dry seasons, however, the evergreen trees retain their leaves because there is always soil water available. Thus, I have included in this class not only the permanently muddy swamp forest, but also the forest on a soil whose surface may appear very dry at times. All forms of this forest exhibit the characteristics described in the synopsis.

Synopsis

This vegetation class, like mangrove, is independent of direct rainfall and more dependant on edaphic (soil) water. Freshwater Swamp Forest occurs in flat areas close to sea-level, with a permanent or seasonal freshwater flow and no inflow of salt water. Trees are evergreen and there is a tendency for more or less monotypic (single-species) stands to form. The surface of the soil becomes muddy because the water table reaches the surface for at least part of the year, and is sometimes inundated. Soil water is available even if the surface dries out. This class varies from the permanently muddy and occasionally inundated swamp redwood forest beside rivers with a permanent flow of water, to forest on flat areas behind beaches that rely on seasonal creeks to maintain the water table.

Descriptions

The classic Freshwater Swamp Forest is swamp redwood forest. The magnificent *Pterocarpus officinalis*, with its sinuous plank buttresses, forms monotypic stands. Formerly, this forest would have covered large areas in the flood plains of large rivers, such as Cul de Sac, Roseau and Fond D'Or, but much of it has been destroyed and replaced by banana plantations or Herbaceous Swamps (section 4.15). Relics remain at Fond d'Or (north end) and Cul de Sac (beside an old rubbish dump). A more pristine area remains along the Ger River, Micoud, between the bridge on the highway and the sea. Small stands can sometimes be seen along estuaries of smaller rivers.

Another form of evergreen forest can occur between the Littoral Evergreen Forest of sandy beaches and mangrove (Figure 18c). The indigenous *Hippomane mancinella* (manchineel, medsinnyé modi) is common here, along with the naturalized *Thespesia populnea* (maho bòd lanmè), *Terminalia catappa* (West Indian almond, zamann) and *Morinda citrifoli* (kòsòl chyenn, noni). The presence of three naturalized species indicates the secondary nature of this Freshwater Swamp Forest, mainly due to prior cultivation of sugar. Planted coconuts may also be present.

These areas are seasonally muddy, but often appear dry in the dry season. The trees are evergreen, however, and therefore easily distinguishable from the Deciduous Seasonal Forest. An almost monotypic stand of *Tabebuia heterophylla* (white cedar, poyé) is often found in these flat muddy areas (Figure 18d). It seems that this species has dominated the regrowth after sugar cane cultivation was abandoned. Although *Tabebuia* is often deciduous, it usually keeps its leaves in these areas due to the high water table and, in this habitat, can be considered a type of swamp forest tree.

Figure 18. Different forms of Freshwater Swamp Forest



(a) *Pterocarpus* Freshwater Swamp Forest after a flood. The water is flowing and will drain to the sea, revealing a muddy surface.



(b) *Annona glabra* (fey manmà, kajouka, manjé kwab, pond apple) is a small tree which grows in mud or freshwater and forms small stands.



(c) *Thespesia populnea*, between beach sand and *Laguncularia* mangrove, at a slightly lower elevation. Image taken at the end of the dry season.



(d) Plot 173: white cedar Freshwater Swamp Forest on muddy soil, with massive godmo, *Cissus verticillata*, vines.

Where the drainage pattern has been disturbed in more recent times, a newly muddy area or drying swamp may become dominated by an invasive species from Asia, the glue tree *Cordia obliqua*, a member of the sip family. This is especially noticeable around Hewanorra airport (Figure 19e).



(e) Glue tree, *Cordia obliqua* (an Asian invader)

4.8 Deciduous Seasonal Forest

Introduction

The TWINSPAN analysis divided the Deciduous Seasonal Forest plots into two subclasses. I examined both the biophysical plot data and the indicator species at the division nodes, but was unable to determine a natural ecological basis for this division. Most likely, it is caused at least in part by disturbance over the years: Subclass 1 plots tended to be more mature and intact. I have therefore decided to treat Deciduous Seasonal Forest as a single class, with a caveat that further research is needed to confirm whether the two subclasses are fundamentally different.

Synopsis

This vegetation class covers large areas in Saint Lucia from the coast to the summit of Petit Piton, although it is virtually all secondary and much of it degraded. It merges inland with the Semi-evergreen Seasonal Forest: the upper slopes of high hills are often covered by Deciduous Seasonal Forest and their lower slopes, leading to ravines, covered by Semi-evergreen Seasonal Forest

This class is defined as deciduous because the taller trees tend to lose all their leaves in most dry seasons, although the smaller trees and shrubs are evergreen. Its overall appearance during a normal dry season is of a more or less leafless canopy. There is no moss or cover of ground ferns. Vines and herbaceous ground cover are present, particularly in the more disturbed areas, where more light passes through canopy during the wet season. This forest class reaches an elevation of 700m on Petit Piton.

Description

The only large tracts of pristine Deciduous Seasonal Forest are on Petit Piton (Figure 19b) and on the lower and middle slopes of Gros Piton, and the upper slopes of other steep dry hills such as Mount Grenier (Figure 19a). The main canopy of dominant trees such as *Bursera simaruba* and *Lonchocarpus punctatus* are deciduous and give these slopes a barren appearance during the dry season. However, the understory trees and shrubs, such as Myrtaceae and Celastraceae, keep their leaves. Plant diversity is high, with many rare species of trees, shrubs and vines.

Smaller pockets of what appear to be quite natural Deciduous Seasonal Forest can be found along the coast. On the edge of high cliffs at Dennery Knob, a windswept and arid location, the forest canopy is 15m high (Figure 19c). Another mature example can be seen just a few metres above sea level, on the southern end of the isolated Petite Anse (Figure 19d). This suggests to me that the original Deciduous Seasonal Forest was well-wooded with a tall canopy right to the coast, and with many evergreen species. Trees such as *Tabebuia heterophylla* (white cedar, poyé) and *Lonchocarpus punctatus* (ti savonnet) were present, but probably less dominant than they are now.

An unusual, seemingly natural, Deciduous Seasonal Forest is found on hills between Praslin and the Bordelais Correctional Facility (Figure 19e). The average canopy is low, about 4-5m high, and the vegetation is gnarled and wind-sculptured. Nevertheless, this is an area of high plant diversity with some trees that are more usually associated with wetter habitats, such as *Ormosia monosperma* (dédéfouden). It may be that this area has been less disturbed by human activities because of the perceived threat of fer de lance snakes, or that it has a special moisture-holding soil.

Figure 19. Different forms of relatively pristine Deciduous Seasonal Forest



(a) Mount Grenier, Bois D'Orange.



(b) Plot 115: Steep rocky slope of Petit Piton.



(c) Mature Deciduous Seasonal Forest, Dennery Knob.



(d) Shady coastal forest at Petite Anse.



(e) Good quality Deciduous Seasonal Forest at Bordelais.



(f) Shady ravine, close to coast, at Louvet.

While large areas of Deciduous Seasonal Forests remain on both coasts, virtually all is secondary, with disturbances still common. The result is often a patchwork, with small gardens, recently coppiced areas, shrubs, small trees and larger trees. The first, massive disturbance to Saint Lucia’s Deciduous Seasonal Forests was caused by sugar cane cultivation and the need to collect wood as fuel. Subsequent coconut cultivation and the practice of charcoaling, clearing for seasonal gardens and creating pasture for livestock, has continued the disturbance, but to a lesser extent, so that there is now more dry forest now than a century ago. A new and continuing threat is the clearance of dry forest for tourist developments, including golf courses.

Figure 20. Different forms of Disturbed Deciduous Seasonal Forest.



(a) Hills between La Bourne and the sea



(b) Secondary and degraded Deciduous Seasonal Forest, Dennery Knob area.



(c) Plot 28: Dennery.



(d) Regrowth in charcoaled area, Anse Louvet.

The largest area of Deciduous Seasonal Forest is found in the north-east of the island, between Cas en Bas and Dennery. It is virtually all secondary and much of it shows signs of recent disturbance. Figure 20a shows a shrubby scrubland, a recently cleared area and some more wooded areas, which have not been so disturbed for a few years. Figure 20b shows another view in the hills north of Dennery; the shrubs *Croton guidingii* and *Croton hircinus* (ti bonms) in the foreground are indicative of extreme degradation. Figures 20c and 20d show areas recovering from charcoaling, with tightly packed saplings. *Guettarda scabra* (bwa madam) and *Myrcia citrifolia* (blackberry), tend to dominate in this type of regrowth. 20c is at a more advanced stage in its recovery than 20d.

Steep ravines still manage to keep a thin strip of more luxuriant vegetation. Figure 19f shows a ravine within 400m of the beach, in a very degraded area. This ravine contained two species that are more typical of Lower Montane Rainforest.

Large areas of Deciduous Seasonal Forest are also found on the Caribbean coast, particularly from Anse La Raye to the Bouton area, Soufriere. In general, they are moderately to severely degraded, with only the ravines holding a more natural forest. Anse La Liberté is now a protected area and the forest is slowly recovering. (Figure 21a).

Deciduous Seasonal Forests can recover if left undisturbed for decades: the mature secondary forest is less diverse than the primary form, but has a similar physiognomy. For example, the hill at Beausejour, near Vieux Fort, was probably more or less treeless during the period of sugar cane cultivation, but a tall secondary forest has now developed. (Figure 21b).

A major area of what used to be Deciduous Seasonal Forest is found between Dennery and Vieux Fort. This forest has become very degraded south of Micoud, with grassy areas becoming commoner and tree cover less (fig.22). . This is probably due to a greater degree of disturbance from the higher population density and possibly a longer tradition of livestock grazing. Fires are frequent in the dry season, further degrading the forest. Because of the now-extensive grassy areas I would classify this man-made savanna in the next vegetation class, Grassland, but is just an extreme form of a degraded Deciduous Seasonal Forest and could potentially regenerate if left undisturbed.

Figure 21. Degraded forms of Deciduous Seasonal Forest



(a) Plot 60: recovering degraded forest, Anse La Liberté.



(b) Plot 8: secondary Deciduous Seasonal Forest, Beausejour, Vieux Fort.

4.9 Grassland (with or without a few trees or shrubs)

Synopsis

Open areas covered mostly by grasses or sedges, but other herbs and low shrubs are also present. Individual trees or small clumps of trees and taller shrubs may also be present. This vegetation class is most common near areas of Deciduous Seasonal Forest and is usually a result of extreme disturbance to that forest class.

Description

Open grassy areas are probably not a natural vegetation class in Saint Lucia, except perhaps as small patches in rocky coastal cliffs and pavement. As discussed in section 4.8, however, fires and other continual disturbance of Deciduous Seasonal Forest produces degraded ‘grassy’ areas (including sedges) with some shrubs and trees. Abandoned gardens in wetter areas can temporarily take on this form, but quickly develop into secondary forest (see Figure 23b).

Figure 22a shows degraded patches of shrubs and trees among the grassy areas. More severe degradation is evident in the image below where only an occasional tree survives (Figure 22b). The Choiseul to La Pointe area also has extensive tracts of Grassland on what was originally Deciduous Seasonal Forest. This has in some cases been caused by clearance for farming and subsequent abandonment.

Figure 22. Grassland



(a) Troumassée Estate, Micoud.



(b) Vieux Fort.

4.10 Semi-evergreen Seasonal Forest

Synopsis

Semi-evergreen Seasonal Forest occupies the zone between Deciduous Seasonal Forest and Lower Montane Rainforest. It is characterized by upper canopy trees with rather thin, often broad, and quite often compound leaves, which may lose some, but not all, of their leaves during a dry spell. There are no, or very few, epiphytes, ground ferns and mosses. Elevation ranges from almost sea-level in ravines to the summit of Gros Piton.

In comparison with Deciduous Seasonal Forest, this forest class has a higher canopy and greater canopy cover and trunks with a greater girth. It occurs in less windy areas, and generally at a higher elevation.

Description

This rare forest has almost been completely destroyed for agriculture: most of the areas currently occupied by banana plantations would have had Semi-evergreen Seasonal Forest.

Table 11. Biophysical Attributes of Semi-evergreen Seasonal Forest plots

(with Lower Montane Rainforest and Deciduous Seasonal Forest for comparison)

<i>Attributes</i>	<i>Lower Montane Rainforest (n=75)</i>	<i>Semi-evergreen Seasonal Forest (n=22)</i>	<i>Deciduous Seasonal Forest (n=72)</i>
Mean Forest Class Average	2.87	1.92	1.09
Mean Number of Trees DBH≥5cm	30	17	19
Mean Rocks Score (0-3)	0.45	1.27	1.33
Mean Canopy Height (m)	27.6	22.82	11.18
Mean Canopy (%)	63.5	64.32	46.46
Mean Wind Score (0-3)	1.19	0.55	1.19
Mean Slope (%)	26	20	16
Mean Elevation (m)	445	155	103
Highest Elevation (m)	680	390	413
Lowest Elevation (m)	102	15	4
Mean Vines Score (0-3)	1.37	0.95	0.82
Mean Epiphytes Score (0-3)	0.88	0.18	0.39
Mean Herbaceous (non-fern) ground cover (%)	4.08	5.91	13.44
Mean Ferns Ground Cover (%)	15.85	0.60	0.00
Mean Moss Score (0-4)	0.75	0.09	0.00
Mean DBH 1 and 2 (cm)	38.25	31.30	21.13

Semi-evergreen Seasonal Forest is now mainly found in small pockets among fields, by roads and as a thin line along rivers, and is virtually all secondary, with the possible exception of the upper third of Gros Piton, Mount Parasol and the northern slope of Mount Souf (Figure 23a). These habitats are

steep and rocky, and therefore not necessarily typical of the main Semi-evergreen Seasonal Forest zone as it used to be.

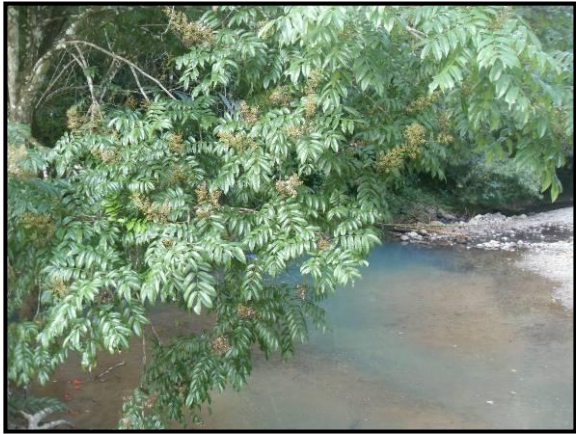
Figure 23. Remnant patches and typical species of Semi-evergreen Seasonal Forest



(a) Some natural Semi-Evergreen Seasonal Forest among disturbed areas, Mount Souf.



(b) Semi-evergreen Seasonal Forest among neglected fields, Motette, Choiseul.



(c) *Andira inermis* (anjlen) in a river valley, Anse La Raye.



(d) *Chrysophyllum argenteum* (bwi).

Because so few tracts remain, Semi-evergreen Seasonal Forest is best recognized by the characteristic species found in it (see Figures 23c,d and 24a-d) and by its typical location in agricultural areas and river valleys below Lower Montane Rainforest. This forest class may be increasing in area as more gardens are abandoned.

Figure 24. Typical species of Semi-evergreen Seasonal Forest



(a) *Cordia sulcata* (sip blan).



(b) *Guazuma ulmifolia* (bwa lonm).



(c) *Inga ingoides* (kakoli).



(d) *Margaritaria nobilis* (bwa mil bwanch, bwa zo bèf).



(e) *Daphnopsis americana* (maho pimen)



(f) *Lonchocarpus heptaphyllus* (Savonnèt gwan fey)

4.11 Lower Montane Rainforest

Introduction

Lower Montane Rainforest is in fact a suite of many different types of forest and defies a simple description: the canopy height varies from 4m to more than 45m; canopy cover is often quite complete on gentler slopes, but broken on steep slopes; ferns, mosses, ground anthuriums, vines, and epiphytes vary from absent to abundant; trees with buttresses and prop roots are present in some areas and absent in others. At ground level, it varies from humid, quite dark and still, to rather breezy and bright. This variation results from natural factors, especially slope gradient, exposure to the prevailing wind, altitude (and therefore rainfall), and recent climatic disturbances. Extensive forest destruction was caused by Hurricane Allen (1980), mostly canopy-level destruction by Hurricane Dean (2007), and numerous, occasionally massive, and still very obvious, landslides were caused by Tropical Storm Debby (1994).

Synopsis

Lower Montane Rainforest merges with Semi-evergreen Seasonal Forest at lower elevations and with Montane/ Cloud Montane Rainforest at higher elevations. Trees are evergreen because there is no water deficit most years in any month. In general, trees of all heights are found, without clear divisions into separate canopy layers. Although there may be a shrub, fern and herbaceous (mainly *Anthurium*) ground cover, this forest class is easy to walk through (if one ignores the incline) except where the canopy has been destroyed and ferns, vines and shrubs colonise the clearing.

In comparison to Semi-evergreen Seasonal Forest, the mean canopy height, wind, and incline are greater and there is a greater abundance of vines, epiphytes, ferns and mosses. The trees are more tightly packed, and the trees can be much wider in girth. This forest class has been recorded from 100-680m above sea level.

Description

As discussed in Section 3, the TWINSPAN analysis indicated there might be two subclasses on Saint Lucia. There are in any case complex trends both in physiognomy and floristics from the more exposed to more sheltered locations and from lower elevations to higher elevations.

The exterior zone of the Lower Montane Rainforest has a characteristic rather ‘clean’ appearance, with little of the profusion of ferns, mosses, epiphytes and vines of more interior and higher parts (see Figure 25a,b). Lauraceae, particularly *Ocotea eggersiana* (lowyé ti fey) and *Ocotea leucoxyton* (lowyé mabwé) are common, along with *Ormosia monosperma* (dédéfouden) and with smaller trees such as *Faramea occidentalis* (ti kafé) *Gymnanthes hypoleuca* (bwa sadinn) and *Eugenia coffeifolia*. Also common are trees such as *Myrcia deflexa* (bwa kwéyòl) and *Guapira fragrans* (mapou) which are also found in other vegetation classes. *Sterculia caribaea* (maho kochon) is often the most common tree.

Figure 25. Lower Montane Rainforest at its lower elevations



(a) A rather open, breezy, forest found at about 380m elevation in the Venus area of Millet, on the Caribbean edge of Lower Montane Rainforest. There is a lack of vines, epiphytes and fern ground cover, although there is a terrestrial anthurium.



(b) A similar forest with a canopy height of about 30m on the Atlantic edge of the forest, Bar de L'Isle area, at about 300m elevation. Again there is a lack of ground cover, epiphytes, vines and mosses.

Table 12. Biophysical Attributes of Lower Montane Rainforest plots

(with Cloud Montane Rainforest and Semi-evergreen Seasonal Forest for comparison. There are no plot data for Montane Rainforest, which in any case is floristically poorly differentiated).

Attributes	<i>Cloud Montane Rainforest (n=4)</i>	Lower Montane Rainforest (n=75)	<i>Semi-evergreen Seasonal Forest (n=22)</i>
Mean Forest Class Average	3.47	2.87	1.92
Mean Number of Trees DBH≥5cm	25	30	17
Mean Rocks Score (0-3)	0.33	0.45	1.27
Mean Canopy Height (m)	5.3	27.6	22.82
Mean Canopy (%)	72	63.5	64.32
Mean Wind Score (0-3)	2.0	1.2	0.6
Mean Slope (%)	28	26	20
Mean Elevation (m)	851	445	155
Highest Elevation (m)	869	680	390
Lowest Elevation (m)	824	102	15
Mean Vines Score (0-3)	1.33	1.37	0.95
Mean Epiphytes Score (0-3)	3.0	0.9	0.2
Mean Herbaceous (non-fern) ground cover (%)	10.0	4.1	5.9
Mean Ferns Ground Cover (%)	22.0	15.9	0.6
Mean Moss Score (1-4)	4.0	0.8	0.1
Mean DBH 1 and 2 (cm)	17.0	38.3	31.3

Away from the edge of the forest, on comparatively gentle slopes without much wind, occasional very tall trees, reaching 45m, are found among the main 30-m canopy. This distinctive forest is often called the *Dacryodes-Sloanea* alliance and is often over-emphasised as being the ‘typical’ rainforest. In fact it occupies just a part of Saint Lucia’s forest reserves. Despite its name, *Tapura latifolia* (bwa kot wouj) and *Licania ternatensis* (bwa dimas) are also important members of this alliance.

Figure 26. Lower Montane Rainforest: the classic *Dacryodes-Sloanea* alliance



(a) Characteristic trunk of *Sloanea caribaea* (chatannyé) with some moss, fern cover and vines. (b) Trunk of *Dacryodes excelsa* (gonnmyé).

Higher slopes, which are usually steeper, tend to have a more vines, moss, ground ferns, ground anthuriums and epiphytes. Species that are rare or absent at lower elevations, such as *Micropholis guyanensis* (fey dowé), *Byrsonima trinitensis* (bwa tan wouj) and *Chrysobalanus cuspidatus* (kaka wat), become more common. *Prestoea montana* (palmis), although present at all elevations, becomes very common along with the tree fern *Alsophila muricata*.

Figure 27. Lower Montane Rainforest at higher elevations



(a) Descartiers trail, elevation about 500m. (b) La Sorciere Summit, 680m.

Figure 28. Lower Montane Rainforest at higher elevations (continued)



(a) Typical ground cover of higher slopes of ferns, anthuriums (*Anthurium*) and heliconias (*Heliconia*).



(b) Forest of canopy height 5-8m, Piton Flore summit, 590m.

Steep, unstable slopes, favour species with prop roots, particularly *Tovomita plumieri*, (*paltivyé jonn*) and *Chrysochlamys caribaea* (*bwa manng*).

On high ridges, the same tree species dominate and vines, moss, ground ferns, ground anthuriums and epiphytes become even more evident (Figure 28a). Exposed ridges often have a dwarfed vegetation because of high winds (Figure 28b). Landslides are a natural phenomenon in Lower Montane Rainforest and can be seen at various stages of recovery (see Figure 29b).

Figure 29. Lower Montane Rainforest modified by natural phenomena.



(a) Fierce Atlantic winds and a steep rocky slope, Mount La Combe, 450m.



(b) The scrambling fern *Gleichenella pectinata* covers the landslide, allowing *Cyathea* tree ferns to grow through and then *Cecropia schereberiana* (*bwa kanon*) trees. The original forest can be seen encroaching on this recovering landslide.

4.12 Montane Rainforest

Synopsis

Montane Rainforest is on the western side and sheltered eastern slopes of the Mount Gimie Range, including Piton Troumassée, above 650m. Slopes are extremely steep, rainfall is very heavy, there is little wind and landslides are very common. The steepest areas are covered with tree ferns and palms, with canopy height of about 4–6m, with some scattered taller trees on slightly less steep areas.

Description

This class is poorly differentiated from Lower Montane Rainforest in terms of species, but it has a very characteristic appearance. It is found only on very steep slopes at high elevation: where the slope is gentler Lower Montane Rainforest replaces it.

The dominant species are *Prestoea montana* (palmis) and *Alsophila* and *Cnemidaria* tree ferns. The spiny *Alsophila imrayana* is a good indicator of this forest class. On slightly less steep slopes, trees typical of higher elevation Lower Montane Rainforest such as *Byrsonima trinitensis* (bwa tan wouj) and *Micropholis guyanensis* (fey dowé) can reach 8m tall. Terrestrial ferns, anthuriums and bromeliads are very common and there is a large quantity of slowly rotting organic material.

Figures 30b,c show Montane Forest on the leeward slopes of the Mount Gimie range (the summit has Cloud Montane Rainforest, section 4.13). Huge numbers of the smaller ‘red’ type of *Prestoea acuminata* are visible. A very rare Lesser Antillean herbaceous vine, *Centropogon berterianus*, is found in this vegetation class (Figure 30a).

Figure 30. Montane Rainforest



(a) *Centropogon berterianus*.



(b) Montane Rainforest (the peaks are Cloud Montane Rainforest).



(c) Montane Rainforest on a sheltered slope on the eastern side of Mount Gimie.

4.13 Cloud Montane Rainforest

Synopsis

This vegetation class is found on the high summits of the Mount Gimie range, including Piton Troumassée (although not in the most windy spots), at an elevation of 700m or higher and possibly the eastern interior end of Mount Tabak ridge and a small area on the western end of the La Sorciere ridge (Figure 30b). The canopy is about 8m high with occasional much taller trees of *Freziera undulata*. Terrestrial ferns, anthuriums, bromeliads, and epiphytes are very common; moss cover is often several centimetres thick (Figure 31a). Cloud and mist cover, with heavy rainfall, is predominant, with only occasional and short periods of sunshine.

Description

Some species found in Montane and Lower Montane Rainforest are also found here, e.g. *Byrsonima trinitatis* (bwa tan wouj) and *Micropholis guyanensis* (fey dowé). However, other species appear almost unique, e.g. *Podocarpus coriaceus* (lowyé woz, Figure 31b), *Freziera undulata*, *Schleffera attenuata* (fijé di mon, Figure 31c), *Miconia globulifera* and *Guettarda crispiflora*. The steeper slopes are often covered in monotypic stands of small, stocky *Prestoea montana* (palmis, Figure 31d).

Figure 31. Cloud Montane Rainforest



(a) Deep moss.



(b) *Podocarpus coriaceus*.



(c) *Schleffera attenuata*.



(d) *Prestoea montana* (palmis).

4.14 Elfin Shrubland

Synopsis

In the windiest spots on the Mount Gimie/ Troumassée ridges and peaks, at an elevation above 700 metres, a shrubland vegetation class dominates. The canopy is up to 2m tall, but often less, with an occasional slightly taller *Prestoea acuminata* palms. Cloud and mist cover, with heavy rainfall, is predominant with occasional short periods of sunshine.

Description

Relatively few species are found in this vegetation type: mainly a mixture of bromeliads, sedges and grasses and shrubs, with many Lesser Antillean endemics.

Figure 32. Elfin Shrubland



(a) Typical Elfin Shrubland.



(b) Elfin Shrubland (showing a member of Prof. Ivie's entomological team for scale).



(c) The endemic shrub *Lobelia santa-luciae*.

The remaining vegetation classes do not fit into the description by elevation.

4.15 Herbaceous Swamp (seasonal or permanent)

Synopsis

Seasonally or permanently muddy or flooded areas with a mainly herbaceous cover, along with some shrubs, and possibly an occasional tree.

Description

As for Freshwater Swamp Forest, I have not divided this vegetation class into seasonal or permanent subclasses because the length of the dry season is so variable from year to year.

Most Herbaceous Swamps are not natural, but result from the clearing of forest in flat areas. The biggest areas are in the Cul de Sac and Fond D'Or river valleys, where swamp redwood forest has been cleared. Grasses and sedges dominate, often with *Acrostichum danaeifolium* ferns (Figure 33a).

Neglected ditches and ponds can become small Herbaceous Swamps (Figure 33b). A beautiful grass *Gynerium sagittatum* (wozo) dominates cleared riverbanks (Figure 33c).

Herbaceous Swamps can also be found at higher elevations for example cleared flat summits and previously cultivated flat clearings in rainforest areas.



(a) Cul De Sac swamp with *Acrostichum* ferns on left.



(b) Ditch in Rodney Bay.



(c) *Gynerium sagittatum* (wozo).

4.16 Aquatic Herbaceous Vegetation

Synopsis

Subclass 1: Marine Herbaceous Vegetation: Rooted herbs growing in shallow sea water forming beds.

Subclass2: Freshwater Herbaceous Vegetation: Floating herbaceous plants in still or slowly moving freshwater.

Descriptions

Subclass 1, Marine Herbaceous Vegetation, occurs in coastal waters. Sea-grasses are not true grasses, but rooted, submerged flowering plants. They form ecologically important beds in shallow marine waters.

Subclass 2, Freshwater Herbaceous Vegetation, comprises several species that float on freshwater (Figure 35a,b), including the alien invasive water hyacinth.



Figure 34. Marine Herbaceous Vegetation (right)

Thalassia testudinum (turtle grass), with the flat blade, and the thread-like *Syringodium filiforme* (manatee grass).

Figure 35. Freshwater Herbaceous Vegetation



(a) *Landoltia punctata* (duckweed).



(b) *Eichhornia crassipes* (water hyacinth).

4.17 Fumarole Vegetation

Synopsis

This is a rare acid-tolerant class confined to the Sulphur Springs, especially on the slope of Mount Souf. It is dominated by ferns about 2m tall and a bromeliad, with widely-spaced trees.

Description

Only plants that can tolerate very acidic conditions can survive here. The most tolerant is *Pitcairnia angustifolia*. This, and two fern species, *Blechnum serrulatum* and *Pteridium arachnoideum*, dominates the hillside along with planted, and now self-seeding, Caribbean pines and *Clusia plukenetii* (awali).



(a) *Pitcairnia angustifolia* with *Clusia plukenetii* in the distance.



(b) *Pinus caribaea* (Caribbean pine).



(c) Sulphur-tolerant ferns.

4.18 Tree Plantations

Note:

Although plantations are usually considered a totally artificial type of vegetation, I have treated the plantations in Saint Lucia’s forest reserve as a semi-natural vegetation class. It has been a policy to allow the indigenous forest to grow back in the plantations (Fig. 37).

Synopsis

This class has mature trees that have been planted in an organized manner, mainly in and around the forest reserve, with smaller wild trees and shrubs growing between them.

Description

Substantial areas of the rainforest reserves have been replanted with *Talipariti elatum* (blue maho), *Swietenia macrophylla* (Honduras mahogany), *Eucalyptus*, *Gmelina arborea* and *Pinus caribaea* (Caribbean pine). The natural forest has been allowed to grow through.



Eucalyptus trees with dark brown trunks.

Figure 37. Tree Plantation

4.19 How these vegetation classes correspond to previous systems

Table 13 shows the relationship of each class above to Stehlé (1945, section 2.2.1), Beard’s Classification (1944, amended 1955; section 2.2.2), the International Vegetation Classification system (Areces-Mallea *et al.*, 1999, section 2.2.3), the Holdridge Life Zones (see section 2.2.4) and the Nature Conservancy map (see section 2.2.5).

Graveson – Vegetation Classification

Table 13. Comparison of the new classification system with previous systems

This classification system	<i>Beard (Climactic Formations)</i>		<i>International Vegetation Classification</i>				
	Stehlé (1945)	Formation Series Equivalent	Formation Equivalent	Code	Description	The Nature Conservancy map	Holdridge Life Zones
Natural Forest							
Littoral Evergreen Forest and Shrubland	n/a	Dry evergreen	Littoral woodland, thicket and hedge	II.A.1.N.a	Tropical or subtropical broad-leaved evergreen woodland	n/a	n/a
				III.A.1.N.a.	Tropical or subtropical broad-leaved evergreen shrubland (includes bamboos and tuft-trees)		
				III.A.1.N.b.	Hemisclerophyllous tropical or subtropical broad-leaved evergreen shrubland		
Mangrove	Forêt Mangrove	Swamp	Swamp forest and mangrove	I.A.5.N.f.	Tidally flooded tropical or subtropical broad-leaved evergreen sclerophyllous closed tree canopy	Mangrove	n/a
Freshwater Swamp Forest	n/a	Swamp	Swamp forest and mangrove	I.A.1.N.f.	Tropical or subtropical seasonally flooded rainforest	n/a	n/a
Deciduous Seasonal Forest	Forêt xerophytique	Seasonal	Deciduous seasonal woodland	I.B.1.N.a.	Lowland or submontane drought-deciduous forest	Woodlands/ shrublands	Subtropical dry/moist, subtropical moist, subtropical moist/wet
Semi-evergreen Seasonal Forest	Forêt mesophytique	Seasonal	Semi-evergreen and evergreen seasonal forest	I.A.3.N.a.	Lowland tropical or subtropical seasonal evergreen forest	Woodlands/ shrublands	Subtropical moist, subtropical moist wet, subtropical wet,
Lower Montane Rainforest	Forêt hygrophytique	Montane	Lower Montane Rainforest	I.C.1.N.a	Lowland tropical or subtropical semi-deciduous forest	Submontane subtropical or tropical rain forest	Subtropical wet, tropical premontane wet, tropical premontane moist wet
Montane Rainforest	Forêt hygrophytique	Montane	Montane Rainforest	I.A.1.N.b.	Submontane tropical or subtropical rainforest	Montane subtropical or tropical rain forest	Tropical premontane wet
Cloud Montane Rainforest	Forêt altitudinale	Montane	Montane thicket?	I.A.1.N.c.	Montane tropical or subtropical rainforest	Montane subtropical or tropical cloud forest	Tropical premontane wet
Semi-natural Forest							
Tree Plantations	n/a	n/a	n/a	n/a	n/a	n/a	n/a

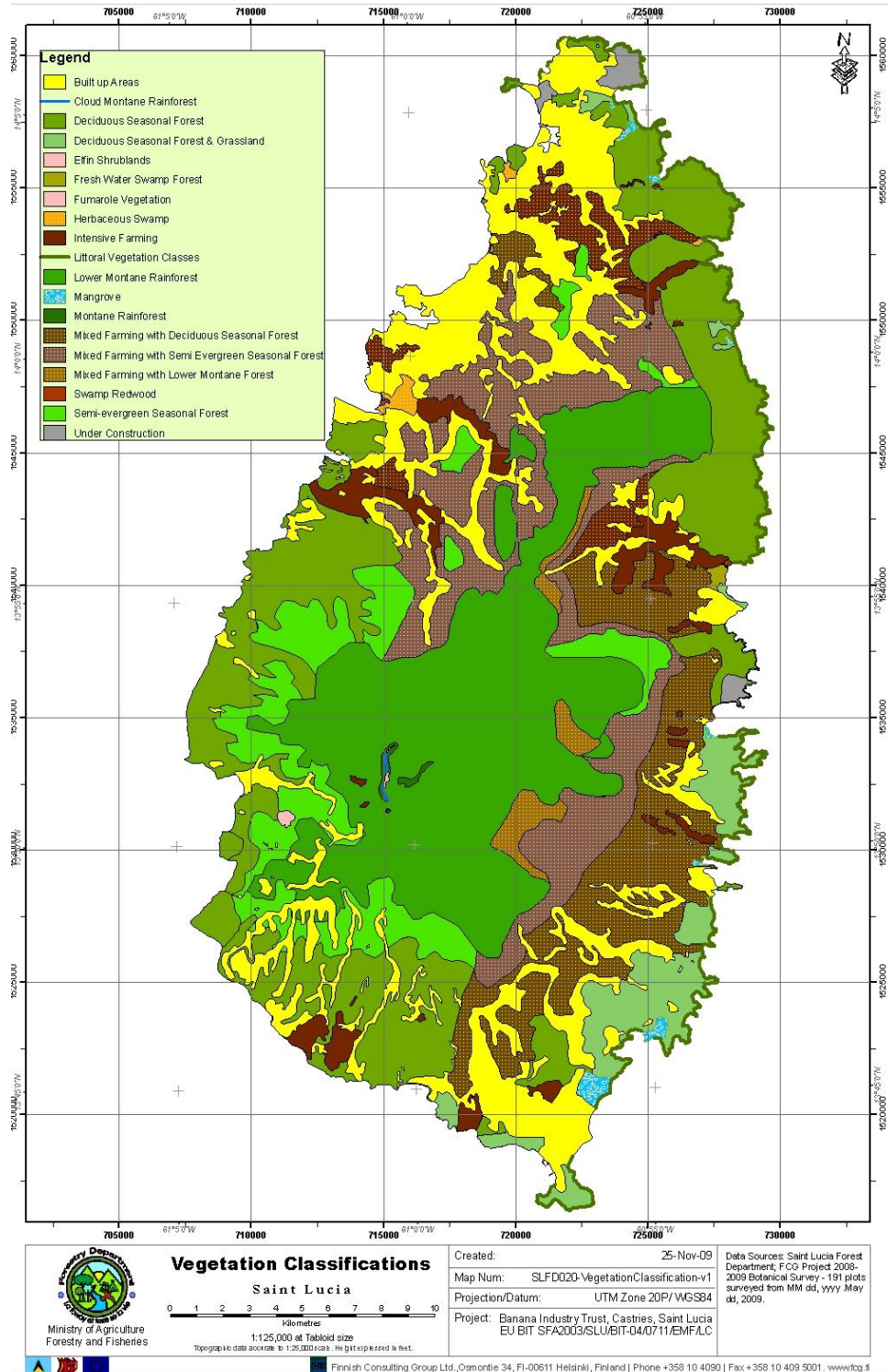
Graveson – Vegetation Classification

This classification system	Stehlé (1945)	<i>Beard (Climactic Formations)</i>		<i>International Vegetation Classification</i>		The Nature Conservancy map	Holdridge Life Zones
		Formation Series Equivalent	Formation Equivalent	Code	Description		
Non-Forest							
Elfin Shrublands	n/a	Montane	Elfin Woodland	III.A.1.N.a.	Tropical or subtropical broad-leaved evergreen shrubland (includes bamboos and tuft-trees)	n/a	n/a
Aquatic Herbaceous Vegetation	n/a			V.A.1.N.g.	Seasonally flooded tropical or subtropical grassland	n/a	n/a
				VII.C.4.N.c.	Seasonally/temporally flooded mud flats		
				V.B.1.N.d.	Saturated tropical or subtropical perennial forb vegetation		
				V.A.1.N.x.	Saturated tropical or subtropical grassland		
				V.A.1.N.h.	Semi-permanently flooded tropical or subtropical grassland		
				V.A.1.N.g.	Seasonally flooded tropical or subtropical grassland		
				V.C.1.N.b.	Tidal permanently flooded tropical or subtropical hydromorphic rooted vegetation		
Littoral Rock and Cliff Vegetation	n/a	Dry evergreen	Rock pavement vegetation	VII.A.1.N.a.	Cliffs with sparse vascular vegetation	n/a	n/a
				VII.A.2.N.a.	Pavement with sparse vascular vegetation		
Littoral Unconsolidated Sand Vegetation	n/a	Dry evergreen		VII.C.2.N.b.	Intermittently flooded sand beaches and shores	n/a	n/a
				VII.C.1.N.a.	Dunes with sparse herbaceous vegetation		
Littoral Scrub, Including Cactae	n/a	Seasonal	Cactus Scrub	III.A.5.N.c.	Succulent extremely xeromorphic evergreen shrubland	n/a	n/a
				III.A.1.N.b.	Hemisclerophyllous tropical or subtropical broad-leaved evergreen shrubland		
				III.A.1.N.a.	Tropical or subtropical broad-leaved evergreen shrubland		
Fumarole Vegetation	n/a			VII.C.3.N.c.	Submontane fumaroles with sparse herbaceous vegetation	n/a	n/a
Grassland, with or without a few trees or shrubs	n/a			Various		Grasslands with 10-25% tree cover	

4.20 New vegetation map

Figure 38 Vegetation map showing the new vegetation classes, November 2009.

This is an advanced draft, developed by the author and Mrs Rebecca Rock, which will be worked on over the next few months. In particular, forest plantations need to be added and more detailed distinctions made in the broad forest classes shown on the Caribbean coast south of Anse La Raye.



5 Conclusions and Recommendations

The TWINSPAN and manual floristic association analyses sorted the plots into quite clear major classes. These relate well to Beard's climactic formations for the most part, but, importantly, have also allowed us to classify non-climactic formations. This project has thus been successful in producing a rational vegetation classification system that gives a more realistic appraisal of the current state of Saint Lucia's vegetation.

Inevitably, there are gaps in our coverage of the island with field plots and it will be useful to keep adding new plot data to the database. More plots are required to investigate the apparent split, revealed by TWINSPAN, between the river valleys of the Caribbean coast and the rest of the Semi-evergreen Seasonal Forest class. Of particular interest is the apparently striking division in the Lower Montane Rainforest class into two subclasses by the TWINSPAN analysis. This seems to have a natural ecological basis because the plots concerned show no signs of human modification. Further research should be directed into this area.

This project has set a baseline for future studies. Additional plot data will help fine-tune the map and future changes in Saint Lucia's vegetation can be monitored either at a very fine scale, by replicating the same plots, or on a large scale, by analysing new Landsat images.

Another purpose of this study was to identify threatened vegetation classes and propose conservation measures. The vegetation classes Lower Montane Rainforest, Montane Rainforest, Cloud Montane Forest and Elfin Shrublands are well-preserved within the existing forest reserves. However Cloud Montane Forest and Elfin Shrublands rely on long periods of cloud cover, especially at night, and this could be affected by global warming. To support the conservation of native plants, and the species that depend on them, the plantation trees should be selectively culled to allow the natural forest trees to gradually replace them.

The Semi-evergreen Seasonal Forest is already very depleted because much of this class was cleared to make way for banana plantations and other crops. However, there are signs that it may be increasing in area as a result of the recent decline in agriculture. Of the remaining natural Semi-evergreen Seasonal Forest, Gros Piton is already a protected reserve, and, to conserve this rare forest class, it would be beneficial to make Mount Souf a preservation area and to add Mount Parasol to the forest reserve. The Choiseul ravines are also more or less Semi-evergreen Seasonal Forest, with unusual riparian vines, and these should be preserved in as natural state as possible. Enforcement of regulations preventing clearing close to rivers in general would also help the recovery of Semi-evergreen Seasonal Forest, as well as serving to stabilize the river banks.

With the exception of the Pitons, which are protected, Deciduous Seasonal Forest is under threat. It is home to a large number of species, many of which have become very rare. Most of it is already secondary, disturbed and often degraded. The purchase of plantations for tourist developments threatens huge areas of the Atlantic coast. The Praslin development bulldozed the coastline and eroded the surrounding hills to bare rock. Even if further developments are not as disastrous, they will still impact the forest. It is therefore very urgent to create a 'dry forest' reserve on the Atlantic coast, ideally between Dennery and Petite Anse. While all of this area is secondary and much of it degraded, it could show a quick recovery if a protected reserve is created.

Mangrove forest is under great threat despite its apparent protection. The main reason is the deliberate modification of the flow of water in rivers, thus changing the flow of freshwater to mangrove. For example, the rerouting of the river between Escap and Micoud may be the cause of the dead mangrove now visible from the highway. Freshwater Swamp Forest is also rare and at risk, and impacts of drainage projects must be minimized. Important swamp redwood forest relics exist at Fond D'Or and Cul de Sac estuary. These sites should be fully protected, as should the Ger river valley between the highway and beach.

In summary, there is a need for the preservation of all remaining swamp redwood Freshwater Swamp Forest and Mangrove Forest. There is also an urgent need to create a Deciduous Seasonal Forest reserve on the Atlantic coast, preferably north of Dennery, and to extend the forest reserves to allow the recovery of more of the Semi-evergreen Seasonal Forests.

Another area of concern is alien invasive plants, which can spread at the expense of native species. So far, Saint Lucia has been fairly lucky in that the rainforest reserve has not been badly affected by invasive species. Risks were taken in the past, as exemplified by the presence of several alien (and non-plantation) species in the Mahaut-La Porte area, but most of our invasive species are in very degraded areas and have not impacted the natural forests yet. It is very important not to experiment with alien tree plantings in the rainforest reserve and in particular PROHIBIT the planting of ornamentals both in the forest reserve and on the Pitons. This undesirable and potentially dangerous practice still continues.

It is also very important to strongly discourage or prohibit the importation of ornamentals by tourist developments. Local alternatives are almost always available. It would be a good idea if the Forestry and Agriculture Departments were to develop a website about the great variety of locally-available ornamentals.

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Prior field work enabled me to be able to identify all species that we came across, except one grass species (now identified as *Paspalum urvillea*). This was only possible because of the help I have received from botanists abroad, primarily Richard Howard, Jacques Fournet and most of all Franklin Axelrod, Herbarium Curator, UPRRP, Puerto Rico.

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Appendix 1

Extract from: Areces-Mallea, A. E. , Weakley , A.S., Li , X., Sayre, R.G. , Parrish , D., Tipton , C.V., & Boucher , T. (1999) *A Guide to Caribbean Vegetation Types: Preliminary Classification System and Descriptions*. The Nature Conservancy, Arlington, Virginia, USA.

Example Alliance from Martinique.

Group: I.A.3. Tropical and subtropical seasonal evergreen forest (mainly broad-leaved evergreen trees with some foliage reduction in dry season)

Subgroup: I.A.3.N. Natural/Semi-natural

Formation I.A.3.N.a. Lowland tropical or subtropical seasonal evergreen forest

ALLIANCE: I.A.3.N.a. *Cedrela mexicana* - *Andira inermis* - *Hymenaea courbaril* Forest Alliance

CONCEPT: Seasonal forests of Martinique, at elevations of 10-500m, formerly occupying large portions of the island.

DISTRIBUTION: Martinique.

Simarouba amara - *Andira inermis* - *Manilkara bidentata* ssp. *surinamensis* - *Hymenaea courbaril* Forest

DESCRIPTION: Seasonal forests of N. Martinique. Typical tree species include *Simarouba amara*, *Andira inermis*, *Manilkara bidentata* ssp. *surinamensis*, *Hymenaea courbaril*, *Calophyllum calaba*, *Sapium caribaeum*, *Ocotea martinicensis*, *Ocotea leucoxylon*, *Inga ingoides*, *Eugenia monticola*, *Eugenia lambertiana*, *Chimarrhis cymosa*, *Meliosma herbertii*.

DISTRIBUTION: Martinique.

COMMENTS: Based on Kimber (1988).

SYNONYMY: Seasonal Forest, in part (Kimber 1988).

Andira inermis - *Lonchocarpus pentaphyllus* - *Zygia latifolia* - *Cedrela mexicana* - *Hymenaea courbaril* Forest

DESCRIPTION: Seasonal forests of S. Martinique. Typical tree species include *Andira inermis*, *Lonchocarpus pentaphyllus*, *Zygia latifolia*, *Cedrela mexicana*, *Hymenaea courbaril*, *Byrsonima coriacea*, and others.

DISTRIBUTION: Martinique.

COMMENTS: Based on Kimber (1988).

SYNONYMY: Seasonal Forest, in part (Kimber 1988).

Appendix 2

Plot Data: (a) Bio-physical characteristics

Plot	Date	Location	Team	Trees >5cm DBH	Description	GPS No.	GPS UTM Easting	GPS UTM Northing	Rockiness	Canopy (m)	Canopy (%)	Stumps	Logs	Wind	Slope (%)	Aspect (°)	Elevation (m)	Vines	Epi-phytes	Herbs (%)	Land ferns (%)	Mosses	DBH1 (cm)	DBH2 (cm)	Notes
1	13-Oct-08	Maria Island	RG MS	24	Dry coastal woodland	1	723701	1518334	1	8	80	NA	NA	2	15	320	50	1	0	2	0	0	23	11	Dry coastal woodland, unmodified recently. Many trees deciduous.
2	13-Oct-08	Maria Island	RG MS	21	Dry coastal woodland	2	723723	1518320	2	6	60	NA	NA	2	20	330	60	1	0	20	0	0	30	30	Dry coastal woodland, unmodified recently. Many trees deciduous. Cactus (<i>Philococcus</i>) treated as a tree
3	12-Jan-09	Cas en Bas Road, next to RG house	RG	14	Dry secondary woodland	24	722134	1557775	0	15	70	0	0	0	20	210	67	1	0	5	0	0	24	27	Previously cleared, left for 20 years.
4	13-Jan-09	Moule a Chique, VF	RG MS	20	Dry mature xeric woodland	25	722379	1516823	1	15	60	2	1	1	25	20	188	1	0	0	0	0	35	37	
5	13-Jan-09	Moule a Chique, VF	RG MS	20	Dry mature xeric woodland	26	722410	1516837	0	15	60	2	2	1	15	30	193	1	0	0	0	0	33	26	
6	13-Jan-09	Moule a Chique	RG MS	21	Wind exposed dry forest	27	722363	1516907	0	7	50	0	0	3	20	60	169	0	0	5	0	0	28	18	Shrubland and rocky cliff close
7	13-Jan-09	Industrial Zone, by Julians VF	RG MS	11	Previously cleared flat	28	719039	1519401	0	8	50	1	0	1	0		5	3	0	70	0	0	18	14.5	Seasonally slightly swampy, still moist, puddle close by
8	13-Jan-09	Beausejour	RG MS	15	Dry forest mature	30	720766	1521414	0	20	85	2	1	1	38	170	146	1	1	2	0	0	27	15.8	Presumably cleared for sugar cane fuel, now recovered
9	17-Jan-09	Latitanse	RG MS	24	Dry quite mature coastal	36	728145	1550533	0	22	65	2	2	0	15	115	73	0	0	0	0	0	26	20	Behind a hill, probably cut down for sugar cane fuel but left alone since
10	17-Jan-09	Latitanse	RG MS	18	Dry quite mature coastal	37	728137	1550550	0	20	75	2	1	0	25	105	73	1	0	0	0	0	31.5	37.9	Behind a hill, probably cut down for sugar cane fuel but left alone since
11	17-Jan-09	Latitanse	RG MS	12	Sandy soil, just behind beach	39	727992	1550690	0	9	40	0	0	1	5	85	5	0	0	5	0	0	44.9	30.5	
12	17-Jan-09	Latitanse	RG MS	22	River sand soil, behind beach	38	727935	1550689	0	17	85	0	0	1	0		5	1	0	0	0	0	65	43.8	Presumably was sugar cane. Mangrove and coconuts closeby.
13	17-Jan-09	Latitanse	RG MS	13	xeric woodland secondary, charcoaled	40	727756	1550388	0	12	30	3	2	1	0		66	1	1	20	0	0	40.1		
14	20-Jan-09	Bellevue, VFLatitanse	RG MS VS	15	Riverside, shady, mature	52	720665	1524937	0	24	80	1	2	1	20	55	88	1	0	0	0	1	37.4	30.1	Shady tall, untouched in recent years
15	20-Jan-09	Bellevue, VFLatitanse	RG MS VS	27	Riverside, shady, mature	53	720650	1524923	1	25	85	3	2	1	20	60	91	1	0	5	0	1	25	19.9	Shady tall, untouched in recent years
16	20-Jan-09	Track to Anse Islet	RG MS VS	5	Xeric savanna, woodland patches.	55	725861	1523474	0	10	35	0	1	1	0		25	1	0	60	0	0	44	16	Degraded by fires, previous charcoaling
17	20-Jan-09	Track to Anse Islet	RG MS VS	15	Xeric savanna, woodland patches.	57	725872	1523415	0	11	40	1	1	1	0		26	1	0	60	0	0	22.5	13.5	Degraded by fires, previous charcoaling
18	20-Jan-09	Track to Anse Islet	RG MS VS	16	Xeric woodland	58	725963	1523347	0	4	75	0	0	1	0		32	1	0	20	0	0	15	12.5	Fenced, coppiced densely shrubby
19	25-Jan-09	Above Latitanse, track to latanye plot	RG MS	33	Xeric woodland, high dry, mesic elements	63	726074	1550371	0	9	80	3	2	1	20	80	208	1	1	5	0	0	31.4	20.5	stumps caused by cutting Trees mainly quite small.
20	25-Jan-09	Above Latitanse, track to latanye plot	RG MS	23	Xeric woodland, high dry, mesic elements	63	726074	1550371	1	18	80	0	2	2	20	70	212	1	1	5	0	0	37.2	30.4	More mature than previous plot, not recently modified, forest reserve?
21	27-Jan-09	Troumasse Estate	RG MS VS	40	Xeric savanna, woodland patches.	67	726883	1527151	0	14	50	2	1	1	5	120	17	1	0	5	0	0	53.5	12.2	Degraded woodland among savanna
22	27-Jan-09	Troumasse Estate	RG MS VS	7	Xeric savanna with a few trees	68	727019	1526903	0	11	10	0	1	1	5	30	16	0	0	95	0	0	18.6	13.1	Degraded open area
23	27-Jan-09	Between Micoud and Escap	RG MS VS	0	Charcoaled xeric woodland	72	726640	1529665	0	5	80	1	1	2	10	120	18	0	0	0	0	0			Saplings crowded together
24	27-Jan-09	Between Micoud and Escap	RG MS VS	8	Charcoaled xeric woodland	73	726671	1529745	1	7	60	1	1	2	15	130	46	0	1	5	0	0	16.5	7.3	Saplings and young trees
25	27-Jan-09	Potwi, Mon repos	RG MS VS	20	Xeric woodland on hill	75	727353	1534175	1	12	80	2	2	1	20	300	39	0	0	0	0	0	29.6	15.6	Dark, quite mature
26	31-Jan-09	Dennerly knob	RG MS	28	Mature coastal	76	728919	1541428	0	15	70	2	0	3	15	75	179	1	1	5	0	0	24.2	26.1	Close to cliff, looks natural, biodiverse.
27	31-Jan-09	Dennerly knob, below grassy area	RG MS	14	Windswept xeric woodland	77	728632	1541288	0	3	50	0	0	3	15	90	108	0	0	0	0	0	11.3	5.1	Natural, exposed, low canopy but woody
28	31-Jan-09	Dennerly knob, half way down	RG MS	13	Xeric coastal woodland, sunny but not fully wind-exposed	79	728505	1541485	1	6	75	0	0	1	15	75	68	1	1	10	0	0	12.5	10.3	Possibly charcoaled years ago
29	31-Jan-09	Fond D'Or swamp	RG MS	17	Riparian swamp	80	728059	1540899	0	35	80	0	2	2	0		5	1	0	0	0	0	56.6	41.5	

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Plot	Date	Location	Team	Trees >5cm DBH	Description	GPS No.	GPS UTM Easting	GPS UTM Northing	Rockiness	Canopy (m)	Canopy (%)	Stumps	Logs	Wind	Slope (%)	Aspect (°)	Elevation (m)	Vines	Epi-phytes	Herbs (%)	Land ferns (%)	Mosses	DBH1 (cm)	DBH2 (cm)	Notes	
30	31-Jan-09	Fond D'Or swamp	RG MS	8	Muddy flat area	81	728038	1541034	0	19	20	0	0	1	0		5	0	0	0	0	0	30.2	25.4	Presumably was sugar cane, next to open swamp	
31	3-Feb-09	Mon Repos, track to Trou Gras beach	RG MS VS	8	Degraded secondary xeric woodland	84	727372	1533406	1	8	50	1	1	1	10	100	89	0	0	30	0	0	18.6	13.6	Signs of recent disturbance around	
32	3-Feb-09	Mon Repos, track to Trou Gras point	RG MS	8	Xeric coastal woodland	86	728732	1533455	0	7	40	0	0	1	10	20	15	0	0	0	0	0	12.7	9.6	Biodiverse: rich in rare ground orchids	
33	3-Feb-09	Mon Repos, track to Trou Gras point	RG MS	19	Xeric coastal woodland	87	728939	1533605	2	9	30	0	1	1	20	25	38	0	0	0	0	0	27.4	13.4	Biodiverse area but more arid than 32. Lots of Ardisia in flower and fruit	
34	3-Feb-09	Troumassee Estate	RG MS	0	Rocky ledge		727221	1526587	3	1	0	0	0	3	5	260	10	0	0	45	0	0	0	0	0	
35	3-Feb-09	Mon Repos, track to Trou Gras point	RG MS	11	Xeric coastal woodland	91	728690	1533360	1	12	65	0	1	1	15	80	4	0	0	20	0	0	15.5	13.8	Dominated by Pimenta. Trees around indicating some moisture. A few dwarfed palms	
36	7-Feb-09	Piton troumasse, high ridge	MS JD	0	Elfin scrub	93	715021	1532570	0	1	5	0	0	3	25	120	824	0	0	80	0	1				
37	7-Feb-09	Piton troumasse, high ridge	MS JD	19	Montane forest	93	715021	1532570	0	3	80	0	0	3	25	120	824	1	3	20	10	4	5.9	5.6	Low but biodiverse rainforest	
38	7-Feb-09	Piton troumasse, just before steep slimb	MS JD	17	Submontane rainforest	94	714452	1532522	0	25	90	0	1	1	20	270	672	1	3	25	30	1	17.2	17.4	Healthy, biodiverse	
39	8-Feb-09	Cap Estate, towards Le Sports	RG	12	secondary xeric	95	721534	1559760	1	10	50	0	2	1	5	170	60	1	0	5	0	0	35	30.4	vacant lot	
40	8-Feb-09	Cap Estate, above anse Galet	RG	15	Coastal xeric woodland	97	723390	1560033	1	6	60	0	2	2	15	80	60	1	1	5	0	0	20.1	14.2	pretty natural	
41	10-Feb-09	Raillon, Mon Repos	RG JD MS VS	16	Submontane rainforest	109	722835	1534973	0	35	80	0	2	0	15	180	262	1	1	5	5	0	52.3	32	undisturbed	
42	10-Feb-09	Raillon, Mon Repos	RG JD MS VS	23	Well-drained, breezy submontane tropical rainforest	112	722707	1535001	0	24	70	1	2	2	15	150	327	1	1	5	5	0	35.1	29.5	undisturbed	
43	14-Feb-09	Paradis, Praslin	RG	19	Cliff top, by the sea, sheltered	115	729136	1536905	1	7	40	0	0	1	20	150	60	1	3	20	0	0	15.2	14.7	undisturbed, some rare species	
44	14-Feb-09	Paradis, Praslin	RG	18	Cliff top, by the sea, exposed	116	729046	1536985	0	4	30	1	1	3	5	60	40	1	0	15	0	0	14.2	10.8	Windy, close to cliff	
45	14-Feb-09	Paradis, Praslin	RG	17	Very exposed slope	117	729019	1537009	2	1	35	0	0	3	10	60	5	1	0	25	0	0			Dwarfed by wind - impossible to penetrate, hence trees not counted.	
46	14-Feb-09	Paradis, Praslin	RG	14	Very sheltered	118	728978	1537026	0	8	30	1	1	0	0		5	0	0	0	0	0	21.1	28.5		
47	14-Feb-09	Paradis, Praslin	RG	12	Sheltered steep slope	121	729031	1537172	1	10	35	1	1	0	30	270	5	0	0	5	0	0	25.2	21.8		
48	14-Feb-09	Paradis, Praslin, golf course	RG	28	Low woodland	128	728385	1536293	1	6	50	2	2	2	15	70	99	1	0	15	0	0	8.4	7.1	Very biodiverse - unusual soil	
49	14-Feb-09	Paradis, Praslin, golf course	RG	18	Xeric woodland	130	728144	1536467	3	15	60	1	1	1	0	90	110	0	0	10	0	0	15	18.4		
50	17-Feb-09	Mount le Blanc	RG MS VS	20	Mesic/xeric woodland	144	716482	1522349	1	18	70	1	2	1	15	120	300	1	0	20	5	0	15	18	secondary recovering	
51	17-Feb-09	Mount Gommier	RG MS VS	7	Mesic woodland	145	716242	1522917	0	22	80	1	1	0	20	240	335	0	0	0	0	0	28	32	large trees	
52	21-Feb-09	Pelouse, Praslin	RG MS	19	Submontane rainforest	155	725094	1536426	0	30	80	1	2	2	15	110	277	0	0	0	0	0	45.2	38.7	breezy dryish	
53	21-Feb-09	Pelouse, Praslin	RG MS	23	submontane rainforest	156	725039	1536673	1	30	75	1	2	2	5	100	325	1	1	0	5	0	67.1	63.2	breezy	
54	24-Feb-09	Massacre, Anse La Raye	RG MS	55	rocky windy ridgetop	174	713055	1542230	3	8	45	0	0	2	0		208	1	1	70	0	0	14.7	12.8	very rich in bromeliads and orchids	
55	24-Feb-09	Massacre, Anse La Raye	RG MS	15	Woodland remnant	176	712729	1542518	0	20	50	1	1	0	10	270	180	1	0	5	0	0	30.6	20.6	leeward, disturbed	
56	24-Feb-09	Pilori point, Anse La Raye	RG MS	18	steep coastal woodland	181	712085	1543615	2	16	60	1	1	3	10	30	114	0	0	0	0	0	31	28.5	very windy, Syagra palms	
57	28-Feb-09	Anse Louvet	RG MS	14	Xeric secondary woodland	187	727976	1544166	1	5	35	1	1	1	10	210	165	0	0	20	0	0	13.8	18.4	degraded	
58	28-Feb-09	Anse Louvet	RG MS	26	Shady deep ravine leading to Trou Halhal	188	727922	1543817	3	15	60	1	1	0	0		106	0	0	20	0	0	14.6	14.7	pristine, biodiverse with some forest species	
59	28-Feb-09	Anse Louvet	RG MS	12	Close to road leading to beach	190	728683	1544128	2	4	40	1	2	2	20	350	111	0	0	30	0	0	14.7	11.8	degraded, rocky sunny	
60	3-Mar-09	Anse La Liberté	RG MS VS	6	Xeric coastal woodland	193	709310	1537214	1	5	20	0	0	1	5	240	164	1	1	15	0	0	10.2	6.2	recovering charcoaled area	
61	3-Mar-09	Anse La Liberté	RG MS VS	11	Xeric coastal woodland	194	708630	1537225	1	9	60	1	1	0	10	270	89	1	1	5	0	0	16.5	10.5	recovering charcoaled area	
62	11-Mar-09	Cas en bas beach	RG	18	Mangrove	212	723804	1558202	0	14	60	1	1	2	0		5	0	0	5	0	0	21.4	22.8	20% water	
63	11-Mar-09	Cas en bas 200m. from beach	RG	21	Secondary xeric coastal woodland	215	723599	1557896	1	12	65	1	2	1	5	30	10	0	0	5	0	0	23.7	22.4		
64	17-Mar-09	Grande Anse	RG MS VS	34	Mesic secondary woodland	225	726301	1549015	1	25	50	2	2	1	5	30	235	1	0	0	0	0	39.2	29.3		
65	17-Mar-09	Grande Anse	RG MS VS	24	Xeric woodland	229	726757	1549031	3	20	30	2	2	1	10	60	74	1	0	0	0	0	20.5	19.4	exposed upper slope	
66	17-Mar-09	Grande Anse	RG MS VS	18	Xeric woodland	230	726597	1548998	2	30	30	1	2	1	10	150	105	1	0	0	0	0	39.7	24.2	exposed upper slope	
67	17-Mar-09	Grande Anse	RG MS VS	33	Xeric/mesic woodland	231	726523	1548891	2	20	50	2	2	0	5	60	108	1	0	0	0	0	20	20.8	quite close to creek	
68	21-Mar-09	Mount Souf	RG MS	28	Mesic woodland	236	712072	1531636	3	35	70	0	1	1	30	90	175	1	0	5	0	0	39.8	34.1	atypical mix	
69	21-Mar-09	Mount Souf	RG MS	19	Mesic woodland	237	712076	1531591	3	30	70	1	1	1	30	100	140	0	0	15	0	0	46.9		atypical mix	
70	24-Mar-09	Chassin	RG MS VS	23	Mature woodland	241	724782	1548414	1	35	70	1	2	1	5	30	73	1	1	5	0	0	39.3	35.1		

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Plot	Date	Location	Team	Trees >5cm DBH	Description	GPS No.	GPS UTM Easting	GPS UTM Northing	Rocki- ness	Canopy (m)	Canopy (%)	Stumps	Logs	Wind	Slope (%)	Aspect (°)	Elevation (m)	Vines	Epi- phytes	Herbs (%)	Land ferns (%)	Mosses	DBH1 (cm)	DBH2 (cm)	Notes
71	24-Mar-09	Chassin	RG MS VS	31	Mature woodland	242	724767	1548403	1	40	60	2	2	1	5	60	91	1	0	0	0	0	63.5	28	
72	24-Mar-09	Chassin	RG MS VS	31	Mature woodland	243	724695	1548305	2	45	75	1	2	1	10	30	102	1	0	0	0	0	52.3	32.7	
73	24-Mar-09	Chassin	RG MS VS	17	Mature woodland	244	724661	1548256	1	35	70	2	2	1	5	50	116	1	0	5	0	0	46.3	31.2	
74	27-Mar-09	Anse Lavoutte	RG	15	Secondary xeric woodland	246	724482	1557268	1	6	30	0	0	2	5	170	55	0	0	20	0	0	12.8	11.4	
75	27-Mar-09	Anse Lavoutte	RG	19	Coastal savanna	249	724468	1557549	2	4	20	0	0	3	5	100	22	1	0	50	0	0	7.2	6.4	20% open grass
76	27-Mar-09	Anse Lavoutte	RG	27	Mangrove	254	724482	1557268	0	35	90	2	2	2	0		1	0	0	0	0	0	25.7	22.8	
77	28-Mar-09	Derache	RG MS	28	rainforest	257	714321	1532903	0	40	70	2	2	0	10	320	600	2	3	5	15	1	65	25	Out of wind
78	28-Mar-09	Derache	RG MS	33	rainforest	258	714290	1532854	0	35	60	2	2	0	15	290	600	2	2	0	20	1	51	45	
79	28-Mar-09	Derache	RG MS	32	rainforest, very steep	259	714275	1532686	0	30	50			0	60	90	645	1	1						Too steep to enter, visual only
80	2-Apr-09	Piton Flore	RG MS VS	16	Rainforest	266	721850	1544750	0	35	50	1	2	0	40	300	457	2	2	5	20	1	90	24.5	steep, broken canopy
81	2-Apr-09	Piton Flore	RG MS VS	19	Rainforest	268	721915	1544760	0	25	60	1	1	0	30	210	530	2	2	0	30	1			steep, broken canopy
82	2-Apr-09	Piton Flore	RG MS VS	32	Summit	269	722031	1544801	2	4	90	0	0	3	70	90	590	1	0			1	8.2		very exposed rocky
83	2-Apr-09	Piton Flore	RG MS VS	22	Exposed slope by ridge	272	722075	1455738	3	30	70	1	1	2	35	60	560	2	1	10	5	1	43.7	40.6	very exposed rocky
84	2-Apr-09	Piton Flore	RG MS VS	14	Sheltered slope by ridge	272	722075	1455738	3	35	60	1	2	0	65	150	560	2	2	10	25	1	43.2	24.8	windless, steep, rocky
85	2-Apr-09	Piton Flore	RG MS VS	43	rainforest	276	721998	1545112	0	40	70	2	2	1	30	150	395	0	1	5	10	1	63	44.9	
86	2-Apr-09	Piton Flore	RG MS VS	22	rainforest	277	721950	1545189	0	40	70	0	1	2	15	30	342	1	1	5	5	1	64	53.7	very sheltered
87	4-Apr-09	Mount Tabak	RG MS	37	high ridge, rainforest	279	711866	1534279	0	20	70	0	1	1	35	120	650	2	1	5	15	2	35	32	leeward slope
88	4-Apr-09	Mount Tabak	RG MS	50	high ridge, rainforest	279	711866	1534279	0	10	40	0	1	3	70	320	650	1	1	5	5	2			windward slope, visual
89	4-Apr-09	Mount Tabak	RG MS	23	high ridge, rainforest	280	711990	1534127	1	15	60	1	1	1	20	320	650	1	1	5	10	2	35	22	windward slope
90	4-Apr-09	Mount Tabak	RG MS	18	high ridge, rainforest	282	711969	1534136	0	30	30	0	0	0	75	120	650	1	1	5	10	2			leeward slope
91	4-Apr-09	Mount Tabak	RG MS	26	high ridge, rainforest	283	711936	1534148	1	15	50	1	2	3	50	320	650	1	1	5	15	2	32	19	windward slope, half visual
92	7-Apr-09	Mount Pimard	RG	30	secondary dry woodland	284	720048	1556622	1	10	20	1	1	1	30	310	43	1	0	5	0	0	45	28	
93	7-Apr-09	Windjammer	RG	22	secondary dry woodland	285	718935	1554745	1	15	20	2	2	0	0		5	1	1	5	0	0			undergrowth recently cleared
94	8-Apr-09	Union Trail	RG MS VS	47	Modified dry woodland	286	719925	1551302	1	30	30	0	1	0	15	60	73	0	0	0	0	0	28.3	25.1	Swietenia trees planted
95	8-Apr-09	Union Trail	RG MS VS	53	secondary dry woodland	288	719849	1551377	1	25	30	1	1	0	15	60	68	1	0	0	0	0	28.6	25	
96	8-Apr-09	Union Trail	RG MS VS	35	secondary dry woodland	289	719745	1551000	3	30	35	0	1	0	15	10	56	1	0	0	0	0	40.1	15	
97	13-Apr-09	Ciceron, road to Coubaril	RG	10	secondary mesic mature woodland	294	715663	1548611	0	40	50	1	2	0	5	240	160	0	0	20	0	0	80	45	appears to be have been left alone for some time-private quite biodiverse though disturbed
98	13-Apr-09	Ciceron, close millenium Highway	RG MS VS	31	secondary xeric woodland	298	714689	1548825	2	10	30	2	2	0	10	350	70	1	2	20	0	0	22	20.8	
99	15-Apr-09	La Sorciere, lower slopes	RG MS VS	43	rainforest	302	725884	1547572	1	35	70	2	2	3	0		310	1	0	0	0	0	62.7	33	
100	15-Apr-09	La Sorciere, lower slopes	RG MS VS	33	rainforest	303	726007	1547168	1	40	65	1	1	1	20	60	363	1	1	0	5	1	101	39.5	
101	15-Apr-09	La Sorciere, lower slopes	RG MS VS	40	rainforest	306	725716	1546698	1	10	35	1	1	3	30	60	498	1	1	5	65	1	52.2	24.5	Ridge top down windy side
102	15-Apr-09	La Sorciere,summit	RG MS VS	37	rainforest	310	725385	1546225	1	20	40	1	2	1	35	120	680	3	3	5	70	2	44	34.5	
103	15-Apr-09	La Sorciere,summit	RG MS VS	44	rainforest	312	725524	1546335	0	16	50	2	2	1	10	20	670	3	3	15	35	1	49.5	28	
104	19-Apr-09	Anse La Raye, road to Venus	RG	13	river valley	316	712755	1540782	2	25	40	0	1	0	50	80	22	1	0	10	0	0	80	25	right next to river
105	19-Apr-09	Anse La Raye, road to Venus	RG	15	river valley	317	713167	1540749	1	30	50	1	1	0	40	30	51	1	0	15	0	0	85		
106	19-Apr-09	Anse La Raye, road to Venus	RG	11	river valley	320	715347	1539244	1	30	70			0	50	170	271	1	0	0	20	1			Too steep to enter, visual
107	19-Apr-09	Mount Durocher	MS	12	Summit of hill, west end		724345	1533407	0	25	80	2	1	1	50		320	1	0	5	5	0	34	25	GPS from map
108	19-Apr-09	Mount Durocher	MS	13	Summit of hill, east end		724473	1533298	3	8	40	1	1	2			270	1	1	0	0	0	15	11	GPS from map
109	22-Apr-09	Bar De L'Isle east	RG MS VS	36	rainforest	322	720874	1541960	1	35	70	2	2	2	15	150	340	1	0	0	0	0	49.7	38.5	
110	22-Apr-09	Bar De L'Isle east	RG MS VS	55	rainforest	323	720630	1541649	0	30	70	1	2	1	10	210	343	1	0	0	0	0	41.2	31.4	
111	22-Apr-09	Bar De L'Isle east	RG MS VS	40	rainforest	325	720789	1541658	0	60	40	1	2	1	15		306	2	0	0	0	0	56.5	43.8	
112	22-Apr-09	Bar De L'Isle east	RG MS VS	55	forestry plantation	327	720636	1541214	0	50	25	0	1	0	10	120	295	1	0	0	5	0	34	33.2	
113	25-Apr-09	Anse Chastanet	RG MS	10	extreme xeric	329	709122	1532902	2	20	15	0	1	1	20	200	91	2	1	5	0	0	45	40	
114	25-Apr-09	Anse Chastanet	RG MS	37	extreme xeric	330	709200	1532962	2	20	15	1	2	1	45	200	152	0	2	5	0	0	35	19	
115	25-Apr-09	Petit Piton, lower slope	RG MS	34	xeric woodland	334	709418	1530583	3	12	10	0	0	1	55	80	137	1	1	5	0	0			

Graveson – Vegetation Classification

Plot	Date	Location	Team	Trees >5cm DBH	Description	GPS No.	GPS UTM Easting	GPS UTM Northing	Rocki- ness	Canopy (m)	Canopy (%)	Stumps	Logs	Wind	Slope (%)	Aspect (°)	Elevation (m)	Vines	Epi- phytes	Herbs (%)	Land ferns (%)	Mosses	DBH1 (cm)	DBH2 (cm)	Notes
116	25-Apr-09	Petit Piton, lower slope	RG MS	18	xeric woodland	336	709398	1530552	3	10	10	0	0	1	55	300	161	1	1	5	0	0			
117	25-Apr-09	Trou Marc Ravine	RG MS	19	riverbank	337	709774	1525087	1	8	80			0	50	190	5	3	1	0	0	0			visual survey
118	25-Apr-09	Trou Marc Ravine	RG MS	17	riverbank	339	709723	1525053	1	15	15	1	1	0	20	340	10	2	2	10	0	0	18	15	
119	28-Apr-09	Bar De L'Isle west	RG MS VS AA	41	rainforest	341	720526	1540286	0	25	70	0	1	2	5	300	300	1	0	0	5	0	31.9		
120	28-Apr-09	Bar De L'Isle west	RG MS VS AA	37	rainforest	342	720452	1540152	0	35	60	1	2	0	30	240	316	1	1	0	5	0	71	50.3	
121	28-Apr-09	Bar De L'Isle west	RG MS VS AA	41	rainforest	344	720550	1539654	0	30	70	1	1	1	10		300	1	0	0	0	0	38.2	37	
122	28-Apr-09	Mount La Combe	RG MS VS AA	15	rainforest	345	720533	1539308	0	15	50	1	3	0	65	270	383	1	2	10	1		33		visual survey
123	28-Apr-09	Mount La Combe	RG MS VS AA	29	rainforest	346	720648	1539120	2	16	50	1	2	0	60	240	441	2	3	15	50	1	22.8	15	leeward slope on ridge top
124	28-Apr-09	Mount La Combe	RG MS VS AA	35	rainforest	346	720648	1539120	3	14	40	0	0	3	50	120	441	1	1	25	0	0	14	9	windward slope on ridge top
125	2-May-09	Quillesse	RG MS AA	23	forestry plantation	347	718865	1531805	0	27	35	0	1	0	5	10	388	1	2	0	15	0	27	25	planted, new plants low in height, mainly Prestoea
126	2-May-09	Quillesse	RG MS AA	28	rainforest	348	718752	1532416	0	35	70	2	2	0	30	350	400	2	2	5	35	1	85	35	
127	2-May-09	Quillesse	RG MS AA	32	rainforest	349	718383	1532889	0	30	55	2	2	0	20		310	2	1	0	25	1	45	38	
128	2-May-09	Quillesse	RG MS AA	33	forestry plantation	351	718085	1532420	1	45	60	0	1	0	5	0	340	1	2	0	40	1	55	52	
129	2-May-09	Quillesse river	RG MS AA	29	rainforest	352	717849	1532411	0	30	50						300	1							weather conditions atrocious, incomplete data
130	5-May-09	Parrot Hill	RG MS VS AA	NA	rainforest	357	718384	1531994	0	18	65	2	2	2	0		585	3	1	5	90	3			weather conditions atrocious, incomplete data
131	5-May-09	Parrot Hill	RG MS VS AA	NA	rainforest	358	718388	1531953	0	20	70	2	2	2	0		592	3	1	5	70	3			weather conditions atrocious, incomplete data
132	5-May-09	Parrot Hill	RG MS VS AA	NA	rainforest	359	718394	1531933	0	25	70	2	1	2	0		591	3	1	5	60	3			weather conditions atrocious, incomplete data
133	5-May-09	Parrot Hill	RG MS VS AA	NA	rainforest	360	718399	1531878	0	25	75	1	0	1	0		588	3	0		0	2			water-logged hollow, weather conditions atrocious, incomplete data
134	5-May-09	Parrot Hill	RG MS VS AA	NA	rainforest	361	718413	1531818	0	25	70	1	2	1	15		562	2	1	5	50	2			weather conditions atrocious, incomplete data
135	5-May-09	Track to Parrot Hill	RG MS VS AA	NA	rainforest	364	718840	1531329	0	25	70	1	2	0	15		490	2	1	5	50	2			weather conditions atrocious, incomplete data
136	9-May-09	Edmond Forest	RG MS	51	rainforest	367	716536	1530038	0	20	70	1	1	2	20	315	540	1	0	0	5	1	27	25	
137	9-May-09	Edmond Forest	RG MS	45	rainforest	368	716535	1530040	0	25	60	1	1	0	15	195	547	2	1	5	15	1	32	28	
138	9-May-09	Edmond Forest	RG MS	44	rainforest	371	716670	1530517	0	25	55	1	1	2	10	355	444	1	1	0	0	1	32		
139	9-May-09	Edmond Forest	RG MS	25	rainforest	372	716616	1530131	1	35	60	1	1	0	15	120	517	3	2	0	15	1	65	45	
140	9-May-09	Edmond Forest	RG MS	42	forestry plantation	373	716674	1530402	0	30	25	1	1	0	15	220	374	1	2	0	15	1	32	32	
141	9-May-09	Edmond Forest	RG MS	17	forestry plantation	375	716740	1530751	0	30	20	0	0	1	0		520	0	3	0	95	1	27	25	
142	9-May-09	Edmond Forest	RG MS	45	forestry plantation	376	717086	1530909	0	23	70	1	1	0	10	170	482	1	1	0	10	1	35	32	
143	12-May-09	Descartiers trail	RG MS AA	35	rainforest	383	718615	1530821	0	32	55	1	1	0	15	190	384	1	1	0	5	0	55	27	
144	12-May-09	Descartiers trail	RG MS AA	25	rainforest	384	718273	1530840	1	45	70	1	1	0	15	145	380	1	1	0	0	0	80	45	
145	12-May-09	Descartiers trail	RG MS AA	12	rainforest, steep ravine	386	718246	1531128	0	20	70	0	1	0	70		448	1	0	0	10	0	30	24	plot across small ravine, hence no slope direction
146	12-May-09	Descartiers trail	RG MS AA	15	rainforest	387	718151	1531204	0	32	65	1	2	0	10	80	429	2	1	0	5	1	37		
147	12-May-09	Descartiers trail	RG MS AA	25	rainforest	388	718241	1531332	1	25	70	1	2	0	10	80	464	3	3	0	10	2	42	38	
148	12-May-09	Descartiers trail	RG MS AA	42	rainforest	391	718476	1531289	0	22	80	2	1	3	30	80	490	0	0	0	0	0	35	32	stumps, cut trees of Aniba ramageana
149	12-May-09	Descartiers trail	RG MS AA	22	rainforest	392	718474	1531342	0	25	80	1	1	2	5	170	494	2	1	0	70	0	45	39	
150	16-May-09	Bellevue	RG MS	38	rainforest	401	719107	1528604	0	25	75	1	1	2	0	352	352	1	0	0	0	0	50	25	flat windy ridge, forest edge
151	16-May-09	Moule a Chique	RG MS	18	xeric woodland	407	722191	1523333	2	10	30	0	0	1	20	210	222	1	0	0	0	0	45	38	
152	19-May-09	Gros Piton	RG MS	22	xeric woodland	408	709180	1526879	3	15	20	0	1	0	30	180	204	1	0	5	0	0	24	22	
153	19-May-09	Gros Piton	RG MS	12	xeric woodland	412	708747	1527119	3	15	20	0	1	1	10	180	332	1	1	5	0	0	28	21	
154	19-May-09	Gros Piton	RG MS	10	xeric woodland	413	708564	1527441	3	20	25	1	1	1	15	170	413	1	1	5	0	0	50	24	
155	24-May-09	En Bas Saut trail, Edmond Forest	RG MS	11	rainforest	415	715362	1531647	0	28	70	1	1	0	75	350	507	2	3	0	75	1	45	42	
156	24-May-09	En Bas Saut trail, Edmond Forest	RG MS	39	rainforest	417	715563	1531880	0	25	65	2	2	2	65	120	470	1	0	0	0	0	45	33	
157	24-May-09	Piton Esprit, Edmond Forest	RG MS	44	rainforest		716654	1531102	0	20	75	1	1	2	15	80	600	1	1	0	15	1	34	28	GPS from Arcview
158	24-May-09	Piton Esprit, Edmond Forest	RG MS	22	rainforest		716631	1530894	0	20	60	0	1	2	20	190	600	1	1	5	35	1	32	28	GPS from Arcview
159	24-May-09	Track to south, Edmond Forest	RG MS	29	rainforest	419	716647	1529863	0	30	80	3	1	2	35	115	505	1	0	0	0	0	45	25	
160	24-May-09	Track to south, Edmond Forest	RG MS	27	rainforest	420	716650	1529842	0	30	60	1	1	2	40	220	510	2	0	0	0	0	25	15	

Graveson – Vegetation Classification

Plot	Date	Location	Team	Trees		GPS No.	GPS Easting	GPS UTM Northing	Rockiness	Canopy (m)	Canopy (%)	Stumps	Logs	Wind	Slope (%)	Aspect (°)	Elevation (m)	Vines	Epi-phytes	Herbs (%)	Land ferns (%)	Mosses	DBH1 (cm)	DBH2 (cm)	Notes
				>5cm DBH	Description																				
161	24-May-09	Track to south, Edmond Forest	RG MS	27	rainforest	421	716632	1529910	0	25	65	3	1	2	35	60	516	0	0	5	0	0	30	25	
162	27-May-09	Millet trail	RG MS	30	rainforest	425	716597	1537058	0	25	75	1	1	2	40	200	360	0	0	0	0	0	36	34	
163	27-May-09	Millet trail	RG MS	30	rainforest	426	716447	1537071	0	25	60	0	1	2	30	200	358	0	0	0	0	0	35	34	
164	27-May-09	Millet trail	RG MS	15	rainforest	429	716521	1537547	0	18	50	0	0	2	50	190	290	1	0	50	0	0	24	22	
165	28-May-09	Piton Troumasse summit	MS	34	cloud montane forest	430	715096	1532439	1	8	70	0	2	1	10	120	869	2	3	5	5	4	20	15	
166	29-May-09	Raillon south	RG MS	41	rainforest	432	723026	1534371	0	25	70	0	2	2	15	85	360	0	0	0	0	0	32	31	
167	29-May-09	Raillon south	RG MS	28	rainforest	435	723004	1534427	0	35	50	1	2	0	35	170	355	2	1	0	5	1	65	31	
168	29-May-09	Raillon south	RG MS	36	rainforest	437	722910	1534525	0	30	60	0	2	1	15	10	322	1	0	0	5	0	42	38	
169	30-May-09	Piton Troumasse	MS	16	palm break		715089	1532428	0	5	65	1	1	2	50	60	860	1	3	5	40	4	40	15	
170	16-Jun-09	Anse Chaloupe	RG MS	43	Dry hill top	443	727685	1547554	1	8	70	1	1	2	20	330	199	1	1	0	0	0	35	22	
171	16-Jun-09	Anse Chaloupe	RG MS	4	Recovering charcoaled area	446	727571	1547218	2	2	20	0	0	1	20	250	125	0	0	25	0	0	5	5	
172	16-Jun-09	Anse Chaloupe	RG MS	23	steep coastal hill		728955	1547395	2	7	55	0	0	3	30	10	50	3	0	0	0	0	28	25	
173	16-Jun-09	Anse Chaloupe	RG MS	11	Behind beach	450	728915	1547524	0	25	85	0	0	2	0		1	1	0	0	0	0	32	29	
174	20-Jun-09	La Bourne - Mount Gayak	RG MS	23	Dry hills	453	726903	1554704	2	15	60	1	2	1	35	260	213	2	1	5	0	0	27	25	
175	20-Jun-09	La Bourne - Mount Gayak	RG MS	21	Dry hills	455	727755	1554672	3	8	60	0	1	3	10	240	250	0	0	0	0	0	25	15	
176	20-Jun-09	La Bourne - Mount Gayak	RG MS	14	Dry hills	456	727709	1554678	3	8	60	0	1	3	10	330	227	0	0	0	0	0	22	18	
177	20-Jun-09	La Bourne - Mount Gayak	RG MS	24	Dry hills	457	727212	1554672	3	8	65	1	2	1	35	190	178	1	0	5	0	0	28	14	
178	20-Jun-09	La Bourne - Mount Gayak	RG MS	1	Dry hills, recovering garden	458	727140	1554602	2	2	30	0	0	1	10	170	154	1	0	30	0	0	7		
179	20-Jun-09	La Bourne - Mount Gayak	RG MS	39	Dry hills	460	726334	1554478	3	10	65	1	2	1	30	180	204	1	0	5	0	0	12	10	
180	27-Jun-09	Venus, Millet	RG MS	52	Forest.	463	715208	1538080	1	17	60	1	1	3	15	20	381	1	0	5	0	0	35	25	
181	27-Jun-09	Venus, Millet	RG MS	22	Forest.	467	715244	1538119	1	22	70	2	2	2	35	150	364	1	0	5	0	0	31	26	
182	27-Jun-09	Venus, Millet	RG MS	15	Mesic woodland	471	715350	1538690	1	20	65	2	2	0	10	90	303	2	0	0	0	0	20	22	
183	1-Jul-09	Dugard gap, Choiseul	RG MS	NA	Riparian woodland	475	712644	1523910	2	12	65	1	1	0	NA	NA	84	2	0	10	10	0	16	18	Ravine plot no 7m radius possible
184	1-Jul-09	River Piaye	RG MS	NA	Riparian woodland	510	713998	1522035	1	18	65	1	1	0	NA	NA	15	2	0	10	0	0	20	12	Ravine plot no 7m radius possible
185	1-Jul-09	Vieux Fort, by Choiseul Highway	RG MS	0	Coastal backfill	482	720790	1518601	0	NA	NA	NA	0	3	0		1	0	0	90	0	0	NA	NA	Seems to be a swamp that has been filled in
186	1-Jul-09	Vieux Fort, by Choiseul Highway	RG MS	12	Flat area by swampy spot	485	720768	1518708	0	6	60	0	1	2	0		1	1	0	10	0	0	11	10	
187	1-Jul-09	Anse Des Sables, Vieux Fort	RG MS	0	Sandy soil, 20m behind beach	15	722134	1518523	0	NA	NA	NA	NA	3	0		1	1	0	10	0	0	NA	NA	
188	1-Jul-09	Anse Des Sables, Vieux Fort	RG MS	0	Beach sand	15	722134	1518523	0	NA	NA	NA	NA	3	0		1	0	0	30	0	0	NA	NA	
189	1-Jul-09	Canelles	RG MS	0	Silted pond	13	725608	1523659	0	NA	NA	NA	NA	0	0		5	0	0	100	0	0	NA	NA	Probably a neglected cattle pond
190	4-Jul-09	Sulphur springs	RG MS	1	hillside		711165	1530980	3	15	5	0	0	0	30	210	258	0	0	15	85	0	25	NA	arcview GPS
191	4-Jul-09	Sulphur springs	RG MS	NA	by river	503	711105	1530930	2	10	40	0	0	0	NA	NA	238	1	0	10	5	0	24	18	no 7m radius possible
192	4-Jul-09	Belfond	RG MS	20	wooded hillside	506	711176	1529108	2	20	80	2	1	0	20	320	390	1	1	5	0	0	36	28	
193	4-Jul-09	Roblot by road	RG MS	11	wooded hillside	508	712868	1523858	1	15	70	1	1	0	30	90	130	2	0	0	0	0	24	18	Just in xeric zone, mesic very close
194	4-Jul-09	Saltbody by water intake	RG MS	21	Secondary and modified rainforest	512	715493	1528431	0	25	35	0	0	1	25	330	466	1	0	5	0	0	26	25	
195	8-Jul-09	Mamiku Estate	RG MS	20	woodland	9	725629	1533919	1	12	75	0	1	0	40	120	40	1	0	0	0	0	20	12	
196	8-Jul-09	Mamiku Estate	MS	17	woodland	10	725640	1533935	1	5	70	1	1	0	30	180	43	0	0	0	0	0	28	23	
197	10-Jul-09	Troumasse Estate, Micoud	RG	0	Mud flat by mangrove	12	725510	1523660	0	NA	NA	1	0	0	0		1	0	0	35	0	0	NA	NA	cleared mangrove, stumps present
198	10-Jul-09	Troumasse Estate, Micoud	RG	9	Degraded dry woodland	13	725608	1523659	1	4	20	0	0	1	5	260	4	1	0	60	0	0	6	5	very degraded
199	10-Jul-09	Mankote Beach, Vieux Fort	RG	0	Sandy area behind beach	14	723515	1520836	0	NA	NA	0	0	3	0		1	0	0	50	0	0	NA	NA	
200	10-Jul-09	Cul de Sac swamp	RG	0	Swamp grassland	16	715629	1546790	0	NA	NA	0	0	1	0		1	0	0	100	0	0	NA	NA	
201	10-Jul-09	Choc Bay	RG	0	Sandy area behind beach	17	719024	1552605	0	NA	NA	0	0	0	0		1	0	0	80	0	0	NA	NA	periodically cleared
202	25-Jul-09	Motete, Choiseul	RG MS JD	14	mesic woodland		713141	1528292	2	22	75	0	1	0	5	240	362	1	1	0	0	0	108	54	mature mesic
203	25-Jul-09	Motete, Choiseul	RG MS JD		mesic woodland	21	713218	1528226	2	24	80	1	0	1	10	240	396	0	0	0	0	1	38	34	mature mesic
204	28-May-09	Piton troumasse, just below ridge	MS		Montane forest		715020	1532554	0	15	85	2	1	0	60	230	780	2	3	15	50	3			plot out of date sequence

Graveson – Vegetation Classification

Plot Data: (b) Floristics

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
1	13-Oct-08	Tabebuia	heterophylla	3					Cyperus	planifolius			Petrea	volubilis				
1	13-Oct-08	Capparis	indica	2														
1	13-Oct-08	Capparis	flexuosa	6														
1	13-Oct-08	Ficus	citrifolia	1														
1	13-Oct-08	Guapira	fragrans	5														
1	13-Oct-08	Rauvolfia	viridis	7														
2	13-Oct-08	Tabebuia	heterophylla	3			Croton	hircinus	Cyperus	planifolius								
2	13-Oct-08	Capparis	indica	3					Plumbago	scandens								
2	13-Oct-08	Bursera	simaruba	2														
2	13-Oct-08	Erythroxylum	havanense	3														
2	13-Oct-08	Guapira	fragrans	6														
2	13-Oct-08	Pilosocereus	royenii	4														
3	12-Jan-09	Capparis	indica	2	Guapira	fragrans			Scleria	lithosperma			Passiflora	suberosa				
3	12-Jan-09	Guettarda	scabra	2	Coccothrinax	barbadensis												
3	12-Jan-09	Lonchocarpus	punctatus	1	Eugenia	cordata												
3	12-Jan-09	Piscidia	carthagensis	3	Eugenia	ligustrina												
3	12-Jan-09	Haematoxylum	campechianum	3	Sauvagesia	erecta												
3	12-Jan-09	Bourreria	succulenta	1														
3	12-Jan-09	Croton	bixoides	2														
4	13-Jan-09	Eugenia	cordata	1	Eugenia	ligustrina		Argythamnia	polygama				Cissus	verticillata		Bursera	simaruba	
4	13-Jan-09	Ficus	citrifolia	1	Rauvolfia	viridis							Pisonia	aculeata		Morisonia	americana	
4	13-Jan-09	Guettarda	scabra	1	Coccothrinax	barbadensis		Psychotria	nervosa				Macfadyena	unguis-cati		Tabebuia	heterophylla	
4	13-Jan-09	Maclura	tinctoria	2	Amyris	elemifera												
4	13-Jan-09	Randia	nitida	1	Capparis	indica												
4	13-Jan-09	Cordia	collococca	1	Casearia	decandra												
4	13-Jan-09	Bourreria	succulenta	3	Coccoloba	swartzii												
4	13-Jan-09				Eugenia	monticola												
4	13-Jan-09				Margaritaria	nobilis												
4	13-Jan-09				Pimenta	racemosa												
4	13-Jan-09	Nectandra	coriacea	3	Sideroxylon	obovatum												
4	13-Jan-09	Guapira	fragrans	7	Zanthoxylum	spiriflex												
5	13-Jan-09	Zanthoxylum	monophyllum	4	Coccothrinax	barbadensis										Bursera	simaruba	
5	13-Jan-09	Cordia	collococca	2	Pimenta	racemosa							Macfadyena	unguis-cati		Morisonia	americana	
5	13-Jan-09	Maclura	tinctoria	2	Amyris	elemifera		Argythamnia	polygama							Tabebuia	heterophylla	
5	13-Jan-09	Bourreria	succulenta	1														
5	13-Jan-09	Citharexylum	spinosum	1														
5	13-Jan-09	Eugenia	monticola	1														
5	13-Jan-09	Forestiera	rhamnifolia	1														
5	13-Jan-09	Guapira	fragrans	5														
5	13-Jan-09	Lonchocarpus	punctatus	2														
5	13-Jan-09	Margaritaria	nobilis	1														
6	13-Jan-09	Eugenia	cordata	2	Amyris	elemifera		Argythamnia	polygama		Pilosocereus	royenii					Krugiodendron	ferreum
6	13-Jan-09	Croton	bixoides	7	Eugenia	cordata					Pitcairnia	angustifolia						
6	13-Jan-09	Tabebuia	heterophylla	1	Bourreria	succulenta												
6	13-Jan-09	Guettarda	scabra	4	Erithalis	fruticosa												
6	13-Jan-09	Lonchocarpus	punctatus	1	Jacquinia	arbores												
6	13-Jan-09	Capparis	indica	1	Pithecellobium	unguis-cati												
6	13-Jan-09	Coccoloba	swartzii	1	Randia	nitida												
6	13-Jan-09	Guapira	fragrans	4														
7	13-Jan-09	Rauvolfia	viridis	2	Erythroxylum	havanense		Cordia	curassavica		Sida	glomerata		Abrus	preparatorius			
7	13-Jan-09	Maclura	tinctoria	2				Senna	bicapsularis		Heliotropium	angiospermum		Heteropterys	purpurea			
7	13-Jan-09	Citharexylum	spinosum	2				Triumfetta	species		Axonopus	compressus		Tournefortia	volubilis			
7	13-Jan-09	Cordia	collococca	1														
7	13-Jan-09	Cordia	obliqua	1														
7	13-Jan-09	Haematoxylum	campechianum	1														
7	13-Jan-09	Tabebuia	heterophylla	1														
7	13-Jan-09	Vachellia	macracantha	1														
8	13-Jan-09	Guapira	fragrans	1	Eugenia	ligustrina					Tradescantia	spathacea		Phoradendron	trinervium	Macfadyena	unguis-cati	
8	13-Jan-09	Lonchocarpus	punctatus	4										Dendropemon	caribaeus		Morisonia	americana
8	13-Jan-09	Amyris	elemifera	1														
8	13-Jan-09	Chionanthus	compactus	1														
8	13-Jan-09	Forestiera	rhamnifolia	3														
8	13-Jan-09	Hymenaea	courbaril	1														
8	13-Jan-09	Krugiodendron	ferreum	2														
8	13-Jan-09	Myrcia	citrifolia	1														
8	13-Jan-09	Schoepfia	schreberi	1														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT											28 METRE RADIUS PLOT					
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs	Epiphytes	Vines		Terrestrial ferns	Trees only				
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
9	17-Jan-09	Byrsonima	spicata	2	Krugiodendron	ferreum	Chiococca	alba									Ardisia	obovata
9	17-Jan-09	Canella	winterana	1	Manilkara	bidentata												
9	17-Jan-09	Pimenta	racemosa	7	Maytenus	laevigata												
9	17-Jan-09	Bourreria	succulenta	1	Myrcia	citrifolia												
9	17-Jan-09	Coccoloba	pubescens	1														
9	17-Jan-09	Cornutia	pyramidata	1														
9	17-Jan-09	Eugenia	confusa	1														
9	17-Jan-09	Lonchocarpus	punctatus	7														
9	17-Jan-09	Schaefferia	frutescens	1														
9	17-Jan-09	Schaefferia	frutescens	1														
9	17-Jan-09	Tabebuia	heterophylla	1														
10	17-Jan-09	Manilkara	bidentata	1	Krugiodendron	ferreum	Chiococca	alba					Passiflora	suberosa				
10	17-Jan-09	Pimenta	racemosa	3	Ardisia	obovata												
10	17-Jan-09	Lonchocarpus	punctatus	4	Capparis	hastata												
10	17-Jan-09	Guapira	fragrans	1	Eugenia	ligustrina												
10	17-Jan-09	Schaefferia	frutescens	1	Myrcia	citrifolia												
10	17-Jan-09	Canella	winterana	3	Sideroxylon	obovatum												
10	17-Jan-09	Bourreria	succulenta	2														
10	17-Jan-09	Tabebuia	heterophylla	3														
11	17-Jan-09	Coccoloba	uvifera	9	Erithalis	fruticosa			Euphorbia	mesembrianthemifolia			Cydista	aequinoctialis			Terminalia	catappa
11	17-Jan-09	Cornutia	pyramidata	2	Terminalia	catappa			Sporobolus	virginicus								
11	17-Jan-09	Jacquinia	arborea	1														
12	17-Jan-09	Tabebuia	heterophylla	21														
12	17-Jan-09	Tabernaemontana	citrifolia	1														
13	17-Jan-09	Lonchocarpus	punctatus	3	Cornutia	pyramidata	Vernonia	arborescens	Abildgaardia	ovata	Psittacanthus	americanus	Jacquemontia	solanifolia				
13	17-Jan-09	Bourreria	succulenta	1	Croton	guldinigi	Chiococca	alba	Scleria	lithosperma			Passiflora	suberosa				
13	17-Jan-09	Coccoloba	pubescens	1	Myrcia	citrifolia			Enicostema	verticillata			Tournefortia	votubilis				
13	17-Jan-09	Bursera	simaruba	2	Pimenta	racemosa			Crotalaria	lotifolia								
13	17-Jan-09	Haematoxylum	campechianum	1	Erythroxylum	havanense												
13	17-Jan-09	Randia	aculeata	2	Guapira	fragrans												
13	17-Jan-09	Canella	winterana	1	Hippomane	mancinella												
13	17-Jan-09	Erithalis	fruticosa	1														
13	17-Jan-09	Guettarda	scabra	1														
14	20-Jan-09	Guapira	fragrans	1	Protium	attenuatum	Piper	dilatatum					Cissus	verticillata			Cecropia	schreberiana
14	20-Jan-09	Myrcia	deflexa	1	Roystonea	oleracea							Ipomoea	tiliacea			Mangifera	indica
14	20-Jan-09	Syzygium	jambos	1	Simarouba	amara							Securidaca	diversifolia			Margaritara	nobilis
14	20-Jan-09	Lonchocarpus	heptaphyllus	2	Myrcia	splendens											Ocotea	leucoxyton
14	20-Jan-09	Chomelia	fasciculata	1	Casearia	decandra												
14	20-Jan-09	Cordia	sulcata	3	Chrysophyllum	argenteum												
14	20-Jan-09	Palicourea	crocea	1	Coccoloba	swartzii												
14	20-Jan-09	Vitex	divaricata	1	Myrcia	splendens												
14	20-Jan-09	Citharexylum	spinosum	1	Protium	attenuatum												
14	20-Jan-09	Byrsonima	spicata	1	Roystonea	oleracea												
14	20-Jan-09	Inga	ingoides	2	Tabernaemontana	citrifolia												
15	20-Jan-09	Cupania	americana	6	Myrcia	deflexa			Ichnanthus	pallens			Macfadyena	unguis-cati				
15	20-Jan-09	Coccoloba	swartzii	1	Cornutia	pyramidata							Passiflora	laurifolia				
15	20-Jan-09	Lonchocarpus	heptaphyllus	5	Vitex	divaricata							Securidaca	diversifolia				
15	20-Jan-09	Chrysophyllum	argenteum	1									Tournefortia	bicolor				
15	20-Jan-09	Byrsonima	spicata	1														
15	20-Jan-09	Casearia	decandra	1														
15	20-Jan-09	Cordia	sulcata	5														
15	20-Jan-09	Guapira	fragrans	1														
15	20-Jan-09	Guazuma	ulmifolia	1														
15	20-Jan-09	Inga	ingoides	1														
15	20-Jan-09	Inga	laurina	1														
15	20-Jan-09	Myrcia	splendens	1														
15	20-Jan-09	Palicourea	crocea	1														
15	20-Jan-09	Zanthoxylum	caribaeum	1														
15	20-Jan-09	Zanthoxylum	caribaeum	1														
16	20-Jan-09	Citharexylum	spinosum	1	Guettarda	odorata	Croton	guldinigi	Abildgaardia	ovata			Cassipoua	filiformis			Wedelia	calycina
16	20-Jan-09	Haematoxylum	campechianum	1	Cornutia	pyramidata			Scleria	lithosperma			Centrosema	virginiana				
16	20-Jan-09				Pimenta	racemosa			Enicostema	verticillatum								
16	20-Jan-09				Coccothrinax	barbadensis			Piriqueta	cistoides								
16	20-Jan-09				Zanthoxylum	monophyllum			Sporobolus	jacquemontii								
16	20-Jan-09	Coccoloba	swartzii	1	Randia	aculeata			Urochloa	distachya								
16	20-Jan-09	Coccoloba	pubescens	1														
16	20-Jan-09	Guettarda	scabra	1														
17	20-Jan-09	Coccoloba	pubescens	2	Erythroxylum	havanense	Mimosa	quadrivalvis	Sporobolus	jacquemontii			Abrus	precatorius				
17	20-Jan-09	Croton	bixoides	8	Randia	aculeata	Wedelia	calycina	Abildgaardia	ovata			Centrosema	virginiana				
17	20-Jan-09	Erithalis	fruticosa	1	Pimenta	racemosa	Cordia	curassavica	Urochloa	distachya			Jacquemontia	pentanthes				
17	20-Jan-09	Guettarda	scabra	1	Rauvolfia	viridis												
17	20-Jan-09	Ficus	citrifolia	1														
17	20-Jan-09	Haematoxylum	campechianum	1														
17	20-Jan-09	Zanthoxylum	monophyllum	1														

Graveson – Vegetation Classification

		PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
Plot No.	Date	Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other	Tree Species
18	20-Jan-09	Ardisia	obovata	1	Guettarda	scabra	Heliotropium	curassavicum	Abildgaardia	ovata			Centrosema	virginiana				
18	20-Jan-09	Croton	bixoides	1	Eugenia	confusa			Scleria	lithosperma			Passiflora	suberosa				
18	20-Jan-09	Byrsonima	spicata	2	Bourreria	succulenta												
18	20-Jan-09	Myrcia	citriifolia	2	Coccolobina	barbadosensis												
18	20-Jan-09	Eugenia	cordata	3	Eugenia	ligustrina												
18	20-Jan-09	Coccoloba	pubescens	1														
18	20-Jan-09	Coccoloba	pubescens	1														
18	20-Jan-09	Jacquinia	arborea	1														
18	20-Jan-09	Pimenta	racemosa	4														
19	25-Jan-09	Tabebuia	heterophylla	5									Hyperbaena	domingensis				
19	25-Jan-09	Ardisia	obovata	1	Eugenia	monticola			Anthurium	cordatum			Petrea	volubilis				
19	25-Jan-09	Bursera	simaruba	1														
19	25-Jan-09	Byrsonima	spicata	4														
19	25-Jan-09	Capparis	flexuosa	1														
19	25-Jan-09	Coccoloba	pubescens	3														
19	25-Jan-09	Coccoloba	swartzii	1														
19	25-Jan-09	Cornutia	pyramidata	1														
19	25-Jan-09	Daphnopsis	americana	1														
19	25-Jan-09	Eugenia	confusa	1														
19	25-Jan-09	Guapira	fragrans	1														
19	25-Jan-09	Guettarda	scabra	5														
19	25-Jan-09	Gymina	latifolia	1														
19	25-Jan-09	Lonchocarpus	punctatus	1														
19	25-Jan-09	Miconia	cornifolia	1														
19	25-Jan-09	Myrcia	citriifolia	3														
19	25-Jan-09	Pimenta	racemosa	1														
19	25-Jan-09	Randia	aculeata	1														
20	25-Jan-09	Ormosia	monosperma	1	Faramea	occidentalis	Odontonema	nitidum	Anthurium	cordatum			Hyperbaena	domingensis			Bunchosia	polystachia
20	25-Jan-09	Bursera	simaruba	2	Maytenus	laevigata	Chiococca	alba									Cestrum	laurifolium
20	25-Jan-09	Guapira	fragrans	3	Eugenia	pseudopodium											Exothea	santa-luciae
20	25-Jan-09	Gyminda	latifolia	1	Ardisia	obovata											Sideroxylon	foetidissimum
20	25-Jan-09	Tabebuia	heterophylla	2	Chrysophyllum	argenteum											Zanthoxylum	punctatum
20	25-Jan-09	Nectandra	patens	6	Pimenta	racemosa											Zanthoxylum	fiavum
20	25-Jan-09	Ficus	citriifolia	1	Coccoloba	swartzii												
20	25-Jan-09	Cassipourea	guianensis	1														
20	25-Jan-09	Chionanthus	compactus	1														
20	25-Jan-09	Diospyros	revoluta	1														
20	25-Jan-09	Inga	laurina	1														
20	25-Jan-09	Krugiodendron	ferreum	1														
20	25-Jan-09	Simarouba	amara	1														
20	25-Jan-09	Zanthoxylum	caribaeum	1														
21	28-Jan-09	Haematoyxylon	campechianum	15	Ouratea	guldinigi	Heliotropium	ternatum	Abildgaardia	ovata			Abrus	preicatorius			Cassythia	filiformis
21	28-Jan-09	Randia	aculeata	6	Eugenia	ligustrina	Euphorbia	tithymaloides	Lasiacis	divaricata							Erithalis	fruticosa
21	28-Jan-09	Cornutia	pyramidata	2					Oxalis	frutescens							Erythroxyllum	havanense
21	28-Jan-09	Myrcia	citriifolia	3					Evolvulus	antillanus							Jacquinia	arborea
21	28-Jan-09	Pithecellobium	unguis-cati	5					Trimezia	martinicensis								
21	28-Jan-09	Bourreria	succulenta	1														
21	28-Jan-09	Coccoloba	pubescens	1														
21	28-Jan-09	Ficus	citriifolia	1														
21	28-Jan-09	Guapira	fragrans	3														
21	28-Jan-09	Guettarda	scabra	2														
21	28-Jan-09	Tabebuia	heterophylla	1														
22	28-Jan-09	Randia	aculeata	2	Rauvolfia	viridis	Croton	guldinigi	Desmodium	incanum								
22	28-Jan-09	Tabebuia	heterophylla	4	Bourreria	succulenta	Cordia	curassavica	Enicostema	verticillatum								
22	28-Jan-09	Guapira	fragrans	1					Trimezia	martinicensis								
23	28-Jan-09				Myrcia	citriifolia	Wedelia	calycina	Abildgaardia	ovata								
23	28-Jan-09				Randia	aculeata	Chamaecrista	glandulosa	Enicostema	verticillatum								
23	28-Jan-09				Cordia	bixoides			Scleria	lithosperma								
23	28-Jan-09				Coccoloba	swartzii												
23	28-Jan-09				Cordia	martinicensis												
23	28-Jan-09				Eugenia	confusa												
23	28-Jan-09				Guettarda	scabra												
23	28-Jan-09				Haematoyxylon	campechianum												
23	28-Jan-09				Lonchocarpus	punctatus												
23	28-Jan-09				Tabebuia	heterophylla												
24	28-Jan-09	Amyris	elemifera	1	Ouratea	guldinigi	Chiococca	alba	Phoradendron	trinervium							Croton	hircinus
24	28-Jan-09	Tabebuia	heterophylla	2	Myrcia	citriifolia			Trichocentrum	cebolleta							Guettarda	odorata
24	28-Jan-09	Guapira	suborbiculata	1	Calliandra	tergemina												
24	28-Jan-09	Lonchocarpus	punctatus	1	Erithalis	fruticosa												
24	28-Jan-09	Haematoyxylon	campechianum	1	Pimenta	racemosa												
24	28-Jan-09	Bursera	simaruba	1	Randia	aculeata												
24	28-Jan-09	Guettarda	scabra	5														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT											28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes	Vines	Terrestrial ferns	Trees only					
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	Tree Species	
25	28-Jan-09	Guettarda	scabra	1	Eugenia	confusa	Chiococca	alba										Ternstroemia	peduncularis
25	28-Jan-09	Coccoloba	pubescens	6	Ardisia	obovata													
25	28-Jan-09	Croton	bixoides	2	Coccothrinax	barbadensis													
25	28-Jan-09	Tabebuia	heterophylla	1	Eugenia	ligustrina													
25	28-Jan-09	Pimenta	racemosa	3	Eugenia	monticola													
25	28-Jan-09	Calliandra	tergemina	2	Gymina	latifolia													
25	28-Jan-09	Byrsonima	spicata	1															
25	28-Jan-09	Capparis	hastata	1															
25	28-Jan-09	Gilircidia	sepium	1															
25	28-Jan-09	Haematoxylon	campechianum	1															
25	28-Jan-09	Myrcia	citrifolia	1															
26	31-Jan-09	Coccoloba	pubescens	2	Myrcia	citrifolia	Argythamnia	polygama	Oxalis	frutescens	Tillandsia	utriculata	Senegalia	riparia				Aechmea	lingulata
26	31-Jan-09	Bourreria	succulenta	1	Tabernaemontana	citrifolia	Malpighia	coccigera	Lasiacis	divaricata			Heteropteryx	purpurea				Amyris	elemifera
26	31-Jan-09	Capparis	hastata	1	Guapira	suborbiculata							Macfadyena	unguis-cati				Coccoloba	swartzii
26	31-Jan-09	Randia	aculeata	1	Eugenia	ligustrina												Gymina	latifolia
26	31-Jan-09	Erythroxylum	havanense	3	Coccothrinax	barbadensis												Margaritopsis	microdon
26	31-Jan-09	Pithecellobium	unguis-cati	1	Jacquinia	arborea												Maytenus	laevigata
26	31-Jan-09	Lonchocarpus	punctatus	7														Tabebuia	pallida
26	31-Jan-09	Krugiodendron	ferreum	1															
26	31-Jan-09	Erithalis	fruticosa	1															
26	31-Jan-09	Eugenia	cordata	2															
26	31-Jan-09	Eugenia	ligustrina	1															
26	31-Jan-09	Guapira	fragrans	2															
26	31-Jan-09	Pilosocereus	royenii	3															
26	31-Jan-09	Zanthoxylum	punctatum	2															
27	31-Jan-09	Myrcia	citrifolia	1	Ardisia	obovata	Chamaecrista	glandulosa											
27	31-Jan-09	Ternstroemia	peduncularis	1	Oureatea	guldinngii	Cordia	curassavica											
27	31-Jan-09	Calliandra	slanaeae	1	Coccothrinax	barbadensis	Wedelia	calycina											
27	31-Jan-09	Coccoloba	pubescens	5			Croton	guldinngii	Abildgaardia	ovata	Tillandsia	utriculata							
27	31-Jan-09	Croton	bixoides	2															
27	31-Jan-09	Guettarda	scabra	2															
27	31-Jan-09	Randia	aculeata	2															
28	31-Jan-09	Calliandra	slanaeae	5	Croton	bixoides	Croton	guldinngii	Abildgaardia	ovata	Tillandsia	utriculata							
28	31-Jan-09	Coccoloba	pubescens	2	Oureatea	guldinngii	Croton	hircinus	Enicostema	verticillata	Trichocentrum	cebolleta							
28	31-Jan-09	Ternstroemia	peduncularis	1	Eugenia	cordata	Chamaecrista	glandulosa	Scleria	lithosperma	Tillandsia	utriculata							
28	31-Jan-09	Guapira	suborbiculata	1	Eugenia	confusa													
28	31-Jan-09	Amyris	elemifera	1															
28	31-Jan-09	Guettarda	scabra	1															
28	31-Jan-09	Myrcia	citrifolia	1															
28	31-Jan-09	Randia	aculeata	1															
29	31-Jan-00				Tabebuia	heterophylla	Montrichardia	arborescens					Rhabdabenia	biflora	Acrostichum	aureum			
29	31-Jan-09	Pterocarpus	officinalis	17															
30	31-Jan-00	Tabebuia	heterophylla	8			Margaritopsis	microdon											
31	3-Feb-09	Haematoxylon	campechianum	1	Eugenia	ligustrina	Wedelia	calycina	Scleria	metaleuca									
31	3-Feb-09	Bursera	simaruba	4	Coccoloba	pubescens	Euphorbia	tithymaloides	Trimezia	martinicensis									
31	3-Feb-09	Randia	aculeata	1	Pimenta	racemosa			Abildgaardia	ovata									
31	03-Feb-09	Tabebuia	heterophylla	2	Calliandra	tergemina													
31	3-Feb-09	Coccoloba	swartzii	1	Eugenia	confusa													
31	3-Feb-09				Erithalis	fruticosa													
31	3-Feb-09				Inga	laurina													
31	3-Feb-09				Schoepfia	schreberi													
32	3-Feb-09	Manilkara	bidentata	1	Eugenia	confusa	Croton	guldinngii	Abildgaardia	ovata									
32	3-Feb-09	Eugenia	tapacumensis	1	Ardisia	obovata			Scleria	lithosperma									
32	3-Feb-09	Myrcia	citrifolia	3	Coccothrinax	barbadensis													
32	3-Feb-09	Randia	aculeata	1	Gymina	latifolia													
32	3-Feb-09	Eugenia	ligustrina	1	Jacquinia	arborea													
32	3-Feb-09	Pimenta	racemosa	1	Picramna	pentandra													
32	3-Feb-09	Byrsonima	spicata	1															
32	3-Feb-09	Coccoloba	pubescens	4															
32	3-Feb-09	Coccoloba	swartzii	1															
32	3-Feb-09	Cornutia	pyramidata	1															
32	3-Feb-09	Croton	bixoides	1															
32	3-Feb-09	Eugenia	monticola	1															
32	3-Feb-09	Lonchocarpus	punctatus	1															
32	3-Feb-09	Tabebuia	heterophylla	1															
33	3-Feb-09	Coccoloba	swartzii	1	Eugenia	monticola													
33	3-Feb-09	Pimenta	racemosa	1	Guapira	fragrans													
33	3-Feb-09	Zanthoxylum	punctatum	1	Ardisia	obovata													
33	3-Feb-09	Coccoloba	pubescens	1	Eugenia	tapacumensis													
33	3-Feb-09	Bursera	simaruba	1	Myrcia	citrifolia													
33	3-Feb-09	Eugenia	ligustrina	1	Zanthoxylum	punctatum													
33	3-Feb-09	Jacquinia	arborea	2															

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT											28 METRE RADIUS PLOT				
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes	Vines	Terrestrial ferns	Trees only			
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other
34	3-Feb-09									Agave	caribaeicola						
34	3-Feb-09									Chamaecrista	glandulosa						
34	3-Feb-09									Euphorbia	articulata						
34	3-Feb-09									Evolvulus	antillanus						
34	3-Feb-09									Evolvulus	convolvuloides						
34	3-Feb-09									Evolvulus	nummularius						
34	3-Feb-09									Heliotropium	ternatum						
34	3-Feb-09									Melanthera	nivea						
34	3-Feb-09									Melocactus	intortus						
34	3-Feb-09									Opuntia	dillenii						
34	3-Feb-09									Oxalis	frutescens						
34	3-Feb-09									Pectis	humifusa						
34	3-Feb-09									Phylla	fruticosa						
34	3-Feb-09									Pilosocereus	royenii						
34	3-Feb-09									Portulaca	oleracea						
34	3-Feb-09									Ruellia	tuberosa						
34	3-Feb-09									Talinum	fruticosum						
34	3-Feb-09									Zornia	microphylla						
35	3-Feb-09	Tabebuia	heterophylla	1	Eugenia	confusa				Scleria	lithosperma					Casearia	decandra
35	3-Feb-09	Inga	laurina	1	Eugenia	monticola				Abildgaardia	ovata					Eugenia	tapacumensis
35	3-Feb-09	Randia	aculeata	1	Eugenia	ligustrina										Guapira	suborbiculata
35	3-Feb-09	Myrcia	citrifolia	1	Coccoloba	pubescens										Miconia	cornifolia
35	3-Feb-09	Coccoloba	pubescens	1	Schoepfia	schreberi										Nectandra	coriacea
35	3-Feb-09	Byrsonima	spicata	1												Zanthoxylum	punctatum
35	3-Feb-09	Pimenta	racemosa	5													
36	7-Feb-09	Prestoea	acuminata	4													
36	7-Feb-09							Tibouchina	chamaecistus	Anthurium	guldinngii						
36	7-Feb-09							Lobelia	santa-luciae	Guzmania	megastachya						
36	7-Feb-09									Isachne	disperma						
36	7-Feb-09									Machaerina	restioides						
36	7-Feb-09									Pitcairnia	angustifolia						
37	7-Feb-09	Schefflera	attenuata	2						Machaerina	restioides			Alsophila	imrayana		
37	7-Feb-09	Charianthus	apinus	7						Anthurium	guldinngii						
37	7-Feb-09	Tovomitia	plumieri	1						Guzmania	megastachya						
37	7-Feb-09	Micropholis	guyanensis	1						Isachne	disperma						
37	7-Feb-09	Prestoea	acuminata	4						Pitcairnia	angustifolia						
37	7-Feb-09	Marilia	racemosa	1						Scleria	scindens						
37	7-Feb-09	Byrsonima	trinities	1													
37	7-Feb-09	Chrysobalanus	cuspidatus	1													
37	7-Feb-09	Persea	urbaniana	1													
38	7-Feb-09	Myrcia	platyclada	1	Marilia	racemosa				Anthurium	hookeri			Marcgravia	umbellata	Cnemidaria	grandifolia
38	7-Feb-09	Chrysochlamys	caribaea	1	Cybianthus	rostratus				Anthurium	guldinngii			Schradera	exotica	Alsophila	imrayana
38	7-Feb-09	Aniba	bracteata	1												Miconia	mirabilis
38	7-Feb-09	Clusia	major	1													
38	7-Feb-09	Daphnopsis	macrocarpa	1													
38	7-Feb-09	Geonoma	interrupta	2													
38	7-Feb-09	Licania	tematensis	1													
38	7-Feb-09	Micropholis	guyanensis	1													
38	7-Feb-09	Ocotea	leucoxydon	1													
38	7-Feb-09	Prestoea	acuminata	3													
38	7-Feb-09	Sloanea	caribaea	1													
38	7-Feb-09	Sterculia	caribaea	1													
38	7-Feb-09	Swartzia	caribaea	2													
39	8-Feb-09	Tabebuia	heterophylla	2	Erythroxylum	havanense	Cryptostegia	madagascariensis	Scleria	lithosperma				Abrus	precatorius		Bursera
39	8-Feb-09	Haematoxylon	campechianum	3	Gynerium	latifolia								Macfadyena	unguis-cati		simaruba
39	8-Feb-09	Piscidia	carthagenensis	6	Canella	winterana											
39	8-Feb-09				Capparis	cyanophallophora											
39	8-Feb-09				Cordia	collococca											
39	8-Feb-09				Eleoedendron	xylocarpum											
39	8-Feb-09				Eugenia	cordata											
39	8-Feb-09				Guapira	fragrans											
39	8-Feb-09				Jacquinia	arborea											
39	8-Feb-09				Randia	aculeata											
39	8-Feb-09	Bourreria	succulenta	1	Terminalia	catappa											
40	8-Feb-09	Jacquinia	arborea	1	Gynerium	latifolia				Agave	caribaeicola	Tillandsia	utriculata	Heteropterys	purpurea		
40	8-Feb-09	Calliandra	slanaeae	8	Canella	winterana				Scleria	lithosperma			Macfadyena	unguis-cati		
40	8-Feb-09	Bourreria	succulenta	1	Maytenus	laevigata				Oxalis	frutescens						
40	8-Feb-09	Haematoxylon	campechianum	1	Capparis	hastata											
40	8-Feb-09	Amyris	elemifera	1	Eugenia	cordata											
40	8-Feb-09	Myrcia	citrifolia	1	Eugenia	ligustrina											
40	8-Feb-09	Croton	bixoides	1	Krugiodendron	ferreum											
40	8-Feb-09	Bursera	simaruba	1													

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT											28 METRE RADIUS PLOT					
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns	Trees only		
		Genus	Species	No.	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Other Tree Species	
41	10-Feb-09	Gymnanthes	hypoleuca	4	Myrcia	fallax	Stylogyne	lateriflora					Smilax	oblongata			Clusia	major
41	10-Feb-09	Sterculia	caribaea	1	Licania	ternatensis	Euphorbia	dussii					Coccoloba	adscendens			Dacyrodes	excelsa
41	10-Feb-09	Protium	attenuatum	2													Endlicheria	sericea
41	10-Feb-09	Nectandra	patens	1													Ficus	insipida
41	10-Feb-09	Cecropia	schreberiana	1													Pouteria	multiflora
41	10-Feb-09	Prestoea	acuminata	1													Simarouba	amara
41	10-Feb-09	Alphanes	minima	1														
41	10-Feb-09	Guatteria	caribaea	1														
41	10-Feb-09	Pithecellobium	jupunba	1														
41	10-Feb-09	Pouteria	pallida	1														
41	10-Feb-09	Psychotria	mapourioides	1														
41	10-Feb-09	Sloanea	caribaea	1														
42	10-Feb-09	Protium	attenuatum	4	Myrcia	fallax	Gonzalagunia	spicata	Anthurium	cordatum	Anthurium	palmatum	Smilax	oblongata	Alsophila	muricata	Aniba	ramageana
42	10-Feb-09	Sloanea	caribaea	2	Faramea	occidentalis	Heliconia	bihai	Prescottia	stachyodes			Coccoloba	adscendens	Adiantum	tetraphyllum	Calyptanthus	forsteri
42	10-Feb-09	Guapira	fragrans	1	Eugenia	coffeifolia	Odontonema	nitidum									Erythroxylum	squamatum
42	10-Feb-09	Micropholis	crotonioides	1	Pouteria	multiflora											Eugenia	coffeifolia
42	10-Feb-09	Ocotea	eggersiana	4	Myrcia	deflexa											Ilex	sideroxyloides
42	10-Feb-09	Casearia	decandra	1													Ixora	ferrea
42	10-Feb-09	Sloanea	caribaea	1													Simarouba	amara
42	10-Feb-09	Ormosia	monosperma	3													Tovomitia	plumieri
42	10-Feb-09	Guatteria	caribaea	1														
42	10-Feb-09	Licania	ternatensis	1														
42	10-Feb-09	Pouteria	pallida	3														
42	10-Feb-09	Prestoea	acuminata	1														
43	14-Feb-09	Sideroxylon	obovatum	5	Coccothrinax	barbadensis	Wedelia	calycina	Aechmea	lingulata	Aechmea	lingulatum	Tournefortia	volubilis			Tabebuia	pallida
43	14-Feb-09	Capparis	hastata	4	Capparis	flexuosa												
43	14-Feb-09	Bourreria	succulenta	2	Eugenia	ligustrina												
43	14-Feb-09	Jacquinia	arborea	1	Pilosocereus	royenii												
43	14-Feb-09	Croton	bixoides	1	Randia	aculeata												
43	14-Feb-09	Pithecellobium	unguis-cati	2	Tabernaemontana	citrifolia												
43	14-Feb-09	Guapira	fragrans	2	Zanthoxylum	punctatum												
43	14-Feb-09	Lonchocarpus	punctatus	2														
44	14-Feb-09	Erithalis	fruticosa	4	Myrcia	citrifolia	Croton	flavens	Abildgaardia	ovata			Jacquemontia	pentanthos				
44	14-Feb-09	Jacquinia	arborea	4	Bursera	simaruba	Wedelia	calycina	Oxalis	frutescens								
44	14-Feb-09	Ficus	citrifolia	1	Ardisia	obovata												
44	14-Feb-09	Coccoloba	pubescens	1	Coccothrinax	barbadensis												
44	14-Feb-09	Diospyros	revoluta	1														
44	14-Feb-09	Guapira	fragrans	2														
44	14-Feb-09	Pithecellobium	unguis-cati	2														
44	14-Feb-09	Tabebuia	pallida	3														
45	14-Feb-09				Tabebuia	pallida	Croton	flavens	Spermacoce	species			Centrosema	virginiana				
45	14-Feb-09				Coccoloba	pubescens	Chamaecrista	glandulosa	Melanthera	nivea								
45	14-Feb-09				Coccoloba	uvifera	Wedelia	calycina	Sporobolus	virginicus								
46	14-Feb-09	Coccoloba	uvifera	2	Pithecellobium	unguis-cati							Smilax	guianensis			Byrsonima	spicata
46	14-Feb-09	Jacquinia	arborea	2	Eugenia	ligustrina											Clusia	plukenetii
46	14-Feb-09	Tabebuia	pallida	8	Myrcia	citrifolia	Wedelia	calycina									Eugenia	confusa
46	14-Feb-09	Ardisia	obovata	2	Coccothrinax	barbadensis	Coccoloba	pubescens									Manilkara	bidentata
47	14-Feb-09	Croton	bixoides	2	Eugenia	ligustrina	Argythamnia	polygama	Lasiacis	divaricata								
47	14-Feb-09	Guapira	fragrans	1					Malpighia	coccigera								
47	14-Feb-09	Pithecellobium	unguis-cati	1					Oxalis	frutescens								
47	14-Feb-09	Lonchocarpuspunc	punctatus	3														
47	14-Feb-09	Coccoloba	pubescens	1														
47	14-Feb-09	Erithalis	fruticosa	1														
47	14-Feb-09	Eugenia	ligustrina	1														
47	14-Feb-09	Jacquinia	arborea	1														
47	14-Feb-09	Pilosocereus	royenii	1														
48	14-Feb-09	Miconia	cornifolia	1	Ardisia	obovata	Chamaecrista	glandulosa	Scleria	lithosperma			Smilax	guianensis			Amyris	elemifera
48	14-Feb-09	Lonchocarpus	punctatus	1	Coccothrinax	barbadensis			Malpighia	coccigera							Bourreria	succulenta
48	14-Feb-09	Pimenta	racemosa	3	Capparis	hastata											Cassipourea	guianensis
48	14-Feb-09	Eugenia	confusa	5													Eugenia	monticola
48	14-Feb-09	Guetarda	scabra	4													Maytenus	laevigata
48	14-Feb-09	Byrsonima	spicata	3													Ormosia	monosperma
48	14-Feb-09	Schoepfia	schreberi	1													Picramnia	pentandra
48	14-Feb-09	Erithalis	fruticosa	1													Randia	aculeata
48	14-Feb-09	Gyrindia	latifolia	2													Zanthoxylum	punctatum
48	14-Feb-09	Bursera	simaruba	3														
48	14-Feb-09	Casearia	decandra	1														
48	14-Feb-09	Coccoloba	pubescens	1														
48	14-Feb-09	Ouatea	guldinigi	2														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT					
		Trees & other plants ≥5cm DBH			Sapiings species		Shrubs species		Herbs species		Epiphytes species	Vines species		Terrestrial ferns species	Trees only		
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	
49	14-Feb-09	Clusia	plukenetii	1	Eugenia	pseudopsidium	Odontonema	nitidum	Malpighia	coccigera					Capparis	hastata	
49	14-Feb-09	Guettarda	scabra	4	Manilkara	bidentata			Scleria	lithosperma				Randia	aculeata		
49	14-Feb-09	Eugenia	confusa	6	Ardisia	obovata											
49	14-Feb-09	Bursera	simaruba	2	Eugenia	monticola											
49	14-Feb-09	Coccoloba	pubescens	2	Myrcia	citrifolia											
49	14-Feb-09	Byrsonima	spicata	1													
49	14-Feb-09	Croton	bixoides	1													
49	14-Feb-09	Picramnia	pentandra	1													
50	17-Feb-09	Cordia	sulcata	1	Myrcia	deflexa	Piper	dilatatum	Ichnanthus	pallens		Securidaca	diversifolia		Byrsonima	spicata	
50	17-Feb-09	Cornutia	pyramidata	1	Eugenia	monticola	Palicourea	crocea	Lasiacis	divaricata		Passiflora	laurifolia		Cassipourea	guianensis	
50	17-Feb-09	Guapira	fragrans	1	Pimenta	racemosa			Bromelia	karatas		Petrea	volubilis		Cecropia	schreberiana	
50	17-Feb-09	Citharexylum	spinosum	1											Clusia	plukenetii	
50	17-Feb-09	Mangifera	indica	1											Guettarda	scabra	
50	17-Feb-09	Inga	laurina	4											Margaritaria	nobilis	
50	17-Feb-09	Casearia	decandra	1											Miconia	cornifolia	
50	17-Feb-09	Bursera	simaruba	2											Myrcia	citrifolia	
50	17-Feb-09	Tabernaemontana	citrifolia	1											Psychotria	mapourioides	
50	17-Feb-09	Eugenia	monticola	1											Tabebuia	heterophylla	
50	17-Feb-09	Chrysophyllum	argenteum	1													
50	17-Feb-09	Coccoloba	pubescens	1													
50	17-Feb-09	Daphnopsis	americana	4													
51	17-Feb-09	Casearia	decandra	1	Nectandra	patens	Odontonema	nitidum							Cordia	sulcata	
51	17-Feb-09	Mangifera	indica	1	Chrysophyllum	argenteum	Chomelia	fasciculata							Guapira	fragrans	
51	17-Feb-09	Myrcia	deflexa	3											Inga	ingoides	
51	17-Feb-09	Inga	laurina	3											Protium	attenuatum	
51	17-Feb-09	Daphnopsis	americana	1											Psychotria	mapourioides	
51	17-Feb-09														Simarouba	amara	
51	17-Feb-09														Tetrazygia	discolor	
52	21-Feb-09	Tapura	latifolia	1									Smilax	guianensis			
52	21-Feb-09	Sterculia	caribaea	8											Alphanes	minima	
52	21-Feb-09	Gymnanthes	hypoleuca	3											Byrsonima	spicata	
52	21-Feb-09	Guapira	fragrans	1											Vitex	divaricata	
52	21-Feb-09	Licania	tematensis	1													
52	21-Feb-09	Micropholis	crotonioides	1													
52	21-Feb-09	Nectandra	patens	1													
52	21-Feb-09	Pouteria	pallida	1													
52	21-Feb-09	Styrax	guianensis	1													
53	21-Feb-09	Sterculia	caribaea	4													
53	21-Feb-09	Cassipourea	guianensis	2													
53	21-Feb-09	Guatteria	caribaea	1													
53	21-Feb-09	Gymnanthes	hypoleuca	8													
53	21-Feb-09	Ormosia	monosperma	1													
53	21-Feb-09	Casearia	decandra	1													
53	21-Feb-09	Daphnopsis	macrocarpa	1													
53	21-Feb-09	Guarea	macrophylla	1													
53	21-Feb-09	Hirtella	pendula	1													
53	21-Feb-09	Pouteria	pallida	1													
53	21-Feb-09	Protium	attenuatum	1													
53	21-Feb-09	Symplocos	martinicensis	1													
54	24-Feb-09	Guapira	suborbiculata	3	Myrcia	citrifolia	Chiococca	alba	Pitcairnia	angustifolia	Tillandsia	fasciculata	Mimosa	ceratonia		Erihalis	fruticosa
54	24-Feb-09	Clusia	plukenetii	2	Tabebuia	heterophylla			Aechmea	lingulata	Catopsis	floribunda				Eugenia	ligustrina
54	24-Feb-09	Eugenia	confusa	40	Amyris	elemifera			Guzmania	lingulata	Tillandsia	utriculata				Styrax	glaber
54	24-Feb-09	Comocladia	dodonaea	2													
54	24-Feb-09	Bursera	simaruba	3													
54	24-Feb-09	Coccoloba	pubescens	1													
54	24-Feb-09	Forestiera	rhamniifolia	1													
54	24-Feb-09	Guettarda	scabra	1													
54	24-Feb-09	Maytenus	laevigata	1													
54	24-Feb-09	Zanthoxylum	punctatum	1													
55	24-Feb-09	Nectandra	patens	2	Pimenta	racemosa	Odontonema	nitidum	Lasiacis	divaricata						Pithecellobium	jupunba
55	24-Feb-09	Buchenavia	tetraphylla	1	Eugenia	monticola			Scleria	secans					Protium	attenuatum	
55	24-Feb-09	Eugenia	pseudopsidium	1	Erithalis	fruticosa											
55	24-Feb-09	Simarouba	amara	1	Faramea	occidentalis											
55	24-Feb-09	Ormosia	monosperma	3	Guapira	fragrans											
55	24-Feb-09	Cornutia	pyramidata	1	Miconia	cornifolia											
55	24-Feb-09	Casearia	decandra	1													
55	24-Feb-09	Coccoloba	pubescens	1													
55	24-Feb-09	Guapira	fragrans	1													
55	24-Feb-09	Myrcia	citrifolia	1													
55	24-Feb-09	Myrcia	deflexa	2													

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT					
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes	Vines	Terrestrial ferns	Trees only			
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species
56	24-Feb-09	Syagra	amara	7	Eugenia	monticola	Wedelia	calycina								Picramnia	pentandra
56	24-Feb-09	Bursera	simaruba	2	Casearia	decandra	Odontonema	nitidum								Pimenta	racemosa
56	24-Feb-09	Bourreria	succulenta	2	Randia	aculeata										Zanthoxylum	caribaeum
56	24-Feb-09	Byrsonima	spicata	1													
56	24-Feb-09	Calliandra	tergemina	1													
56	24-Feb-09	Eugenia	pseudopsidium	1													
56	24-Feb-09	Ficus	citrifolia	1													
56	24-Feb-09	Hymenaea	coubaril	1													
56	24-Feb-09	Myrcia	citrifolia	1													
56	24-Feb-09	Tabernaemontana	citrifolia	1													
57	28-Feb-09	Myrcia	citrifolia	3	Byrsonima	spicata	Wedelia	calycina	Scleria	melaleuca		Smilax	guianensis				
57	28-Feb-09	Leucaena	leucocephala	1	Erithalis	fruticosa	Croton	guldinngii									
57	28-Feb-09	Haematoxylon	campechianum	1	Guettarda	scabra	Croton	hircinus									
57	28-Feb-09	Coccoloba	pubescens	2													
57	28-Feb-09	Eugenia	confusa	2													
57	28-Feb-09	Tabebuia	pallida	2													
57	28-Feb-09	Ternstroemia	peduncularis	3													
58	28-Feb-09	Tabebuia	pallida	8	Coccoloba	pubescens			Anthurium	cordatum		Smilax	oblongata			Calyptanthes	forsteri
58	28-Feb-09	Syagra	amara	2	Erithalis	fruticosa			Ichnanthus	pallens						Clusia	plukenetii
58	28-Feb-09	Myrcia	citrifolia	3	Guapira	fragrans										Erythroxylum	havanense
58	28-Feb-09	Manilkara	bidentata	2	Eugenia	confusa										Gymninda	latifolia
58	28-Feb-09	Chrysophyllum	argenteum	1	Bursera	simaruba										Inga	laurina
58	28-Feb-09	Calliandra	tergemina	7	Pimenta	racemosa										Maytenus	laevigata
58	28-Feb-09	Guettarda	scabra	1	Myrcia	deflexa										Myrcia	leptoclada
58	28-Feb-09	Eugenia	coffeifolia	1													
58	28-Feb-09	Ixora	ferrea	1													
59	28-Feb-09	Tabebuia	pallida	2	Byrsonima	spicata	Wedelia	calycina	Oxalis	frutescens						Clusia	plukenetii
59	28-Feb-09	Bursera	simaruba	1	Erithalis	fruticosa	Croton	hircinus	Scleria	melaleuca						Daphnopsis	americana
59	28-Feb-09	Schoepfia	schreberi	1	Miconia	cornifolia	Croton	guldinngii	Enicostema	verticilla						Ormosia	monosperma
59	28-Feb-09	Croton	bixoides	4												Pimenta	racemosa
59	28-Feb-09	Calliandra	tergemina	1													
59	28-Feb-09	Cornutia	pyramidata	1													
59	28-Feb-09	Guettarda	scabra	2													
59	28-Feb-09	Myrcia	citrifolia	1													
60	3-Mar-09	Ternstroemia	peduncularis	1	Guapira	suborbiculata	Croton	guldinngii	Scleria	lithosperma	Tillandsia	polystachia	Cassytha	filiformis		Byrsonima	spicata
60	3-Mar-09	Coccoloba	pubescens	4	Calliandra	tergemina	Croton	hircinus	Bulbostylis	antillana						Croton	bixoides
60	3-Mar-09	Tabebuia	heterophylla	1	Myrcia	citrifolia	Wedelia	calycina								Daphnopsis	americana
60	3-Mar-09															Eugenia	confusa
60	03-Mar-09															Miconia	cornifolia
60	03-Mar-09															Pimenta	racemosa
61	3-Mar-09	Guettarda	scabra	1	Guapira	fragrans	Croton	guldinngii	Lasiacis	divaricata			Passiflora	suberosa		Amyris	elemifera
61	3-Mar-09	Bourreria	succulenta	1	Calliandra	tergemina	Chiococca	alba								Bunchosia	polystachia
61	3-Mar-09	Myrcia	citrifolia	1	Eugenia	cordata										Erithalis	fruticosa
61	3-Mar-09	Bursera	simaruba	3												Forestiera	rhamnifolia
61	3-Mar-09	Croton	bixoides	2												Plumeria	alba
61	3-Mar-09	Guapira	suborbiculata	1												Randia	aculeata
61	3-Mar-09	Eugenia	ligustrina	1													
61	3-Mar-09	Haematoxylon	campechianum	1													
62	11-Mar-09	Avicennia	germinans	1	Conocarpus	erectus			Ipomoea	pes-caprae							
62	11-Mar-09	Thespesia	populnea	10					Spartina	patens							
62	11-Mar-09	Hippomane	mancinella	1													
62	11-Mar-09	Laguncularia	racemosa	1													
62	11-Mar-09	Rhizophora	mangle	5													
63	11-Mar-09	Canella	winterana	2	Schoepfia	schreberi	Croton	guldinngii	Scleria	lithosperma						Acacia	nilotica
63	11-Mar-09	Erithalis	fruticosa	2			Croton	hircinus								Capparis	flexuosa
63	11-Mar-09	Lonchocarpus	punctatus	2												Capparis	indica
63	11-Mar-09	Croton	bixoides	1												Cornutia	pyramidata
63	11-Mar-09	Bursera	simaruba	1												Erythroxylum	havanense
63	11-Mar-09	Bourreria	succulenta	1												Guettarda	scabra
63	11-Mar-09	Haematoxylon	campechianum	1												Jacquinia	arborea
63	11-Mar-09	Eugenia	cordata	1												Maclura	tinctoria
63	11-Mar-09	Guapira	fragrans	10												Myrcia	citrifolia
63	11-Mar-09															Pithecellobium	unguis-cati
63	11-Mar-09															Randia	aculeata
63	11-Mar-09															Zanthoxylum	spinifex

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT				
		Trees & other plants ≥25cm DBH			Saplings		Shrubs		Herbs		Epiphytes	Vines		Terrestrial ferns	Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species
64	17-Mar-09	Randia	nitida	1	Eugenia	ligustrina	Piper	dilatatum				Securidaca	diversifolia			
64	17-Mar-09	Faramea	occidentalis	1	Margaritopsis	microdon										
64	17-Mar-09	Annona	muricata	1												
64	17-Mar-09	Casearia	decandra	2												
64	17-Mar-09	Citharexylum	spinosum	2												
64	17-Mar-09	Coccoloba	swartzii	1												
64	17-Mar-09	Coccoloba	venosa	2												
64	17-Mar-09	Cordia	collococca	1												
64	17-Mar-09	Cupania	americana	4												
64	17-Mar-09	Eugenia	trinitatis	1												
64	17-Mar-09	Guapira	fragrans	2												
64	17-Mar-09	Guazuma	ulmifolia	2												
64	17-Mar-09	Haematoxylon	campechianum,	1												
64	17-Mar-09	Inga	ingoides	1												
64	17-Mar-09	Lonchocarpus	heptaphyllus	7												
64	17-Mar-09	Myrcia	deflexa	2												
64	17-Mar-09	Nectandra	patens	1												
64	17-Mar-09	Tabebuia	heterophylla	1												
64	17-Mar-09	Tabernaemontana	citrifolia	1												
65	17-Mar-09	Erythroxylum	havanense	6	Morisonia	americana	Argythamnia	polygama				Macfadyena	unguis-cati			
65	17-Mar-09	Margaritopsis	microdon	2								Paullinia	cururu			
65	17-Mar-09	Bourreria	succulenta	1												
65	17-Mar-09	Bursera	simaruba	1												
65	17-Mar-09	Capparis	hastata	2												
65	17-Mar-09	Casearia	decandra	5												
65	17-Mar-09	Coccoloba	venosa	1												
65	17-Mar-09	Eugenia	ligustrina	1												
65	17-Mar-09	Eugenia	monticola	1												
65	17-Mar-09	Guapira	fragrans	1												
65	17-Mar-09	Lonchocarpus	punctatus	7												
65	17-Mar-09	Randia	nitida	1												
65	17-Mar-09	Tabebuia	heterophylla	1												
66	17-Mar-09	Guapira	fragrans	5	Eugenia	ligustrina	Chiococca	alba				Heteropterys	purpurea			
66	17-Mar-09	Bourreria	succulenta	1	Canella	winterana						Macfadyena	unguis-cati			
66	17-Mar-09	Bursera	simaruba	1												
66	17-Mar-09	Capparis	hastata	2												
66	17-Mar-09	Casearia	decandra	1												
66	17-Mar-09	Coccoloba	swartzii	2												
66	17-Mar-09	Cornuta	pyramidata	1												
66	17-Mar-09	Erythroxylum	havanense	1												
66	17-Mar-09	Haematoxylon	campechianum	3												
66	17-Mar-09	Lonchocarpus	punctatus	1												
67	17-Mar-09	Eugenia	monticola	1	Margaritopsis	microdon						Paullinia	cururu			
67	17-Mar-09	Chionanthus	compactus	4	Cupania	americana										
67	17-Mar-09	Casearia	decandra	8	Eugenia	ligustrina										
67	17-Mar-09	Lonchocarpus	punctatus	3	Eugenia	pseudopsidium										
67	17-Mar-09	Coccoloba	swartzii	6	Eugenia	trinitatis										
67	17-Mar-09	Pimenta	racemosa	4	Faramea	occidentalis										
67	17-Mar-09	Chrysophyllum	argenteum	1												
67	17-Mar-09	Cordia	sulcata	1												
67	17-Mar-09	Inga	laurina	1												
67	17-Mar-09	Myrcia	citrifolia	1												
67	17-Mar-09	Myrcia	deflexa	2												
67	17-Mar-09	Nectandra	patens	1												
68	21-Mar-09	Quararibaea	turbinata	1			Piper	dilatatum	Anthurium	hookeri		Philodendron	scandens		Castilla	elastica
68	21-Mar-09	Vitex	divaricata	2								Pilea	caribaea		Daphnopsis	americana
68	21-Mar-09	Cecropia	schreberiana	1								Macfadyena	unguis-cati		Ficus	citrifolia
68	21-Mar-09	Pouteria	multiflora	5								Plukenetia	volubilis		Pithecellobium	jupunba
68	21-Mar-09	Chrysophyllum	argenteum	1												
68	21-Mar-09	Cinnamomum	elongatum	10												
68	21-Mar-09	Eugenia	bilifera	1												
68	21-Mar-09	Inga	ingoides	4												
68	21-Mar-09	Persea	americana	3												
68	21-Mar-09	Tabernaemontana	citrifolia	3												
69	21-Mar-09	Guapira	fragrans	5			Odontonema	nitidum	Peperomia	urocarpa		Cissus	verticillata			
69	21-Mar-09	Protium	attenuatum	2			Piper	dilatatum	Anthurium	cordatum						
69	21-Mar-09	Tabernaemontana	citrifolia	3					Anthurium	hookeri						
69	21-Mar-09	Aiphanes	minima	1												
69	21-Mar-09	Casearia	decandra	1												
69	21-Mar-09	Lonchocarpus	heptaphyllus	1												
69	21-Mar-09	Nectandra	patens	2												
69	21-Mar-09	Picrasma	excelsa	1												
69	21-Mar-09	Sapium	caribaum	3												

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT				
		Trees & other plants ≥5cm DBH			Sapiings species		Shrubs species		Herbs species		Epiphytes species	Vines species		Terrestrial ferns species	Trees only	
		Genus	Species	No.	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Genus	Species
70	24-Mar-09	Nectandra	patens	5	Eugenia	coffeifolia	Chiococca	alba	Scleria	scindens	Trichocentrum	cebolleta	Mikania	latifolia		
70	24-Mar-09	Chrysophyllum	argenteum	2	Aiphanes	minima	Piper	dilatatum	Geophila	repens	Epidendrum	ciliare	Passiflora	suberosa		
70	24-Mar-09	Eugenia	pseudopsidium	3	Inga	laurina	Odontonema	nitidum	Pharus	lappulaceus			Rourea	surinamensis		
70	24-Mar-09	Micropholis	crotonioides	2	Palicourea	crocea										
70	24-Mar-09	Coccoloba	swartzii	2	Randia	aculeata										
70	24-Mar-09	Diospyros	revoluta	1	Simarouba	amara										
70	24-Mar-09	Bourreria	succulenta	1												
70	24-Mar-09	Carapa	guianensis	3												
70	24-Mar-09	Guapira	fragrans	1												
70	24-Mar-09	Gymnanthes	hypoleuca	1												
70	24-Mar-09	Myrcia	fallax	2												
71	24-Mar-09	Carapa	guianensis	10	Eugenia	coffeifolia	Chiococca	alba					Petrea	volubilis		Cordia
71	24-Mar-09	Guarea	macrophylla	1	Guapira	fragrans	Odontonema	nitidum					Smilax	oblongata		Ficus
71	24-Mar-09	Guapira	fragrans	2	Eugenia	pseudopsidium										Licania
71	24-Mar-09	Chrysophyllum	argenteum	1	Plinia	pinnata										Margaritaria
71	24-Mar-09	Gymnanthes	hypoleuca	2	Palicourea	crocea										Tabebuia
71	24-Mar-09	Nectandra	patens	4	Myrcia	citrifolia										
71	24-Mar-09	Buchenavia	tetraphylla	1	Myrcia	deflexa										
71	24-Mar-09	Bursera	simarouba	1												
71	24-Mar-09	Casearia	simarouba	1												
71	24-Mar-09	Coccoloba	swartzii	1												
71	24-Mar-09	Cordia	sulcata	2												
71	24-Mar-09	Diospyros	revoluta	1												
71	24-Mar-09	Faramea	occidentalis	1												
71	24-Mar-09	Micropholis	crotonioides	1												
71	24-Mar-09	unknown		2												
72	24-Mar-09	Licania	tematensis	4	Palicourea	crocea							Petrea	volubilis		Aniba
72	24-Mar-09	Nectandra	patens	4	Aiphanes	minima							Smilax	oblongata		Byrsonima
72	24-Mar-09	Pouteria	pallida	8	Croton	crotonioides							Philodendron	scandens		
72	24-Mar-09	Gymnanthes	hypoleuca	2	Hirtella	pendula										
72	24-Mar-09	Faramea	occidentalis	1	Pithecellobium	jupunba										
72	24-Mar-09	Casearia	decandra	2												
72	24-Mar-09	Chrysophyllum	argenteum	1												
72	24-Mar-09	Coccoloba	swartzii	2												
72	24-Mar-09	Guapira	fragrans	1												
72	24-Mar-09	Ormosia	monosperma	1												
72	24-Mar-09	Protium	attenuatum	2												
72	24-Mar-09	Sapium	caribaeum	1												
72	24-Mar-09	Simarouba	amara	1												
72	24-Mar-09	Sterculia	caribaea	1												
73	24-Mar-09	Simarouba	amara	1	Plinia	pinnata	Odontonema	nitidum	Ichnanthus	pallens			Petrea	volubilis		Guazuma
73	24-Mar-09	Coccoloba	swartzii	3	Chrysophyllum	argenteum							Rourea	surinamensis		Licania
73	24-Mar-09	Pouteria	pallida	1	Aiphanes	minima										
73	24-Mar-09	Gymnanthes	hypoleuca	1	Faramea	occidentalis										
73	24-Mar-09	Nectandra	patens	2	Palicourea	crocea										
73	24-Mar-09	Diospyros	revoluta	1												
73	24-Mar-09	Faramea	occidentalis	1												
73	24-Mar-09	Guettarda	scabra	1												
73	24-Mar-09	Inga	laurina	1												
73	24-Mar-09	Micropholis	crotonioides	1												
73	24-Mar-09	Myrcia	deflexa	1												
73	24-Mar-09	Ocotea	eggersiana	1												
73	24-Mar-09	Rudgea	citrifolia	1												
73	24-Mar-09	Sterculia	caribaea	1												
74	27-Mar-09	Tabebuia	heterophylla	2	Eugenia	cordata	Wedelia	calycina	Bothriochloa	pertusa						Elaeodendron
74	27-Mar-09	Haematoxylon	campechianum	4	Bourreria	succulenta			Abildgaardia	ovata						xylocarpa
74	27-Mar-09	Croton	bixoides	2	Randia	aculeata										
74	27-Mar-09	Erithalis	fruticosa	3												
74	27-Mar-09	Guettarda	scabra	1												
74	27-Mar-09	Leucaena	leucoccephala	1												
74	27-Mar-09	Schoepfia	schreberi	2												
75	27-Mar-09	Pithecellobium	unguis-cat	2			Croton	flavens	Bothriochloa	pertusa						
75	27-Mar-09	Capparis	flexuosa	1			Lantana	arubensis	Desmodium	incanum						
75	27-Mar-09	Capparis	indica	1												
75	27-Mar-09	Coccoloba	uvifera	5												
75	27-Mar-09	Erithalis	fruticosa	1												
75	27-Mar-09	Eugenia	cordata	1												
75	27-Mar-09	Jacquinia	arborea	1												
75	27-Mar-09	Pilosocereus	royenii	2												
75	27-Mar-09	Randia	aculeata	3												
75	27-Mar-09	Tabebuia	pallida	4												

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
76	27-Mar-09	Laguncularia	racemosa	27													Avicennia	germinans
76	27-Mar-09																Conocarpus	erectus
76	27-Mar-09																Hippomane	mancinella
76	27-Mar-09																Rhizophora	mangle
77	28-Mar-09	Simarouba	amara	2	Prestoea	acuminata			Ponthieva	petiolata			Asplundia	rigida	Thelypteris	clypeoluta	Cybianthus	antillanus
77	28-Mar-09	Sloanea	caribaea	2	Sterculia	caribaea			Anthurium	guldinngii			Salpichlaena	votubilis	Danaea	antillensis	Geonoma	interrupta
77	28-Mar-09	Endlicheria	sericea	2	Swartzia	caribaea			Erythodes	hirtella							Ternstroemia	peduncularis
77	28-Mar-09	Alsophila	muricata	8		ternatensis												
77	28-Mar-09	Ixora	ferrea	1	Miconia	furfuracea												
77	28-Mar-09	Aiphanes	minima	1														
77	28-Mar-09	Aniba	ramageana	1														
77	28-Mar-09	Byrsonima	trinitensis	4														
77	28-Mar-09	Chrysobalanus	cuspidatus	3														
77	28-Mar-09	Cordia	reticulata	1														
77	28-Mar-09	Micropholis	guyanensis	3														
77	28-Mar-09	Pouteria	pallida	3														
77	28-Mar-09	Tovomita	plumieri	1														
78	28-Mar-09	Tovomita	plumieri	2	Psychotria	berteriana							Marcgravia	umbellata	Thelypteris	clypeoluta	Aniba	bracteata
78	28-Mar-09	Alsophila	muricata	1									Asplundia	rigida			Cybianthus	rostratus
78	28-Mar-09	Geonoma	interrupta	3									Paullinia	verspertilio			Dacryodes	excelsa
78	28-Mar-09	Prestoea	acuminata	8									Salpichlaena	votubilis			Ilex	sideroxyloides
78	28-Mar-09	Chrysobalanus	cuspidatus	4													Protium	attenuatum
78	28-Mar-09	Sterculia	caribaea	3													Rudgea	citrifolia
78	28-Mar-09	Micropholis	guyanensis	4													Talauma	dodecapetala
78	28-Mar-09	Endlicheria	sericea	3														
78	28-Mar-09	Licania	ternatensis	1														
78	28-Mar-09	Swartzia	caribaea	2														
78	28-Mar-09	Tapura	latifolia	2														
79	28-Mar-09	Tovomita	plumieri	10					Scleria	secans			Marcgravia	umbellata				
79	28-Mar-09	Alsophila	muricata	8														
79	28-Mar-09	Chrysobalanus	cuspidatus	2														
79	28-Mar-09	Clusia	major	1														
79	28-Mar-09	Heliconia	bihai	4														
79	28-Mar-09	Marlia	racemosa	1														
79	28-Mar-09	Miconia	luciana	1														
79	28-Mar-09	Miconia	mirabilis	1														
79	28-Mar-09	Pouteria	pallida	1														
79	28-Mar-09	Prestoea	acuminata	1														
79	28-Mar-09	Psychotria	berteriana	1														
79	28-Mar-09	Swartzia	caribaea	1														
80	2-Apr-09	Prestoea	acuminata	4	Myrcia	antillana	Psychotria	muscosa	Ichnanthus	pallens			Salpichlaena	votubilis	Selaginella	flabellata	Chrysobalanus	cuspidatus
80	2-Apr-09	Tovomita	plumieri	1	Guarea	macrophylla			Scleria	latifolia			Asplundia	rigida			Erythroxylum	squamatum
80	2-Apr-09	Protium	attenuatum	1	Myrcia	fallax							Marcgravia	umbellata			Geonoma	interrupta
80	2-Apr-09	Licania	ternatensis	1	Sterculia	caribaea											Hirtella	pendula
80	2-Apr-09	Alsophila	muricata	2	Heliconia	bihai											Ixora	ferrea
80	2-Apr-09	Clusia	major	1	Miconia	furfuracea											Miconia	mirabilis
80	02-Apr-09	Dacryodes	excelsa	1	Sloanea	caribaea											Plinia	pinnata
80	2-Apr-09	Aniba	bracteata	1													Sloanea	caribaea
80	2-Apr-09	Byrsonima	trinitensis	1														
80	2-Apr-09	Nectandra	membranacea	3														
81	2-Apr-09	Aniba	bracteata	1	Miconia	furfuracea							Asplundia	rigida	Selaginella	flabellata	Talauma	dodecapetala
81	2-Apr-09	Prestoea	acuminata	6									Marcgravia	umbellata				
81	2-Apr-09	Simarouba	amara	2									Salpichlaena	votubilis				
81	2-Apr-09	Chrysobalanus	cuspidatus	1														
81	2-Apr-09	Guettarda	crispiflora	1														
81	2-Apr-09	Myrcia	fallax	1														
81	2-Apr-09	Nectandra	membranacea	4														
81	2-Apr-09	Sterculia	caribaea	3														
82	2-Apr-09	Micropholis	guyanensis	3									Schlegelia	axillaris			Ficus	americana
82	2-Apr-09	Sterculia	caribaea	1													Ilex	sideroxyloides
82	2-Apr-09	Symplocos	martinicensis	2													Marlierea	guldiniana
82	2-Apr-09	Prestoea	acuminata	6													Myrcia	fallax
82	2-Apr-09	Clusia	major	4													Myrcia	ramageana
82	2-Apr-09	Myrcia	platyclada	3													Oreopanax	capitatus
82	2-Apr-09	Byrsonima	trinitensis	1														
82	2-Apr-09	Charianthus	alpinus	4														
82	2-Apr-09	Chrysobalanus	cuspidatus	2														
82	2-Apr-09	Erythroxylum	squamatum	4														
82	2-Apr-09	Rondeletia	parviflora	2														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥25cm DBH			Saplings		Shrubs		Herbs		Epiphytes	Vines		Terrestrial ferns		Trees only		
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species
83	2-Apr-09	Cybianthus	rostratus	1	Geonema	interrupta							Alloplectus	cristatus				
83	2-Apr-09	Aniba	bracteata	1	Miconia	luciana	Odontonema	nitidum	Anthurium	gouldingii			Asplundia	rigida	Selaginella	flabellata		
83	2-Apr-09	Micropholis	guyanensis	2	Protium	attenuatum							Marcgravia	umbellata				
83	2-Apr-09	Prestoea	acuminata	1	Sloanea	caribaea							Schradera	exotica				
83	2-Apr-09	Byrsonima	trinitensis	3														
83	2-Apr-09	Daphnopsis	macrocarpa	2														
83	2-Apr-09	Endlicheria	sericea	1														
83	2-Apr-09	Heliconia	bihai	1														
83	2-Apr-09	Licania	ternatensis	1														
83	2-Apr-09	Myrcia	fallax	1														
83	2-Apr-09	Ormosia	monosperma	3														
83	2-Apr-09	Psychotria	mapourioides	1														
83	2-Apr-09	Rondeletia	parviflora	2														
83	2-Apr-09	Rudgea	citrifolia	1														
83	2-Apr-09	Tovomita	plumeria	1														
84	2-Apr-09	Ficus	insipida	1			Odontonema	nitidum	Anthurium	gouldingii								
84	2-Apr-09	Heliconia	bihai	1			Boehmeria	ramiflora							Olfersia	cervina	Geonema	interrupta
84	2-Apr-09	Micropholis	guyanensis	1													Myrcia	fallax
84	2-Apr-09	Protium	attenuatum	1													Ormosia	monosperma
84	2-Apr-09	Aniba	bracteata	1													Sterculia	caribaea
84	2-Apr-09	Linga	ingoides	2														
84	2-Apr-09	Miconia	luciana	1														
84	2-Apr-09	Miconia	mirabilis	1														
84	2-Apr-09	Pithecellobium	jupunba	1														
84	2-Apr-09	Sloanea	caribaea	1														
84	2-Apr-09	Sterculia	caribaea	1														
84	2-Apr-09	Swartzia	caribaea	1														
84	2-Apr-09	Trichilia	pallida	1														
85	2-Apr-09	Alphanes	minima	1	Geonema	interrupta	Euphorbia	dussii	Anthurium	gouldingii								
85	2-Apr-09	Tovomita	plumeri	2					Scleria	latifolia			Smilax	oblongata	Selaginella	flabellata	Dacyrodes	excelsa
85	2-Apr-09	Alsophila	muricata	3					Anthurium	palmatum							Sloanea	caribaea
85	2-Apr-09	Daphnopsis	macrocarpa	1					Erythodes	hirtella								
85	2-Apr-09	Endlicheria	sericea	1														
85	2-Apr-09	Erythroxylum	squamatum	2														
85	2-Apr-09	Guarea	macrophylla	1														
85	2-Apr-09	Ixora	ferrea	1														
85	2-Apr-09	Licania	ternatensis	7														
85	2-Apr-09	Myrcia	fallax	1														
85	2-Apr-09	Ormosia	monosperma	1														
85	2-Apr-09	Plinia	pinnata	1														
85	2-Apr-09	Prestoea	acuminata	3														
85	2-Apr-09	Protium	attenuatum	6														
85	2-Apr-09	Psychotria	mapourioides	8														
85	2-Apr-09	Sterculia	caribaea	4														
86	2-Apr-09	Sterculia	caribaea	8	Cybianthus	antillanus			Erythodes	hirtella			Heteropterys	playptera			Dacyrodes	excelsa
86	2-Apr-09	Prestoea	acuminata	1	Micropholis	guyanensis											Guatteria	caribaea
86	2-Apr-09	Ixora	ferrea	4	Plinia	pinnata											Pouteria	pallida
86	2-Apr-09	Byrsonima	trinitensis	1	Stylogyne	lateriflora											Sloanea	caribaea
86	2-Apr-09	Protium	attenuatum	1	Palicourea	crocea							Coccoloba	adscendens	Selaginella	flabellata		
86	2-Apr-09	Alphanes	minima	1	Swartzia	caribaea												
86	2-Apr-09	Aniba	bracteata	1														
86	2-Apr-09	Calypttranthes	forsteri	1														
86	2-Apr-09	Licania	ternatensis	2														
86	2-Apr-09	Rudgea	citrifolia	1														
86	2-Apr-09	Tapura	latifolia	1														
87	4-Apr-09	Byrsonima	trinitensis	1	Heliconia	bihai			Anthurium	gouldingii					Olfersia	cervina		
87	4-Apr-09	Pithecellobium	jupunba	3	Miconia	furfuracea			Scleria	latifolia			Asplundia	rigida	Cnemidaria	grandifolia		
87	04-Apr-09	Tovomita	plumieri	3									Marcgravia	lineolata	Selaginella	flabellata		
87	4-Apr-09	Micropholis	guyanensis	5											Thelypteris	clypeolulata		
87	4-Apr-09	Alphanes	minima	2														
87	4-Apr-09	Alsophila	muricata	5														
87	4-Apr-09	Aniba	bracteata	2														
87	4-Apr-09	Chrysobalanus	cuspidatus	1														
87	4-Apr-09	Clusia	major	1														
87	4-Apr-09	Cybianthus	rostratus	1														
87	4-Apr-09	Erythroxylum	squamatum	1														
87	4-Apr-09	Ocotea	imrayana	1														
87	4-Apr-09	Prestoea	acuminata	1														
87	4-Apr-09	Protium	attenuatum	1														
87	4-Apr-09	Simarouba	amara	1														
87	4-Apr-09	Siparuna	sanctae-luciae	1														
87	4-Apr-09	Sloanea	caribaea	3														
87	4-Apr-09	Sterculia	caribaea	1														
87	4-Apr-09	Symplocos	martinicensis	3														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
88	4-Apr-09	Rondeletia	parviflora	16								Asplundia	rigida	Selaginella	flabellata			
88	4-Apr-09	Aiphanes	minima	1	Oreopanax	capitatus			Anthurium	guingingii		Marcgravia	lineolata	Cnemidaria	grandifolia			
88	4-Apr-09	Byrsonima	trinitensis	2														
88	4-Apr-09	Charianthus	alpinus	6														
88	4-Apr-09	Chrysobalanus	cuspidatus	3														
88	4-Apr-09	Clusia	major	1														
88	4-Apr-09	Drypetes	glauca	1														
88	4-Apr-09	Hedyosum	arborescens	1														
88	4-Apr-09	Ilex	sideroxyloides	1														
88	4-Apr-09	Micropholis	guyanensis	2														
88	4-Apr-09	Myrcia	antillana	1														
88	4-Apr-09	Pithecellobium	jupunba	2														
88	4-Apr-09	Podocarpus	coriaceus	3														
88	4-Apr-09	Prestoea	acuminata	9														
88	4-Apr-09	Tovomita	plumieri	1														
89	4-Apr-09	Cordia	reticulata	1	Ocotea	eggersiana			Anthurium	guingingii		Asplundia	rigida	Selaginella	flabellata			
89	4-Apr-09	Symplocos	marticensis	1	Clusia	major			Anthurium	hookeri		Marcgravia	umbellata	Thelypteris	clypeolata			
89	4-Apr-09	Prestoea	acuminata	7	Sterculia	caribaea	Psychotria	muscosa	Erythrodos	hirtella		Smilax	oblongata	Olfersia	cervina			
89	4-Apr-09	Rondeletia	parviflora	1	Oreopanax	capitatus			Begonia	vincentiana								
89	4-Apr-09	Myrcia	antillana	1					Ichnanthus	pallens								
89	4-Apr-09	Aiphanes	minima	1														
89	4-Apr-09	Byrsonima	trinitensis	1														
89	4-Apr-09	Chrysobalanus	cuspidatus	1														
89	4-Apr-09	Ilex	sideroxyloides	1														
89	4-Apr-09	Micropholis	crotonioides	1														
89	4-Apr-09	Nectandra	membranacea	1														
89	4-Apr-09	Nectandra	membranacea	1														
89	4-Apr-09	Pithecellobium	jupunba	1														
89	4-Apr-09	Psychotria	mapourioides	4														
89	4-Apr-09	Tovomita	plumieri	1														
90	4-Apr-09	Ormosia	monosperma	1										Olfersia	cervina	Dacryodes	excelsa	
90	4-Apr-09	Protium	attenuatum	1					Anthurium	guingingii		Asplundia	rigida	Thelypteris	clypeolata	Eugenia	coffeifolia	
90	4-Apr-09	Micropholis	guyanensis	1												Exostemma	santa-luciae	
90	4-Apr-09	Pithecellobium	jupunba	1												Miconia	luciana	
90	4-Apr-09	Alsophila	muricata	1														
90	4-Apr-09	Amiba	bracteata	1														
90	4-Apr-09	Clusia	major	1														
90	4-Apr-09	Cyrtosperma	speciosum	4														
90	4-Apr-09	Heliconia	bihai	4														
90	4-Apr-09	Sloanea	caribaea	1														
90	4-Apr-09	Sterculia	caribaea	1														
91	4-Apr-09	Prestoea	acuminata	8					Pilea	semidentata		Marcgravia	lineolata	Selaginella	flabellata	Actinostemon	caribaeus	
91	4-Apr-09	Sloanea	caribaea	1					Peperomia	obtusifolia		Hillia	parasitica			Endlicheria	sericea	
91	4-Apr-09	Alsophila	muricata	2					Anthurium	guingingii		Asplundia	rigida			Ficus	americana	
91	4-Apr-09	Byrsonima	trinitensis	2												Inga	ingoides	
91	4-Apr-09	Erythroxylum	squamatum	4												Myrcia	fallax	
91	4-Apr-09	Chrysobalanus	cuspidatus	1												Myrcia	platyclada	
91	4-Apr-09	Micropholis	guyanensis	2												Ocotea	leucoxydon	
91	4-Apr-09	Charianthus	alpinus	1														
91	4-Apr-09	Clusia	major	1														
91	4-Apr-09	Rondeletia	parviflora	2														
91	4-Apr-09	Rudgea	citrifolia	1														
91	4-Apr-09	Tovomita	plumieri	1														
92	7-Apr-09	Ficus	citrifolia	1	Eugenia	ligustrina	Chamaecrista	glandulosa				Ipomoea	tiliacea			Clusia	plukenetii	
92	7-Apr-09	Calliandra	tergeminata	2	Coccoloba	swartzii	Croton	hircinus				Abrus	preparatorius			Cordia	marticensis	
92	07-Apr-09	Lonchocarpus	punctatus	4	Croton	bixoides						Tournefortia	volubilis			Elaeodendron	xylocarpa	
92	7-Apr-09	Citharexylum	spinosum	1												Eugenia	cordata	
92	7-Apr-09	Haematoxylum	campechianum	13												Miconia	cornifolia	
92	7-Apr-09	Maclura	tinctoria	1												Myrcia	citrifolia	
92	7-Apr-09	Coccoloba	pubescens	1														
92	7-Apr-09	Guapira	fragrans	2														
92	7-Apr-09	Tabebuia	heterophylla	5														
93	7-Apr-09	Bursera	simaruba	5	Erythroxylum	havanense			Tradescantia	spathacea		Trichocentrum	cebolleta					
93	7-Apr-09	Guapira	fragrans	1														
93	7-Apr-09	Haematoxylum	campechianum	5														
93	7-Apr-09	Lonchocarpus	punctatus	3														
93	7-Apr-09	Schoepfia	schreberi	3														
93	7-Apr-09	Tabebuia	heterophylla	5														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes	Vines		Terrestrial ferns	Trees only			
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
94	08-Apr-09	Eugenia	ligustrina	1	Eugenia	pseudopsidium							Tournefortia	votubilis			Senna	siamea
94	8-Apr-09	Daphnopsis	americana	2	Bourreria	succulenta												
94	8-Apr-09	Myrcia	citrifolia	1	Capparis	hastata												
94	8-Apr-09	Casearia	decandra	1	Chionanthus	compactus												
94	8-Apr-09	Calliandra	tergemia	8	Gyminda	latifolia												
94	8-Apr-09	Coccoloba	swartzii	2	Myrcia	deflexa												
94	8-Apr-09	Eugenia	monticola	1														
94	8-Apr-09	Forestiera	rhamnifolia	1														
94	8-Apr-09	Guapira	fragrans	1														
94	8-Apr-09	Pimenta	racemosa	1														
94	8-Apr-09	Ptychosperma	macarthurii	1														
94	8-Apr-09	Swietenia	macrophylla	16														
94	8-Apr-09	Tabebuia	heterophylla	11														
95	8-Apr-09	Capparis	hastata	7	Capparis	baducca							Macfadyena	unguis-cati				
95	8-Apr-09	Lonchocarpus	punctatus	4	Picramna	pentandra	Odontonema	nitidum					Smilax	oblongata				
95	8-Apr-09	Guapira	fragrans	9	Guazuma	ulmifolia												
95	8-Apr-09	Bourreria	succulenta	1														
95	8-Apr-09	Bursera	simaruba	1														
95	8-Apr-09	Casearia	decandra	1														
95	8-Apr-09	Chionanthus	compactus	8														
95	8-Apr-09	Chrysophyllum	argenteum	1														
95	8-Apr-09	Erythroxylum	havanense	1														
95	8-Apr-09	Eugenia	ligustrina	8														
95	8-Apr-09	Eugenia	monticola	1														
95	8-Apr-09	Eugenia	tapacumensis	1														
95	8-Apr-09	Myrcia	citrifolia	6														
95	8-Apr-09	Randia	aculeata	1														
95	8-Apr-09	Schoepfia	schreberi	2														
95	8-Apr-09	Tabebuia	heterophylla	1														
96	8-Apr-09	Eugenia	pseudopsidium	7	Calliandra	tergemia	Odontonema	nitidum					Petrea	volubilis				
96	8-Apr-09	Guettarda	scabra	1	Chrysophyllum	argenteum	Chiococca	alba										
96	8-Apr-09	Myrciaria	floribunda	1	Picramna	pentandra												
96	8-Apr-09	Capparis	hastata	3														
96	8-Apr-09	Casearia	decandra	1														
96	8-Apr-09	Coccoloba	swartzii	4														
96	8-Apr-09	Erythroxylum	havanense	1														
96	8-Apr-09	Eugenia	ligustrina	2														
96	8-Apr-09	Eugenia	monticola	1														
96	8-Apr-09	Guapira	fragrans	1														
96	8-Apr-09	Hymenaea	coubaril	2														
96	8-Apr-09	Myrcia	citrifolia	4														
96	8-Apr-09	Pimenta	racemosa	3														
96	8-Apr-09	Randia	aculeata	1														
96	8-Apr-09	Schoepfia	schreberi	3														
97	13-Apr-09	Tabebuia	heterophylla	3	Coccoloba	swartzii	Chiococca	alba	Ichnanthus	pallens							Coccoloba	pubescens
97	13-Apr-09	Simarouba	amara	3	Inga	laurina	Palicourea	crocea	Opilismus	hirtellus							Roystonea	oleracea
97	13-Apr-09	Myrcia	deflexa	1	Inga	ingoides												
97	13-Apr-09	Clusia	plukenetii	1	Trema	micrantha												
97	13-Apr-09	Cordia	sulcata	1														
97	13-Apr-09	Lonchocarpus	heptaphyllus	1														
98	13-Apr-09	Calliandra	tergemia	1	Eugenia	ligustrina	Bernardia	corensis	Enicostema	verticillata	Aechmea	lingulata	Petrea	volubilis			Inga	laurina
98	13-Apr-09	Eugenia	confusa	6	Capparis	hastata	Palicourea	crocea	Guzmania	lingulata	Guzmania	lingulata					Manilkara	bidentata
98	13-Apr-09	Bourreria	succulenta	3	Guapira	fragrans	Chamaecrista	glandulosa	Scleria	melaleuca							Miconia	cornifolia
98	13-Apr-09	Tabebuia	heterophylla	3			Chiococca	alba	Aechmea	lingulata								
98	13-Apr-09	Coccoloba	swartzii	1					Scleria	lithosperma								
98	13-Apr-09	Coccoloba	pubescens	5														
98	13-Apr-09	Croton	bixoides	3														
98	13-Apr-09	Eugenia	pseudopsidium	1														
98	13-Apr-09	Guapira	suborbiculata	1														
98	13-Apr-09	Guettarda	scabra	1														
98	13-Apr-09	Morisonia	americana	1														
98	13-Apr-09	Myrcia	citrifolia	4														
98	13-Apr-09	Zanthoxylum	punctatum	1														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT					
		Trees & other plants ≥5cm DBH			Saplings		Shrubs	Herbs	Epiphytes	Vines		Terrestrial ferns	Trees only				
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	Other Tree Species	
99	15-Apr-09	Myrcia	fallax	5	Pouteria	multiflora						Coccoloba	adscendens	Cnemidaria	grandifolia	Cassipourea	guyanensis
99	15-Apr-09	Myrcia	deflexa	2	Ocotea	leucoxylo										Licania	ternatensis
99	15-Apr-09	Aiphanes	minima	5	Erythroxylum	squamatum										Miconia	mirabilis
99	15-Apr-09	Ixora	ferrea	1	Eugenia	coffeifolia										Pithecellobium	jupunba
99	15-Apr-09	Ocotea	eggersiana	2												Sapium	caribaeum
99	15-Apr-09	Simarouba	amara	2												Swartzia	caribaea
99	15-Apr-09	Guapira	fragrans	7												Symplocos	martinicensis
99	15-Apr-09	Alsophila	muricata	1													
99	15-Apr-09	Byrsonima	spicata	1													
99	15-Apr-09	Daphnopsis	macrocarpa	1													
99	15-Apr-09	Ficus	trigonata	1													
99	15-Apr-09	Inga	laurina	1													
99	15-Apr-09	Lonchocarpus	heptaphyllus	4													
99	15-Apr-09	Miconia	cornifolia	1													
99	15-Apr-09	Ocotea	leucoxylo	1													
99	15-Apr-09	Pouteria	pallida	3													
99	15-Apr-09	Protium	attenuatum	3													
99	15-Apr-09	Sterculia	caribaea	1													
99	15-Apr-09	Tapura	latifolia	1													
100	15-Apr-09	Nectandra	patens	1	Tapura	latifolia						Marcgravia	umbellata	Adiantum	species	Guatteria	caribaea
100	15-Apr-09	Myrcia	deflexa	2	Sterculia	caribaea										Talauma	dodecapetala
100	15-Apr-09	Hirtella	pendula	1	Eugenia	coffeifolia											
100	15-Apr-09	Ocotea	eggersiana	2	Plinia	pinnata											
100	15-Apr-09	Aniba	bracteata	1													
100	15-Apr-09	Casearia	decandra	1													
100	15-Apr-09	Chrysoclamys	caribaea	1													
100	15-Apr-09	Cordia	reticulata	1													
100	15-Apr-09	Dacryodes	excelsa	1													
100	15-Apr-09	Guapira	fragrans	2													
100	15-Apr-09	Licania	ternatensis	3													
100	15-Apr-09	Pouteria	pallida	2													
100	15-Apr-09	prestoaea	acuminata	4													
100	15-Apr-09	Protium	attenuatum	5													
100	15-Apr-09	Sterculia	caribaea	4													
100	15-Apr-09	Swartzia	caribaea	1													
100	15-Apr-09	Swartzia	caribaea	1													
101	15-Apr-09	Daphnopsis	macrocarpa	5	Chrysobalanus	cuspidatus		Anthurium	gulingii			Aristolochia	trilobata				
101	15-Apr-09	Dacryodes	excelsa	1	Heliconia	bihai						Gonolobus	martinicensis				
101	15-Apr-09	Rudgea	citrifolia	1								Marcgravia	umbellata				
101	15-Apr-09	Nectandra	patens	2								Passiflora	andersonii				
101	15-Apr-09	Aiphanes	minima	3								Schradera	exotica				
101	15-Apr-09	Prestoaea	acuminata	8								Smilax	oblongata				
101	15-Apr-09	Casearia	decandra	1													
101	15-Apr-09	Chrysobalanus	cuspidatus	1													
101	15-Apr-09	Cyathea	species	1													
101	15-Apr-09	Drypetes	glauca	2													
101	15-Apr-09	Erythroxylum	squamatum	1													
101	15-Apr-09	Eugenia	greggii	1													
101	15-Apr-09	Geonema	interrupta	1													
101	15-Apr-09	Ixora	ferrea	1													
101	15-Apr-09	Myrcia	antillana	6													
101	15-Apr-09	Plinia	pinnata	2													
101	15-Apr-09	Protium	attenuatum	2													
101	15-Apr-09	Swartzia	caribaea	1													
102	15-Apr-09	Prestoaea	acuminata	11	Persea	urbaniana		Anthurium	gulingii			Asplundia	rigida	Selaginella	fiabellata	Chrysoclamys	caribaea
102	15-Apr-09	Chrysobalanus	cuspidatus	5	Miconia	furfuracea						Coccoloba	adscendens	Geonema	cervina	Geonema	interrupta
102	15-Apr-09	Aegiphila	martinicensis	1	Ocotea	imrayana						Scleria	secans	Thelypteris	clypeolulat	Henrietta	triflora
102	15-Apr-09	Alsophila	muricata	2								Anthurium	grandifolium	Salpichlaena	volubilis	Oreopanax	capitatus
102	15-Apr-09	Guarea	glabra	1										Blechnum	fragile	Stylogyne	lateriflora
102	15-Apr-09	Myrcia	antillana	3												Talauma	dodecapetala
102	15-Apr-09	Byrsonima	trinitensis	4													
102	15-Apr-09	Guarea	glabra	1													
102	15-Apr-09	Ixora	ferrea	1													
102	15-Apr-09	Micropholis	guyanensis	4													
102	15-Apr-09	Myrcia	fallax_m	3													
102	15-Apr-09	Sterculia	caribaea	1													

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT												28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only			
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
103	15-Apr-09	Myrcia	fallax	1	Heliconia	bihai	Piper	glabrescens	Notopleura	uliginosa			Anthurium	grandifolium	Blechnum	fragile				
103	15-Apr-09	Aiphanes	minima	2	Dacryodes	excelsa			Anthurium	guldinii			Asplundia	rigida	Cnemidaria	grandifolia				
103	15-Apr-09	Micropholis	guyanensis	5											Salpichlaena	volubilis				
103	15-Apr-09	Prestoea	acuminata	16											Selaginella	flabellata				
103	15-Apr-09	Alsophila	muricata	1											Thelypteris	clypeolutat				
103	15-Apr-09	Aniba	bracteata	1																
103	15-Apr-09	Chrysobalanus	cuspidatus	2																
103	15-Apr-09	Chrysochlamys	caribaea	5																
103	15-Apr-09	Clusia	major	1																
103	15-Apr-09	Daphnopsis	macrocarpa	1																
103	15-Apr-09	Myrcia	fallax_m	1																
103	15-Apr-09	Nectandra	patens	1																
103	15-Apr-09	Picramnia	pentandra	1																
103	15-Apr-09	Plinia	pinnata	1																
103	15-Apr-09	Psychotria	mapourioides	2																
103	15-Apr-09	Stylogyne	lateriflora	2																
103	15-Apr-09	Swartzia	caribaea	1																
104	19-Apr-09	Eugenia	oerstediana	1	Andira	sapindoides	Piper	dilatatum	Lasiacis	divaricata			Monstera	andersonii					Aiphanes	minima
104	19-Apr-09	Cocos	nucifera	2					Justicia	secunda									Calliandra	tergemina
104	19-Apr-09	Tabebuia	heterophylla	1					Anthurium	cordatum									Calophyllum	antillana
104	19-Apr-09	Inga	laurina	1															Castilla	elastica
104	19-Apr-09	Inga	ingoides	1					Costus										Cordia	sulcata
104	19-Apr-09	Myrcia	splendens	2															Cupania	americana
104	19-Apr-09	Mangifera	indica	1					Nauticocalyx	multiflorus			Syngonium	podophyllum				Guazuma	ulmifolia	
104	19-Apr-09	Heliconia	caribaea	1															Theobroma	cacao
104	19-Apr-09	Cecropia	schreberiana	2																
104	19-Apr-09	Myrcia	deflexa	1																
105	19-Apr-09	Cordia	collococca	1	Spondias	mombin			Olyra	latifolia			Ipomea	tiliacea						
105	19-Apr-09	Mangifera	indica	1	Andira	sapindoides			Geophila	repens			Rourea	surinamensis						
105	19-Apr-09	Eugenia	oerstediana	2	Coccoloba	swartzii							Securidaca	diversifolia						
105	19-Apr-09	Tabernaemontana	citrifolia	3	Palicourea	crocea														
105	19-Apr-09	Bursera	simaruba	1																
105	19-Apr-09	Cecropia	schreberiana	1																
105	19-Apr-09	Chrysophyllum	argenteum	1																
105	19-Apr-09	Inga	ingoides	3																
105	19-Apr-09	Pimenta	racemosa	1																
105	19-Apr-09	Tabebuia	heterophylla	1																
106	19-Apr-09	Syzygium	jambos	2	Miconia	mirabilis	Piper	dilatatum					Coccoloba	ascendens	Thelypteris	reticulata			Byrsonima	spicata
106	19-Apr-09	Licania	leucosepala	1	Cecropia	schreberiana							Vanilla	planifolia	Thelypteris	dentata			Cyathea	species
106	19-Apr-09	Lonchocarpus	heptaphyllus	1	Pouteria	multiflora	Miconia	racemosa											Prestoea	acuminata
106	19-Apr-09	Nectandra	membranacea	2															Symplocos	martinicensis
106	19-Apr-09	Alsophila	muricara	1																
106	19-Apr-09	Cocos	nucifera	1																
106	19-Apr-09	Miconia	furfuracea	1																
106	19-Apr-09	Myrcia	deflexa	1																
106	19-Apr-09	Sterculia	caribaea	1																
107	19-Apr-09	Myrcia	deflexa	2	Fareaea	occidentalis	Odontonema	nitidum	Ichnanthus	pallens			Marcravia	umbellata	Adiantum				Heliconia	bihai
107	19-Apr-09	Symplocos	martinicensis	1	Eugenia	coffeifolia													Pithecolobium	jupunba
107	19-Apr-09	Aniba	bracteata	1															Pouteria	multiflora
107	19-Apr-09	Protium	attenuatum	1															Quararibaea	turbinata
107	19-Apr-09	Sterculia	caribaea	2															Simarouba	amara
107	19-Apr-09	Guarea	glabra	1																
107	19-Apr-09	Micropholis	guyanensis	1																
107	19-Apr-09	Nectandra	patens	2																
107	19-Apr-09	Ocotea	leucoxylon	1																
108	19-Apr-09	Daphnopsis	americana	1	Vitex	divaricata	Chiococca	alba					Senegalia	riparia					Byrsonima	spicata
108	19-Apr-09	Pimenta	racemosa	1	Casearia	decandra	Odontonema	nitidum											Chione	venosa
108	19-Apr-09	Clusia	plukenetii	2															Diospyros	revoluta
108	19-Apr-09	Eugenia	confusa	1															Ormosia	monosperma
108	19-Apr-09	Bursera	simaruba	2																
108	19-Apr-09	Coccoloba	swartzii	1																
108	19-Apr-09	Cordia	sulcata	1																
108	19-Apr-09	Guapira	fragrans	1																
108	19-Apr-09	Myrcia	citrifolia	2																
108	19-Apr-09	Zanthoxylum	caribaeum	1																

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥25cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species
109	22-Apr-09	Licania	ternatensis	4	Plinia	pinnata						Marcgravia	umbellata			Chrysoclamys	caribaea	
109	22-Apr-09	Micropholis	crotonioides	4								Smilax	oblongata			Diospyros	revoluta	
109	22-Apr-09	Ficus	insipida	1											Eugenia	lambertiana		
109	22-Apr-09	Eugenia	coffeifolia	4											Pithecellobium	jupunba		
109	22-Apr-09	Clusia	major	1														
109	22-Apr-09	Guatteria	caribaea	1														
109	22-Apr-09	Ocotea	eggersiana	1														
109	22-Apr-09	Ocotea	leucoxydon	1														
109	22-Apr-09	Pouteria	pallida	1														
109	22-Apr-09	Prestoea	acuminata	1														
109	22-Apr-09	Protium	attenuatum	1														
109	22-Apr-09	Psychotria	mapourioides	4														
109	22-Apr-09	Sterculia	caribaea	6														
109	22-Apr-09	Stylogyne	lateriflora	2														
109	22-Apr-09	Swietenia	macrophylla	3														
109	22-Apr-09	Symplocos	martinicensis	1														
110	22-Apr-09	Ocotea	eggersiana	9	Plinia	pinnata				Anthurium	palmatum	Coccoloba	adscendens					
110	22-Apr-09	Protium	attenuatum	18	Faramea	occidentalis						Paullinia	vespertilio					
110	22-Apr-09	Licania	ternatensis	8	Maytenus	guianensis						Smilax	oblongata					
110	22-Apr-09	Eugenia	duchassaingiana	4	Tapura	latifolia												
110	22-Apr-09	Dacryodes	excelsa	1														
110	22-Apr-09	Ilex	sideroxyloides	2														
110	22-Apr-09	Licania	sericea	2														
110	22-Apr-09	Micropholis	crotonioides	1														
110	22-Apr-09	Ocotea	leucoxydon	1														
110	22-Apr-09	Ormosia	monosperma	2														
110	22-Apr-09	Pouteria	pallida	1														
110	22-Apr-09	Sterculia	caribaea	4														
110	22-Apr-09	Swartzia	caribaea	2														
111	22-Apr-09	Protium	attenuatum	4	Sloanea	caribaea				Anthurium	palmatum	Coccoloba	adscendens					
111	22-Apr-09	Nectandra	membranacea	1	Psychotria	mapourioides						Marcgravia	umbellata					
111	22-Apr-09	Eugenia	duchassaingiana	1	Plinia	pinnata						Rourea	surinamensis					
111	22-Apr-09	Simarouba	amara	2								Smilax	oblongata					
111	22-Apr-09	Byrsonima	trinensis	1														
111	22-Apr-09	Daphnopsis	macrocarpa	1														
111	22-Apr-09	Endlicheria	sericea	3														
111	22-Apr-09	Eugenia	coffeifolia	1														
111	22-Apr-09	Hirtella	pendula	1														
111	22-Apr-09	Ilex	sideroxyloides	1														
111	22-Apr-09	Ixora	ferrea	2														
111	22-Apr-09	Licania	leucosepala	1														
111	22-Apr-09	Licania	ternatensis	1														
111	22-Apr-09	Myrcia	fallax	1														
111	22-Apr-09	Nectandra	patens	2														
111	22-Apr-09	Ocotea	eggersiana	1														
111	22-Apr-09	Ormosia	monosperma	2														
111	22-Apr-09	Pouteria	pallida	2														
111	22-Apr-09	prestoea	acuminata	1														
111	22-Apr-09	Sterculia	caribaea	11														
112	22-Apr-09	Alsophila	muricata	6	Eugenia	coffeifolia						Smilax	oblongata	Salpichlaena	volubilis	Miconia	furfuracea	
112	22-Apr-09	Ixora	ferrea	3	Dacryodes	excelsa								Thelypteris	dentata	Stylogyne	lateriflora	
112	22-Apr-09	Swietenia	macrophylla	11	Sloanea	caribaea										Tabernaemontana	citrifolia	
112	22-Apr-09	Simarouba	amara	1	Byrsonima	spicata												
112	22-Apr-09	Maytenus	guianensis	2	Micropholis	crotonioides												
112	22-Apr-09	Cordia	reticulata	2	Psychotria	mapourioides												
112	22-Apr-09	Sterculia	caribaea	2	Rudgea	citrifolia												
112	22-Apr-09	Inga	laurina	1														
112	22-Apr-09	Myrcia	deflexa	4														
112	22-Apr-09	Ormosia	monosperma	3														
112	22-Apr-09	Palicourea	crocea	3														
112	22-Apr-09	Prestoea	acuminata	1														
112	22-Apr-09	Protium	attenuatum	2														
112	22-Apr-09	Symplocos	martinicensis	8														
112	22-Apr-09	Talipariti	elatum	3														
112	22-Apr-09	Tovomitia	plumieri	3														
113	25-Apr-09	Zanthoxylum	spiniifex	1	Senegalia	tamarindifolia	Acanthocercus	tetragonus	Lasiacis	divaricata	Tillandsia	utriculata	Cissus	verticillata		Annona	reticulata	
113	25-Apr-09	Capparis	indica	3	Guettarda	odorata	Chiococca	alba	Pitcairnia	angustifolia			Heteropterys	purpurea		Capparis	flexuosa	
113	25-Apr-09	Croton	niveus	1	Guapira	fragrans	Margaritopsis	microdon					Macfadyena	unguis-cati		Cordia	collococca	
113	25-Apr-09	Bursera	simaruba	2												Ficus	citrifolia	
113	25-Apr-09	Bourreria	succulenta	1												Leucaena	leucocephala	
113	25-Apr-09	Erythroxylum	havanense	1												Maclura	tinctoria	
113	25-Apr-09	Lonchocarpus	punctatus	1												Tabebuia	heterophylla	

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
114	25-Apr-09	Bourreria	succulenta	3			Acanthocereus	tetragonus	Peperomia	myrtilifolia	Tillandsia	utriculata						
114	25-Apr-09	Capparis	indica	1														
114	25-Apr-09	Erythroxylum	havanense	5														
114	25-Apr-09	Eugenia	ligustrina	1														
114	25-Apr-09	Guapira	fragrans	1														
114	25-Apr-09	Guettarda	odorata	2														
114	25-Apr-09	Lonchocarpus	punctatus	2														
114	25-Apr-09	Maclura	tinctoria	1														
114	25-Apr-09	Pilosocereus	royenii	20														
114	25-Apr-09	Senegalia	tamarindifolia	1														
115	25-Apr-09	Bursera	simaruba	5	Capparis	baducca	Margaritopsis	microdon	Anthurium	cordatum	Tillandsia	Macfadyena	unguis-cati					
115	25-Apr-09	Guapira	fragrans	18	Nectandra	coriacea	Chiococca	alba	Peperomia	myrtilifolia								
115	25-Apr-09	Capparis	indica	4	Krugiodendron	ferreum												
115	25-Apr-09	Picrasma	excelsa	1	Pilosocereus	royenii												
115	25-Apr-09	Amyris	elemifera	2														
115	25-Apr-09	Erythroxylum	havanense	2														
115	25-Apr-09	Lonchocarpus	punctatus	2														
116	25-Apr-09	Capparis	baducca	3	Krugiodendron	ferreum	Margaritopsis	microdon	Anthurium	cordatum	Tillandsia	Macfadyena	unguis-cati					
116	25-Apr-09	Randia	nitida	1	Pilosocereus	royenii	Chiococca	alba	Lasiacis	divaricata								
116	25-Apr-09	Guapira	fragrans	3					Peperomia	myrtilifolia								
116	25-Apr-09	Bursera	simaruba	6														
116	25-Apr-09	Capparis	indica	2														
116	25-Apr-09	Forestiera	rhamnifolia	1														
116	25-Apr-09	Lonchocarpus	punctatus	2														
117	25-Apr-09	Calliandra	tergeminia	8	Guapira	fragrans	Chiococca	alba	Anthurium	cordatum	Tillandsia	Dalbergia	monetaria				Annona	montana
117	25-Apr-09	Eugenia	monticola	6			Pisonia	aculeata									Cecropia	schreberiana
117	25-Apr-09	Randia	nitida	1													Ceiba	pentandra
117	25-Apr-09	Bourreria	succulenta	1													Erythroxylum	havanense
117	25-Apr-09	Bursera	simaruba	1													Miconia	laevigata
117	25-Apr-09	Zanthoxylum	spinfex	1													Picramnia	pentandra
117	25-Apr-09	Chrysophyllum	argenteum	1													Terminalia	catappa
118	25-Apr-09	Mangifera	indica	1	Piper	amalago	Chiococca	alba	Axonopus	compressus	Tillandsia	utriculata	Securidaca	diversifolia			Eugenia	greggii
118	25-Apr-09	Bursera	simaruba	4	Terminalia	catappa			Lasiacis	divaricata	Tillandsia	polystachia	Senegalia	riparia			Schoepfia	scheberi
118	25-Apr-09	Myrcia	citrifolia	1	Mammea	americana			Trichocentrum	luridum			Abrus	preparatorius				
118	25-Apr-09	Maclura	tinctoria	1									Macfadyena	unguis-cati				
118	25-Apr-09	Andira	sapindoides	1														
118	25-Apr-09	Bourreria	succulenta	1														
118	25-Apr-09	Ceiba	pentandra	1														
118	25-Apr-09	Coccoloba	swartzii	1														
118	25-Apr-09	Eugenia	ligustrina	1														
118	25-Apr-09	Guettarda	scabra	1														
118	25-Apr-09	Tabebuia	heterophylla	2														
118	25-Apr-09	Tabernaemontana	citrifolia	1														
118	25-Apr-09	Zanthoxylum	punctatum	1														
119	28-Apr-09	Licania	termatensis	5	Alphanes	minima							Coccoloba	adscendens				
119	28-Apr-09	Protium	attenuatum	5	Simarouba	amara							Heteropterys	platyptera				
119	28-Apr-09	Dacyrodes	excelsa	2	Pouteria	pallida	Odontonema	nitidum					Smilax	oblongata			Selaginella	flabellata
119	28-Apr-09	Sterculia	caribaea	8	Pouteria	semicarpifolia												
119	28-Apr-09	Aniba	ramageana	1														
119	28-Apr-09	Calyptranthes	forsteri	1														
119	28-Apr-09	Cordia	reticulata	1														
119	28-Apr-09	Daphnopsis	macrocarpa	1														
119	28-Apr-09	Eugenia	coffeifolia	1														
119	28-Apr-09	Ilex	sideroxyloides	1														
119	28-Apr-09	Ixora	ferrea	1														
119	28-Apr-09	Licania	sericea	1														
119	28-Apr-09	Micropholis	crotonioides	1														
119	28-Apr-09	Nectandra	membranacea	2														
119	28-Apr-09	Ocotea	eggersiana	1														
119	28-Apr-09	Ormosia	monosperma	3														
119	28-Apr-09	Swartzia	caribaea	1														
119	28-Apr-09	Tovomita	plumieri	5														

Graveson – Vegetation Classification

Plot No.	Date	Trees & other plants ≥25cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only		
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other	Tree Species	
120	28-Apr-09	Protium	attenuatum	5	Ixora	ferrea													
120	28-Apr-09	Guatteria	caribaea	1	Plinia	pinnata	Odontonema	nitidum					Marcgravia	umbellata				Guarea	macrophylla
120	28-Apr-09	Sterculia	caribaea	5									Smilax	oblongata				Guarea	glabra
120	28-Apr-09	Alsophila	muricata	1									Heteropterys	platyptera					
120	28-Apr-09	Aniba	bracteata	3															
120	28-Apr-09	Calyptranthes	forsteri	1															
120	28-Apr-09	Dacryodes	excelsa	2															
120	28-Apr-09	Guatteria	caribaea	1															
120	28-Apr-09	Heliconia	bihai	1															
120	28-Apr-09	Licania	leucosepala	3															
120	28-Apr-09	Licania	ternatensis	2															
120	28-Apr-09	Micropholis	crotonioides	1															
120	28-Apr-09	Nectandra	membranacea	1															
120	28-Apr-09	Ocotea	jacquinia	1															
120	28-Apr-09	Psychotria	mapourioides	1															
120	28-Apr-09	Sloanea	caribaea	6															
120	28-Apr-09	Stylogyne	lateriflora	1															
120	28-Apr-09	Talauma	dodecapetala	1															
120	28-Apr-09	Tapura	latifolia	1															
121	28-Apr-09	Micropholis	guyanensis	2	Cecropia	schreberiana	Odontonema	nitidum					Anthurium	palmatum					
121	28-Apr-09	Cordia	reticulata	2	Licania	leucosepala							Marcgravia	umbellata					
121	28-Apr-09	Protium	attenuatum	8	Plinia	pinnata							Philodendron	lingulatum					
121	28-Apr-09	Aiphanes	minima	1															
121	28-Apr-09	Dacryodes	excelsa	1															
121	28-Apr-09	Eugenia	coffeifolia	1															
121	28-Apr-09	Faramea	occidentalis	1															
121	28-Apr-09	Guarea	glabra	1															
121	28-Apr-09	Guarea	macrophylla	1															
121	28-Apr-09	Licania	ternatensis	5															
121	28-Apr-09	Nectandra	membranacea	1															
121	28-Apr-09	Ormosia	monosperma	2															
121	28-Apr-09	Psychotria	mapourioides	1															
121	28-Apr-09	Sloanea	caribaea	2															
121	28-Apr-09	Sterculia	caribaea	9															
121	28-Apr-09	Stylogyne	lateriflora	1															
121	28-Apr-09	Tapura	latifolia	2															
122	28-Apr-09	Quararibaea	turbinata	2	Cecropia	schreberiana	Cnemidaria	grandifolium	Peperomia	nigropunctata									
122	28-Apr-09	Chrysoclamys	caribaea	4			Boehmeria	ramiflora											
122	28-Apr-09	Heliconia	caribaea	1			Piper	dussii											
122	28-Apr-09	Heliconia	bihai	7															
122	28-Apr-09	Pouteria	multiflora	1															
122	28-Apr-09																		
123	28-Apr-09	Micropholis	crotonioides	1	Cordia	reticulata	Odontonema	nitidum	Pitcairnia	angustifolia	Guzmania	lingulata	Petrea	volubilis	Selaginella	flabellata	Cordia	sulcata	
123	28-Apr-09	Ocotea	eggarsiana	6					Anthurium	guingii	Oncidium	altissimum	Marcgravia	umbellata					
123	28-Apr-09	Sterculia	caribaea	1					Scleria	scindens	Werauhia	ringens							
123	28-Apr-09	Aiphanes	minima	1															
123	28-Apr-09	Chrysophyllum	argenteum	2															
123	28-Apr-09	Daphnopsis	macrocarpa	1															
123	28-Apr-09	Diospyros	revoluta	1															
123	28-Apr-09	Exostemma	caribaea	1															
123	28-Apr-09	Guapira	fragrans	1															
123	28-Apr-09	Guarea	glabra	1															
123	28-Apr-09	Inga	laurina	1															
123	28-Apr-09	Micropholis	guyanensis	3															
123	28-Apr-09	Myrcia	deflexa	1															
123	28-Apr-09	Plinia	pinnata	1															
123	28-Apr-09	Protium	attenuatum	5															
123	28-Apr-09	Psychotria	mapourioides	1															
123	28-Apr-09	Swartzia	caribaea	1															
124	28-Apr-09	Guapira	fragrans	3	Tovomitia	plumieri			Anthurium	guingii	Epidendrum	ciliare	Petrea	volubilis					
124	28-Apr-09	Casearia	decandra	1					Pitcairnia	angustifolia	Oncidium	altissimum							
124	28-Apr-09	Ocotea	eggarsiana	5					Scleria	scindens	Epidendrum	boricuarum							
124	28-Apr-09	Nectandra	patens	1															
124	28-Apr-09	Aiphanes	minima	1															
124	28-Apr-09	Chrysophyllum	argenteum	2															
124	28-Apr-09	Daphnopsis	macrocarpa	1															
124	28-Apr-09	Diospyros	revoluta	1															
124	28-Apr-09	Drypetes	glauca	3															
124	28-Apr-09	Eugenia	coffeifolia	3															
124	28-Apr-09	Guarea	glabra	1															
124	28-Apr-09	Inga	laurina	3															
124	28-Apr-09	Miconia	cornifolia	3															
124	28-Apr-09	Myrcia	citifolia	5															
124	28-Apr-09	Psychotria	mapourioides	2															

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
125	02-May-09	Inga	ingoides	1	Stylogyne	lateriflora	Piper	dussii					Vanilla	planifolia	Selaginella	flabellata	Chimarris	cymosa
125	02-May-09	Swietenia	macrophylla	3	Hekiconia	bihai							Heteropterys	platyptera	Thelypteris	dentata	Ficus	insipida
125	02-May-09	Gmelina	arborea	9	Aniba	bracteata							Marcgravia	umbellata			Nectandra	membranacea
125	02-May-09	Prestoea	acuminata	21	Miconia	luciana											Simarouba	amara
					Sloanea	caribaea												
126	02-May-09	Micropholis	guyanensis	3	Swartzia	caribaea							Asplundia	rigida	Thelypteris	clypeolutat	Erythroxylum	squamatum
126	02-May-09	Sterculia	caribaea	4	Cybianthus	antillanus							Schradera	exotica			Guatteria	caribaea
126	02-May-09	Dacryodes	excelsa	1	Plinia	pinnata											Henriettia	triflora
126	02-May-09	Marlia	racemosa	1	Tapura	latifolia											Licania	sericea
126	02-May-09	Sloanea	caribaea	4													Miconia	furfuracea
126	02-May-09	Chrysobalanus	cuspidatus	1													Pouteria	semicarpifolia
126	02-May-09	Stylogyne	lateriflora	1													Rondeletia	parviflora
126	02-May-09	Alsophila	muricata	7														
126	02-May-09	Cordia	reticulata	1														
126	02-May-09	Endlicheria	sericea	1														
126	02-May-09	Licania	ternatensis	2														
126	02-May-09	Prestoea	acuminata	1														
126	02-May-09	Tovomita	plumieri	1														
127	02-May-09	Pouteria	pallida	2	Pouteria	semicarpifolia	Psychotria	muscosa					Heteropterys	platyptera			Styrax	glaber
127	02-May-09	Pouteria	multiflora	1	Psychotria	mapourioides	Cnemidaria	grandifolium					Asplundia	rigida				
127	02-May-09	Tapura	latifolia	1	Daphnopsis	macrocarpa							Schradera	exotica				
127	02-May-09	Licania	ternatensis	2	Aniba	bracteata							Smilax	oblongata				
127	02-May-09	Guatteria	caribaea	2	Cecropia	schreberiana												
127	02-May-09	Guarea	glabra	2	Palicourea	crocea												
127	02-May-09	Guarea	macrophylla	2	Stylogyne	lateriflora												
127	02-May-09	Dacryodes	excelsa	1														
127	02-May-09	Erythroxylum	squamatum	1														
127	02-May-09	Licania	sericea	3														
127	02-May-09	Ormosia	monosperma	2														
127	02-May-09	Protium	attenuatum	3														
127	02-May-09	Sloanea	caribaea	1														
127	02-May-09	Sterculia	caribaea	9														
128	02-May-09	Prestoea	acuminata	1	Aegiphila	martincensis	Piper	dussii					Asplundia	rigida	Selaginella	flabellata	Ligustrum	japonicum
128	02-May-09	Swietenia	macrophylla	5	Psychotria	mapourioides									Thelypteris	clypeolutat		
128	02-May-09	Myrcia	deflexa	1	Eugenia	coffeifolia												
128	02-May-09	Cestrum	megalophyllum	2	Myrcia	fallax												
128	02-May-09	Eucalyptus	robusta	15	Plinia	pinnata												
128	02-May-09	Clusia	major	1	Psychotria	berteriana												
128	02-May-09	Talauma	dodecapetala	7	Sloanea	caribaea												
128	02-May-09	Henriettia	triflora	1	Stylogyne	lateriflora												
129	02-May-09	Pouteria	pallida	1	Aiphanes	minima	Piper	dussii					Asplundia	rigida				
129	02-May-09	Tovomita	plumieri	1	Faramea	occidentalis												
129	02-May-09				Aiphanes	minima												
129	02-May-09				Licania	ternatensis												
129	02-May-09				Tapura	latifolia												
129	02-May-09				Calyptanthus	forsteri												
129	02-May-09				Faramea	occidentalis												
129	02-May-09				Tovomita	plumieri												
129	02-May-09				Sloanea	caribaea												
129	02-May-09				Protium	attenuatum												
129	02-May-09				Heliconia	bihai												
129	02-May-09				Gonzalagunia	spicata												
129	02-May-09	Chimarris	cymosa	1														
129	02-May-09	Dacryodes	excelsa	2														
129	02-May-09	Henriettia	triflora	1														
129	02-May-09	Myrcia	fallax	1														
129	02-May-09	Prestoea	acuminata	17														
129	02-May-09	Sapium	caribaeum	1														
129	02-May-09	Simarouba	amara	1														
129	02-May-09	Sterculia	caribaea	2														
129	02-May-09	Talauma	dodecapetala	1														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT							28 METRE RADIUS PLOT	
		Trees & other plants ≥5cm DBH species		Saplings species	Shrubs species	Herbs species	Epiphytes species	Vines species	Terrestrial ferns species	Trees only Other Tree Species
130	05-May-09			Psychotria muscosa	Notopleura uliginosa			Philodendron lingulatum	Selaginella flabellata	Aiphanes minima
130	05-May-09				Scleria latifolia			Asplundia rigida		Aisophila muricata
130	05-May-09				Scleria secans			Marcgravia umbellata		Aniba bracteata
130	05-May-09				Erythroides hirtella			Schradera exotica		Byrsonima trinitensis
130	05-May-09				Anthurium guildingii			Anthurium grandifolium		Chrysobalanus cuspidatus
130	05-May-09									Clusia major
130	05-May-09									Cordia reticulata
130	05-May-09									Geonema interrupta
130	05-May-09									Heliconia bihai
130	05-May-09									Ilex sideroxyloides
130	05-May-09									Miconia furfuracea
130	05-May-09									Miconia secunda
130	05-May-09									Micropholis guyanensis
130	05-May-09									Ocotea imrayana
130	05-May-09									Persea urbaniana
130	05-May-09									Prestoea acuminata
130	05-May-09									Protium attenuatum
130	05-May-09									Rondeletia parviflora
130	05-May-09									Sapium caribaeum
130	05-May-09									Simarouba amara
130	05-May-09									Sterculia caribaea
130	05-May-09									Swartzia caribaea
130	05-May-09									Tovomitia plumieri
131	05-May-09				Scleria secans			Marcgravia umbellata	Thelypteris clypeolulata	Aiphanes minima
131	05-May-09				Scleria latifolia			Anthurium grandifolium	Selaginella flabellata	Aisophila muricata
131	05-May-09				Ponthevia petiolata			Asplundia rigida		Aniba bracteata
131	05-May-09				Erythroides hirtella			Smilax oblongata		Byrsonima trinitensis
131	05-May-09				Notopleura uliginosa					Daphnopsis macrocarpa
131	05-May-09				Anthurium guildingii					Geonema interrupta
131	05-May-09				Peperomia nigropunctata					Guarea macrophylla
131	05-May-09									Licania ternatensis
131	05-May-09									Marila racemosa
131	05-May-09									Miconia furfuracea
131	05-May-09									Ocotea imrayana
131	05-May-09									Protium attenuatum
131	05-May-09									Psychotria mapouroides
131	05-May-09									Rondeletia parviflora
131	05-May-09									Simarouba amara
131	05-May-09									Sloanea caribaea
131	05-May-09									Sterculia caribaea
131	05-May-09									Tovomitia plumieri
132	05-May-09				Peperomia nigropunctata			Malanea macrophylla	Thelypteris clypeolulata	Aisophila muricata
132	05-May-09				Anthurium guildingii			Alloplectus cristatus	Selaginella flabellata	Aniba bracteata
132	05-May-09				Notopleura uliginosa			Smilax oblongata		Byrsonima trinitensis
132	05-May-09				Erythroides hirtella			Anthurium grandifolium		Chrysobalanus cuspidatus
132	05-May-09				Scleria latifolia			Heteropterys playptera		Dacryodes excelsa
132	05-May-09				Ponthevia petiolata			Asplundia rigida		Geonema interrupta
132	05-May-09				Scleria secans			Schlegelia axillaris		Marila racemosa
132	05-May-09							Marcgravia umbellata		Miconia furfuracea
132	05-May-09							Coccoloba adscendens		Micropholis guyanensis
132	05-May-09									Myrcia fallax_m
132	05-May-09									Prestoea acuminata
132	05-May-09									Protium attenuatum
132	05-May-09									Rondeletia parviflora
132	05-May-09									Sloanea caribaea
132	05-May-09									Sterculia caribaea
133	05-May-09				Peperomia nigropunctata			Marcgravia umbellata		Sterculia caribaea
133	05-May-09				Notopleura uliginosa			Asplundia rigida		Aiphanes minima
133	05-May-09				Anthurium guildingii					Chrysobalanus cuspidatus
133	05-May-09									Chrysochlamys caribaea
133	05-May-09									Geonema interrupta
133	05-May-09									Guarea glabra
133	05-May-09									Ilex sideroxyloides
133	05-May-09									Miconia furfuracea
133	05-May-09									Miconia secunda
133	05-May-09									Micropholis guyanensis
133	05-May-09									Prestoea acuminata
133	05-May-09									Psychotria mapouroides
133	05-May-09									Rondeletia parviflora
133	05-May-09									Sloanea caribaea
133	05-May-09									Sterculia caribaea
133	05-May-09									Tapura latifolia
133	05-May-09									Tovomitia plumieri

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	Tree Species
134	05-May-09							Notopleura	uliginosa			Philodendron	lingulatum	Selaginella	flabellata	Alsophila	muricata	
134	05-May-09											Asplundia	rigida			Aniba	ramageana	
134	05-May-09							nigropunctata	nigropunctata			Heteropterys	platyptera	Thelypteris	clypeolutat	Aniba	bracteata	
134	05-May-09											Anthurium	grandifolium			Byrsonima	trinitensis	
134	05-May-09															Calyptranthes	forsteri	
134	05-May-09															Chrysobalanus	cuspidatus	
134	05-May-09															Cybianthus	antillanus	
134	05-May-09															Dacryodes	excelsa	
134	05-May-09															Geonema	interrupta	
134	05-May-09															Guarea	glabra	
134	05-May-09															Ilex	sideroxyloides	
134	05-May-09															Ixora	ferrea	
134	05-May-09															Marilia	racemosa	
134	05-May-09															Miconia	furfuracea	
134	05-May-09															Miconia	secunda	
134	05-May-09															Micropholis	guyanensis	
134	05-May-09															Myrcia	fallax_m	
134	05-May-09															Prestoea	acuminata	
134	05-May-09															Protium	attenuatum	
134	05-May-09															Simarouba	amara	
134	05-May-09															Sterculia	caribaea	
134	05-May-09															Tapura	latifolia	
134	05-May-09															Tovomita	plumieri	
135	05-May-09											Asplundia	rigida			Aniba	ramageana	
135	05-May-09											Malanea	macrophylla			Aniba	ramageana	
135	05-May-09											Smilax	oblongata			Aniba	bracteata	
135	05-May-09											Coccoloba	adscendens			Chrysobalanus	cuspidatus	
135	05-May-09											Salpichlaena	volubilis			Cybianthus	antillanus	
135	05-May-09															Cybianthus	rostratus	
135	05-May-09															Dacryodes	excelsa	
135	05-May-09															Geonema	interrupta	
135	05-May-09															Licania	ternatensis	
135	05-May-09															Miconia	furfuracea	
135	05-May-09															Micropholis	guyanensis	
135	05-May-09															Myrcia	antillana	
135	05-May-09															Ocotea	imrayana	
135	05-May-09															Pouteria	pallida	
135	05-May-09															Pouteria	semicarpifolia	
135	05-May-09															Prestoea	acuminata	
135	05-May-09															Protium	attenuatum	
135	05-May-09															Protium	attenuatum	
135	05-May-09															Rudgea	citrifolia	
135	05-May-09															Sterculia	caribaea	
135	05-May-09															Sterculia	caribaea	
135	05-May-09															Stylogyne	lateriflora	
135	05-May-09															Stylogyne	lateriflora	
135	05-May-09															Talauma	dodecapetala	
135	05-May-09															Tapura	latifolia	
135	05-May-09															Tovomita	plumieri	
136	09-May-09	Rudgea	citrifolia	1	Myrcia	splendens		Anthurium	guingii			Smilax	oblongata			Aniba	bracteata	
136	09-May-09	Chrysobalanus	cuspidatus	6	Protium	attenuatum						Salpichlaena	volubilis			Byrsonima	trinitensis	
136	09-May-09	Pouteria	pallida	2	Symplocos	marticensis						Coccoloba	adscendens			Cybianthus	rostratus	
136	09-May-09	Cybianthus	antillanus	1								Marcgravia	umbellata			Endlicheria	sericea	
136	09-May-09	Chrysochlamys	caribaea	2												Miconia	secunda	
136	09-May-09	Alsophila	muricata	10												Sloanea	caribaea	
136	09-May-09	Aniba	ramageana	2														
136	09-May-09	Dacryodes	excelsa	1														
136	09-May-09	Daphnopsis	macrocarpa	1														
136	09-May-09	Erythroxylum	squamatum	3														
136	09-May-09	Guatteria	caribaea	1														
136	09-May-09	Licania	ternatensis	4														
136	09-May-09	Micropholis	guyanensis	4														
136	09-May-09	Myrcia	platyclada	1														
136	09-May-09	Pithecellobium	jupunba	1														
136	09-May-09	Prestoea	acuminata	4														
136	09-May-09	Rondeletia	parviflora	6														
136	09-May-09	Sterculia	caribaea	1														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
137	09-May-09	Rudgea	citrifolia	3	Sloanea	caribaea							Asplundia	rigida	Thelypteris	clypeolutat	Henrietta	triflora
137	09-May-09	Pouteria	pallida	5	Rondeletia	parviflora							Heteropterys	platyptera			Hirtella	triandra
137	09-May-09	Prestoea	acuminata	4	Miconia	furfuracea							Marcgravia	umbellata			Marila	racemosa
137	09-May-09	Guatteria	caribaea	1	Cordia	reticulata							Anthurium	grandifolium			Simarouba	amara
137	09-May-09	Aiphanes	minima	1														
137	09-May-09	Alsophila	muricata	14														
137	09-May-09	Aniba	ramageana	1														
137	09-May-09	Byrsonima	spicata	1														
137	09-May-09	Cybianthus	rostratus	2														
137	09-May-09	Erythroxylum	squamatum	1														
137	09-May-09	Licania	tematensis	2														
137	09-May-09	Micropholis	guyanensis	6														
137	09-May-09	Ocotea	leucoxylo	1														
137	09-May-09	Plinia	pinnata	1														
137	09-May-09	Protium	attenuatum	1														
137	09-May-09	Swartzia	caribaea	1														
138	09-May-09	Prestoea	acuminata	3									Marcgravia	umbellata			Marila	racemosa
138	09-May-09	Pouteria	pallida	1									Schradera	exotica			Simarouba	amara
138	09-May-09	Aiphanes	minima	1														
138	09-May-09	Byrsonima	trinitensis	5														
138	09-May-09	Calyptanthus	forsteri	1														
138	09-May-09	Chrysobalanus	cuspidatus	1														
138	09-May-09	Chrysochlamys	caribaea	2														
138	09-May-09	Cybianthus	rostratus	1														
138	09-May-09	Daphnopsis	macrocarpa	1														
138	09-May-09	Guatteria	caribaea	1														
138	09-May-09	Ixora	ferrea	2														
138	09-May-09	Licania	tematensis	1														
138	09-May-09	Miconia	mirabilis	1														
138	09-May-09	Micropholis	guyanensis	3														
138	09-May-09	Myrcia	platyclada	3														
138	09-May-09	Protium	attenuatum	1														
138	09-May-09	Rudgea	citrifolia	4														
138	09-May-09	Sloanea	caribaea	2														
138	09-May-09	Sterculia	caribaea	7														
138	09-May-09	Swartzia	caribaea	2														
138	09-May-09	Talauma	dodecapetala	1														
139	09-May-09	Psychotria	mapourioides	1									Asplundia	rigida	Selaginella	flabellata	Ficus	americana
139	09-May-09	Prestoea	acuminata	13	Byrsonima	trinitensis	Piper	dussii					Philodendron	lingulatum	Thelypteris	clypeolutat	Guarea	macrophylla
139	09-May-09	Chimarris	cymosa	1	Protium	attenuatum									Tectaria	hieracifolia	Myrcia	fallax_m
139	09-May-09	Chrysochlamys	caribaea	2	Cestrum	megalophyllum											Oxandra	launifolia
139	09-May-09	Cecropia	schreberiana	2	Alsophila	muricata											Talauma	dodecapetala
139	09-May-09	sterculia	caribaea	2													Turpinia	occidentalis
139	09-May-09	Guarea	glabra	2														
139	09-May-09	Sloanea	caribaea	2														
140	09-May-09	Swietenia	macrophylla	15	Aniba	bracteata	Cnemidaria	grandifolium					Asplundia	rigida	Selaginella	flabellata		
140	09-May-09	Talipartii	elatum	10	Prithcellobium	jupunba							Salpichlaena	volubilis	Thelypteris	clypeolutat		
140	09-May-09	Aiphanes	minima	1	Byrsonima	trinitensis												
140	09-May-09	Prestoea	acuminata	11	Myrcia	fallax_m												
140	09-May-09	Symplocos	martincensis	3	Protium	attenuatum												
140	09-May-09	Henrietta	triflora	1	Sterculia	caribaea												
140	09-May-09	Chrysochlamys	caribaea	1														
141	09-May-09	Pinus	caribaea	17	Aegiphila	martincensis	Piper	dussii							Selaginella	flabellata		
141	09-May-09				Aiphanes	minima												
141	09-May-09				Alsophila	muricata												
141	09-May-09				Byrsonima	trinitensis												
141	09-May-09				Conostegia	icosandra												
141	09-May-09				Hedyosmum	arborescens												
141	09-May-09				Miconia	luciana												
141	09-May-09				Miconia	mirabilis												
141	09-May-09				Psychotria	mapourioides												
141	09-May-09				Symplocos	martincensis												
141	09-May-09				Talipartii	elatum												

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Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT					
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs	Epiphytes	Vines	Terrestrial ferns		Trees only			
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species
142	09-May-09	Alsophila	muricata	3	Rondeletia	parviflora	Piper	dussii						Selaginella	flabellata	Chimarris	cymosa
142	09-May-09	Prestoea	acuminata	2	Psychotria	mapourioides								Thelypteris	clypeolulot	Marlia	racemosa
142	09-May-09	Myrcia	fallax_m	2	Tovomita	plumieri										Ormosia	monosperma
142	09-May-09	Aiphanes	minima	5	Aniba	bracteata											
142	09-May-09	Aegiphila	martinicensis	1	Ilex	sideroxyloides											
142	09-May-09	Talauma	dodecapetala	8	Ixora	ferrea											
142	09-May-09	Symplocos	martinicensis	1	Miconia	furfuracea											
142	09-May-09	Miconia	secunda	1	Plinia	pinnata											
142	09-May-09	Sterculia	caribaea	2	Sloanea	caribaea											
142	09-May-09	Talipartii	elatum	15	Swartzia	caribaea											
142	09-May-09	Cybianthus	antillanus	1													
142	09-May-09	Endlicheria	sericea	1													
142	09-May-09	Licania	tematensis	1													
142	09-May-09	Protium	attenuatum	1													
143	12-May-09	Palicourea	crocea	1	Cecropia	schreberiana	Piper	dussii				Marcgravia	umbellata			Bunchosia	polystachia
143	12-May-09	Prestoea	acuminata	8	Aniba	bracteata	Psychotria	muscosa	Scleria	latifolia		Asplundia	rigida	Thelypteris	clypeolulot	Ficus	insipida
143	12-May-09	Sterculia	caribaea	9	Swietenia	macrophylla						Heteropterys	platyptera			Guarea	macrophylla
143	12-May-09	Endlicheria	sericea	2	Protium	attenuatum						Schradera	exotica			Talauma	dodecapetala
143	12-May-09	Stylogyne	lateriflora	1	Byrsonima	trinitensis											
143	12-May-09	Aiphanes	minima	2													
143	12-May-09	Alsophila	muricata	1													
143	12-May-09	Daphnopsis	macrocarpa	1													
143	12-May-09	Heliconia	bihai	1													
143	12-May-09	Licania	leucosepala	1													
143	12-May-09	Licania	tematensis	1													
143	12-May-09	Micropholis	guyanensis	1													
143	12-May-09	Pouteria	semicarpifolia	2													
143	12-May-09	Simarouba	amara	1													
143	12-May-09	Sloanea	caribaea	1													
143	12-May-09	Tapura	latifolia	1													
143	12-May-09	Tovomita	plumieri	1													
144	12-May-09	Prestoea	acuminata	1	Stylogyne	lateriflora	Piper	dussii				Asplundia	rigida			Aniba	bracteata
144	12-May-09	Sloanea	caribaea	1	Alsophila	muricata	Piper	glabrescens				Marcgravia	umbellata			Marlia	racemosa
144	12-May-09	Protium	attenuatum	3	Byrsonima	trinitensis						Philodendrom	lingulatum				
144	12-May-09	Bunchosia	polystachia	3													
144	12-May-09	Chimarris	cymosa	1													
144	12-May-09	Endlicheria	sericea	1													
144	12-May-09	Ficus	insipida	1													
144	12-May-09	Guarea	glabra	1													
144	12-May-09	Guarea	macrophylla	1													
144	12-May-09	Miconia	mirabilis	1													
144	12-May-09	Micropholis	guyanensis	1													
144	12-May-09	Pouteria	multiflora	2													
144	12-May-09	Quararibaea	turbinata	2													
144	12-May-09	Sapium	caribaeum	1													
144	12-May-09	Sterculia	caribaea	4													
144	12-May-09	Swartzia	caribaea	1													
145	12-May-09	Henriettia	triflora	1	Alsophila	muricata	Piper	dussii				Asplundia	rigida	Selaginella	flabellata	Marlia	racemosa
145	12-May-09	Dacyrodes	excelsa	1	Heliconia	bihai	Clidemia	umbrosa				Anthurium	grandifolium	Danaea	antillensis	Psychotria	berteriana
145	12-May-09	Chrysochlamys	caribaea	7			Piper	glabrescens								Tovomita	plumieri
145	12-May-09	Prestoea	acuminata	1			Cnemidaria	grandifolium									
145	12-May-09	Simarouba	amara	1													
145	12-May-09	Symplocos	martinicensis	1													
146	12-May-09	Prestoea	acuminata	3	Miconia	furfuracea	Piper	dussii	Noropleura	uliginosa		Asplundia	rigida	Thelypteris	clypeolulot	Calyptranthes	forsteri
146	12-May-09	Sterculia	caribaea	6	Alsophila	muricata	Cnemidaria	grandifolium	Anthurium	guldinngii		Anthurium	grandifolium	Danaea	antillensis	Chrysobalanus	cuspidatus
146	12-May-09	Licania	leucosepala	1	Stylogyne	lateriflora						Marcgravia	umbellata				
146	12-May-09	Pouteria	semicarpifolia	1	Chrysochlamys	caribaea											
146	12-May-09	Tapura	latifolia	2	Dacyrodes	excelsa											
146	12-May-09	Endlicheria	sericea	1	Exostemma	caribaea											
146	12-May-09	Sloanea	caribaea	1	Heliconia	bihai											
146	12-May-09				Picramna	pentandra											
146	12-May-09				Psychotria	mapourioides											
146	12-May-09				Stylogyne	lateriflora											

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
147	12-May-09	Tapura	latifolia	1	Ixora	ferrea						Salpichlaena	volubilis	Thelypteris	clypeolutat	Aniba	bracteata	
147	12-May-09	Aniba	ramageana	2	Licania	ternatensis						Marcgravia	umbellata			Exostemma	caribaea	
147	12-May-09	Sterculia	caribaea	4	Calyptanthus	forsteri						Asplundia	rigida			Guatteria	caribaea	
147	12-May-09	Ocotea	jacquinii	1												Marila	racemosa	
147	12-May-09	Prestoea	acuminata	7												Miconia	furfuracea	
147	12-May-09	Protium	attenuatum	3												Miconia	secunda	
147	12-May-09	Alsophila	muricata	1														
147	12-May-09	Cordia	reticulata	1														
147	12-May-09	Micropholis	guyanensis	2														
147	12-May-09	Pouteria	semicarpifolia	1														
147	12-May-09	Rudgea	citrifolia	1														
147	12-May-09	Sloanea	caribaea	1														
148	12-May-09	Tapura	latifolia	1			Odontonema	nitidum								Beilschiemedia	pendula	
148	12-May-09	Chrysobalanus	cuspidatus	4			Psychotria	muscosa								Plinia	pinnata	
148	12-May-09	Chrysoclamys	caribaea	8														
148	12-May-09	Aniba	bracteata	1														
148	12-May-09	Byrsonima	trinitensis	1														
148	12-May-09	Cordia	reticulata	1														
148	12-May-09	Dacryodes	excelsa	1														
148	12-May-09	Daphnopsis	macrocarpa	2														
148	12-May-09	Erythroxylum	squamatum	1														
148	12-May-09	Micropholis	guyanensis	2														
148	12-May-09	Prestoea	acuminata	2														
148	12-May-09	Protium	attenuatum	9														
148	12-May-09	Psychotria	mapourioides	1														
148	12-May-09	Rudgea	citrifolia	1														
148	12-May-09	Simarouba	amara	1														
148	12-May-09	sterculia	caribaea	6														
149	12-May-09	Sterculia	caribaea	2	Pouteria	semicarpifolia	Psychotria	muscosa				Philodendron	lingulatum			Dacryodes	excelsa	
149	12-May-09	Sloanea	caribaea	3								Marcgravia	umbellata			Ormosia	monosperma	
149	12-May-09	Protium	attenuatum	2								Salpichlaena	volubilis					
149	12-May-09	Psychotria	mapourioides	1								Schradera	exotica					
149	12-May-09	Aniba	bracteata	1														
149	12-May-09	Byrsonima	trinitensis	1														
149	12-May-09	Calyptanthus	forsteri	1														
149	12-May-09	Cordia	reticulata	1														
149	12-May-09	Licania	leucosepala	1														
149	12-May-09	Licania	ternatensis	2														
149	12-May-09	Micropholis	guyanensis	3														
149	12-May-09	Myrcia	fallax_m	2														
149	12-May-09	Plinia	pinnata	1														
149	12-May-09	Stylogyne	lateriflora	1														
150	16-May-09	Ixora	ferrea	2	Erythroxylum	squamatum						Smilax	oblongata			Cassipourea	guyanensis	
150	16-May-09	Cybianthus	antillanus	3	Licania	ternatensis						Coccoloba	adscendens			Ficus	americana	
150	16-May-09	Psychotria	mapourioides	3	Maytenus	guyanensis										Ficus	trigonata	
150	16-May-09	Hirtella	pendula	1	Pouteria	pallida										Ocotea	eggersiana	
150	16-May-09	Rudgea	citrifolia	3	Endlicheria	sericea										Pouteria	semicarpifolia	
150	16-May-09	Sterculia	caribaea	4	Heliconia	bihai										Pouteria	multiflora	
150	16-May-09	Protium	attenuatum	6	Aiphanes	minima										Simarouba	amara	
150	16-May-09	Calyptanthus	forsteri	2												Talauma	dodecapetala	
150	16-May-09	Byrsonima	trinitensis	1														
150	16-May-09	Cordia	reticulata	1														
150	16-May-09	Guatteria	caribaea	1														
150	16-May-09	Ilex	sideroxyloides	1														
150	16-May-09	Myrcia	fallax_m	5														
150	16-May-09	Ormosia	monosperma	1														
150	16-May-09	Palicourea	crocea	1														
150	16-May-09	Prestoea	acuminata	3														
151	16-May-09	Amyris	elemifera	4								Petrea	volubilis			Erythroxylum	havanense	
151	16-May-09	Zanthoxylum	monophyllum	1												Eugenia	tapacumensis	
151	16-May-09	Bursera	simarouba	4												Pilosocerus	royenii	
151	16-May-09	Bourreria	succulenta	2														
151	16-May-09	Capparis	hastata	2														
151	16-May-09	Capparis	indica	1														
151	16-May-09	Eugenia	ligustrina	1														
151	16-May-09	Guapira	fragrans	1														
151	16-May-09	Lonchocarpus	punctatus	1														
151	16-May-09	Zanthoxylum	spinifex	1														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT											28 METRE RADIUS PLOT					
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs	Epiphytes	Vines		Terrestrial ferns		Trees only			
		Genus	Species	No.	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Other Tree Species	
152	19-May-09	Tabebuia	heterophylla	1	Capparis	indica	Senegalia	riparia	Lasiacis	divaricata			Abrus	preceptorius			Capparis	indica
152	19-May-09	Randia	aculeata	3													Capparis	baduoca
152	19-May-09	Erythroxylum	havanense	10	Guapira	fragrans	Chiococca	alba	Cyanotis	cristata			Petrea	volubilis			Cedrela	odorata
152	19-May-09	Capparis	flexuosa	1									Gouania	lupuloides			Guettarda	odorata
152	19-May-09	Bursera	simaruba	1													Pilosocereus	royenii
152	19-May-09	Bourreria	succulenta	3													Zanthoxylum	spinifex
152	19-May-09	Casearia	decandra	1														
152	19-May-09	Croton	bixoides	1														
152	19-May-09	Lonchocarpus	punctatus	1														
153	19-May-09	Capparis	flexuosa	1													Bourreria	succulenta
153	19-May-09	Guapira	fragrans	2			Chiococca	alba	Peperomia	myrtifolia							Eugenia	monticola
153	19-May-09	Casearia	decandra	2			Odontonema	nitidum	Gibasis	geniculata			Cissampelos	pareira			Nectandra	coriacea
153	19-May-09	Pilosocereus	royenii	2					Pitcairnia	angustifolia							Oreopanax	capitatus
153	19-May-09	Lonchocarpus	punctatus	1			Senegalia	riparia	Epidendrum	viliare							Prockia	crucis
153	19-May-09	Erythroxylum	havanense	4			Odontonema	nitidum	Lasiacis	divaricata							Zanthoxylum	microcarpum
154	19-May-09	Maytenus	laevigata	2	Eugenia	monticola	Senegalia	riparia	Peperomia	myrtifolia							Nectandra	coriacea
154	19-May-09	Guapira	fragrans	2	Daphnopsis	americana	Randia	nitida	Anthurium	cordatum							Sideroxylon	foetidissimum
154	19-May-09	Gyminda	latifolia	1	Casearia	decandra	Pavonia	spinifex									Tournefortia	filiflora
154	19-May-09	Bourreria	succulenta	1														
154	19-May-09	Bursera	simaruba	1														
154	19-May-09	Erythroxylum	havanense	1														
154	19-May-09	Krugiodendron	ferreum	2														
155	24-May-09	Sterculia	caribaea	1	Heliconia	bihai	Psychotria	muscosa	Anthurium	hookeri			Marcgravia	umbellata	Selaginella	flabellata	Cinnamomum	elongatum
155	24-May-09	Swartzia	caribaea	2	Sloanea	caribaea	Piper	dilatatum	Anthurium	guldinngii			Heteropterys	platyptera	Thelypteris	reticulata	Dacyrodes	excelsa
155	24-May-09	Sapium	caribaeum	1	Erythroxylum								Asplundia	rigida			Guarea	macrophylla
155	24-May-09	Byrsonima	trinitensis	1	Stylogyne	lateriflora											Inga	ingoides
155	24-May-09	Myrcia	fallax_m	1	Pouteria	pallida											Miconia	furfuracea
155	24-May-09	Chimarris	cymosa	1	Tapura	latifolia											Miconia	luciana
155	24-May-09	Calyptanthes	forsteri	1	Rudgea	citrifolia											Myrsine	antillana
155	24-May-09	Micropholis	guyanensis	2													Protium	attenuatum
155	24-May-09	Quararibaea	turbinata	1													Trichillia	pallida
156	24-May-09	Alsophila	muticata	4	Micropholis	guyanensis	Cnemidaria	grandifolium	Anthurium	hookeri			Marcgravia	umbellata			Calyptanthes	forsteri
156	24-May-09	Ormosia	monosperma	3	Pouteria	pallida							Smilax	oblongata			Ficus	insipida
156	24-May-09	Protium	attenuatum	2	Stylogyne	lateriflora											Oreopanax	capitatus
156	24-May-09	Erythroxylum	squamatum	1	Cybianthus	rostratus											Pouteria	multiflora
156	24-May-09	Sterculia	caribaea	4	Licania	ternatensis											Symplocos	marticensis
156	24-May-09	Simarouba	amara	1													Talauma	dodecapetala
156	24-May-09	Aiphanes	minima	3														
156	24-May-09	Cordia	reticulata	2														
156	24-May-09	Endlicheria	sericea	1														
156	24-May-09	Ilex	sideroxyloides	2														
156	24-May-09	Ocotea	leucoxylon	1														
156	24-May-09	Pithecellobium	jupunba	1														
156	24-May-09	Prestoea	acuminata	9														
156	24-May-09	Psychotria	mapourioides	3														
156	24-May-09	Swartzia	caribaea	2														
156	24-May-09	Tovomita	plumieri	1														
157	24-May-09	Tapura	latifolia	1	Ocotea	leucoxylon	Cnemidaria	grandifolium					Schradera	exotica	Selaginella	flabellata	Aniba	bracteata
157	24-May-09	Sterculia	caribaea	6	Tovomita	plumieri							Marcgravia	umbellata	Thelypteris	clypeolulata	Hedyosmum	arborescens
157	24-May-09	Geonema	interrupta	2	Daphnopsis	macrocarpa									Danaea	antillensis	Miconia	furfuracea
157	24-May-09	Cordia	reticulata	1														
157	24-May-09	Alsophila	muricata	2														
157	24-May-09	Calyptanthes	forsteri	1														
157	24-May-09	Casearia	decandra	1														
157	24-May-09	Chrysobalanus	cuspidatus	1														
157	24-May-09	Cybianthus	antillanus	1														
157	24-May-09	Cybianthus	rostratus	1														
157	24-May-09	Ilex	sideroxyloides	2														
157	24-May-09	Marlia	racemosa	1														
157	24-May-09	Micropholis	guyanensis	3														
157	24-May-09	Myrcia	fallax_m	1														
157	24-May-09	Ocotea	imrayana	3														
157	24-May-09	Prestoea	acuminata	4														
157	24-May-09	Psychotria	mapourioides	10														
157	24-May-09	Rondeletia	parviflora	2														
157	24-May-09	Talauma	dodecapetala	1														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT											28 METRE RADIUS PLOT					
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
158	24-May-09	Clusia	major	1				Scleria	latifolia			Alloplectus	cristatus					
158	24-May-09	Cordia	reticulata	1				Anthurium	gulingii			Anthurium	grandifolium					
158	24-May-09	Schleffera	attenuata	1								Coccoloba	adscendens					
158	24-May-09	Myrcia	fallax_m	1								Salpichlaena	volubilis					
158	24-May-09	Byrsonima	trinitensis	1														
158	24-May-09	Chrysobalanus	cuspidatus	1														
158	24-May-09	Ficus	america	2														
158	24-May-09	Hedyosmum	arborescens	1														
158	24-May-09	Ilex	sideroxyloides	1														
158	24-May-09	Miconia	furfuracea	1														
158	24-May-09	Ocotea	leucoxydon	2														
158	24-May-09	Psychotria	mapourioides	2														
158	24-May-09	Rondeletia	parviflora	4														
158	24-May-09	Sterculia	caribaea	3														
159	24-May-09	Dacryodes	excelsa	1								Coccoloba	adscendens			Chimarris	cymosa	
159	24-May-09	Chrysobalanus	cuspidatus	1												Cordia	reticulata	
159	24-May-09	Licania	tematensis	2												Marila	racemosa	
159	24-May-09	Pouteria	pallida	5												Miconia	luciana	
159	24-May-09	Alsophila	muricata	4														
159	24-May-09	Calyptanthus	forsteri	5														
159	24-May-09	Erythroxylum	squamatum	2														
159	24-May-09	Guatteria	caribaea	3														
159	24-May-09	Prestoea	acuminata	1														
159	24-May-09	Protium	attenuatum	1														
159	24-May-09	Psychotria	mapourioides	1														
159	24-May-09	Rudgea	citrifolia	1														
159	24-May-09	Sterculia	caribaea	2														
160	24-May-09	Prestoea	acuminata	10	Dacryodes	excelsa						Salpichlaena	volubilis			Aniba	ramageana	
160	24-May-09	Chimarris	cymosa	1	Byrsonima	trinitensis						Asplundia	rigida			Cybianthus	rostratus	
160	24-May-09	Chrysoclamys	caribaea	2	Calyptanthus	forsteri										Myrcia	fallax_m	
160	24-May-09	Psychotria	mapourioides	1	Micropholis	guyanensis										Myrcia	platyclada	
160	24-May-09	Sterculia	caribaea	2	Sloanea	caribaea										Rondeletia	parviflora	
160	24-May-09	Marila	racemosa	1												Swartzia	caribaea	
160	24-May-09	Alsophila	muricata	5														
160	24-May-09	Heliconia	bihai	1														
160	24-May-09	Miconia	luciana	2														
160	24-May-09	Picramnia	pentandra	1														
160	24-May-09	Protium	attenuatum	1														
161	24-May-09	Erythroxylum	squamatum	3	Dacryodes	excelsa												
161	24-May-09	Chrysoclamys	caribaea	1		1												
161	24-May-09	Alsophila	muricata	4														
161	24-May-09	Calyptanthus	forsteri	2														
161	24-May-09	Chrysobalanus	cuspidatus	1														
161	24-May-09	Hedyosmum	arborescens	1														
161	24-May-09	Licania	tematensis	2														
161	24-May-09	Micropholis	guyanensis	2														
161	24-May-09	Pouteria	pallida	2														
161	24-May-09	Prestoea	acuminata	4														
161	24-May-09	Psychotria	mapourioides	1														
161	24-May-09	Rudgea	citrifolia	1														
161	24-May-09	Sterculia	caribaea	1														
161	24-May-09	Swartzia	caribaea	2														
162	27-May-09	Swartzia	caribaea	2	Pithecellobium	jupunba						Smilax	oblongata			Ilex	sideroxyloides	
162	27-May-09	Protium	attenuatum	5	Miconia	luciana										Miconia	furfuracea	
162	27-May-09	Ormosia	monosperma	3	Eugenia	coffeifolia										Prestoea	acuminata	
162	27-May-09	Pouteria	pallida	4	Calyptanthus	forsteri										Simarouba	amara	
162	27-May-09	Guapira	fragrans	1												Tovomitia	plumieri	
162	27-May-09	Alsophila	muricata	1														
162	27-May-09	Byrsonima	spicata	1														
162	27-May-09	Endlicheria	sericea	2														
162	27-May-09	Licania	tematensis	2														
162	27-May-09	Myrcia	deflexa	4														
162	27-May-09	Myrcia	fallax_m	1														
162	27-May-09	Palicourea	crocea	1														
162	27-May-09	Rudgea	citrifolia	1														
162	27-May-09	Sterculia	caribaea	1														
162	27-May-09	Symplocos	martinicensis	1														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT											28 METRE RADIUS PLOT						
		Trees & other plants 25cm DBH			Saplings		Shrubs		Herbs		Epiphytes	Vines		Terrestrial ferns	Trees only				
		Genus	Species	No.	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Genus	Species	
163	27-May-09	Pouteria	pallida	2	Palicourea	crocea			Scleria	secans									
163	27-May-09	Ormosia	monosperma	4	Miconia	furfuracea							Smilax	oblongata					
163	27-May-09	Byrsonima	spicata	1	Faramea	occidentalis							Coccoloba	adscendens					
163	27-May-09	Ilex	sideroxyloides	1									Mikania	latifolia					
163	27-May-09	Sterculia	caribaea	7															
163	27-May-09	Guatteria	caribaea	2															
163	27-May-09	Simarouba	amara	1															
163	27-May-09	Swartzia	caribaea	1															
163	27-May-09	Rudgea	citrifolia	1															
163	27-May-09	Cordia	reticulata	1															
163	27-May-09	Cyathia	speciosa	1															
163	27-May-09	Endlicheria	sericea	1															
163	27-May-09	Hirtella	pendula	1															
163	27-May-09	Ixora	ferrea	1															
163	27-May-09	Licania	tematensis	1															
163	27-May-09	Myrcia	deflexa	2															
163	27-May-09	Symplocos	martinicensis	2															
164	27-May-09	Ilex	sideroxyloides	4	Maytenus	guianensis			Scleria	secans									
164	27-May-09	Rudgea	citrifolia	1	Symplocos	martinicensis			Scleria	latifolia			Coccoloba	adscendens					
164	27-May-09	Byrsonima	spicata	4	Eugenia	coffeifolia							Passiflora	andersonii					
164	27-May-09	Cordia	reticulata	1	Calypttranthes	forsteri							Rourea	surinamensis					
164	27-May-09	Guatteria	caribaea	1	Clusia	major													
164	27-May-09	Ormosia	monosperma	1	Myrcia	antillana													
164	27-May-09	Ormosia	monosperma	1	Palicourea	crocea													
164	27-May-09	Miconia	furfuracea	1															
164	27-May-09	Pithecellobium	junpaba	1															
165	28-May-09	Charianthus	alpinus	1			Cnemidaria	grandifolium											
165	28-May-09	Myrcia	fallax_m	2					Pitcairnia	angustifolia			Mucuna	urens					
165	28-May-09	Podocarpus	coriaceus	5					Rhynchospora	longifolia			Centropogon	berterianus					
165	28-May-09	Heliconia	bihai	1					Notopleura	uliginosa			Blechnum	fragile					
165	28-May-09	Hedyosmum	arborescens	3					Isachne	dispema									
165	28-May-09	Alsophila	imrayana	1															
165	28-May-09	Byrsonima	trinitensis	2															
165	28-May-09	Persea	urbaniana	1															
165	28-May-09	Prestoea	acuminata	14															
165	28-May-09	Schefflera	attenuata	4															
166	29-May-09	Licania	tematensis	6	Pinia	pinnata													
166	29-May-09	Rudgea	citrifolia	2	Hirtella	pendula							Smilax	oblongata					
166	29-May-09	Protium	attenuatum	9	Chrysophyllum	argenteum													
166	29-May-09	Micropholis	crotonioides	3															
166	29-May-09	Ormosia	monosperma	4															
166	29-May-09	Aiphanes	minima	1															
166	29-May-09	Aniba	bracteata	1															
166	29-May-09	Byrsonima	trinitensis	1															
166	29-May-09	Casearia	decandra	1															
166	29-May-09	Dacyrodes	excelsa	1															
166	29-May-09	Eugenia	coffeifolia	2															
166	29-May-09	Faramea	occidentalis	1															
166	29-May-09	Meliosma	herbertii	1															
166	29-May-09	Myrcia	fallax	3															
166	29-May-09	Nectandra	membranacea	1															
166	29-May-09	Pouteria	multiflora	1															
166	29-May-09	Pouteria	pallida	2															
166	29-May-09	Sterculia	caribaea	2															
167	29-May-09	Ixora	ferrea	1															
167	29-May-09	Guarea	glabra	1															
167	29-May-09	Pouteria	multiflora	1															
167	29-May-09	Daphnopsis	macrocarpa	2															
167	29-May-09	Dacyrodes	excelsa	3															
167	29-May-09	Alsophila	muricata	1															
167	29-May-09	Aniba	bracteata	1															
167	29-May-09	Guarea	macrophylla	2															
167	29-May-09	Licania	tematensis	2															
167	29-May-09	Micropholis	guyanensis	1															
167	29-May-09	Myrcia	antillana	1															
167	29-May-09	Ocotea	eggertiana	1															
167	29-May-09	Quararibaea	turbinata	1															
167	29-May-09	Rudgea	citrifolia	1															
167	29-May-09	Sterculia	caribaea	7															
167	29-May-09	Swartzia	caribaea	1															
167	29-May-09	Tapura	latifolia	1															

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT								
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only			
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	Tree Species		
168	29-May-09	Guatteria	caribaea	1	Alphanes	minima														
168	29-May-09	Licania	tematensis	2																
168	29-May-09	Dacyrodes	excelisa	3																
168	29-May-09	Protium	attenuatum	4																
168	29-May-09	Sterculia	caribaea	4																
168	29-May-09	Alsophila	muricata	1																
168	29-May-09	Cordia	reticulata	1																
168	29-May-09	Gymnanthes	hypoleuca	12																
168	29-May-09	Ixora	ferrea	1																
168	29-May-09	Myrcia	antillana	2																
168	29-May-09	Pouteria	multiflora	1																
168	29-May-09	Rudgea	citrifolia	2																
168	29-May-09	Sloanea	caribaea	1																
168	29-May-09	Stylogyne	latiflora	1																
169	30-May-09	Byrsonima	trinitensis	1			Cnemidaria	grandifolium	Notopleura	uliginosa										
169	30-May-09	Alsophila	imrayana	6																
169	30-May-09	Heliconia	bihai	2																
169	30-May-09	Prestoea	acuminata	6																
169	30-May-09	Schleffera	attenuata	2																
169	30-May-09	Cecropia	schreberiana	1																
170	16-Jun-09	Lonchocarpus	heptaphyllus	3	Eugenia	pseudopsidium	Malpighia	coccigera	Lasiacis	divaricata	Phoradendron	trinervium	Cissampelos	pariera						
170	16-Jun-09	Cusia	plukenetii	1																
170	16-Jun-09	Zanthoxylum	punctatum	5																
170	16-Jun-09	Erythroxylum	havanense	5																
170	16-Jun-09	Margaritaria	nobilis	2																
170	16-Jun-09	Eugenia	monticola	2																
170	16-Jun-09	Bunchosia	polystachia	3																
170	16-Jun-09	Guapira	fragrans	7																
170	16-Jun-09	Amyris	elemifera	1																
170	16-Jun-09	Bourreria	succulenta	2																
170	16-Jun-09	Bursera	simaruba	3																
170	16-Jun-09	Byrsonima	spicata	1																
170	16-Jun-09	Daphnopsis	america	2																
170	16-Jun-09	Eugenia	confusa	5																
170	16-Jun-09	Forestiera	rharnifolia	1																
170	16-Jun-09	Guettarda	scabra	1																
170	16-Jun-09	Krugiodendron	ferreum	1																
170	16-Jun-09	Myrcia	citrifolia	2																
170	16-Jun-09	Picramnia	pentandra	1																
170	16-Jun-09	Pimenta	racemosa	1																
170	16-Jun-09	Zanthoxylum	caribaeum	1																
170	16-Jun-09	Zanthoxylum	microcarpum	1																
171	16-Jun-09	Guettarda	scabra	4	Randia	aculeata	Chamaecrista	glandulosa	Scleria	melaleuca			Smilax	guianensis						
171	16-Jun-09			1																
171	16-Jun-09			1																
171	16-Jun-09			1																
171	16-Jun-09			1																
172	16-Jun-09	Guapira	fragrans	1	Randia	aculeata	Cordia	curassavica												
172	16-Jun-09	Syagra	amara	6																
172	16-Jun-09	Tabebuia	pallida	12																
172	16-Jun-09	Coccoloba	swartzii	2																
172	16-Jun-09	Ocotea	cernua	2																
173	16-Jun-09	Tabernaemontana	citrifolia	1									Cissus	verticillata						
173	16-Jun-09	Tabebuia	heterophylla	7																
173	16-Jun-09	calophyllum	antillana	1																
173	16-Jun-09	Terminalia	catappa	2																
174	20-Jun-09	Krugiodendron	ferreum	2	Pilosocereus	royenii	Argythamnia	polygama			Tillandsia	utriculata	Heteropterys	purpurea						
174	20-Jun-09	Eugenia	confusa	1																
174	20-Jun-09	Bursera	simaruba	6																
174	20-Jun-09	Amyris	elemifera	2																
174	20-Jun-09	Bunchosia	polystachia	1																
174	20-Jun-09	Coccoloba	swartzii	1																
174	20-Jun-09	Erithalis	fruticosa	1																
174	20-Jun-09	Erythroxylum	havanense	1																
174	20-Jun-09	Forestiera	rharnifolia	1																
174	20-Jun-09	Guapira	fragrans	3																
174	20-Jun-09	Margaritopsis	microdon	1																
174	20-Jun-09	Nectandra	coriacea	1																
174	20-Jun-09	Pisonia	aculeata	1																
174	20-Jun-09	Plumiera	alba	1																
174	20-Jun-09			1																

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT					
		Trees & other plants 25cm DBH			Saplings		Shrubs		Herbs		Epiphytes	Vines	Terrestrial ferns	Trees only			
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other
175	20-Jun-09	Randia	aculeata	2			Agave	caribaeicola									
175	20-Jun-09	Croton	bixoides	4			Solanum	racemosum									
175	20-Jun-09	Amyris	elemifera	1													
175	20-Jun-09	Bunchosia	polystachia	1													
175	20-Jun-09	Bursera	simaruba	1													
175	20-Jun-09	Calliandra	slaneae	1													
175	20-Jun-09	Eugenia	confusa	1													
175	20-Jun-09	Guapira	fragrans	3													
175	20-Jun-09	Jacquinia	arborea	2													
175	20-Jun-09	Pilosocereus	royenii	2													
175	20-Jun-09	Sideroxylon	obovatum	1													
175	20-Jun-09	Tabebuia	pallida	1													
175	20-Jun-09	Zanthoxylum	punctatum	1													
176	20-Jun-09	Morisonia	americana	1			Agave	caribaeicola									
176	20-Jun-09	Amyris	elemifera	2													
176	20-Jun-09	Canella	winterana	1													
176	20-Jun-09	Cornutia	pyramidata	2													
176	20-Jun-09	Croton	bixoides	1													
176	20-Jun-09	Erithalis	fruticosa	2													
176	20-Jun-09	Eugenia	confusa	1													
176	20-Jun-09	Jacquinia	arborea	1													
176	20-Jun-09	Pilosocereus	royenii	2													
176	20-Jun-09	Pimenta	racemosa	1													
176	20-Jun-09	Zanthoxylum	punctatum	1													
177	20-Jun-09	Maytenus	laevigata	1	Erythroxylum	havanense	Malpighia	coccigera	Aechmea	lingulata		Heteropterys	purpurea				
177	20-Jun-09	Cordia	martinicensis	2					Anthurium	cordatum							
177	20-Jun-09	Allophylus	compactus	2													
177	20-Jun-09	Bourreria	succulenta	2													
177	20-Jun-09	Bursera	simaruba	2													
177	20-Jun-09	Erithalis	fruticosa	1													
177	20-Jun-09	Eugenia	confusa	5													
177	20-Jun-09	Guettarda	scabra	1													
177	20-Jun-09	Lonchocarpus	punctatus	3													
177	20-Jun-09	Randia	aculeata	1													
177	20-Jun-09	Tabebuia	pallida	2													
177	20-Jun-09	Zanthoxylum	punctatum	2													
178	20-Jun-09	Coccoloba	pubescens	1	Guettarda	scabra	Croton	guldianiana	Enicostema	verticillata		Centrosema	virginianum				
178	20-Jun-09				Croton	bixoides	Wedelia	calycina	Sporobolus	jacquemontii		Ipomoea	tiliacea				
178	20-Jun-09				Bourreria	succulenta			Abildgaardia	ovata							
178	20-Jun-09				Cordia	martinicensis											
178	20-Jun-09				Erithalis	fruticosa											
178	20-Jun-09				Randia	aculeata											
178	20-Jun-09				Tabebuia	heterophylla											
179	20-Jun-09	Miconia	cornifolia	3			Wedelia	calycina	Abildgaardia	ovata							
179	20-Jun-09	Randia	aculeata	7			Chamaecrista	glandulosa	Scleria	melaleuca							
179	20-Jun-09	Ternstroemia	peduncularis	1			Chiococca	alba									
179	20-Jun-09	Bourreria	succulenta	2													
179	20-Jun-09	Coccoloba	pubescens	2													
179	20-Jun-09	Cornutia	pyramidata	1													
179	20-Jun-09	Croton	bixoides	2													
179	20-Jun-09	Daphnopsis	americana	1													
179	20-Jun-09	Guettarda	scabra	7													
179	20-Jun-09	Lonchocarpus	heptaphyllus	2													
179	20-Jun-09	Myrcia	citrifolia	2													
179	20-Jun-09	Pimenta	racemosa	1													
179	20-Jun-09	Tabebuia	heterophylla	2													
180	27-Jun-09	Myrcia	deflexa	7	Aiphanes	minima			Olyra	latifolia		Marcgravia	umbellata			Byrsonima	spicata
180	27-Jun-09	Erythroxylum	squamatum	1	Calypttranthes	forsteri	Odontonema	nitidum	Anthurium	guldianii		Passiflora	rubra			Diospyros	revoluta
180	27-Jun-09	Proitum	attenuatum	8	Guarea	macrophylla						Smilax	oblongata			Guazuma	ulmifolia
180	27-Jun-09	Sterculia	caribaea	5												Andira	spindoides
180	27-Jun-09	Simarouba	amara	1												Manilkara	bidentata
180	27-Jun-09	Lonchocarpus	heptaphyllus	2												Nectandra	patens
180	27-Jun-09	Ocotea	leucoxyfon	4												Pouteria	multiflora
180	27-Jun-09	Casearia	decandra	1													
180	27-Jun-09	Cinnamomum	elongatum	1													
180	27-Jun-09	Clusia	major	1													
180	27-Jun-09	Dacyrodes	excelsa	1													
180	27-Jun-09	Eugenia	biflora	1													
180	27-Jun-09	Eugenia	coffeifolia	3													
180	27-Jun-09	Eugenia	pseudopsidium	2													
180	27-Jun-09	Faramea	occidentalis	4													
180	27-Jun-09	Faramea	occidentalis	1													
180	27-Jun-09	Inga	laurina	2													
180	27-Jun-09	Micropholis	crotonioides	1													
180	27-Jun-09	Ocotea	eggersiana	1													
180	27-Jun-09	Ormosia	monosperma	5													
180	27-Jun-09	Symplocos	martinicensis	1													

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs	Epiphytes	Vines		Terrestrial ferns	Trees only				
		Genus	Species	No.	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Genus	Species	Other Tree Species			
181	27-Jun-09	Micropholis	crotonioides	3	Pithecellobium	jupunba	Odontonema	nitidum	Anthurium	guildingii			Smilax	oblongata		Aiphanes	minima	
181	27-Jun-09	Eugenia	coffeifolia	4	Cassipourea	guianensis	Piper	dilatatum					Marcgravia	umbellata		Byrsonima	spicata	
181	27-Jun-09	Faramea	occidentalis	1									Coccoloba	adscendens		Drypetes	glauca	
181	27-Jun-09	sterculia	caribaea	1												Eugenia	greggii	
181	27-Jun-09	Ficus	insipida	1												Ficus	nymphaeifolia	
181	27-Jun-09	Nectandra	patens	2												Guapira	fragrans	
181	27-Jun-09	Protium	attenuatum	1												Guarea	glabra	
181	27-Jun-09	Casearia	decandra	1												Guarea	macrophylla	
181	27-Jun-09	Clusia	major	1												Margaritara	nobilis	
181	27-Jun-09	Calyptanthes	forsteri	1												Ocotea	cernua	
181	27-Jun-09	Diospyros	revoluta	1														
181	27-Jun-09	Myrcia	deflexa	1														
181	27-Jun-09	Ocotea	eggersiana	2														
181	27-Jun-09	Ocotea	leucoxylo	2														
182	27-Jun-09	Tabernaemontana	citrifolia	5	Psychotria	mapourioides							Cissus	verticillata		Andira	inermia	
182	27-Jun-09	Lonchocarpus	heptaphyllus	1	Guarea	macrophylla							Ipomoea	tilacea		Casearia	decandra	
182	27-Jun-09	Protium	attenuatum	1	Calophyllum	antillana							Securidaca	diversifolia		Inga	laurina	
182	27-Jun-09	Zanthoxylum	caribaeum	1	Eugenia	biflora							Smilax	guianensis		Inga	ingoides	
182	27-Jun-09	Guapira	fragrans	4												Sapium	caribaeum	
182	27-Jun-09	Byrsonima	spicata	1												Tetrazygia	discolor	
182	27-Jun-09	Chrysophyllum	argenteum	1														
182	27-Jun-09	Daphnopsis	americana	1														
183	01-Jul-09						Odontonema	nitidum	Costus	arabicus			Petrea	volubilis	Selaginella	flabellata	Calliandra	tergemina
183	01-Jul-09						Piper	dilatatum	Pitcairnia	angustifolia			Cissus	verticillata		Chrysophyllum	argenteum	
183	01-Jul-09								Anthurium	cordatum			Pachyrhizus	erosus		Coccoloba	swartzii	
183	01-Jul-09								Callisia	repens			Dioscorea	alata		Cordia	sulcata	
183	01-Jul-09								Nauticocalyx	meltifolius			Monstera	adansonii		Erythroxylum	havanense	
183	01-Jul-09								Pilea	caribaea			Gouania	lupuloides		Eugenia	oerstediana	
183	01-Jul-09								Lasiacis	sorghoidea						Eugenia	monticola	
183	01-Jul-09															Ficus	citrifolia	
183	01-Jul-09															Guapira	fragrans	
183	01-Jul-09															Guazuma	ulmifolia	
183	01-Jul-09															Hymenaea	coubaril	
183	01-Jul-09															Inga	ingoides	
183	01-Jul-09															Inga	laurina	
183	01-Jul-09															Mangifera	indica	
183	01-Jul-09															Myrcia	citrifolia	
183	01-Jul-09															Picrasma	excelsa	
183	01-Jul-09															Spondias	mombin	
184	01-Jul-09						Aegiphila	martinicensis					Plukenetia	volubilis		Andira	sapindoides	
184	01-Jul-09						Piper	dilatatum					Hyperbaena	domingensis		Chrysophyllum	argenteum	
184	01-Jul-09												Cissus	verticillata		Coccoloba	swartzii	
184	01-Jul-09												Passiflora	laurifolia		Eugenia	monticola	
184	01-Jul-09															Genipa	americana	
184	01-Jul-09															Inga	ingoides	
184	01-Jul-09															Lonchocarpus	pentaphyllus	
184	01-Jul-09															Maclura	tinctoria	
184	01-Jul-09															Mangifera	indica	
184	01-Jul-09															Schoepfia	schreberi	
184	01-Jul-09															Tabebuia	heterophylla	
184	01-Jul-09															Terminalia	catappa	
185	01-Jul-09						Indigofera	tinctoria	Tephrosia	cinerea			Cassipourea	filiformis				
185	01-Jul-09						Cordia	curassavica	Spermacoce	verticillata			Cryptostegia	madagascariensis				
185	01-Jul-09								Sida	cordata								
185	01-Jul-09								Stachytarpheta	jamaicensis								
185	01-Jul-09								Tephrosia	senna								
186	01-Jul-09								Acalypha	indica								
186	01-Jul-09								Achyranthes	aspera								
186	01-Jul-09								Leonotis	nepetiifolia								
186	01-Jul-09	Tabebuia	heterophylla	1	Morinda	citrifolia	Cordia	curassavica	Stachytarpheta	jamaicensis								
186	01-Jul-09	Cordia	obliqua	11					Urena	sinuata								
187	01-Jul-09						Cordia	obliqua	Cenchrus	echinatus			Cassipourea	filiformis				
187	01-Jul-09						Lantana	strigocamara	Fimbristylis	cymosa								
187	01-Jul-09						Solanum	racemosum	Urochloa	subquadripara								
187	01-Jul-09						Chrysobalanus	icaco										
187	01-Jul-09						Clerodendrum	aculeatum										
187	01-Jul-09						Coccoloba	uvifera										
187	01-Jul-09						Corchorus	hirsutus										
187	01-Jul-09						Indigofera	tinctoria										
187	01-Jul-09						Lantana	arubensis										
187	01-Jul-09						Morinda	citrifolia										
188	01-Jul-09								Canavalia	rosea								
188	01-Jul-09								Ipomoea	pes-caprae								
188	01-Jul-09								Sporobolus	virginicus								

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
189	01-Jul-09								Cyperus	alopecuroides								
189	01-Jul-09								Eleocharis	instinctra								
189	01-Jul-09								Eleocharis	mutata								
189	01-Jul-09								Ludgwigia	octovalvis								
190	04-Jul-09								Gynerium	sagittatum				Pteridium	arachnoideum	Byrsonima	spicata	
190	04-Jul-09	Pinus	caribaea	1					Pitcairnia	angustifolia				Blechnum	serrulatum	Clusia	plukenetii	
191	04-Jul-09								Pterolepis	glomerata						Byrsonima	spicata	
191	04-Jul-09								Pitcairnia	angustifolia						Cecropia	schreberiana	
191	04-Jul-09												Cissus	verticillata		Clusia	plukenetii	
191	04-Jul-09															Ficus	citrifolia	
191	04-Jul-09															Miconia	cornifolia	
191	04-Jul-09															Miconia	luciana	
191	04-Jul-09															Miconia	racemosa	
191	04-Jul-09															Palicourea	crocea	
192	04-Jul-09	Inga	ingoides	1	Inga	laurina	Piper	dilatatum	Pilea	caribaea	Anthurium	hookeri	Securidaca	diversifolia		Anacardium	occidentale	
192	04-Jul-09	Guapira	fragrans	3	Aiohanes	minima			Anthurium	cordatum			Gouania	lupuloides		Margaritara	nobilis	
192	04-Jul-09	Daphnopsis	americana	1	Lonchocarpus	punctatus			Anthurium	hookeri						Ocotea	leucoxylo	
192	04-Jul-09	Syzgium	jambos	4	Calophyllum	antillana										Picrasma	excelsa	
192	04-Jul-09	Ficus	insipida	2												Tetrazygia	discolor	
192	04-Jul-09	Casearia	decandra	4														
192	04-Jul-09	Chrysophyllum	argenteum	2														
192	04-Jul-09	Cinnamomum	elongatum	1														
192	04-Jul-09	Citharexylum	spinosum	1														
192	04-Jul-09	Oreopanax	capitatus	1														
193	04-Jul-09	Bursera	simaruba	1	Randia	aculeata	Solanum	racemosum					Paullinia	cururu				
193	04-Jul-09	Bourreria	succulenta	1			Margaritopsis	microdon					Senegalia	riparia				
193	04-Jul-09	Daphnopsis	americana	2														
193	04-Jul-09	Ficus	citrifolia	1														
193	04-Jul-09	Guapira	fragrans	2														
193	04-Jul-09	Lonchocarpus	punctatus	1														
193	04-Jul-09	Zanthoxylum	monophyllum	3														
194	04-Jul-09	Gmelina	arborea	1	Myrcia	deflexa			Scleria	secans			Coccoloba	adscendens		Nectandra	patens	
194	04-Jul-09	Pinus	caribaea	8	Protium	attenuatum							Smilax	oblongata		Sapium	caribaeum	
194	04-Jul-09	Ilex	sideroxyloides	2	Siparuna	martiniensis										Swartzia	caribaea	
194	04-Jul-09	Cyathia	species	6	Palicourea	crocea												
194	04-Jul-09	Byrsonima	spicata	1	Rudgea	citrifolia												
194	04-Jul-09	Byrsonima	trinitensis	1														
194	04-Jul-09	Miconia	luciana	1														
194	04-Jul-09	Simarouba	amara	1														
195	08-Jul-09	Chrysophyllum	argenteum	1	Miconia	cornifolia	Heliconia	caribaea	Lasiacis	sorghoidea			Petrea	volubilis		Byrsonima	spicata	
195	08-Jul-09	Nectandra	patens	1	Eugenia	monticola							Securidaca	diversifolia		Licania	leucosepala	
195	08-Jul-09	Faramea	occidentalis	1	Myrcia	citrifolia	Odontonema	nitidum								Lonchocarpus	heptaphyllum	
195	08-Jul-09	Tabernaemontana	citrifolia	3												Ormosia	monosperma	
195	08-Jul-09	Bourreria	succulenta	2														
195	08-Jul-09	Casearia	decandra	1														
195	08-Jul-09	Coccoloba	swartzii	1														
195	08-Jul-09	Cordia	sulcata	1														
195	08-Jul-09	Eugenia	pseudopsidium	1														
195	08-Jul-09	Guapira	fragrans	1														
195	08-Jul-09	Guazuma	ulmifolia	1														
195	08-Jul-09	Inga	laurina	2														
195	08-Jul-09	Myrcia	deflexa	2														
195	08-Jul-09	Tabebuia	heterophylla	1														
196	08-Jul-09	Tabernaemontana	citrifolia	3	Faramea	occidentalis										Bursera	simaruba	
196	08-Jul-09	Daphnopsis	americana	1	Miconia	cornifolia										Ocotea	leucoxylo	
196	08-Jul-09	Casearia	decandra	3	Coccoloba	swartzii										Pimenta	racemosa	
196	08-Jul-09	Myrcia	deflexa	1	Palicourea	crocea												
196	08-Jul-09	Lonchocarpus	heptaphyllum	1														
196	08-Jul-09	Bourreria	succulenta	1														
196	08-Jul-09	Chrysophyllum	argenteum	2														
196	08-Jul-09	Cordia	sulcata	2														
196	08-Jul-09	Guapira	fragrans	1														
196	08-Jul-09	Inga	laurina	1														
196	08-Jul-09	Nectandra	patens	1														
197	10-Jul-09								Blutaparon	vermiculare								
197	10-Jul-09								Cyperus	ligularis								
197	10-Jul-09								Eleocharis	mutata								
197	10-Jul-09								Ericostema	verticillata								
197	10-Jul-09								Fimbristylis	ferruginea								
197	10-Jul-09								Sporobolus	virginicus								
198	10-Jul-09	Tabebuia	heterophylla	3	Pithecellobium	unguis-cati	Lantana	arubensis	Abilgaardia	o vata			Cassipourea	filiformis		Guettarda	scabra	
198	10-Jul-09	Coccoloba	pubescens	1			Croton	guldbergiana	Bothriochloa	pertusa								
198	10-Jul-09	Randia	aculeata	4			Croton	hircinus										
198	10-Jul-09	Haematoxylon	campechianum	1														

Graveson – Vegetation Classification

Plot No.	Date	PLANTS WITHIN 7-METRE RADIUS SUBPLOT										28 METRE RADIUS PLOT						
		Trees & other plants ≥5cm DBH			Saplings		Shrubs		Herbs		Epiphytes		Vines		Terrestrial ferns		Trees only	
		Genus	species	No.	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Genus	species	Other Tree Species	
199	10-Jul-09				Erithalis	fruticosa	Clerodendrum	aculeatum	Cleome	viscosa								
199	10-Jul-09				Coccoloba	uvifera	Chrysobalanus	icaco	Ipomoea	imperati								
199	10-Jul-09						Sophora	tomentosa	Sporobolus	virginicus								
199	10-Jul-09						Lantana	arubensis	Stachytarpheta	jamaicensis								
200	10-Jul-09								Ludwigia	octovalvis					Acrostichum	danaeifolium		
200	10-Jul-09								Persicaria	punctata								
200	10-Jul-09								Urochloa	mutica								
201	10-Jul-09						Triumfetta	semitriloba	Acalypha	alopencuroidea								
201	10-Jul-09						Lantana	arubensis	Argemone	mexicana								
201	10-Jul-09								Conzya	canadensis								
201	10-Jul-09								Crotalaria	retusa								
201	10-Jul-09								Crotalaria	spectabilis								
201	10-Jul-09								Heliotropium	angiospermum								
201	10-Jul-09								Mimosa	pubica								
201	10-Jul-09								Momordica	charantia								
201	10-Jul-09								Spermacoce	verticillata								
201	10-Jul-09								Waltheria	indica								
202	25-Jul-09	Andira	sapindoides	1	Guapira	fragens	Piper	dilatatum			Anthurium	hookeri	Monstera	adansonii				
202	25-Jul-09	Casearia	decandra	1	Myrcia	splendens					Aechmea	lingulata	Philodendron	lingulatum				
202	25-Jul-09	Cinnamomum	elongatum	1	Aiphanes	minima												
202	25-Jul-09	Daphnopsis	americana	1	Cedrela	odorata												
202	25-Jul-09	Syzygium	jambos	1	Chrysophyllum	argenteum												
202	25-Jul-09	Simarouba	amara	1	Eugenia	monticola												
202	25-Jul-09	Lonchocarpus	heptaphyllus	2	Nectandra	patens												
202	25-Jul-09	Ocotea	leucoxydon	1	Protium	attenuatum												
202	25-Jul-09	Inga	ingoides	1	Psychotria	mapourioides												
202	25-Jul-09	Byrsonima	spicata	1														
202	25-Jul-09	Myrcia	deflexa	1														
202	25-Jul-09	Citharexylum	spinulosum	1														
202	25-Jul-09	Chimarris	cymosa	1														
203	25-Jul-09	Chimarris	cymosa	1	Protium	attenuatum	Piper	dilatatum										
203	25-Jul-09	Syzygium	jambos	2	Aiphanes	minima												
203	25-Jul-09	Ocotea	leucoxydon	1	Chrysophyllum	argenteum												
203	25-Jul-09	Byrsonima	spicata	2	Cinnamomum	elongatum												
203	25-Jul-09	Zanthoxylum	caribaeum	2	Eugenia	colleifolia												
203	25-Jul-09	Mangifera	indica	1	Myrcia	splendens												
203	25-Jul-09	Sapium	caribaeum	2	Psychotria	mapourioides												
203	25-Jul-09	Andira	sapindoides	2														
203	25-Jul-09	Myrcia	deflexa	1														
203	25-Jul-09	Nectandra	patens	1														
203	25-Jul-09	Casearia	decandra	1														
203	25-Jul-09	Lonchocarpus	heptaphyllus	1														
203	25-Jul-09	Cordia	sulcata	1														
203	25-Jul-09	Citharexylum	spinulosum	1														
204	28-May-09																Aisophila	imrayana
204	28-May-09																Aisophila	muricata
204	28-May-09																Aniba	bracteata
204	28-May-09																Byrsonima	trinitensis
204	28-May-09																Chrysobalanus	cuspidatus
204	28-May-09																Clusia	major
204	28-May-09																Guarea	glabra
204	28-May-09																Hedyosmum	arborescens
204	28-May-09																Marlia	racemosa
204	28-May-09																Miconia	furfuracea
204	28-May-09																Micropholis	guyanensis
204	28-May-09																Myrcia	fallax_m
204	28-May-09																Persea	urbaniana
204	28-May-09																Picramnia	pentandra
204	28-May-09																Prestoea	acuminata
204	28-May-09																Stylogyne	lateriflora
204	28-May-09																Tovomitia	plumieri

Appendix 3

Table of Forest Class Values (FCV) assigned to each species (see section 2.5.2 for explanation)

Genus	Species	FCV	Genus	Species	FCV	Genus	Species	FCV
<i>Abildgaardia</i>	<i>ovata</i>	1	<i>Capparis</i>	<i>flexuosa</i>	1	<i>Cupania</i>	<i>americana</i>	2
<i>Abrus</i>	<i>preparatorius</i>	1	<i>Capparis</i>	<i>hastata</i>	1	<i>Cybianthus</i>	<i>antillanus</i>	3
<i>Acanthocereus</i>	<i>tetragonus</i>	1	<i>Capparis</i>	<i>indica</i>	1	<i>Cybianthus</i>	<i>rostratus</i>	3
<i>Aechmea</i>	<i>lingulata</i>	1	<i>Casearia</i>	<i>decandra</i>	2	<i>Cyperus</i>	<i>planifolius</i>	1
<i>Aegiphila</i>	<i>martinicensis</i>	2	<i>Cassipourea</i>	<i>guianensis</i>	2	<i>Dacryodes</i>	<i>excelsa</i>	3
<i>Agave</i>	<i>caribaeicola</i>	1	<i>Cassytha</i>	<i>filiformis</i>	1	<i>Danaea</i>	<i>antillensis</i>	3
<i>Aiphanes</i>	<i>minima</i>	2.5	<i>Castilla</i>	<i>elastica</i>	2	<i>Daphnopsis</i>	<i>americana</i>	2
<i>Allophylus</i>	<i>racemosus</i>	2	<i>Cedrela</i>	<i>odorata</i>	2	<i>Daphnopsis</i>	<i>macrocarpa</i>	3
<i>Alloplectus</i>	<i>cristatus</i>	3	<i>Celtis</i>	<i>iguanea</i>	1	<i>Drypetes</i>	<i>glauca</i>	3
<i>Alsophila</i>	<i>imrayana</i>	4	<i>Centropogon</i>	<i>berterianus</i>	4	<i>Elaeodendron</i>	<i>xylocarpa</i>	1
<i>Alsophila</i>	<i>muricata</i>	3	<i>Centrosema</i>	<i>virginianum</i>	1	<i>Endlicheria</i>	<i>sericea</i>	3
<i>Alternanthera</i>	<i>flavescens</i>	1	<i>Cestrum</i>	<i>laurifolium</i>	2	<i>Enicostema</i>	<i>verticillata</i>	1
<i>Amyris</i>	<i>elemifera</i>	1	<i>Cestrum</i>	<i>megalophyllum</i>	3	<i>Epidendrum</i>	<i>ciliare</i>	1
<i>Andira</i>	<i>sapindoides</i>	2	<i>Chamaecrista</i>	<i>glandulosa</i>	1	<i>Erithalis</i>	<i>fruticosa</i>	1
<i>Aniba</i>	<i>bracteata</i>	3	<i>Charianthus</i>	<i>alpinus</i>	3.5	<i>Erythrodes</i>	<i>hirtella</i>	3
<i>Aniba</i>	<i>ramageana</i>	3	<i>Chimarris</i>	<i>cymosa</i>	3	<i>Erythroxyllum</i>	<i>havanense</i>	1
<i>Anthurium</i>	<i>cordatum</i>	1	<i>Chionanthus</i>	<i>compactus</i>	1	<i>Erythroxyllum</i>	<i>squamatum</i>	3
<i>Anthurium</i>	<i>grandifolium</i>	3	<i>Chione</i>	<i>venosa</i>	2.5	<i>Eugenia</i>	<i>coffeifolia</i>	3
<i>Anthurium</i>	<i>guldinngii</i>	3	<i>Chrysobalanus</i>	<i>cuspidatus</i>	3	<i>Eugenia</i>	<i>confusa</i>	1
<i>Anthurium</i>	<i>hookeri</i>	2.5	<i>Chrysobalanus</i>	<i>icaco</i>	1	<i>Eugenia</i>	<i>cordata</i>	1
<i>Anthurium</i>	<i>palmatum</i>	3	<i>Chrysochlamys</i>	<i>caribaea</i>	3	<i>Eugenia</i>	<i>duchassaingiana</i>	3
<i>Ardisia</i>	<i>obovata</i>	1	<i>Cinnamomum</i>	<i>elongatum</i>	2.5	<i>Eugenia</i>	<i>lambertiana</i>	3
<i>Argythamnia</i>	<i>polygama</i>	1	<i>Cissampelos</i>	<i>pareira</i>	1	<i>Eugenia</i>	<i>ligustrina</i>	1
<i>Asplundia</i>	<i>rigida</i>	3	<i>Cnemidaria</i>	<i>grandifolia</i>	3	<i>Eugenia</i>	<i>monticola</i>	1.5
<i>Beilschiemedia</i>	<i>pendula</i>	3	<i>Coccoloba</i>	<i>adscendens</i>	3	<i>Eugenia</i>	<i>oerstediana</i>	2
<i>Bernardia</i>	<i>corensis</i>	1	<i>Coccoloba</i>	<i>uvifera</i>	1	<i>Eugenia</i>	<i>pseudopsidium</i>	2
<i>Blechnum</i>	<i>fragile</i>	3	<i>Coccothrinax</i>	<i>barbadensis</i>	1	<i>Eugenia</i>	<i>tapacumensis</i>	1
<i>Bothriochloa</i>	<i>pertusa</i>	1	<i>Comocladia</i>	<i>dodonaea</i>	1	<i>Eugenia</i>	<i>trinitatis</i>	1
<i>Bourreria</i>	<i>succulenta</i>	1	<i>Conostegia</i>	<i>icosandra</i>	3	<i>Euphorbia</i>	<i>tithymaloides</i>	1
<i>Buchenavia</i>	<i>tetraphylla</i>	2	<i>Cordia</i>	<i>collococca</i>	1	<i>Evolvulus</i>	<i>antillanus</i>	1
<i>Bursera</i>	<i>simaruba</i>	1	<i>Cordia</i>	<i>curassavica</i>	1	<i>Evolvulus</i>	<i>convolvuloides</i>	1
<i>Byrsonima</i>	<i>trinitensis</i>	3	<i>Cordia</i>	<i>reticulata</i>	3	<i>Evolvulus</i>	<i>nummularius</i>	1
<i>Calliandra</i>	<i>slanaeae</i>	1	<i>Cordia</i>	<i>sulcata</i>	2	<i>Exostemma</i>	<i>caribaea</i>	3
<i>Calliandra</i>	<i>tergemina</i>	1.5	<i>Croton</i>	<i>bixoides</i>	1	<i>Exothea</i>	<i>paniculata</i>	2
<i>Calyptanthus</i>	<i>forsteri</i>	3	<i>Croton</i>	<i>flavens</i>	1	<i>Faramea</i>	<i>occidentalis</i>	2.5
<i>Canella</i>	<i>winterana</i>	1	<i>Croton</i>	<i>guldinngii</i>	1	<i>Ficus</i>	<i>citrifolia</i>	1
<i>Capparis</i>	<i>baducca</i>	1	<i>Croton</i>	<i>niveus</i>	1	<i>Ficus</i>	<i>insipida</i>	2.5
<i>Capparis</i>	<i>cyanophallophora</i>	1	<i>Cryptostegia</i>	<i>madagascariensis</i>	1	<i>Ficus</i>	<i>nymphaeifolia</i>	2

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Genus	Species	FCV	Genus	Species	FCV	Genus	Species	FCV
<i>Ficus</i>	<i>trigonata</i>	3	<i>Licaria</i>	<i>sericea</i>	3	<i>Myrciaria</i>	<i>floribunda</i>	1
<i>Forestiera</i>	<i>rhamnifolia</i>	1	<i>Ligustrum</i>	<i>japonicum</i>	3	<i>Myrsine</i>	<i>coriacea</i>	3
<i>Freziera</i>	<i>undulata</i>	4	<i>Lobelia</i>	<i>santa-luciae</i>	4	<i>Nectandra</i>	<i>coriacea</i>	1
<i>Geonoma</i>	<i>interrupta</i>	3	<i>Lonchocarpus</i>	<i>heptaphyllus</i>	2	<i>Nectandra</i>	<i>membranacea</i>	2.5
<i>Geophila</i>	<i>repens</i>	2	<i>Lonchocarpus</i>	<i>punctatus</i>	1	<i>Nectandra</i>	<i>patens</i>	2.5
<i>Gesneria</i>	<i>ventricosa</i>	3	<i>Macfadyena</i>	<i>unguis-cati</i>	1	<i>Noropleura</i>	<i>uliginosa</i>	3
<i>Gouania</i>	<i>lupuloides</i>	2	<i>Machaerina</i>	<i>restioides</i>	4	<i>Ocotea</i>	<i>eggersiana</i>	3
<i>Guapira</i>	<i>suborbiculata</i>	1	<i>Maclura</i>	<i>tinctoria</i>	1	<i>Ocotea</i>	<i>imrayana</i>	3.5
<i>Guarea</i>	<i>glabra</i>	3	<i>Malanea</i>	<i>macrophylla</i>	3	<i>Ocotea</i>	<i>jacquinii</i>	3
<i>Guarea</i>	<i>kunthiana</i>	3	<i>Malpighia</i>	<i>coccigera</i>	1	<i>Ocotea</i>	<i>leucoxydon</i>	2.5
<i>Guarea</i>	<i>macrophylla</i>	2.5	<i>Marcgravia</i>	<i>umbellata</i>	3	<i>Olfersia</i>	<i>cervina</i>	3
<i>Guatteria</i>	<i>caribaea</i>	3	<i>Margaritaria</i>	<i>nobilis</i>	2	<i>Olyra</i>	<i>latifolia</i>	2
<i>Guazuma</i>	<i>ulmifolia</i>	2	<i>Marila</i>	<i>racemosa</i>	3	<i>Oplismus</i>	<i>hirtellus</i>	3
<i>Guettarda</i>	<i>crispiflora</i>	4	<i>Maytenus</i>	<i>guianensis</i>	3	<i>Opuntia</i>	<i>dillenii</i>	1
<i>Guettarda</i>	<i>odorata</i>	1	<i>Maytenus</i>	<i>laevigata</i>	1	<i>Ouratea</i>	<i>gildingii</i>	1
<i>Guettarda</i>	<i>scabra</i>	1	<i>Melanthera</i>	<i>nivea</i>	1	<i>Oxandra</i>	<i>laurifolia</i>	3
<i>Gyminda</i>	<i>latifolia</i>	1	<i>Meliosma</i>	<i>herbertii</i>	3	<i>Palicourea</i>	<i>crocea</i>	2.5
<i>Gymnanthes</i>	<i>hypoleuca</i>	3	<i>Melocactus</i>	<i>intortus</i>	1	<i>Passiflora</i>	<i>laurifolia</i>	2
<i>Haematoxylum</i>	<i>campechianum</i>	1	<i>Miconia</i>	<i>cornifolia</i>	2	<i>Paullinia</i>	<i>cururu</i>	1
<i>Hedyosmum</i>	<i>arborescens</i>	3	<i>Miconia</i>	<i>furfuracea</i>	3	<i>Paullinia</i>	<i>vespertilio</i>	3
<i>Henriettia</i>	<i>triflora</i>	3	<i>Miconia</i>	<i>globulifera</i>	4	<i>Pavonia</i>	<i>spinifex</i>	2
<i>Heteropterys</i>	<i>purpurea</i>	1	<i>Miconia</i>	<i>laevigata</i>	2	<i>Peperomia</i>	<i>hernandifolia</i>	4
<i>Hieronyma</i>	<i>caribaea</i>	3	<i>Miconia</i>	<i>luciana</i>	3	<i>Peperomia</i>	<i>magnoliifolia</i>	2
<i>Hirtella</i>	<i>pendula</i>	3	<i>Miconia</i>	<i>mirabilis</i>	3	<i>Peperomia</i>	<i>smithiana</i>	3
<i>Hymenaea</i>	<i>coubaril</i>	2	<i>Miconia</i>	<i>racemosa</i>	3	<i>Peperomia</i>	<i>urocarpa</i>	2
<i>Ilex</i>	<i>macfadyenii</i>	4	<i>Miconia</i>	<i>secunda</i>	3	<i>Persea</i>	<i>urbaniana</i>	3.5
<i>Ilex</i>	<i>sideroxyloides</i>	3	<i>Micropholis</i>	<i>crotonioides</i>	3	<i>Philodendron</i>	<i>lingulatum</i>	3
<i>Ilex</i>	<i>nitida</i>	2	<i>Micropholis</i>	<i>guyanensis</i>	3	<i>Philodendron</i>	<i>scandens</i>	2
<i>Indigofera</i>	<i>tinctoria</i>	1	<i>Mikania</i>	<i>latifolia</i>	3	<i>Phoradendron</i>	<i>trinervium</i>	1
<i>Inga</i>	<i>ingoides</i>	2	<i>Mimosa</i>	<i>ceratonia</i>	1	<i>Phyla</i>	<i>fruticosa</i>	1
<i>Inga</i>	<i>laurina</i>	2	<i>Monstera</i>	<i>andersonii</i>	2	<i>Picrasma</i>	<i>excelsa</i>	2
<i>Isachne</i>	<i>disperma</i>	4	<i>Morisonia</i>	<i>americana</i>	1	<i>Pilosocereus</i>	<i>royenii</i>	1
<i>Ixora</i>	<i>ferrea</i>	3	<i>Myrcia</i>	<i>antillana</i>	3	<i>Pimenta</i>	<i>racemosa</i>	1
<i>Jacquemontia</i>	<i>pentantha</i>	1	<i>Myrcia</i>	<i>citrifolia</i>	1	<i>Piper</i>	<i>dussii</i>	3
<i>Jacquemontia</i>	<i>solanifolia</i>	1	<i>Myrcia</i>	<i>deflexa</i>	2.5	<i>Piper</i>	<i>glabrescens</i>	3
<i>Jacquinea</i>	<i>arborea</i>	1	<i>Myrcia</i>	<i>fallax</i>	2.5	<i>Piscidia</i>	<i>carthagensis</i>	1
<i>Krugiodendron</i>	<i>ferreum</i>	1	<i>Myrcia</i>	<i>fallax_m</i>	3	<i>Pisonia</i>	<i>aculeata</i>	1
<i>Lantana</i>	<i>arubensis</i>	1	<i>Myrcia</i>	<i>leptoclada</i>	2	<i>Pithecellobium</i>	<i>jupunba</i>	2.5
<i>Leucaena</i>	<i>leucocephala</i>	1	<i>Myrcia</i>	<i>platyclada</i>	3	<i>Pithecellobium</i>	<i>unguis-cati</i>	1
<i>Licania</i>	<i>leucosepala</i>	2.5	<i>Myrcia</i>	<i>ramageana</i>	3	<i>Plinia</i>	<i>pinnata</i>	3
<i>Licania</i>	<i>ternatensis</i>	3	<i>Myrcia</i>	<i>splendens</i>	2	<i>Pluchea</i>	<i>symphitifolia</i>	1

<i>Genus</i>	<i>Species</i>	<i>FCV</i>	<i>Genus</i>	<i>Species</i>	<i>FCV</i>
<i>Plukenetia</i>	<i>volubilis</i>	2	<i>Sideroxylon</i>	<i>foetidissimum</i>	1
<i>Plumiera</i>	<i>alba</i>	1	<i>Sideroxylon</i>	<i>obovatum</i>	1
<i>Podocarpus</i>	<i>coriaceus</i>	4	<i>Simarouba</i>	<i>amara</i>	2.5
<i>Ponthieva</i>	<i>petiolata</i>	3	<i>Siparuna</i>	<i>santae-luciae</i>	3
<i>Portulaca</i>	<i>oleracea</i>	1	<i>Sloanea</i>	<i>caribaea</i>	3
<i>Pouteria</i>	<i>multiflora</i>	2.5	<i>Spermacoce</i>	<i>verticillata</i>	1
<i>Pouteria</i>	<i>pallida</i>	3	<i>Spondias</i>	<i>mombin</i>	2
<i>Prestoea</i>	<i>acuminata</i>	3	<i>Swartzia</i>	<i>caribaea</i>	3
<i>Protium</i>	<i>attenuatum</i>	2.5	<i>Syagra</i>	<i>amara</i>	1
<i>Psychotria</i>	<i>berteriana</i>	3	<i>Symplocos</i>	<i>martinicensis</i>	2.5
<i>Psychotria</i>	<i>muscosa</i>	3	<i>Syzygium</i>	<i>jambos</i>	2
<i>Psychotria</i>	<i>nervosa</i>	2	<i>Tabebuia</i>	<i>heterophylla</i>	1
<i>Psychotria</i>	<i>pleeana</i>	3	<i>Tabebuia</i>	<i>pallida</i>	1
<i>Quararibea</i>	<i>turbinata</i>	2.5	<i>Talauma</i>	<i>dodecapetala</i>	3
<i>Randia</i>	<i>aculeata</i>	1	<i>Talinum</i>	<i>fruticosum</i>	1
<i>Randia</i>	<i>nitida</i>	1	<i>Tapura</i>	<i>latifolia</i>	3
<i>Rauvolfia</i>	<i>viridis</i>	1	<i>Tectaria</i>	<i>hieracifolia</i>	3
<i>Rondeletia</i>	<i>parviflora</i>	3	<i>Tephrosia</i>	<i>cinerea</i>	1
<i>Rourea</i>	<i>surinamensis</i>	2.5	<i>Tephrosia</i>	<i>senna</i>	1
<i>Roystonea</i>	<i>oleracea</i>	2	<i>Ternstroemia</i>	<i>peduncularis</i>	1
<i>Rudgea</i>	<i>citrifolia</i>	3	<i>Tetrazygia</i>	<i>discolor</i>	2
<i>Salpichlaena</i>	<i>volubilis</i>	3	<i>Thelypteris</i>	<i>clypeolutata</i>	3
<i>Sapium</i>	<i>caribaeum</i>	2.5	<i>Tibouchina</i>	<i>chamaecistus</i>	4
<i>Schaefferia</i>	<i>frutescens</i>	1	<i>Tournefortia</i>	<i>volubilis</i>	1
<i>Schefflera</i>	<i>attenuata</i>	4	<i>Tovomita</i>	<i>plumieri</i>	3
<i>Schlegelia</i>	<i>axillaris</i>	3	<i>Tradescantia</i>	<i>spathacea</i>	1
<i>Schoepfia</i>	<i>scheberi</i>	1	<i>Trema</i>	<i>micrantha</i>	2
<i>Schradera</i>	<i>exotica</i>	3	<i>Trichillia</i>	<i>pallida</i>	3
<i>Scleria</i>	<i>latifolia</i>	3	<i>Trichocentrum</i>	<i>cebolleta</i>	1
<i>Scleria</i>	<i>lithosperma</i>	1	<i>Verbesina</i>	<i>gigantea</i>	2
<i>Scleria</i>	<i>scindens</i>	2.5	<i>Vernonia</i>	<i>arborescens</i>	1
<i>Scleria</i>	<i>secans</i>	3	<i>Vitex</i>	<i>divaricata</i>	2
<i>Securidaca</i>	<i>diversifolia</i>	2	<i>Wedelia</i>	<i>calycina</i>	1
<i>Selaginella</i>	<i>flabellata</i>	3	<i>Weinmannia</i>	<i>pinnata</i>	4
<i>Senegalia</i>	<i>riparia</i>	1	<i>Zanthoxylum</i>	<i>caribaeum</i>	2
<i>Senegalia</i>	<i>tamarindifolia</i>	1	<i>Zanthoxylum</i>	<i>flavum</i>	2
<i>Senna</i>	<i>bicapsularis</i>	1	<i>Zanthoxylum</i>	<i>microcarpum</i>	2
<i>Senna</i>	<i>siamea</i>	2	<i>Zanthoxylum</i>	<i>monophyllum</i>	1
<i>Sida</i>	<i>cordata</i>	1	<i>Zanthoxylum</i>	<i>punctatum</i>	1
<i>Sida</i>	<i>glomerata</i>	1	<i>Zanthoxylum</i>	<i>spinifex</i>	1

Appendix 4

Plot Analysis Table. Plots are listed in order of their TWINSpan grouping, together with their Mean Forest Class Value (FCV). The “Vegetation Class (Final)” is the name used by our new classification system.

Plot no.	GPS UTM Easting	GPS UTM Northing	TWINSpan group	Mean FCV	"Forest Class"	Vegetation Class (Final)	Description	Location	Elevation (m)
165	715096	1532439	A1	3.58	Cloud montane rainforest (altitudinal)	Cloud montane rainforest		Piton Troumasse summit	869
169	715089	1532428	A1	3.36	Cloud montane rainforest (altitudinal)	Cloud montane rainforest		Piton Troumasse close to summit	860
36	715021	1532570	A1	3.67	Cloud montane rainforest (altitudinal)	Elfin shrubland	A few dwarfed palmis	PitonTroumasse, high ridge	824
37	715021	1532570	A2	3.32	Cloud montane rainforest (altitudinal)	montane rainforest	Low but biodiverse forest	PitonTroumasse, high ridge	824
88	711866	1543279	A2	3.05	Cloud montane rainforest (altitudinal)	montane rainforest	Windward slope, very steep	Mount Tabak	650
140	716674	1530402	B1	2.88	n/a	Plantation, and wild trees	Mahogany and Blue Maho	Edmond Forest	374
141	716740	1530751	B1	3.00	n/a	Plantation, and wild trees	Pine	Edmond Forest	520
125	718865	1531805	B2	2.81	n/a	Plantation, and wild trees	Mahogany and Gmelina, low palmis predominant	Quillesse	388
84	722075	1455738	B2	2.81	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Windless, steep, rocky	Piton Flore	560
90	711969	1534136	B2	2.94	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Leeward slope	Mount Tabak	650
122	720533	1539308	B2	2.91	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Very steep	Mount La Combe	383
139	716616	1530131	B2	2.95	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Edmond Forest	517
144	718273	1530840	B2	2.88	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Descartiers trail	380
155	715362	1531647	B2	2.87	Lower montane rainforest (rainforest)	Lower montane rainforest 2		En Bas Saut trail, Edmond Forest	507
160	716650	1529842	B2	2.98	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Track to south, Edmond Forest	510
142	717086	1530909	C1	2.91	n/a	Plantation, and wild trees	Blue Maho	Edmond Forest	482
38	714452	1532522	C1	3.00	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Probably prisitine, biodiverse	Piton Troumasse, before steep climb	672
77	714321	1532903	C1	2.96	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Out of wind	Derache	600
78	714290	1532854	C1	2.98	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Derache	600
79	714275	1532686	C1	3.00	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Too steep to enter, visual only	Derache	645
80	721850	1544750	C1	2.93	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Steep, broken canopy	Piton Flore	457
81	721915	1544760	C1	2.96	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Steep, broken canopy	Piton Flore	530
83	722075	1455738	C1	2.95	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Very exposed rocky	Piton Flore	560
85	721998	1545112	C1	2.91	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Piton Flore	395
86	721950	1545189	C1	2.94	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Very sheltered	Piton Flore	342
87	711866	1543279	C1	2.93	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Leeward slope	Mount Tabak	650
101	725716	1546698	C1	2.88	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Ridge top down windy side	La Sorciere, lower slopes	498
102	725385	1546225	C1	3.00	Lower montane rainforest (rainforest)	Lower montane rainforest 2		La Sorciere,summit	680
103	725524	1546335	C1	2.94	Lower montane rainforest (rainforest)	Lower montane rainforest 2		La Sorciere,summit	670
126	718752	1532416	C1	3.00	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Quillesse	400
129	717849	1532411	C1	2.83	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Quillesse river	300
130	718384	1531994	C1	2.97	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Parrot Hill	585
131	718388	1531953	C1	2.95	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Parrot Hill	592
132	718394	1531933	C1	2.98	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Parrot Hill	591
133	718399	1531878	C1	2.97	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Parrot Hill	588
134	718413	1531818	C1	2.97	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Parrot Hill	562
135	718840	1531329	C1	3.00	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Track to Parrot Hill	490
136	716536	1530038	C1	2.92	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Edmond Forest	540
137	716535	1530040	C1	2.88	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Edmond Forest	547

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Plot no.	GPS UTM Easting	GPS UTM Northing	TWINSpan group	Mean FCV	"Forest Class"	Vegetation Class (Final)	Description	Location	Elevation (m)
138	716670	1530517	C1	2.94	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Edmond Forest	444
143	718615	1530821	C1	2.88	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Descartiers trail	384
145	718246	1531128	C1	2.94	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Forest gully	Descartiers trail	448
146	718151	1531204	C1	2.98	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Descartiers trail	429
147	718241	1531332	C1	2.69	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Descartiers trail	464
148	718476	1531289	C1	2.94	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Descartiers trail	490
149	718474	1531342	C1	2.95	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Descartiers trail	494
156	715563	1531880	C1	2.83	Lower montane rainforest (rainforest)	Lower montane rainforest 2		En Bas Saut trail, Edmond Forest	470
157	716654	1531102	C1	2.98	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Piton Esprit, Edmond Forest	600
159	716647	1529863	C1	2.97	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Track to south, Edmond Forest	505
161	716632	1529910	C1	3.03	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Track to south, Edmond Forest	516
167	723004	1534427	C1	2.91	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Raillon south	355
82	722031	1544801	C2	2.97	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Very exposed rocky	Piton Flore	590
89	711990	1534127	C2	2.88	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Windward slope	Mount Tabak	650
91	711936	1534148	C2	2.93	Lower montane rainforest (rainforest)	Lower montane rainforest 2	Windward slope, very steep	Mount Tabak	650
158	716631	1530894	C2	3.06	Lower montane rainforest (rainforest)	Lower montane rainforest 2		Piton Esprit, Edmond Forest	600
128	718085	1532420	D1	2.89	n/a	Plantation, and wild trees	Eucalyptus and Gmelina	Quillesse	340
41	722835	1534973	D1	2.81	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Raillon, Mon Repos	262
120	720452	1540152	D1	2.90	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Bar De L'Isle west	316
121	720550	1539654	D1	2.85	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Bar De L'Isle west	300
127	718383	1532889	D1	2.91	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Quillesse	310
168	722910	1534525	D1	2.89	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Raillon south	322
42	722707	1535001	D2	2.77	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Raillon, Mon Repos	327
100	726007	1547168	D2	2.89	Lower montane rainforest (rainforest)	Lower montane rainforest 1		La Sorciere, lower slopes	363
110	720630	1541649	D2	2.92	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Bar De L'Isle east	343
111	720789	1541658	D2	2.86	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Bar De L'Isle east	306
119	720526	1540286	D2	2.91	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Bar De L'Isle west	300
150	719107	1528604	D2	2.88	Lower montane rainforest (rainforest)	Lower montane rainforest 1	Flat windy ridge, forest edge	Bellevue	352
166	723026	1534371	D2	2.71	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Raillon south	360
112	720636	1541214	E1	2.83	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Bar De L'Isle east	295
162	716597	1537058	E1	2.86	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Millet trail	360
163	716447	1537071	E1	2.88	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Millet trail	358
164	716521	1537547	E1	2.89	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Millet trail	290
194	715493	1528431	E1	2.79	Lower montane rainforest (rainforest)	Lower montane rainforest 1	Some plantings and recovering forest	Saltibus by water intake	466
99	725884	1547572	E2	2.68	Lower montane rainforest (rainforest)	Lower montane rainforest 1		La Sorciere, lower slopes	310
106	715347	1539244	E2	2.68	Lower montane rainforest (rainforest)	Lower montane rainforest 1	Shady river valley	Anse La Raye, road to Venus	271
53	725039	1536673	F1	2.70	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Pelouse, Praslin	325
107	724345	1533407	F1	2.69	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Mount Durocher	320
109	720874	1541960	F1	2.87	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Bar De L'Isle east	340
180	715208	1538080	F1	2.55	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Venus, Millet	381
181	715244	1538119	F1	2.63	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Venus, Millet	364
123	720648	1539120	F2	2.75	Lower montane rainforest (rainforest)	Lower montane rainforest 1	Shelattered, ridge top	Mount La Combe	441
124	720648	1539120	F2	2.41	Lower montane rainforest (rainforest)	Lower montane rainforest 1	Fully wind exposed, ridge top	Mount La Combe	441
52	725094	1536426	G	2.70	Lower montane rainforest (rainforest)	Lower montane rainforest 1		Pelouse, Praslin	277
72	724695	1548305	G	2.61	Lower montane rainforest (rainforest)	Lower montane rainforest 1	Undisturbed, fully natural?	Chassin	102

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Plot no.	GPS UTM Easting	GPS UTM Northing	TWINSpan group	Mean FCV	"Forest Class"	Vegetation Class (Final)	Description	Location	Elevation (m)
73	724661	1548256	G	2.53	Lower montane rainforest (rainforest)	Lower montane rainforest 1	Undisturbed, fully natural?	Chassin	116
190	711165	1530980	H	n/a	n/a	Fumarole		Sulphur springs	258
191	711105	1530930	H	n/a	n/a	Fumarole		Sulphur springs	238
68	712072	1531636	I1	2.04	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Recently undisturbed	Mount Souf	175
12	727935	1550689	I2	n/a	n/a	Freshwater swamp forest	Tabebuia forest	Latitanse	5
173	728915	1547524	I2	n/a	n/a	Freshwater swamp forest	Tabebuia forest	Anse Chaloupe	1
104	712755	1540782	I2	1.90	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Shady river valley	Anse La Raye, road to Venus	22
105	713167	1540749	I2	1.79	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Shady river valley	Anse La Raye, road to Venus	51
183	712644	1523910	I2	1.78	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Ravine	Dugard gap, Choiseul	84
184	713998	1522035	I2	1.63	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Ravine	River Piaye	15
51	716242	1522917	J1	2.18	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Tall trees	Mount Gommier	335
69	712076	1531591	J1	2.15	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Recently undisturbed	Mount Souf	140
182	715350	1538690	J1	2.17	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest		Venus, Millet	303
192	711176	1529108	J1	2.03	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest		Belfond	390
14	720665	1524937	J2	2.16	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Shady river valley	Bellevue, VFLatitanse	88
15	720650	1524923	J2	2.00	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Shady river valley	Bellevue, VFLatitanse	91
64	726301	1549015	J2	1.70	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest		Grande Anse	235
97	715663	1548611	J2	2.04	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Appears to be have been left alone for some time-private	Ciceron, road to Coubaril	160
196	725640	1533935	J2	1.97	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest		Mamiku Estate	43
20	726074	1550371	K1	1.52	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	More mature than previous plot, not recently modified, forest reserve?	Above Latitanse, track to latanye plot	212
50	716482	1522349	K1	1.70	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Secondary, recovering	Mount le Blanc	300
55	712729	1542518	K1	1.91	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Sheltered forested remnant	Massacre, Anse La Raye	180
67	726523	1548891	K1	1.65	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Shady river valley	Grande Anse	108
108	724473	1533298	K1	1.59	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest		Mount Durocher	270
195	725629	1533919	K1	1.91	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest		Mamiku Estate	40
70	724782	1548414	K2	2.23	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Undisturbed, fully natural?	Chassin	73
71	724767	1548403	K2	2.27	Semi-evergreen seasonal forest (mesic)	Semi-evergreen seasonal forest	Undisturbed, fully natural?	Chassin	91
11	727992	1550690	L	n/a	n/a	Evergreen littoral forest/shrubland	Seagrape vegetation	Latitanse	5
45	729019	1537009	L	n/a	n/a	Evergreen littoral forest/shrubland	Seagrape vegetation	Paradis, Praslin	5
199	723515	1520836	L	n/a	n/a	Evergreen littoral forest/shrubland	Seagrape vegetation	Mankote Beach, Vieux Fort	1
13	727756	1550388	M1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Degraded secondary	Latitanse	66
16	725861	1523474	M1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Grassy areas plus a few trees, fires, charcoaling	Track to Anse Islet	25
17	725872	1523415	M1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Grassy areas plus a few trees, fires, charcoaling	Track to Anse Islet	26
21	726883	1527151	M1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Grassy areas plus a few trees, fires, degraded	Troumasse Estate	17
23	726640	1529665	M1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Saplings crowded together, charcoaling area	Between Micoud and Escap	18
24	726671	1529745	M1	1.03	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Saplings and young trees, charcoaling area	Between Micoud and Escap	46
27	728632	1541288	M1	1.12	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Natural, exposed, low canopy but woody	Denney Knob, below grassy area	108
28	728505	1541485	M1	1.13	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Recently undisturbed	Denney Knob, half way down	
31	727372	1533406	M1	1.09	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Signs of recent disturbance around	Mon Repos, track to Trou Gras beach	89
57	727976	1544166	M1	1.18	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Very degraded, charcoal, fire	Anse Louvet	165
61	708630	1537225	M1	1.03	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Recovering charcoaled area	Anse La Liberte	89
74	724482	1557268	M1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Disturbed	Anse Lavoutte	55

Graveson – Vegetation Classification

Plot no.	GPS UTM Easting	GPS UTM Northing	TWINSpan group	Mean FCV	"Forest Class"	Vegetation Class (Final)	Description	Location	Elevation (m)
92	720048	1556622	M1	1.09	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Secondary, recently undisturbed	Mount Pimard	43
171	727571	1547218	M1	1.41	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Degraded, repeated charcoaling	Anse Chaloupe	125
177	727212	1554672	M1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Almost untouched, rocky	La Bourne - Mount Gayak	178
178	727140	1554602	M1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Degraded, old garden	La Bourne - Mount Gayak	154
179	726334	1554478	M1	1.33	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Slightly disturbed	La Bourne - Mount Gayak	204
198	725608	1523659	M1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Very degraded, disturbed	Troumasse Estate, Micoud	4
46	728978	1537026	M2	n/a	n/a	Evergreen littoral forest/shrubland	Seagrape vegetation	Paradis, Praslin	5
9	728145	1550533	M2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Dry coastal woodland, unmodified recently.	Latitanse	73
18	725963	1523347	M2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Fenced, coppiced densely shrubby	Track to Anse Islett	32
19	726074	1550371	M2	1.15	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Recent cutting, small trees	Above Latitanse, track to latanye plot	208
25	727353	1534175	M2	1.06	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Recently undisturbed	Potwi, Mon Repos	39
26	728919	1541428	M2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Probably completely natural	Denney Knob	179
32	728732	1533455	M2	1.07	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Biodiverse: rich in rare ground orchids, probably natural	Mon Repos, track to Trou Gras point	15
33	728939	1533605	M2	1.05	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Biodiverse area but more arid than 32, probably natural	Mon Repos, track to Trou Gras point	38
35	728690	1533360	M2	1.18	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Dominated by Pimenta. Trees around indicating some moisture.	Mon Repos, track to Trou Gras point	4
40	723390	1560033	M2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Recently undisturbed	Cap Estate, above Anse Galet	60
44	729046	1536985	M2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Windy, close to cliff, natural	Paradis, Praslin	40
48	728385	1536293	M2	1.15	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Special forest, very diverse but low, natural	Paradis, Praslin, golf course	99
49	728144	1536467	M2	1.12	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Special forest, very diverse but low, natural	Paradis, Praslin, golf course	110
54	713055	1542230	M2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Very rich in bromeliads and orchids, rocky ridge	Massacre, Anse La Raye	208
56	712085	1543615	M2	1.36	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Syagra palm forest	Pilori Point, Anse La Raye	114
58	727922	1543817	M2	1.52	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Steep dark gully	Anse Louvet	106
59	728683	1544128	M2	1.18	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Rocky, very sunny	Anse Louvet	111
60	709310	1537214	M2	1.17	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Recovering charcoaled area	Anse La Liberte	164
96	719745	1551000	M2	1.33	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Secondary, recently undisturbed	Union Trail	56
98	714689	1548825	M2	1.24	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Disturbed but biodiverse	Ciceron, close millenium Highway	70
170	727685	1547554	M2	1.41	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Biodiverse, recently undisturbed	Anse Chaloupe	199
172	728955	1547395	M2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Steep coastal hill, natural	Anse Chaloupe	50
175	727755	1554672	M2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Probably untouched, rocky, exposed	La Bourne - Mount Gayak	250
176	727709	1554678	M2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 1	Probably untouched, rocky, exposed	La Bourne - Mount Gayak	227
94	719925	1551302	N1	1.42		Plantation, and wild trees	Mahogany among wild trees	Union Trail	73
1	723701	1518334	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Dry coastal woodland, unmodified recently.	María Island	50
2	723723	1518320	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Dry coastal woodland, unmodified recently.	María Island	60
4	722379	1516823	N1	1.13	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Dry coastal woodland, unmodified recently.	Moule a Chique	188
5	722410	1516837	N1	1.09	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Dry coastal woodland, unmodified recently.	Moule a Chique	193
7	719039	1519401	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Very secondary, lightly muddy	Industrial Zone, by Julians VF	5
8	720766	1521414	N1	1.08	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Presumable cleared for sugar cane fuel, now recovered	Beausejour	146
10	728137	1550550	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Dry coastal woodland, unmodified recently.	Latitanse	73
22	727019	1526903	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Grassy areas plus a few trees, fires, degraded	Troumasse Estate	16
39	721534	1559760	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Vacant lot, previously cleared	Cap Estate, towards Le Sports	60
65	726757	1549031	N1	1.11	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Exposed upper slope, quite natural	Grande Anse	74

Graveson – Vegetation Classification

Plot no.	GPS UTM Easting	GPS UTM Northing	TWINSpan group	Mean FCV	"Forest Class"	Vegetation Class (Final)	Description	Location	Elevation (m)
66	726597	1548998	N1	1.09	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Exposed upper slope, quite natural	Grande Anse	105
93	718935	1554745	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Undergrowth recently cleared	Windjammer	5
95	719849	1551377	N1	1.19	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Secondary, recently undisturbed	Union Trail	68
113	709122	1532902	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Natural, steep rocky, sun-exposed	Anse Chastanet	91
114	709200	1532962	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Natural, steep rocky, sun-exposed	Anse Chastanet	152
115	709418	1530583	N1	1.08	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Natural, steep rocky, sun-exposed	Petit Piton, lower slope	137
116	709398	1530552	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Natural, steep rocky, sun-exposed	Petit Piton, lower slope	161
117	709774	1525087	N1	1.27	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Ravine	Trou Marc Ravine	5
118	709723	1525053	N1	1.14	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Ravine	Trou Marc Ravine	10
151	722191	1523333	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Natural, rocky, steep	Moule a Chique	222
152	709180	1526879	N1	1.17	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Natural, rocky, steep	Gros Piton	204
153	708747	1527119	N1	1.21	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Natural, rocky, steep	Gros Piton	332
154	708564	1527441	N1	1.23	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Natural, rocky, steep	Gros Piton	413
174	726903	1554704	N1	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Natural	La Bourne - Mount Gayak	213
193	712868	1523858	N1	1.11	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Recently undisturbed, steep	Roblot by road	130
3	722134	1557775	N2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Previously cleared, left for 20 years.	Cas en Bas Road, vacant lot	67
6	722363	1516907	N2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Dry coastal woodland, unmodified recently.	Moule a Chique	169
43	729136	1536905	N2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Natural, some rare species	Paradis, Praslin	60
47	729031	1537172	N2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Pretty natural	Paradis, Praslin	5
63	723599	1557896	N2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Recently undisturbed	Cas en bas 200m. from beach	10
75	724468	1557549	N2	1.00	Deciduous seasonal forest (xeric)	Deciduous seasonal forest 2	Grassy areas plus a few trees, Seagrass present	Anse Lavoutte	22
29	728059	1540899	O	n/a	n/a	Freshwater swamp forest	Swamp redwood forest	Fond D'Or swamp	5
30	728038	1541034	O	n/a	n/a	Freshwater swamp forest	Tabebuia forest	Fond D'Or swamp	5
186	720768	1518708	O	n/a	n/a	Freshwater swamp forest	Cordia obliqua forest	Vieux Fort, by Choiseul Highway	1
76	724482	1557268	P	n/a	n/a	Mangrove		Anse Lavoutte	1
62	723804	1558202	P	n/a	n/a	Mangrove	20% water	Cas en Bas beach	5
34	727221	1526587		n/a	n/a	Cliff and rock pavement vegetation		Troumassee Estate	10
189	725900	1527339		n/a	n/a	Herbaceous swamp		Canelles	5
197	725510	1523660		n/a	n/a	Herbaceous swamp	Cleared mangrove, stumps present	Troumassee Estate, Micoud	1
200	715629	1546790		n/a	n/a	Herbaceous swamp		Cul de Sac swamp	1
185	720790	1518601		n/a	n/a	Landfill shrublands	Landfill of swamp	Vieux Fort, by Choiseul Highway	1
187	714334	1523350		n/a	n/a	Unconsolidated sand		Anse Des Sables, Vieux Fort	1
188	714334	1523350		n/a	n/a	Unconsolidated sand		Anse Des Sables, Vieux Fort	1
201	719024	1552605		n/a	n/a	Unconsolidated sand	Periodically cleared	Choc Bay	1

Appendix 5

Simple comparison of the biophysical attributes of plots within the final major forest types

Attributes	Cloud Montane Rainforest (n=4)	Montane Rainforest (n=0)	Lower Montane Rainforest (n=75)	Semi-evergreen Seasonal Forest (n=22)	Deciduous Seasonal Forest (n=72)
Mean Forest Class Average	3.47		2.87	1.92	1.09
Mean Number of Trees DBH≥5cm	25		30	17	19
Mean Rocks Score (0-3)	0.33		0.45	1.27	1.33
Mean Canopy Height (m)	5.3		27.6	22.82	11.18
Mean Canopy (%)	72.0		63.5	64.32	46.46
Mean Stumps Score (0-2)	0.33		1.06	1.1	0.8
Mean Logs Score (0-2)	1.0		1.4	1.5	1.0
Mean Wind Score (0-3)	2.0		1.19	0.55	1.19
Mean Slope (%)	28		26	20	16
Mean Elevation (m)	851	No data	445	155	103
Highest Elevation (m)	869		680	390	413
Lowest Elevation (m)	824		102	15	4
Mean Vines Score (0-3)	1.33		1.37	1.0	0.8
Mean Epiphytes Score (0-3)	3.0		0.88	0.2	0.4
Mean Herbaceous (non-fern) ground cover (%)	10.0		4.1	5.9	13.4
Mean Ferns Ground Cover (%)	22.0		15.9	0.6	0
Mean Moss Score (0-4)	4.0		0.8	0.1	0
Mean DBH 1 and 2 (cm)	17.0		38.3	31.3	21.1