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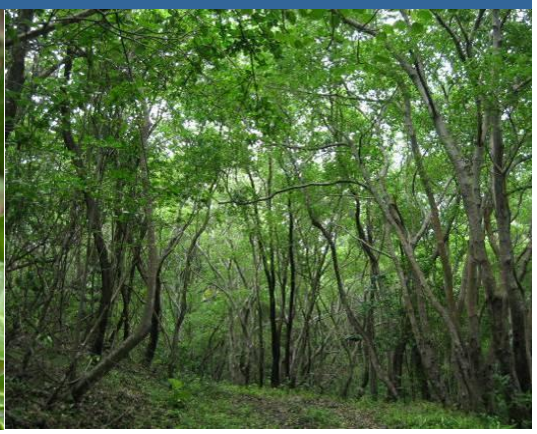

**NATIONAL FOREST DEMARCATION AND BIO-PHYSICAL RESOURCE INVENTORY PROJECT**

**CARIBBEAN – SAINT LUCIA**

**SFA 2003/SLU/BIT-04/0711/EMF/LC**



# BIODIVERSITY ASSESSMENT OF SAINT LUCIA'S FORESTS, WITH MANAGEMENT RECOMMENDATIONS

By

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2009

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



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# Executive Summary

Saint Lucia's forests perform essential functions in safeguarding and regulating the island's water supply, preventing soil erosion and landslides, and supporting the country's present and future renewable fuel supply. The forests also support, and are maintained by, a rich diversity of animals and plants, many of which are unique to this island.

This report summarises the main findings and recommendations of a series of ecological studies conducted between September 2008 and September 2009. More than 750 person-days were spent in the forests to conduct this work, with more than 25 international and 13 national personnel taking an active part (as well as more than 250 local interviewees). More than 300 forest sites were visited nationwide to understand the forest biodiversity and its spatial variation, both inside and outside of the Forest Reserves.

Some of the major achievements and findings of this work were:-

- The development of a robust, user-friendly classification system for all forests and other major vegetation types on Saint Lucia, together with a new vegetation map.
- The discovery of well over 650 forest species not previously recorded in Saint Lucia - most of them invertebrates - and an updated and significantly enlarged inventory of forest plants and animal, summarised as follows (species checklists are appended to this report):

| | Saint Lucian endemic species | Indigenous species | Alien species | **Total species** |
|---|---|---|---|---|
| Seed-bearing plants | 10 | 1,009 | 282+ | **1,291** |
| Ferns | 0 | 138 | 7 | **145** |
| Mammals | 1 (+1 subsp.) | 10 | 7 | **17** |
| Birds | 5 (+13 subspp.) | 132 | 2 | **134** |
| Reptiles | 7 (+5 subspp.) | 13 | 6 | **19** |
| Amphibians | 1 | 2 | 3 | **5** |
| Beetles | 144 | 777+ | 39+ | **816** |
| Dragonflies | 0 | 26 | 0 | **26** |
| Flies | 19 | ? | ? | **134** |
| **Total species** | **187** | **>2,107** | **>346** | **2,537** |

- An analysis across most taxa revealed that the deciduous and semi-evergreen seasonal forests support an even greater variety of indigenous species than the rainforests, including a larger number of island endemics and globally threatened species. However, the seasonal forests also contained the majority of alien invasive species.
- Improved distibution maps were compiled and new information collated on the ecology and relative abundance of many of the vertebrate animals. By applying international criteria for assessing threat, it was revealed that many Saint Lucia forest species are globally threatened with extinction and should be added to the IUCN Red List accordingly.

- Twenty-five priority areas for biodiversity conservation were identified both inside the Forest Reserves (12 sites) and outside of the Forest Reserves (13 sites). If managed appropriately, these could conserve virtually all of the indigenous forest species on Saint Lucia.
- A preliminary analysis of the carbon storage of Saint Lucia's forests was conducted, showing that approximately 1.8 million tonnes are stored within the Forest Reserve and 1.2 million tonnes outside the Forest Reserve. There is clear potential for the latter figure to increase by enabling young secondary forests to mature.

A participatory threat analysis was carried out to identify the main threats and pressures on forest biodiversity. Chief among the threats were the ongoing degradation and loss of deciduous seasonal forests, mangroves and freshwater swamp forests to residential, tourism and other developments, alien invasive species; and, for a few species, over-exploitation. The analysis demonstrated that forests outside of the Forest Reserve system were approximately four times more at risk from severe threats than forests inside the reserves: a testimony to the effectiveness of the reserves' management.

The ecological team, however, also identified many promising opportunities to mitigate or reverse the threats to Saint Lucia's forest ecosystems. Among the top priority recommendations are:-

1. Within the Forest Reserves, establish and implement site management plans that integrate biodiversity conservation with other forest uses and services
2. Make a concerted effort to safeguard important forests outside of the current Forest Reserves, with particular attention to deciduous and semi-evergreen seasonal forests
3. Control the introduction and spread of alien invasive species that seriously endanger Saint Lucia's forests and their biodiversity.
4. Revise and amend the national legislation to reflect the current status and needs of Saint Lucia's forest biodiversity.
5. Develop species management plans for exploited and threatened species, and ensure their Red List status is up to date.
6. Conduct applied research to inform and monitor the management of Saint Lucia's forest biodiversity.
7. Strengthen local and national understanding and support for forest biodiversity conservation, with special attention to the lesser-known forest types.
8. Foster the development of civil society organisations as a tool for lobbying for and enhancing the conservation of forests and their biodiversity.

# 1. Introduction

## 1.1. Context of this Report

This report is a synthesis of a series of ecological studies conducted as a part of the National Forest Demarcation and Bio-Physical Resource Inventory Project, funded by the European Community under the Saint Lucia SFA2003 Programme of Economic and Agriculture Diversification and Poverty Reduction through Integrated National Resources Management. The purpose of this inventory project was "to survey and demarcate the physical parameters of the public forest reserve and conduct a comprehensive biophysical inventory/ assessment and management system of forest resources". The present report contributes especially towards project Result 3 ("*comprehensive report on the current state of forest resources [….biodiversity, wild fauna etc], with recommendations for sustainable management practices"*, including "*f. vegetation classification"* and "*g. species list*"); Result 5 ("*an assessment of wildlife use attributes identifying critical habitats and recommendation for sustainaing habitats of important, rare or endangered animal species*") and the overlapping Result 9 ("*comprehensive report on the nature, magnitude and geographical scope of forest resources […biodiversity, carbon storage and processes]*)".

The ecological research programme began during the final quarter of 2008 and continued until August 2009. It comprised original field-based studies of the status, ecology and conservation needs of Saint Lucia's forest mammals (Clarke, 2009), reptiles and amphibians (Daltry, 2009), birds (Toussaint *et al.*, 2009), beetles, flies, dragonflies and other insects (Ivie, in prep.) and selected vascular plants (Graveson, 2009b). For some the most threatened species, Morton (2009a) provided a further analysis of their ecology and management needs. A major component of this programme was an assessment of the island's vegetation, which resulted in the vegetation classification system described by Graveson (2009a) and summarized in section 2.1. Finally, Morton (2009b) examined the use of selected wild forest animals and plants by local people.



All of these studies can be pooled under the title of forest biodiversity assessment. Biodiversity is often considered by forest managers as simply a list of the species present, some of which may be useful. Biodiversity in fact has a much wider definition than that: the Convention on Biological Diversity defined "biological diversity" as the variability among living organisms from all sources including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are part. This includes diversity within species, among species, and of ecosystems.

This report draw out some of the research highlights and presents the main recommendations for conserving Saint Lucia's remarkably rich yet fragile forest biodiversity. For further details of the methods and findings, please refer to the technical reports cited above for each taxon or theme.

## 1.2. Biodiversity Research Team

Although the project documents called for one Conservation Biologist to work throughout the project, a larger team was drawn together on the same budget to boost productivity and study as wide a range of taxa and issues as possible (**Table 1**). More than 25 international and 13 national personnel took part (not including more than 250 interviewees in the survey of wildlife use: Morton, 2009b).

Table 1 The Project Biodiversity Team

| Name | Instution | Role | Dates | Working with (international) | Working with (national) |
|---|---|---|---|---|---|
| Project Conservation Biologist/ Team Leader | | | | | |
| **Dr Jennifer Daltry** | Fauna & Flora International | Technical oversight of research outputs. Reptile and amphibian survey | Oct 2008 – Dec 2009- (part time) | All listed staff below. | All listed below. Specifically included Stephen Lesmond Nereus Mitchel and Canice Peterson on reptile survey. |
| Critical Habitats Specialist | | | | | |
| Matthew Morton | Durrell Wildlife Conservation Trust | Wildlife use, priority species, key conservation areas, Other. | Jan 2008 – Dec 2009 (part time) | All listed staff below. | All listed below. |
| Bird Specialist | | | | | |
| Adam Toussaint | Saint Lucia Forestry Department | Bird survey | July, August 2009 | M. Morton (analysis) | Lyndon John |
| Project Mammalogist | | | | | |
| Dr Frank Clarke | University of Aberdeen | Mammal survey | Jan-May 2009 | J. Daltry (part), M. Morton (analysis) | George Antione<br>Timothy Jno Baptiste<br>Alwin Dornelly<br>Mary James<br>Stephen Lesmond<br>Randall Marius<br>Nereus Mitchel<br>Canice Peterson<br>Melvyn Smith |
| Project Entomologist | | | | | |
| Prof. Michael Ivie | Montana State University | Entomological survey | 26 Apr – 17 Jul 2009 | Dr Don Bright<br>Dr Michael Caterino<br>Dan J. Cavan<br>Dr Evelyn Clark<br>Dr Dalton Clark<br>Dr Shawn M. Clark<br>Dr Andrew Cline<br>Ian A. Foley<br>Leslie E. Foley<br>Dr Stephen Gaimari<br>Dr Matthew Gimmel<br>Katie J. Hopp<br>LaDonna L. Ivie<br>Eli A. Ivie<br>Dr James B. Johnson<br>Tiffany Lillrose<br>Crystal A. Maier<br>Dr Justin Runyon<br>Dr Fred Sibley<br>Ross Winton<br>(plus undergraduates) | Melvyn Smith |
| Project Botanist | | | | | |
| Roger Graveson | Independent | Plant survey, vegetation classification, herbariam developments | Jan 2008 – Dec 2009 (part time) | J. Daltry (analysis)<br>M. Morton (GIS)<br>Vijay Datadin (GIS) | Chris Sealys,<br>Melvin Smith<br>Rebecca Rock (GIS) |

This enlarged team brought a wide range of specialist skills and spent well over 750 person-days in the forests between September 2008 and September 2009. The majority of the team members generously gave their time at no charge, for the sake of furthering science and understanding of the island's biodiversity. More than 300 locations were visited nationwide to understand the forest composition and its spatial variation, both inside and outside of the Forest Reserves.

Most of the international experts who took part in this survey provided 'on the job' training and mentoring to national counterparts, and the team leader delivered a one-week training class for 15 national personnel on ecological survey techniques. This transfer of skills and information was a two-way exchange, however, as the majority of the national personnel who participated in the surveys (**Table 1**) already had an impressive knowledge of the island's wildlife, its use and its history. Adams Toussaint and members of the Wildlife Unit proved to be especially well informed about the island's wildlife and contributed invaluable information to many of these studies. Melvin Smith must also be singled out here, for his outstanding knowledge of Saint Lucia's flora (Graveson, 2009b).

## 1.3. Saint Lucia: A Brief Introduction

Saint Lucia is in the Windward Islands of the Lesser Antilles in the West Indies. Its closest neighbouring islands are Martinique, 32km to the north, and Saint Vincent, 40km to the south. It is the second largest island of the Lesser Antilles, with an area of 616km$^2$, and with a maximum length and width of 43km and 21km, respectively. The human population today is close to 166,838 residents, giving a mean density of approximately 1,036/km$^2$, but much of the island's interior is uninhabited.

Volcanic in origin, Saint Lucia has a mountainous topography dominated by a central ridge running almost the full length of the island from north to south. Numerous steep offshoot ridges extend to both sides of the coasts. Some valleys are broad and occupied by large banana plantations, including Cul-de-sac, Roseau and Mabouya. These valleys, together with the area around the town of Vieux-Fort in the South, account for most of the flat lands of the country. The central southern part of the country has high mountains (Mount Gimie being the highest at 958m). The coastlines, particularly the east coast, are deeply indented by near-vertical cliffs and have a number of narrow sandy beaches.

The island's tropical marine climate is characterized by relatively uniform high temperature throughout the year. The dry season is roughly from January to April and the rainy season from May to August, with usually sunny, warm weather from September to October. (This pattern is variable, however, and the present study regularly experienced torrential storms). Tropical storms and hurricanes are infrequent, with the majority of West Indian tropical cyclones passing to the north of Saint Lucia. The hottest period is May to October, and the coolest, December to March, giving a mean annual temperature of approximately 26°C at sea level. Annual rainfall varies from 1,524-1,778mm in the north to 2,540-3,683mm in the mountainous interior of the south.

Approximately 30% of Saint Lucia's land area is pastoral and arable land. Originally the mainstay of the economy, agriculture has been in decline in recent years, contributing only 3.4% of Gross Domestic Product (GDP) in 2005, with bananas the principal export crop. The economy has shifted to a service economy, with tourism the largest economic sector, accounting for 13.6% of GDP in 2005.

# 2. The Forests and Their Biodiversity

## 2.1. Forest Diversity

Forests, defined for the purposes of this study as any area dominated by trees (including woodlands with a broken canopy), cover more than 20,000 hectares[1], approximately one third Saint Lucia's land area. Almost half are within the network of government Forest Reserves, with a total area of 9,196 hectares. Much of this forest is mature but secondary, including extensive tracts of deciduous seasonal forest that are reclaiming abandoned cotton plantations at lower elevations. Most forest areas have also been modified by human activities, such as grazing, cutting for charcoal and planting of exotic trees. Natural disturbances, such as landslides and hurricanes, also explain why relatively few of the forest areas display a classic climax structure: they are constantly changing (Graveson, 2009b).

A long history of human disturbance, and even more importantly, natural spatial variation in topography, rainfall, temperature, wind exposure, and geology, have given rise to an astonishingly diverse array of forest forms. These range from cacti-dominated forms on offshore islands, which receive less than 1,500mm rain and endure long droughts, to lush rainforests that receive more than 3,000mm of precipitation and are almost permanently enveloped in cool mist. As part of the present project, Graveson (2009a) developed a much-needed new classification system for Saint Lucia, which identified 10 very distinct, natural forest classes (summarized on **Table 2**) as well as other vegetation types. The new vegetation map shows the distribution and extent of the main vegetation classes (**Fig. 1**).

This impressive variety of forest types in turn provides a rich diversity of habitats for numerous animal and plant species, as summarised below and in **Table 3**. Forests are not merely vessels for wildlife, however, but are living ecosystems that actively created and maintained by the animals and plants that inhabit them. As well as obvious roles above ground, such as pollination and seed dispersal, living organisms are crucial in the recycling of nutrients and formation of soil. As the world has becomes increasingly aware of the importance of tropical forests and their soils in capturing and storing excess carbon, it should be noted that mature natural forests with high biodiversity make a significantly greater contribution than forests that have been degraded and weakened by the loss of native species (Thompson *et al*,. 2009).

Climate change is indicated several times in the captions above, and has been identified as a serious threat to Saint Lucia's forests (section 5.1). Maintaining and restoring biodiversity in forests increases their resilience to human-induced pressures and is therefore an essential 'insurance policy' and safeguard against expected climate change impacts. Thompson *et al.* (2009) observed that "*Plantations and modified natural forests will face greater disturbances and risks for large-scale losses due to climate change than primary forests, because of their generally reduced biodiversity*." It should be conceeded, however, that even modified forests are much better at mitigating climate change than almost any other forms of land use.

[1] FAO (1996) registered 20,073 hectares of natural forest, or 35% of Saint Lucia's land area. Definitions, and therefore published measurements, of Saint Lucia's forests vary, however, with some authors measuring only the rainforest areas or areas with an unbroken forest canopy.

**Figure 1** Forests and other vegetation types of Saint Lucia

Provisional map from Graveson (2009a).

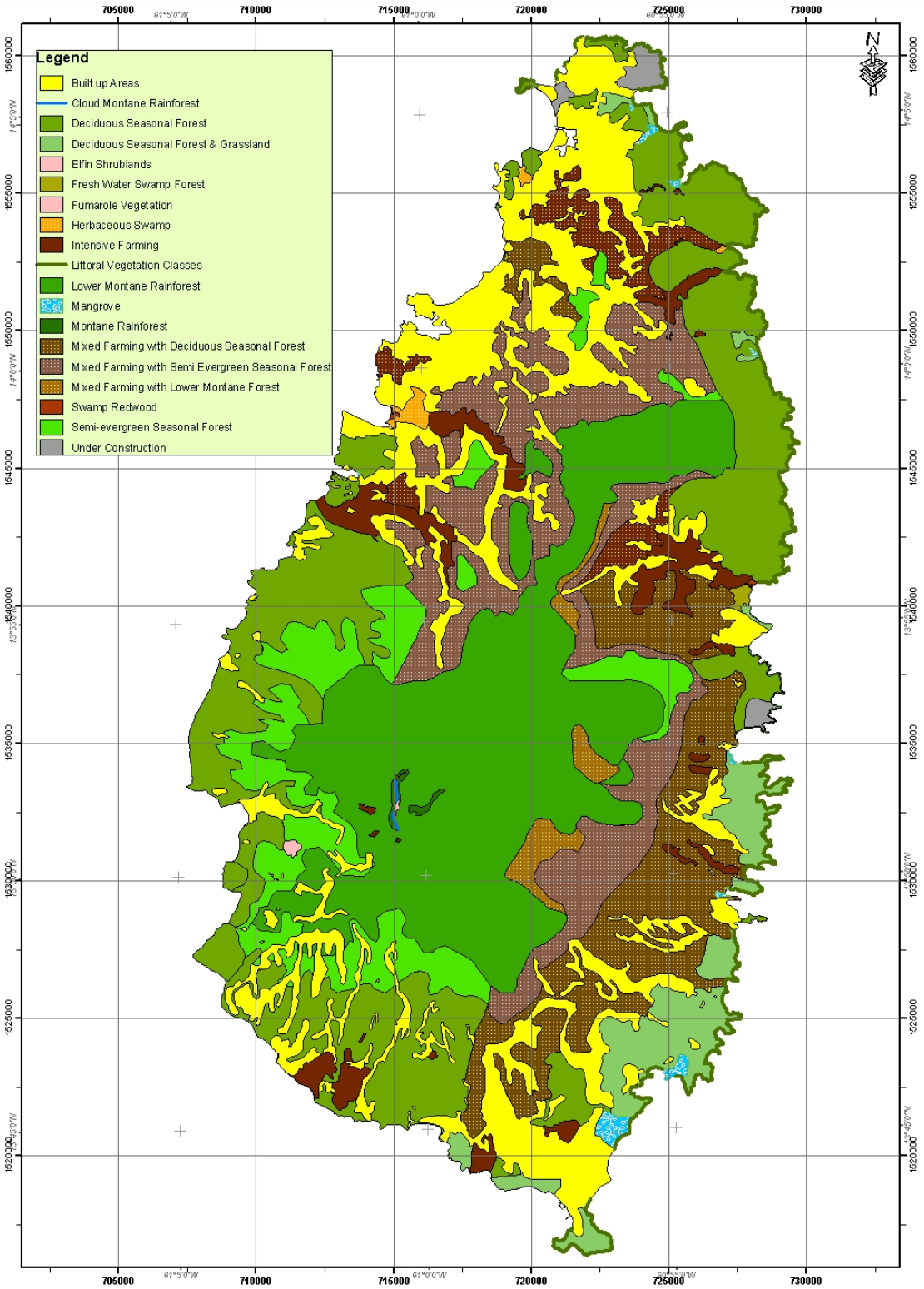


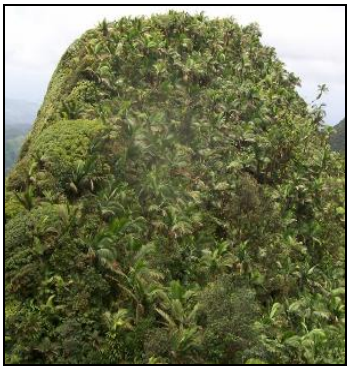
Table 2 Forest types of Saint Lucia

See Graveson (2009a) for more extensive descriptions and illustrations, including a further eight vegetation classes.

**1. Elfin Shrublands** Naturally scarce and vulnerable.

This shrubland vegetation class is found only in the windiest spots on the Mount Gimie/ Troumassée ridges and peaks, at an elevation above 700 metres,. The canopy is up to two metres 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. Relatively few species are found in this vegetation type: mainly a mixture of bromeliads, sedges and grasses and shrubs, with many Lesser Antillean endemics. Because this vegetation type has specialist climatic needs, it is most threatened by climate change (rising temperatures and/or reduced mist and rain).

**2. Cloud Montane Forest** Naturally scarce and vulnerable.



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 700 metres 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. 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. Cloud and mist cover, with heavy rainfall, is predominant, with only occasional and short periods of sunshine. This vegetation type is most threatened by climate change, because its species need almost continual cloud cover.

**3. Montane Forest** Naturally rare.

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 four to six metres, with some scattered taller trees on slightly less steep areas. This class is similar to Lower Montane Rainforest in terms of species, but it has a very characteristic appearance. Although this vegetation type is rare, it is not at risk unless climate change is very severe.

**4. Lowland Montane Rainforest** Abundant and well protected

Trees are evergreen because there is usually no water deficit. Trees of all heights are found (up to 45m), without clear divisions into separate canopy layers. Although there may be a shrub, fern and herbaceous (mainly Anthuriums) ground cover, this forest class is easy to walk through except where the canopy has been destroyed and ferns, vines and shrubs colonise the clearing. In comparison to Semi-evergreen Seasonal Forest, the canopy height, wind, and incline are greater and there is a greater abundance of vines, epiphytes, ferns and mosses. Trees are more tightly packed, and the trees can be much wider in girth, and often have buttress roots. This forest class has been recorded from 100-680m above sea level.

**5. Semi-evergreen Seasonal Forest** Severely reduced and fragmented

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, and it occurs in less windy areas, and generally at a higher elevation. Most of this forest type has been replaced by farmland (e.g. most banana plantations are in this zone).

**6. Deciduous Seasonal Forest** Widespread, but degraded and at risk

This vegetation class covers large areas in Saint Lucia from the coast to the summit of Petit Piton (700m), but virtually all is secondary and much of it degraded. It merges inland with the Semi-evergreen Seasonal Forest. The taller trees tend to lose all their leaves in most dry seasons, but 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 disturbed areas. Residential and tourism developments, livestock grazing and fire are the greatest risk to this class on a large scale.

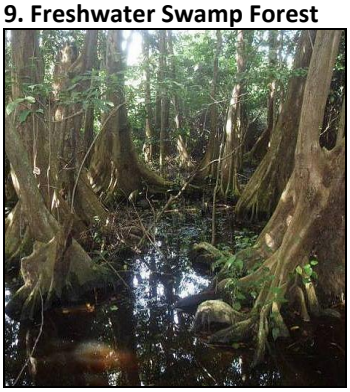
**7. Littoral Evergreen Forest and Shrubland** Widespread, at moderate risk

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. This class is at some risk from coastal residential and tourism developments.

**8. Littoral Scrub, With or Without Cacti** Widespread, at moderate risk

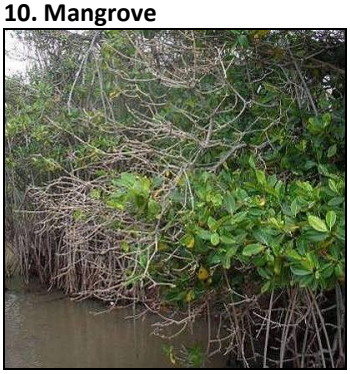
This type of vegetation is found in a narrow zone between littoral rock and cliff vegetation and Deciduous Seasonal Forest or Littoral Evergreen Forest. It consists of shrubs, cacti and sometimes grassy spaces.

**9. Freshwater Swamp Forest** Naturally uncommon, at severe risk



This vegetation class 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 single-species stands to form. The soil becomes muddy because the water table reaches the surface for at least part of the year, and is sometimes inundated. This class ranges from permanently muddy, 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 high water table. Threatened by manmade changes to water flow.

**10. Mangrove** Naturally uncommon, at severe risk



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, Mangrove forests contain four tree species and are mainly on the Atlantic coast. Manroves are threatened by manmade changes to water flow and cutting for charcoal.



Of the natural vegetation classes above, the Forest Reserve system is predominantly covered by the 'wet' forest formations: especially Lowland Montane Rainforest, together with virtually all of the country's Montane Forest, Cloud Montane Rainforest and Elfin Shrublands. They also contain several hundred hectares of plantations of exotic trees (2.4.1), intermingled with the native species. The reserves contains only a few small, but significant, patches of Deciduous Seasonal Forest and Semi-evergreen Seasonal Forest (section 3.2) and none of the other lowland classes.

The majority of forest types shown in **Table 2**, as well as other non-forest vegetation types described by Graveson (2009a), are thus situated outside of the reserve, in areas that lack formal protection (section 3.3).

## 2.2. Plant Diversity

### *2.2.1. Vascular plants*

1,147 native terrestrial vascular plants have been documented on Saint Lucia to date, including 11 new national records in 2009. Most of the native species are forest plants.At least ten species are endemic to Saint Lucia (*Acalypha elizabethiae*, *Bernardia laurentii*, *Cuphea crudyana* [possibly extinct], *Chrysochlamys caribaea*, *Daphnopsis macrocarpa*, *Gonolobus iyanolensis*, *Lobelia santa-luciae*, *Miconia luciana*, *Miconia secunda*, and *Siparuna sanctae-luciae*) and many more have only a restricted range within the Lesser Antilles.

Table 3: The Terrestrial (Non-Marine) Flora and Fauna of Saint Lucia

Not including non-vascular plants, fungi, crustaceans, and many other groups.

| | **Vascular Plants** | | **Vertebrate Animals** | | | | **Invertebrate Animals** | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Seed plants | Ferns and their allies | Mammals | Birds[2] | Reptiles | Amphibians | Beetles[3] | Dragonflies | Flies | **Total known** |
| ***Native species*** | ***c. 1,009[4]*** | ***138*** | ***10*** | ***132*** | ***13*** | ***2*** | ***777+*** | ***26?*** | ***?*** | 2,107 |
| Saint Lucia endemic species | 10 | 0 | 1 | 5 | 7 | 1 | c. 144 (49 uncertain) | 0 | c. 19 | 187 |
| Saint Lucia endemic subspecies | 1+ | 0 | 1 | 13 | 5 | 0 | n/a | 0 | ? | 20 |
| Lesser Antilles endemic species | 111 | 7 | 3 | 15 | 10 | 2 | c. 204 | 3 | ? | 355 |
| Caribbean endemic species | 200 | 16 | 4 | 23 | 10 | 2 | c.252 (West Indies) | 3 | ? | 510 |
| Extinct/ Extirpated (not recorded for decades) | 63 | 0 | 2 | 1 | 2 | 1 | n/a | ? | ? | 69 |
| Taxa listed as globally threatened by IUCN (2009) | 6 (1xCR, 2xEN, 3xVU) | 0 | 1 (1xEX) | 5 (1xCR, 2xEN 2xVU) | 2 (1xEN, 1xVU) | 1 (1xCR) | 0 | 0 | 0 | 15 |
| Taxa qualifying as globally threatened using IUCN criteria | 6+ | ? | 1+ | 5+ | 10 (7 spp.; 3 subspp.) | 1 (1 sp.) | ? | ? | ? | 23 |
| ***Alien (non-native) species*** | ***282+*** | ***7*** | ***7*** | ***2*** | ***6*** | ***3*** | ***39+*** | ***0?*** | ***?*** | 346 |
| **TOTAL SPECIES (native and alien)** | **1,291** | **145** | **17** | **134** | **19** | **5** | **816** | **26** | **c. 134[5]** | 2,587 |



[2] Residents (72 species) and migrants only: vagrant records are excluded. Figures include shorebirds and seabirds that feed or breed on the coast.
[3] The number of native beetles and alien beetles are incomplete. A total of 816 beetle species had been recorded by M. Ivie as of 16 November 2009.
[4] Possibly an overestimate because the indigenous ranges of many neotropical plants are poorly known. Graveson (2009b) reported only 945 indigenous seed-plants (including two seagrasses) and fewer endemic species, but omitted recent (2009) findings and species that had not been collected since the 1930s (Annex).
[5] 1,200 species of flies (and over 1,000 beetles) are predicted to be found on Saint Lucia, with further survey effort (M. Ivie, pers. comm.).

An additional 289 non-native species have also become established in natural habitats (i.e. outside of farmland and residential areas) from plants deliberately or accidentally imported to the island. Graveson (2009b) divided these alien species into 'escaped' (species that have remained close to where they were intoduced) and 'naturalized' (more invasive species that have dispersed themselves widely). Some of the most invasive plants in Saint Lucia are the common bamboo (*Bambusa vulgaris*), African tulip tree (*Spathdea campanulata*), water hyacinth (*Eichornia crassipes*) and leucaena (*Leucaena leucocephala*). The majority of alien plants have been observed in degraded forests in lowland areas: it appears that relatively few have been successful at invading the mature rainforests to date.

Currently, only six native plants[6] (0.5% of native vascular species) are listed as globally threatened by IUCN (2009): Critically Endangered: pencil cedar (*Juniperus barbadensis var. barbadensis*); Endangered: lignum vitae or gayak (*Guaiacum officinale*); pennepis (*Pouteria pallida*); Vulnerable: red cedar or acajou (*Cedrela odorata*); arkokwa (*Zanthoxylum flavum*); and contweven (*Pouteria semecarpifolia*). Although *Pouteria semecarpifolia* is recognised as globally threatened, it is in fact still very common on Saint Lucia (R. Graveson, pers. comm.).

Most plant species have not even begun to be evaluated against the IUCN criteria, however, and further research is likely to reveal many species are globally and nationally threatened with extinction. Graveson (2009b) revealed more than 60 indigenous plants have not been recorded since the 1930s – which probably means they have either been extipated or were incorrectly attributed to Saint Lucia in the first place – and a very large number of species are now scarce or highly localized.

Among the species considered to be at risk today are akoma or yellow mastic (*Sideroxylon foetidissimum*); arkokwa (*Zanthoxylum flavum*); balata (*Manilkara bidentata*); bois caille or bois rouge (*Carapa guianensis*); lowye kannel (*Aniba ramageana*); lignum vitae (*Guaiacum officinale*); pencil cedar (*Juniperus barbadensis*); and *Bernardia laurentii*. The latter two occur only on the summit of Petit Piton, where they are at risk from fire and invasive ornamentals. Species confined to highest elevation vegetation types are currently well protected, but are likely to be among the first species to be lost to climate change, e.g. the endemic Saint Lucia lobelia (*Lobelia santa-luciae*). Lansan (*Protium attenuatum*) and latannyé (*Coccothrinax barbadensis*) are currently widely harvested and at risk from overexploitation.



### *2.2.2. Non-vascular plants*

While the national checklist of vascular plants is considered largely complete and up to date, the non-vascular plants (bryophytes), including mosses and liverworts, have not been surveyed in recent years. There appear to be no published lists or statistics on these.

[6] IUCN also list a seventh globally threatened (Vulnerable) plant, the small-leaved mahogany (*Swietenia mahagoni*), as being native to Saint Lucia. Botanist Roger Graveson believes that this tree does not naturally occur, on Saint Lucia, and is present only were it was planted for its timber.

## 2.3. Animal Diversity

One hundred and fifty seven native terrestrial vertebrate animals have been confirmed on Saint Lucia, the majority of which are forest birds. Endemicity is impressively high, with 14 species and at least 19 recognised subspecies that naturally occur only on Saint Lucia. The number of alien vertebrate animals is also high and growing, however, and has driven some of the native fauna to extinction.

### *2.3.1. Mammals*

Nine of the 10 confirmed native mammals are bats, with only one exception, the large endemic Saint Lucia musk rat (*Megalomys luciae*), which has not been formally recorded since the 1880s and is probably extinct (attempts to find this species in 2009 were unsuccessful: Clarke, 2009). Although most of the bats are widespread throughout the Lesser Antilles, many species are in decline due to the loss of forest cover, major roost sites and other factors, and Saint Lucia has an important role to play in their conservation. One bat subspecies is endemic, the Saint Lucia little yellow-shouldered bat (*Sturnira lilium luciae*), and another occus only on Saint Lucia and Saint Vincent (the tree bat *Ardops nichollsi luciae*). Most bat species are present in the rainforests of the Forest Reserves, but there are important foraging and roosting areas in the forests outside of the reserve system (Clarke, 2009). None of the bats are currently protected by law.

The mammal list has become significantly enlarged with the introduction of the southern opossum (*Didelphis marsupialis*), Brazilian agouti (*Dasyprocta leporina*), feral pigs (*Sus scrofa*), rats (*Rattus rattus, R. norvegicus*), mice (*Mus musculus*) and small Asian mongoose (*Herpestes javanicus*), many of which pose a very serious threat to native species and have significantly altered the natural forest ecosystem. Rats have been successfully eradicated from Praslin, Dennery and Rat islands, but most of the alien mammals have spread unchecked, and two species are even protected under the Wildlife Protection Act (the opossum and agouti).



### *2.3.2. Birds*

Of the 132 birds regularly recorded on Saint Lucia (i.e. not vagrants), 72 are year-round residents and the remainder are migrants. Saint Lucia boasts one of the highest levels of bird endemicity in the region, with five endemic species (Saint Lucia amazon *Amazona versicolor*, Saint Lucia black finch *Melanospiza richardsoni*, Saint Lucia oriole *Icterus laudabilis*, Saint Lucia warbler *Dendroica delicata*, and Semper's warbler *Leucopeza semperi* [possibly extinct]) and 13 endemic subspecies. Five birds – all forest species – are currently listed as globally threatened with extinction (IUCN, 2009) i.e., Critically Endangered: Semper's warbler; Endangered: Saint Lucia black finch, white-breasted thrasher (*Ramphocinclus brachyurus*); and Vulnerable: Saint Lucia amazon, forest thrush (*Cichlherminia lherminieri)*. The Saint Lucia oriole is listed as Near Threatened.

The vulnerable Saint Lucia amazon is recovering strongly thanks to concerted conservation efforts, but a number of other forest birds appear to be in decline, including the Saint Lucia oriole, Saint Lucia nightjar (*Caprimulgus rufus otiosus*), the endemic subpscies of white-breasted thrasher (*R. b. sanctaeluciae*), Saint Lucia wren (*Troglodytes aedon mesoleucus*), and the rarely-seen forest thrush (*C.l. sanctaeluciae*) (Toussaint *et al.*, 2009). The Forest Reserves clearly play a critical role in conserving the species at greatest risk of extinction, with about 19% of the 16 'priority birds' restricted to these rainforests, and a further 44% also using this habitat. However, 38% of the priority birds almost entirely in habitats outside the Forest Reserve, chiefly the deciduous seasonal forests

(Toussaint *et al.*, 2009). An aalysis of the areas used by migrant birds also found the majority of records fell outside of the forest reserves (Toussaint *et al*., 2009)..

### *2.3.3. Reptiles and amphibians*

'The Place Where the Iguana is Found' (Iouanalao), is also a country of outstanding significant for reptiles, with seven endemic species - 53% of indigenous terrestrial species - Saint Lucia anole *Anolis luciae*, Saint Lucia whiptail *Cnemidophorus vanzoi*, Saint Lucia pygmy gecko *Sphaerodactylus microlepis*, Saint Lucia fer-de-lance *Bothrops caribbaeus*, Saint Lucia cribo *Clelia errabunda*, Saint Lucia thread snake *Leptotyphlops bruilei*, and Saint Lucia racer *Liophis ornatus*. There are five endemic subspecies, including the Saint Lucia boa *Boa constrictor orophias*. Three full species have become extinct in recent history, however. While only two reptiles are currently shown on the IUCN (2009) Red List as threatened with extinction (Endangered: Saint Lucia racer; Vulnerable: Saint Lucia whiptail), almost all of the endemic taxa are in serious decline and meet IUCN's criteria as being globally threatened, including the endemic pygmy gecko (both subspecies), thread snake and fer-de-lance (Daltry, 2009).

Six alien reptiles have been documented on Saint Lucia since 1900, of which only three have persisted. These include an alien green iguana (*Iguana iguana*) which is undoubtedly capable of wiping out the endemic iguana unless it is eradicated. Another alarming discovery of the present survey was that another alien lizard, *Anolis wattsi*, which was previously believed to be harmless, is spreading very rapidly across the island and appears to be capable of displacing the endemic *Anolis luciae* (Daltry, 2009).

The amphibian list is considerably shorter, as is usually the case on oceanic islands, with only two native species documented: the endemic, and very abundant, Johnstone's whistling frog (*Eleutherodactylus johnstonei*) and the now-extirpated mountain chicken (*Leptodactylus fallax*), a Lesser Antillean endemic. Three alien amphibians have been reported, of which two have continued to flourish, including the notorious cane toad (*Bufo marinus*).

The forest class with the greatest diversity and abundance of reptiles and amphibians is mature Deciduous Seasonal Forest, closely followed by mature Freshwater Swamp Forest and Semi-Evergreen Seasonal Forest. Forests with low herpetofaunal diversity and abundance were Elfin Shrubland, Lower Montane Rainforest, Fumarole Vegetation and Mangrove. Human degradation of all forest classes was significantly associated with an increased number of alien invasive reptiles and amphibians. These findings tell us that the forest classes that are best represented in the protected area system have the lowest diversity and abundance. The species-rich Deciduous Seasonal Forests and Freshwater Swamp Forests are largely outside of the protected zone and thus at risk. An important exception to this rule are the xeric Maria Islands (12ha), which supports seven native species, most of which are scarce or absent from the 'mainland'.

### *2.3.4. Invertebrates*

The invertebrate fauna, while greatly outnumbering the vertebrate animals in term of number of species and orders, is only partially known. The 2009 ecological surveys included the first intensive forest insect survey, especially beetles (Coleoptera – the most diverse order of insects), but also flies (Diptera), dragonflies (Odonata) and other selected insect orders.

Prior to this study, only 179 species (27 families) of beetles had been formally documented in Saint Lucia (plus a further 33 unpublished records). The present survey increased this total to at least 816 species in at least 70 families[7], of which 739 species were collected in 2009 (M. Ivie, pers. comm.). This is a significantly larger number of species than have been found during longer term beetle inventories on Dominica and Monserrat. The actual number of beetle species present is likely to be well over 1,000. (M. Ivie, pers. comm.). This diversity does include a large number of alien beetles, however, at least three of which were deliberately introduced as biocontrol agents (*Diomus roseicollis, Pseudoazya trinitatis* and *Coleophora inaequalis*). Approximately 144 (18%) of the beetle species found to date have been tentatively identified as species endemic to Saint Lucia, but many of these have not been formally named yet (see Annex Table C). Among the few species of beetles previously recorded on Saint Lucia is the very large hercules beetle (*Dynastes hercules reidi*), which is restricted to montane areas.

The beetle study in 2009 found that diversity of species decreases with elevation (but the percentage of endemics rises), so the summits have a limited fauna of mostly native, mostly Saint Lucian endemics. At lower elevations, notably in the deciduous seasonal forests, the number of species is very high. Not only do the lowland forests contain a greater diversity of Saint Lucian endemic species, but also more alien species. The endemics here tend to be more scarce than the more widespread native and invasive species, and it takes more survey effort to locate them. This indicates that the dry forests are greatly underrated in terms of their biodiversity value, and are more threatened by aliens than the wetter forests in the Forest Reserves (M. Ivie, pers. comm.).

Flies (Diptera) were equally poorly known, with only 45 species documented prior to 2009, but nearer 1,200 expected (M. Ivie and R. Winton, unpublished data). The 2009 survey of one family, Dolichopodidae, in 2009 yielded a preliminary total of 60 species in 22 genera (see Annex, Table D), 19 of which appear to be new species and are assumed to be single island endemics, but could be found to be more widespread with more collecting in the region (J. Runyon, unpublished data.). The fact that fourteen of the 60 species are represented by a single individual specimen indicates a large number of species yet to be discovered. Two-thirds of the species were in the wetter forests in the Forest Reserves, and one-third were in drier forests (chiefly Deciduous Seasonal Forest) outside of the reserves.

Among the smaller insect groups (in terms of number of species) are the dragonflies (Odonota), of which 26 species have been recorded from Saint Lucia to date. Most of these known dragonflies have a wide distribution, but three are endemic Lesser Antilles (Annex, Table E).

Forest crustaceans (not shown on Table 3) include at least two species of forest-living crabs identified by Morton (2009a) as bak, or the forest crab, *Guinotia dentata*, and kwab or coastal crab, *Cardisoma guanhumi*. Morton's study revealed a high percentage of Saint Lucians consume forest-living crabs, and collection pressure is evidently high, especially in coastal areas. There is insufficient data to determine whether this harvest is sustainable or not. Thirteen species of freshwater shrimps or 'crayfish' have been identified within the rivers that run through the forests. Their numbers are

[7] As 16 November 2009. On 27 November, M. Ivie confirmed that the number had reached 817 species. This figure may continue to rise with further analyses of the collected specimens.

reportedly on the decline, putatively due to pollution of the freshwater systems (Government of Saint Lucia (1998), although these crustaceans are also caught in large numbers for food.

Other major invertebrate groups, such as arachnids (spiders, scorpions, ticks and mites), molluscs (snails and slugs) and annelids (earthworms), were not surveyed in 2009 and there appears to be very little written information on these.

## 2.4. Functions and Values

### *2.4.1. Conservation and use of wildlife*

The main theme of this report is among the major benefits that forests bring. More than 2,100 native species have been found to date (**Table 3**), and this number should more than double when other terrestrial plant taxa (notably the bryophytes and algae), invertebrate taxa and fungi are surveyed. The majority of these organisams are largely or entirely dependent on forest habitats.

As a party or signatory to the Convention on Biological Diversity, the St. George's Declaration on Environmental Sustainability in the OECS, the Protocol Concerning Specially Protected Areas and Wildlife (SPAW Protocol), among others, Saint Lucia has a global responsibility to conserve its indigenous plants, animals and their habitats. Maintaining sizeable, representative areas of the different natural forest types is the single most important action that Saint Lucia can take to achieve this. While plantations of exotic trees can, to some extent, serve as forest surrogates and support a number of native animals and plants (more than arable or livestock farming anyway, or most other land uses), the greatest diversity and abundance of indigenous species are to be found in the natural, mature forests.



This native and alien forest biodiversity also makes a direct contribution to local livelihoods, as Saint Lucians collect, buy and use a remarkably diverse array of forest products, especially plants. Morton (2009b) provides a more detailed account of the use of the native gonmyé (*Dacroydes excelsa*), lansan (*Protium attenuatum*), latannyé (*Coccothrinax barbadensis*), and four species of lyenn: awali (*Clusia major* and *C. plukenetii*), ti kannou (*Asplundia rigida*) and ponm dilyenn (*Passiflora laurifolia*); the native animals bak or forest crab (*Guinotia dentata*), kwab or coastal crab (*Cardisoma guanhumi*), léza or iguana (*Iguana cf iguana*), tet chyenn or boa (*Boa constrictor*), and the alien mannikou or opossum (*Didelphis marsupialis*), kochon mawon or feral pig (*Sus scrofa*) and agouti (*Dasyprocta leporina*). The harvesting and current management of latannyé and the now-rare mabi or mauby (*Colubrina elliptic*a) were examined by van Eynde (2009).

All of the main animal quarry are protected by the Wildlife Protection Act (1980), which appears to have been successful in significantly reducing hunting (John, 2001). Traditionally, killing of a variety of birds was commonplace, for sport or food, but this practice has largely ceased due to law enforcement and changing attitudes towards wildlife (Adams Toussaint, pers. comm.). Hunters may, however, be able to develop a valuable role in heliping to control undesirable alien mammals, notably feral pigs (Dornelly & Jn Baptiste, in prep.). Other less controversial animal products include bat guano, which is collected as a fertilizer for gardens on a small scale.

Wood is, of course, another major forest product, and the focus of attention from other members of the project implementation team. Tennant (2009) provided an quantitative analysis of the current timber reserves on Saint Lucia's forest reserves, while van Eynde (2009) provided further analysis of how

this resource is currently being managed and used. Saint Lucia boasts a number of trees that produce high quality, valuable timber, and was a net exporter of timber until the 1940s. Although some of the most sought-after trees, such as arkokwa , have become extremely scarce, many useful native timber species remain in the forests, including gonmyé or gommier, lowye mabwe (*Ocotea leucoxylon*), white cedar (*Tabebuia pallida*), bwa blan (Simarouba amara), bwa damand (*Hieronyma caribaea*), red cedar (*Cedrela odorata*), bwa kweyol (Myrcia deflexa) bwapen mawon (*Talauma dodecapetata*) and la glu (*Sapium caribaeum*) (van Eynde, 2009). Despite the presence of these indigenous trees, a number of exotic alternatives have been introduced, chiefly into the Forest Reserves, in an effort to boost timber production, reforest degraded areas and safeguard watersheds. The exotic species include mahogany (*Swietenia macryophylla*), blue mahoe (*Hibiscus elatus*) and Caribbean pine (*Pinus caribbaea*), with lesser numbers of gmelina (*Gmelina arborea*), teak (*Tectona grandis*), eucalyptus (*Eucalyptus resinifera, E. robusta, E. kirtoniana*) and leucaena (*Leucaena leucocephala*). The plantations are scattered, but cover a relatively small total area of 505 hectares (van Eynde, 2009). Replacing imported timber with local supplies would be an important strategy for reducing the country's 'carbon footprint', but the use of exotic timber species should be discouraged in areas of high conservation value (section 3).

Although demand has generally decrease in recent decades, charcoal continues to be an important source of domestic fuel and income in Saint Lucia: a charcoal maker can earn as much as EC$1,500 from one "good burn". Charcoal is produced in covered pits, which can be seen scattered around the country, often utilizing wood from secondary forests outside of the Forest Reserve. Saint Lucia used to export charcoal, and this industry was blamed for extensive deforestation (Towle & Towle, 1991). Since the early 1980s, a number of projects have therefore endeavoured to ensure the nation's charcoal supply is more sustainable, including the introduction of leucaena (*Leucaena leucocephala*) plantations (although yields fell short of expectations) and a community project to manage the 40-hectares of mangroves at Mankòtè, near Vieux Fort (Smith & Berkes, 1993). As fossil fuel alternatives become increasingly rare and expensive, domestic and overseas demand for renewable fuels is likely to skyrocket in the coming decades. While a resurgence in charcoal exports could be viewed as a threat, conserving Saint Lucia's wood supply is undoubtedly a wise investment to buffer the country against future global energy crises.



### *2.4.2. Watershed and soil protection*

Intact forested land captures rainwater far more efficiently than any other form of land cover, and, like a giant sponge, releases this water steadily, thereby serving to buffer rivers and users downstream from seasonal floods and droughts. This vital regulatory function has long been recognised in Saint Lucia, with the need to protect critical catchment areas being the driving force behind the designation of many Forest Reserves. Indeed, the country's first was Castries Waterworks Reserve, established in 1916 to safeguard the city's water supply.

To clear or degrade any of the existing forest reserve areas would be exceedingly risky. All of the island's major rivers have their headwaters in Forest Reserves, in the island's mountainous interior, where rainfall typically exceeds 3,000mm. Most of the >12 million $m^3$ of water consumed in Saint Lucia is derived from the forested watersheds of seven major rivers: Canelles, Cul de Sac, Fond D'Or, Marquis, Troumassee, Vieux Fort and Roseau, the largest at 49.1$km^2$. (Towle & Towle, 1991; Kundall, 2008).

It is, however, simplistic to regard the Forest Reserves as the island's water catchments and all other areas as being irrelevant. The watersheds of all rivers, large or small, also encompass the island's foothills and other land areas downstream - areas with lower rainfall than the mountains, but are cumulatively larger in area. The remaining forests outside the reserve thus also make a major contribution to maintaining Saint Lucia's water supply, especially those nearest to ravines and their tributaries.

Forests also serve to anchor soil, especially on land that is sloping, prone to erosion by rivers or on inherently loose soils. CIDA (1988) identified 3,462 hectares as being at "extreme and high erosion risk", 578 hectares of which were outside of the existing Forest Reserves. With a very large amount of Saint Lucia's private lands already cleared of their forests for agriculture and settlements (**Figure 1**), soil erosion is a persistent problem in almost all watersheds, leading to landslides, irregular water flow, and increased sedimentation of rivers and coastal reefs. Policies to maintain existing forests and promote regrowth are crucial, especially near watercourse and on steep slopes.

### *2.4.3. Carbon storage*

The forests of Saint Lucia currently represent more than three million tonnes of stored carbon (equivalent to 11,570,000 tonnes $CO_2$). **Table 4** shows their calculated carbon storage, based on average values published for equivalent types of tropical forest. The potential carbon could be significantly higher, but much of the forest is disturbed or secondary regrowth, which holds less carbon than mature, intact forests.

**Table 4** Preliminary estimate of carbon in Saint Lucia's forests (above and below ground biomass carbon, plus soil).

Areas of forest cover are conservative visual estimates and should not be cited. These calculations should be redone when more accurate measures of forest cover become available.



| *Forest category (major classes)* | *Estimated[8] tonnes of Carbon/ha* | *Area (hectares)* | | *Carbon (tonnes)* | | *Total Carbon* |
|---|---|---|---|---|---|---|
| | | **Forest Reserve** | **Outside Reserve** | **Forest Reserve** | **Outside Reserve** | |
| Littoral Evergreen Forest and Shrubland | 70 | 0 | 1,000 | 0 | 70,000 | 70,000 |
| Mangrove | >300 | 0 | 200 | 0 | >60,000 | >60,000 |
| Freshwater Swamp Forest | 211 | 0 | 100 | 0 | 21,100 | 21,100 |
| Deciduous Seasonal Forest | 80 (disturbed) to 143 (intact) | 350 | 7,000 | 35,000 | 700,000 | 735,000 |
| Semi-evergreen Seasonal Forest, Lowland Montane Rainforest | 200 (disturbed) to 259 (intact) | 8,200 | 2,000 | 1,804,000 | 420,000 | 2,224,000 |
| Montane Rainforest, Cloud Montane Rainforest | 140 (disturbed) to 190 (intact) | 200 | 50 | 34,000 | 8,500 | 42,500 |
| | | **8,750** | **10,350** | **1,873,000** | **1,279,600** | **3,152,600** |

[8] Mean carbon content figures are "conservative" calculations for the equivalent forest types in Guyana (Cedergren, 2009) and other forests in tropical South America (Fauna & Flora International's Arcadia Climate Assessment Project database, based on Eggleston *et al.*, 2006).

In common with many other islands in the Lesser Antilles (Helmer *et al.*, 2008), Saint Lucia's forest cover appears to have increased significantly since Beard mapped the island's vegetation in the 1940s (Beard, 1949). This trend could continue due to declines in traditional arable plantations, enabling Saint Lucia to sequester substantial carbon as its forest regrowth continues. Many of the Deciduous and Semi-evergreen Seasonal Forests are still in their first decades of regrowth, and will assimilate carbon at a faster rate than the old growth forests. Although the land area is small on a global scale, there may be scope for Saint Lucia to secure funding through various carbon schemes for its contribution in the fight against climate change (see van Eynde, 2009, for options).

### *2.4.4. Tourism*

Saint Lucia's appeal to tourists owes much to its natural beauty, with the rainforests in particular adding to its 'tropical paradise' label. A large number visit the forest reserves or hike up Petit Piton every year, or experience the forests through driving, birding tours, aerial flights, and horse-back riding. Tourists are becoming increasingly knowledgeable and concerned about tropical forests and wildlife. There is more scope to promote the forests and increase their accessibility to visitors in return for more revenue for the Forestry Department or private enterprises. Nature-based tourism is still one of the fastest growing sectors of tourism (Balmford, *et al.* 2009) and Saint Lucia is well placed to make use of this opportunity, with birding enthusiasts especially drawn to the island's large number of endemic species.

### *2.4.5. Scenic and other values*

Forests are important for the well-being of residents too: a point that may be fully appreciate only when exposed to countries that have lost most of their forest cover, such as Barbados and Antigua. Saint Lucians who visit such deforested islands often complain of the lack of shade and poor-tasting, desalinated water. The contribution of forests to the health and well-being of people may go much further than this, however. Experimental research has demonstrated a significant reduction in blood pressure, diabetes and cancer by walking in old-growth forests (compared to city walking), and people who view forest scenery for 20 minutes have 13% lower blood concentration of the stress hormone cortisol than people viewing urban settings (Park *et al.*, 2007). In 2008, Japanese scientists demonstrated that people living in areas with a higher percentage of forest cover had lower mortality rates for cancers of the lung, breast, uterus, prostate, kidney, and colon, compared with people living in areas with lighter forest cover, even after factoring in socioeconomic status. For a fuller review of the relationships between forests and human health, see Colfer *et al.* (2006).

# 3. Priority Forest Biodiversity Areas

## 3.1. Introduction

Saint Lucia's wild animal and plant species are very unevenly distributed, even within the forested areas. After consultation with many of the biologists that participated in field surveys in 2009, 25 areas were identified and rated as priorities using the Forest Stewardship Council's first three criteria for identifying High Conservation Value (HCV) forests:-

> HCV 1: Globally, regionally or nationally significant concentrations of biodiversity values (this includes: protected areas; rare or threatened species; endemic species; and seasonal concentrations of species)
>
> HCV 2: Globally, regionally or nationally significant large landscape–level forests
>
> HCV 3: Forest areas that are in or contain rare, threatened or endangered ecosystems

Together, the 25 areas identified contain virtually all of Saint Lucia's known natural vegetation formations, endemic terrestrial species and globally threatened terrestrial species.

The recommended management activities in zones ranked as Very High or High in importance for biodiversity should be primarily conservation-oriented. While this does not necessarily exclude other activities (e.g. selective logging, harvesting non-timber forest products, tourism), such uses should be strictly controlled to avoid spoiling the outstanding biodiversity values of these areas.

In zones ranked as being of Medium or Lower importance, there will be greater scope for other activities, including plantations and even agriculture. The needs of protected and threatened species should be respected, however (e.g. safeguarding parrot nesting trees and large bat roosts in timber extraction areas).

In all zones, it is crucial to avoid introducing of alien invasive species, because these could spread throughout the country. Other crucial functions of the forests - most notably watershed protection - should also be borne in mind, and the Precautionary Principle applied wherever there is uncertainty. Achieving the recommended management objectives below, both inside and outside of the Forest Reserves, will depend on the Forestry Department engaging the cooperation and support of private owners, developers, wildlife consumers, the National Trust, and other forest stakeholders.



## 3.2. Priority areas within the Forest Reserve

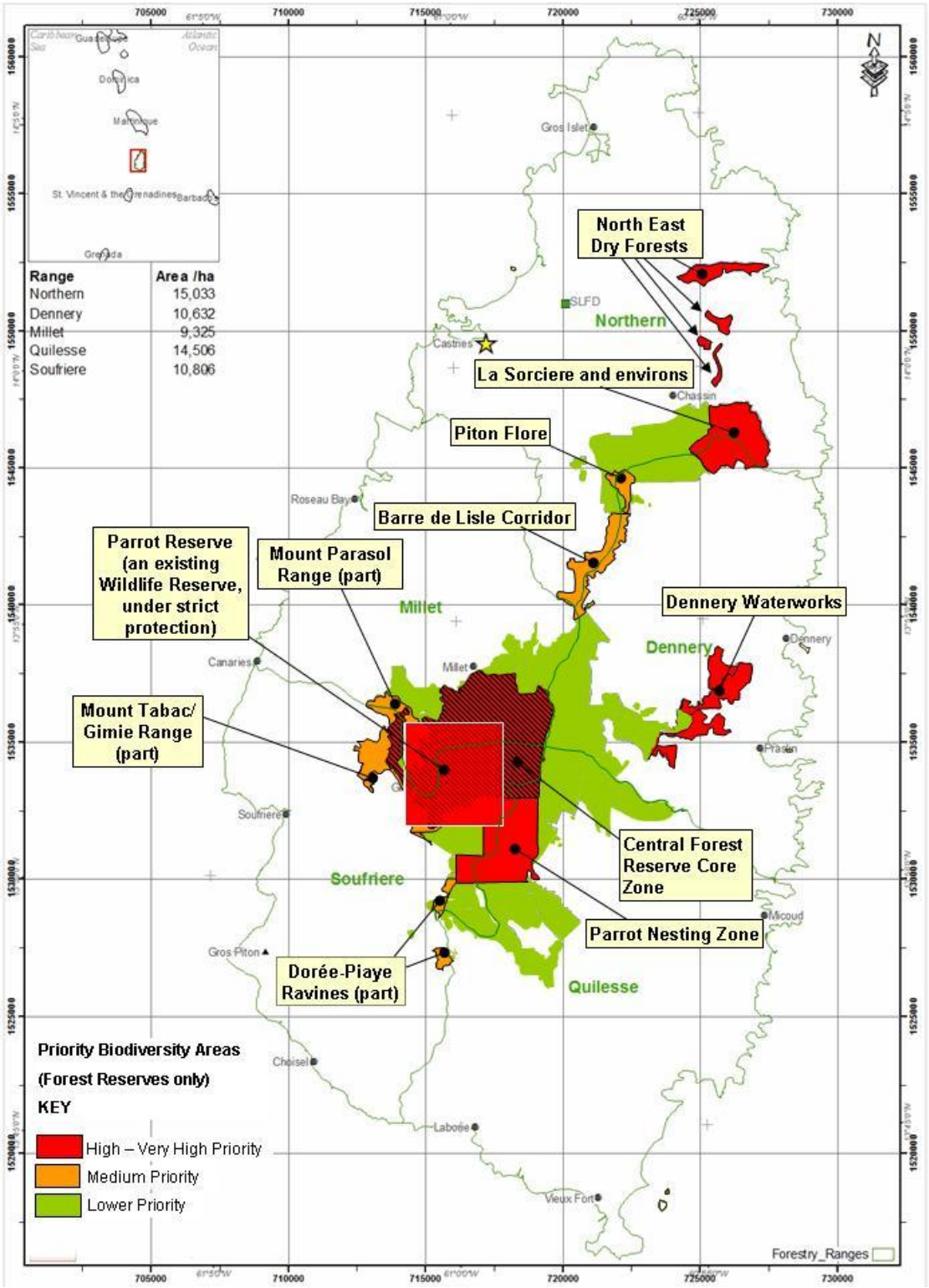
See **Figure 2** for location of zones.

### 1. North East Dry Forest Reserves — Conservation Importance - Very High

***Rationale*** **-** Almost the only examples of deciduous seasonal forest designated as Forest Reserves, these four reserves capture a very significant variety of species and habitats that do not occur in the rest of the reserve system. Rare trees, including arkokwa (*Zanthoxylum flavum*) akoumat (*Sideroxylon foetidissimum*) and *Exothea paniculata* are found in the forest reserve strips in the Maquis-Bouguis area. A small number of Saint Lucia iguana (*Iguana cf iguana*) inhabit these areas, but require several

**Figure 2** Priority areas for biodiversity conservation within the Forest Reserve

See text for descriptions.



adjoining areas, outside of the Reserves, for nesting.These reserves form part of the Government Forest Reserve Important Bird Area (#LC002), and are directly adjacent to the North East Coast IBA (#LC001) (see North East Coast Dry Forests below). While most of these forest areas are secondary and degraded, they could recover quickly if given the chance.

***Management needs*** **-** Enable the recovery and long term conservation of these sites in the context of the wider dry forest landscape. Protect all indigenous wild animals and plants. No hunting (with possible exception of pig hunting as part of a control programme) and any collection of non-timber forest products should be strictly regulated within sustainable limits. All exotic tree plantations and farms (squatters) should be removed to allow native seasonal deciduous forest to replace them. Avoid logging, but localized clearings may help create the low forests favoured by the rare Saint Lucia nightjar (*Caprimulgus rufus otiosus*). Planting of rare trees that naturally occur in this habitat, e.g., arkokwa, akoumat, and gayak (*Guaiacum officinale*), would benefit these forests and the species concerned. Acquire land or form agreements with local private landowners to enlarge the effective area under protection. A top priority is to maintain contiguous forest cover to the iguana's coastal nesting areas. Research and monitor these forests and selected wildlife.

**2. Parrot Reserve** Conservation Importance - Very High

***Rationale*** **-** A Wildlife Reserve established for the conservation of the Saint Lucia amazon (*Amazona versicolor*), covering 3,128 hectares. The western part of this reserve includes Mount Gimie (Saint Lucia's highest mountain) and therefore most of Saint Lucia's elfin shrublands, cloud montane forests and their associated flora. Important populations of endemic and threatened animals and plants are present, including a wide variety of rainforest birds, Saint Lucia boa, Saint Lucia fer-de-lance, and Saint Lucia pygmy gecko. The wildlife reserve forms part of the Government Forest Reserve Important Bird Area (#LC002).



***Management needs*** **-** Maintain the high conservation value of this area, especially for parrots. Strict protection of all indigenous wild animals and plants within this area, as mandated under the Wildlife Protection Act (this applies to fer-de-lance). No logging or hunting, with the possible exception of pig hunting as part of a feral pig control programme. Collection of non-timber forest products (e.g. lyenn) should be strictly limited to minimise disturbance to nesting parrots. Demarcate boundary in the more accessible parts. Research and monitor parrots and other selected wildlife.

**3. Parrot Nesting Zone** Conservation Importance - High

***Rationale*** **-** Additional to the Parrot Reserve, this is the main area where the Saint Lucia amazon (*Amazona versicolor*) lives and breeds, and is also significant for other endemic rainforest birds, reptiles and plants. It forms part of the Government Forest Reserve Important Bird Area (#LC002).

***Management needs*** **-** Maintain the high conservation value of this area, especially for parrots. All indigenous wild animals and plants should be protected. Gradually phase out the exotic tree plantations, taking care to leave trees identified as being in active use by feeding or nesting parrots and roosting bats. Allow native vegetation to succeed them. Feral pig control. Logging, hunting and the collection of non-timber forest products (NTFP), such as lyenn, should be strictly limited to minimise disturbance to nesting parrots. Low-impact nature-based tourism could be developed here, but the locations of parrot nests should not be revealed. Research and monitor parrots and other selected wildlife.

**4. Central Forest Reserve Core Zone** Conservation Importance - High

***Rationale*** **-** The most remote parts of the Central Forest Reserve, difficult to access and therefore an excellent natural sanctuary for lowland montane rainforest wildlife. Additional and overlapping with the Parrot Reserve and Parrot Nesting Zone above, this zone forms part of the Government Forest Reserve Important Bird Area (#LC002).This remote area has a high density of fer-de-lance and human activity in this area should be minimal to avoid snake-human conflict. This area was also identified by CIDA as a protection zone (see CIDA report for rational).

***Management needs*** **-** Minimise human activity in this area, both for the benefit of wildlife and to ensure human safety. All indigenous wild animals and plants should be strictly protected. Feral pig control is required, to conserve this forest and prevent this being a breeding area from which pigs will spread to other areas. No, or minimal, logging, NTFP collection or hunting. Limited research and monitoring of wildlife. Most of this area should be off limits to tourists for safety reasons (the main hiking trail is east of the boundary of this zone).

**5. La Sorciere and Environs** Conservation Importance - High

***Rationale*** **-** An area is noted for the quality of its flora, comprised mainly of lower montane rainforest, with some rare deciduous and semi-evergreen seasonal forests. It forms part of the Government Forest Reserve Important Bird Area (#LC002), with historical reports of the critically endangered Semper's warbler (*Leucopeza semperi*, last recorded here in 1972) and vulnerable forest thrush (*Cichlherminia lherminieri*, last recorded here in 2007). It also adjoins the North East Coast IBA (#LC001). This zone borders crucial deciduous seasonal forests for Saint Lucia iguanas, Saint Lucia nightjars (*Caprimulgus rufus otiosus*), white-breasted thrashers (*Ramphocinctus brachyurus*) and Saint Lucia wrens (*Troglodytes aedon martinicensis*) and is therefore important as a buffer area for any future developments in the North East Dry Forests (see below).

***Management needs*** **-** Preserve good forests and enable the recovery of degraded areas in the context of the wider forest landscape. Protect indigenous wild animals and plants. Remove exotic tree plantations, starting with Caribbean pines (*Pinus caribbaea*), which are not thriving and pose a fire hazard, and remove farms (squatters), to allow native vegetation to replace them. Limited scope for logging, but small clearings may be beneficial in creating improved nightjar habitat. NTFP collection (lyenn, lansan, etc) should be possible if conducted sustainably. Develop co-management agreements with neighbouring landowners or developers to maintain forest on their properties in order to form a contigous band along the full wet-mesic-dry gradient down to the coats (including the key ravines of Louvet, Caille des, and Grand Anse). Research and monitor forest cover and wildlife.

**6. Dennery Waterworks** Conservation Importance - High

***Rationale*** **-** A very important link between the coastal deciduous seasonal forests and the lower montane rainforest, containing some unique deciduous seasonal and semi-evergreen seasonal forest flora (forest types that are generally under-represented in the Forest Reserve system). This reserve forms part of the Government Forest Reserve Important Bird Area (#LC002) and adjoins the Mandelé Dry Forest IBA (#LC004). It supports a small, but important, number of white-breasted thrashers (*Ramphocinctus brachyurus*) and foraging flocks of Saint Lucia amazons (*Amazona versicolor*).

***Management needs*** **-** Preserve good forests and enable the recovery of degraded areas in the context of the wider forest landscape. Ensure high level protection of all indigenous wild animals and plants.

Logging should be limited, but NTFP collection (e.g. lyenn) would be permissible if conducted sustainably. Endeavour to acquire land or form agreements with local landowners to bring adjoining deciduous seasonal forest areas under protection. Research and monitor the forest cover and wildlife, in particular the white-breasted thrashers.

**7. Barre de Lisle Corridor** Conservation Importance - Medium

***Rationale*** **-** An important link between the northern and southern parts of the Forest Reserve network. As a corridor, this zone can provide contiguous lowland montane rainforest to enable the movement of forest species between the northern and southern reserves (many rainforest species, including many understory birds, are unwilling or unable to cross clearings). This zone also contains important populations of many rainforest species, including probably the highest concentration of lansan trees (*Protium attenuatum*). It also lies at the centre of the Government Forest Reserve Important Bird Area (#LC002), noted for its large number of threatened and endemic rainforest birds.

***Management needs*** **-** Maintain a continuous natural forest canopy between the northern and southern parts of the Forest Reserve network. Gradually phase out exotic tree plantations, including *Eucalyptus*, and remove farms (squatters) to allow native rainforest vegetation to replace them. Any logging (apart from removal of exotics) should be highly selective and generally best avoided due to steep slopes and high rainfall. Low-impact tourism (e.g. hiking trails) and sustainable NTFP collection (e.g. lansan resin) would be permissible.

**8. Piton Flore** Conservation Importance - Medium

***Rationale*** **-** The summit of Piton Flore has a unique dwarf form of lower montane rainforest species, while the lower slopes are more typical lower montane rainforest. This area forms part of the Government Forest Reserve Important Bird Area (#LC002) and contains important habitat for the Saint Lucia amazon.

***Management needs*** **-** Maintain this area under natural forest cover for the purposes of biodiversity conservation (and watershed protection). Avoid any logging on the flanks and summit of this piton, and especially ensure large, old trees are preserved for nesting parrots and roosting bats. Low-impact tourism (hiking) and sustainable NTFP collection should be permissible.

**9. Mount Tabac/ Gimie Range** Conservation Importance - Medium

***Rationale*** **-** Range identified for its botanical importance. The summits and joining ridges have a mosaic of cloud montane rainforest and elfin shrublands, containing about 15 plant species not found anywhere else in Saint Lucia. Many of these are Saint Lucian or Lesser Antillean endemics.

***Management needs*** **-** Maintain this area under natural forest cover and ensure it remains contiguous with the Mount Tabac forested landscape outside of the Forest Reserve. Avoid any logging on the flanks and summits of these mountains and ridges. Especially ensure large, old trees are preserved for nesting parrots and bat roosts. Low-impact tourism (hiking) and sustainable NTFP collection should be permissible.

**10. Dorée-Piaye Ravines** Conservation Importance – Lower/Medium

***Rationale –*** Small, but important segments of ravines (the remainder of which lie outside of the Forest Reserve) with well-developed forests and an exceptionally high diversity of plants. Forms part of the Government Forest Reserve Important Bird Area (#LC002)

***Management needs -*** Maintain under natural forest cover, contiguous with the rest of the Dorée and Piaye ravines that continue downstream outside of the Forest Reserve (see below). Avoid logging (these are very steep ravines). More research should be conducted into the flora and especially fauna of these ravines. Local people could be enabled to develop low-impact tourist hiking trails along the ravines, especially if the rest of the ravines can be maintained downstream.

**11. Part of Mount Parasol Range** Conservation Importance – Lower/Medium

***Rationale*** **-** Range identified for its botanical importance, but also forms part of the Government Forest Reserve Important Bird Area (#LC002).

***Management needs*** **-** Maintain under as much natural forest cover as possible, both to conserve its native biodiversity and to maintain its watershed functions.

**12. Other Forest Reserve** Conservation Importance – Lower

***Rationale*** **-** All other parts of the Forest Reserve not included in the zones above. Predominantly lowland montane rainforest, these form the rest of the Government Forest Reserve Important Bird Area (#LC002) and contain a rich diversity of animals and plants, with some excellent forest habitats. No species are known to be in this area, however, which do not also occupy at least one of the priority zones above.

***Management needs*** **-** A multiple use area, but incorporating sound conservation principles to conserve biodiversity and maintain its critical watershed functions. Logging should be low-impact and highly selective, following best practices to avoid soil erosion and landslides. Only exotic and non-endangered native trees should be harvested. Large, old trees can be preserved for nesting parrots and bat roosts. As far as economically viable, tree plantations in this zone should use mixed native species in preference to exotic ones. Exotic *Pinus* and *Eucalyptus* should be phased out as a priority, because they represent a fire hazard, degrade the topsoil and offer least benefits to native wildlife. No new exotic species should be introduced into the Forest Reserve for timber, ornamental or other purposes in case they become invasive. Illegal farms (squatters) should be removed from all forest reserves and replaced with forest or plantations (ideally using native species). Local people can be enabled to benefit from sustainable use of forest products, both animals and plants. Research and monitor wildlife, especially tree species and forest areas targeted by logging.

## 3.3. Priority areas outside the Forest Reserve

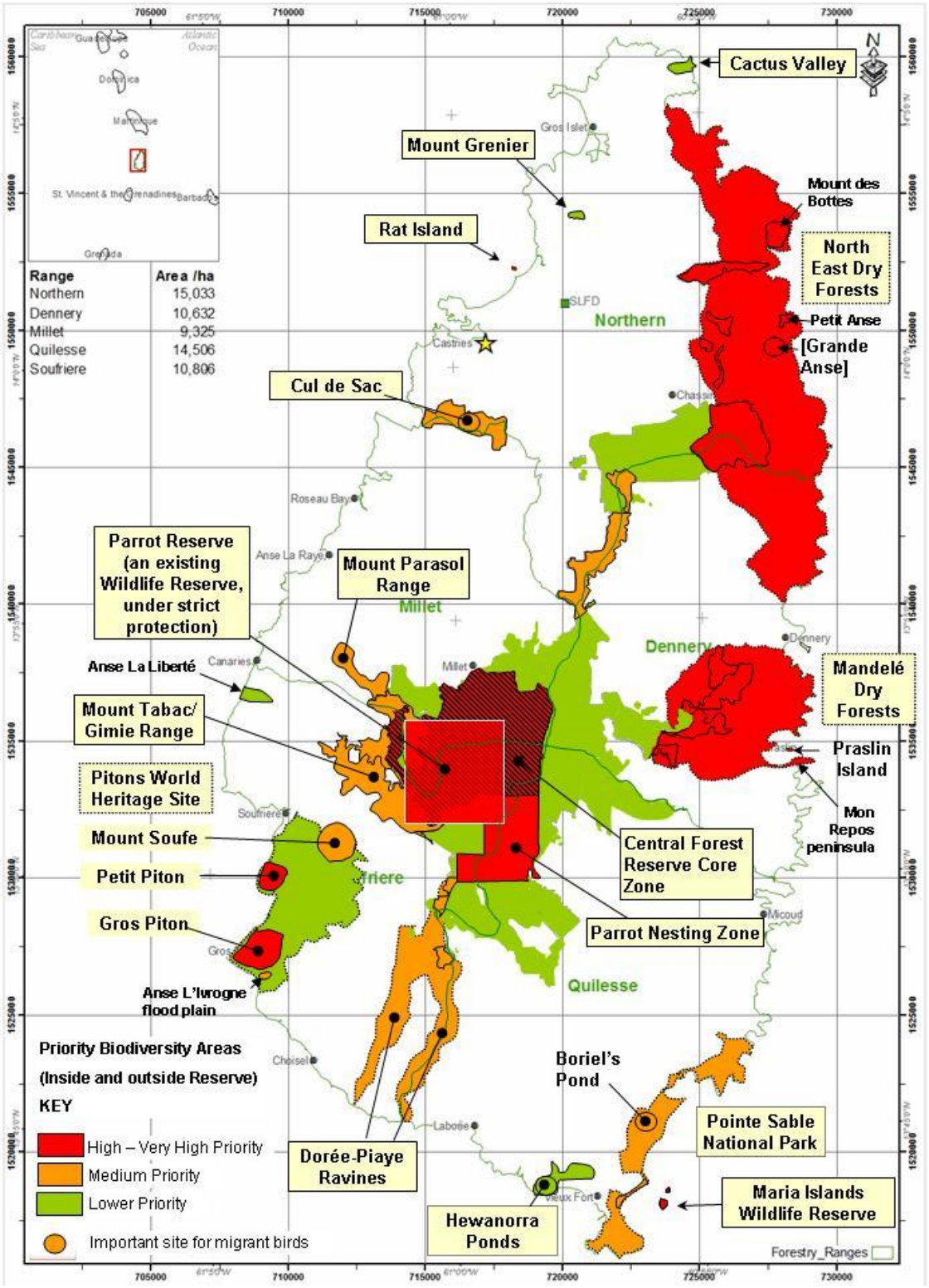
See **Figure 3** for location of zones.

**13. North East Dry Forests** Conservation Importance – High/ Very High

***Rationale*** **-** Outstanding concentration of rare and endemic plants, birds and reptiles in a rolling forested landscape dominated by deciduous seasonal forest and other coastal vegetation classes, with some arable and pastoral land. This ecosystem, with its many unique species, is not adequately represented in the existing Forest Reserve or other protected areas. Covering approximately 5,000 hectares, this zone is considered large enough to conserve viable populations of many deciduous

**Figure 3** Priority areas for biodiversity conservation outside the Forest Reserve

See text for details.



seasonal forest species. While much of the deciduous seasonal forests are secondary and degraded, they will recover quickly if given the opportunity, and would enable populations of rare species to increase. This zone encompasses the entire North-east Coast Important Bird Area (#LC001), immediately adjacent to the Government Forest Reserve IBA (#LC002). It contains an estimated 7.5% of Saint Lucia's endangered white-breasted thrashers (*Ramphocinctus brachyurus*), the endangered Saint Lucia black finch (*Melospiza richardsoni*), most of the world population of Saint Lucia nightjars (*Caprimulgus rufus otiosus*) and other endemic birds. Rare native Saint Lucia iguanas (*Iguana cf iguana*) occupy in this zone, which is also noteworthy for the presence of Saint Lucia boas (*Boa constrictor orophias*) and Saint Lucie fer-de-lance (*Bothrops caribbaeus*). Latannyé palms (*Coccothrinax barbadensis*) are naturally present, but overharvested. Key sites within this zone are:-

North East Dry Forest Reserves: See above.

Grande Anse coast (Very High): Nesting area for Saint Lucia iguanas and three species of sea turtles. Significant population of Saint Lucia pygmy gecko (*Sphaerodactylus microlepis microlepis*) and Saint Lucia worm lizards (*Gymnophthalmus pleii luetkeni*). The northern slopes of Grande Anse have good deciduous seasonal forest with the rare understory tree *Morisonia americana* and the only population of *Eugenia trinitatis*, a rare Lesser Antillean endemic. Very rare vines are found along the river including *Tanaecium crucigerum*. Important site for migratory birds. A pond at Grande Anse forms Saint Lucia's only known breeding site for masked duck (*Nomonyx dominicus*).

Petit Anse: Excellent mature deciduous seasonal forest, and an important population of white-breasted thrashers.

Louvet: The other important area for iguanas and sea turtles. The globally threatened gayak (*Guiacum officinale*) has been found on a dry hill at Louvet. Pockets of *Syagra amara*, a Lesser Antillean endemic palm, occupy hills close to the sea between Desbarras and Louvet.

Mount de Bottes: Located north of Marquis, with good quality deciduous seasonal forest. Two extremely rare indigenous species are gayak (*Guiacum officinale*) and mabi (*Colubrina elliptica*).

***Management needs*** **-** A multiple use area that should seek to conserve and enhance the nationally and globally important role of these forests for conserving Saint Lucia's dry forest biodiversity. Enable the recovery/ restoration of native deciduous seasonal and coastal forest vegetation. Endeavour to acquire land or form conservation agreements with landowners and developers to maintain as much natural forest cover as possible. Forest cover should especially be maintained along ravines, along beaches (in the *Coccoloba* fringe where iguanas and hawksbill turtles nest), and along migration corridors for iguanas moving to and from their traditional nesting areas. Exotic tree plantations and squatters on crown land should be phased out. Mixed plantations of native timber trees that belong in this habitat (e.g. arkokwa) could be a commercially viable alternative and would be more beneficial for wildlife. Logging and other forms of natural resource use should be kept within sustainable limits. Hunting should be prohibited, with possible exception of hunting of feral pigs (without using dogs). Special activities should be conducted (continued) to support the recovery of the Saint Lucia iguana, Saint Lucia nightjar, nesting sea turtles, arkowa, and other rare species: e.g. conduct localised control of opossums, mongooses and other alien invasive predators, enforce rules against sand-mining, plant rare native trees, and create forest clearings suitable for nesting iguanas and Saint Lucia nightjars. Explore potential for low-impact, nature-based tourism. Any Crown Land in this area (Mount de Bottes?)

should be designated as Forest Reserve or Wildlife Reserve. (See above for additional recommendations for the existing North East Dry Forest Reserves, which form part of this zone).

**14. Pointe-Sable National Park (incl. Maria Islands Wildlife Reserve)** Conservation Importance – Medium/ Very High

***Rationale*** **-** The Pointe Sable National Park contains a mosaic of rare and important coastal forest habitats, including mangroves. It is an Important Bird Area (#LC005) because more than 20,000 seabirds nest here, including sooty terns, bridled terns, roseate terns, royal terns, red-billed tropic birds, and brown noddies.

The Maria Islands (Very High): a Wildlife Reserve, already under strict protection. Because the islands are free of alien mammals, they are critically important for endemic reptiles, including the world's last remaining population of Saint Lucia racer (*Liophis ornatus*), the largest populations of Saint Lucia whiptail (*Cnemidophorus vanzoi*), Saint Lucia thread snake (*Leptotyphlops bruilei*) and Antilles leaf-toed gecko (*Hemidactylus palaichthus*), and probably the only populations of the Maria Islands pygmy gecko (*Sphaerodactylus microlepis thomasi*) and Maria Islands worm lizard (*Gymnophthalmus pleii nesydrion*). A very important seabird nesting area: the nesting birds include a regionally important colony of red-billed tropicbirds (*Phaethon aethereus*).

Moule a Chique and Anse de Sables beach (Medium): rare coastal flora.

Savannes Bay and Mankòté mangroves (Medium): Saint Lucia's only two Ramsar sites. These are important for waterbirds and neotropical migrants. Mangroves are also an important source of fuel for local communities.

Boriel's Pond (Medium): important for migratory birds.

***Management needs*** **-** The mainland part of this park is a multiple use area and many parts are already degraded. What natural vegetation remains should be kept intact. The Maria Islands are exceptionally pristine and harbour globally important biodiversity, and must be kept as close to their natural state as possible.

Maria Islands: High level protection of all indigenous wild animals and plants. Prevent the invasion of any kind of alien species, and check the island regularly for any alien plants or animals (including maintaining and regularly monitoring the existing bait stations). Alien species should be promptly removed. Restrict visitor numbers and manage access through permitting only limited trained tour guides to take groups. Uphold the annual closed season when most birds are nesting. Study the status and ecology of the poorly-known endemic reptiles, especially the Saint Lucia racer, whiptail lizard, Maria Islands pygmy gecko, Maria Islands worm lizard, and Saint Lucia worm snake. Monitor bird colonies every year. Continue to implement the whiptail lizard action plan, to conserve the two Maria Islands colonies as part of the wider metapopulation.

Mainland: Tackle pressure from tourism developments, mining and quarrying, and unauthorized harvesting of mangrove for charcoal.

**15. Mandelé Dry Forest** Conservation Importance – High

***Rationale*** **-** Covering approximately 2,000 hectares, including parts of Dennery Waterworks (above). This area contains some of Saint Lucia's most intact and biodiverse deciduous seasonal forests. Most

of this area is the Mandelé Dry Forest Important Bird Area (#LC004), noted for containing over 90% of the Saint Lucia white-breasted thrasher (*Ramphocinclus brachyurus*). It also includes an important population of the endangered Saint Lucia black finch (*Melospiza richardsoni*), supports seasonal foraging flocks of Saint Lucia amazon (*Amazona versicolor*), and the endemic subspecies of Lesser Antillean flycatcher (*Myiarchus oberi santaeluciae*). Royal terns (*Sterna maxima*) breed on the coast. Latannyé palms are present, but over-harvested, in this area. Sites within this area include:

Dennery Waterworks: (Forest Reserve) See above.

Praslin Island: Contains an important reintroduced population of whiptail lizards (*Cnemidophorus vanzoi*).

Bordelais Forest: Exceptionally diverse flora, including a mixture of deciduous seasonal forest species and evergreen seasonal forest plants more usually associated with wetter areas. (Conspicuous differences in species composition between this area and the North East Dry Forests, above, may be indicative of different soil types).

Mon Repos Peninsula: Very mature deciduous seasonal forest, and excellent rock/cliff pavement and cactus scrub.

***Management needs*** **-** Conserve and restore this area's globally important dry forest biodiversity. Promote the recovery and restoration of native deciduous seasonal and coastal forest vegetation. This should include re-establishing vegetation on the southern parts of this area that were recently cleared (whether or not this development continues at a later date) because these barren areas are almost useless for wildlife and exacerbate soil erosion and sedimentation of the adjoining marine ecosystems. Forest regrowth will be extremely slow and may need to be assisted: the clearings are large and much of the top soil has already washed away to expose the rock beneath. It is important to acquire land or form agreements with landowners and developers to maintain and restore as much natural forest cover as possible: white-breasted thrashers are poor at crossing clearings or roads, and require forests with a dense canopy and deep leaf litter. Mixed plantations of native timber trees that belong in this habitat (e.g. arkokwa) would be a more wildlife-friendly alternative to exotic plantations or agriculture, but logging and other forms of natural resource use should be kept within sustainable limits. Special activities should be conducted (continued) to support the recovery of the white-breasted thrasher and other rare species. These should include conducting localised control of opossums, mongooses and other alien invasive predators. (See above for additional recommendations for the Dennery Waterworks forest reserve, which also forms part of this zone). Research and monitor wildlife, especially the white-breasted thrasher and its threats (mainland) and the whiptail lizard colony (Praslin Island).

Specifically on Praslin Island, prevent the invasion of any kind of alien species, and check the island regularly for any alien plants or animals (including maintaining and regularly monitoring the existing bait stations). Any alien species should be promptly removed. Visitor numbers should be restricted, and fires and overnight camping prohibited. This should be achieved through a formal co-management agreement with the owner (Louvet Estate Paradis).

Special precautions should be taken to avoid forest fires in this area (e.g. warning signs on highway, prohibit use of campfires on Praslin island). Fires could have a devastating impact on the white-breasted thrashers (mainland) and whiptail lizards (Praslin island).

**16. Pitons World Heritage Site** Conservation Importance – Medium/ Very High

***Rationale*** **-** Aside from its aesthetic appeal and iconic status, the pitons landscape is of outstanding importance for biodiversity, especially plants and birds. A World Heritage Site, this area is also recognised as the Pitons Important Bird Area (#LC003) and includes an important population of the endangered Saint Lucia black finch (*Melospiza richardsoni*), the near threatened Saint Lucia oriole (*Icterus laudabilis*), the endemic subspecies of Lesser Antillean flycatcher (*Myiarchus oberi santaeluciae*) and Saint Lucia wren (*Troglodytes aedon martinicensis*). Royal terns (*Sterna maxima*) breed on the coast. A group of very rare shrubs are found only on the Pitons, including *Salvia lamiifolia, Justicia periplocifolia, Dicliptera martinicensis* and *Koanophyllon celtidifolia*. Some of the many other rare and unusual plants are indicated below. Maintenance of this forest ecosystem is also important for maintaining the fringing coral reefs (deforestation would increase sedimentation of reefs and reduce fisheries productivity). Key sites are:

Petit Piton (Very High): almost entirely deciduous seasonal forest. Contains many very rare species, including the endemics *Gonolobus iyolensis* and *Bernardia laurentii* (the only known population is on the summit), and world's last remaining population of *Juniperus barbadensis var. barbadensis. Myrcianthes fragrans,* and *Dodonea elliptica* are also known only from Petit Piton in Saint Lucia. Some endemic birds occur here.

Gros Piton (Very High): covered mainly by deciduous seasonal forest, with the middle and upper slopes more or less intact. The flattish area at the top is an unusual form of semi-evergreen seasonal forest with a few lower montane rainforest species mixed in. Examples of species found only on Gros Piton are *Ilex nitida, Sloanea dentata, Passiflora cuneata, Psidium sartorianum, Lantana radula, Mikania cordifolia,* and *Galactia rubra*, but there are many others. Its overall floral biodiversity is very significant, with many very rare species. At least 27 bird species have been recorded on Gros Piton, including five endemics.

Mount Souf (Medium): Rare example of sulfarole vegetation by the hot springs, while the other (northern) side has the rare semi-evergreen seasonal forest.

Anse L'Ivrogne flood plain (Medium): Close to the sea, this site contains *Annona montana*, a Lesser Antillean endemic plant not found elsewhere in Saint Lucia.

***Management needs*** **-** A multiple use area that should seek to conserve and enhance its nationally and globally important flora and birds. Forest uses should be compatible with the area's international status as a World Heritage Site. Preserve native vegetation across most of this area, especially the key sites indicated on the left. Logging and other forms of natural resource extraction should be kept within sustainable limits. Low-impact tourism can continue. If trampling of rare flora and erosion of trails increases, this may be mitigated by controlling visitor numbers and with correct trail infrastructure. Seek and respond to any reports of alien green iguanas (*Iguana iguana*) in this area. All alien green iguanas should be culled immediately.

Petit Piton and Gros Piton, eradicate any alien invasive plants and prohibit (and enforce) the planting of exotic ornamental species. Monitor the rare wild plants on the pitons, bearing in mind that ranges may shift due to climate change; monitor their threats and pressures; and conduct faunal surveys of the pitons.

Mount Souf: conserve all remaining areas of natural vegetation on the slopes on the far side of the springs and remove the (non-native) coconut palms. The (non-native) Caribbean pines should be gradually removed and not replanted (they are self-seeding in this area, and seedlings should be pulled up).

**17. Rat Island** Conservation Importance – High

***Rationale*** **-** Important for the conservation of the Saint Lucia whiptail lizard (*Cnemidophorus vanzoi*, a newly introduced population) and Saint Lucia worm lizard (*Gymnophthalmus pleii*).

***Management needs*** **-** Ensure the island retains suitable habitat for these rare native lizards. Prevent the invasion of any alien species, and check the island regularly for any alien plants or animals (including maintaining and regularly monitoring bait stations). Any alien species should be promptly removed. Visitor numbers should be restricted, and overnight camping prohibited. Raise national awareness of the importance of this site. Study status and ecology of the endemic reptiles and their prey.

**18. Mount Tabac/ Gimie Range** Conservation Importance – Medium

***Rationale*** **-** Range identified for its botanical importance, part of which (including Mount Gimie) is in the Forest Reserve. The summits and joining ridges have a narrow band of interspersed cloud montane rainforest and elfin shrublands, containing about 15 plant species not found elsewhere, many of which are Lesser Antillean and Caribbean endemics. Mount Tabak ridge has abundant *Podocarpus coriaceus* on its interior half.

***Management needs*** **-** Maintain under as much natural forest cover as possible, both to conserve biodiversity and maintain its watershed functions. (Most of this area is too steep to be used for almost any other purpose).

**19. Dorée-Piaye Ravines** Conservation Importance – Medium

***Rationale*** **-** More than 1,000 hectares of steep-sided ravines (River Doree and Piaye) containing rare examples of well developed, intact semi-evergreen seasonal forest. Noted for rare riverine vines.

***Management needs*** **-** A multiple use area which should be maintained under its rich natural forest cover. Avoid logging (steep ravines). More research warranted into flora and fauna. Explore potential for establishing tourist hiking trails along the ravines (in addition to the natural beauty, there are rare petroglyphs to see). The main areas of ecological importance are fairly inaccessible, but should be protected from pollution from agricultural lands.

**20. Cul de Sac** Conservation Importance – Medium

***Rationale*** **-** An important wetland along the Cul de Sac River: an important site for migratory birds, and contains a rare example of *Pterocarpus officinalis* freshwater swamp forest.

***Management needs*** **-** Prevent any developments that may alter inflow or drainage of this wetland, or pollute its water supply.

**21. Mount Parasol Range** Conservation Importance – Medium

***Rationale*** **-** Range identified for its botanical importance. Mount Parasol contains good examples of semi-evergreen seasonal forest, while the adjoining areas have pristine semi-evergreen seasonal forest

and lower montane rain forest. The Lesser Antillean endemic plant *Calyptranthes elegans* occurs here and nowhere else in Saint Lucia. This area is also noted for its Saint Lucia fer-de-lance (*Bothrops caribbaeus*).

***Management needs*** **-** Maintain this zone under natural forest cover, ensuring this is contiguous to the Forest Reserve and a large estate to the north, now owned by the National Trust. Replant denuded lower slopes with native vegetation. Control feral pigs and monitor impacts of control efforts.

**22. Mount Grenier** Conservation Importance – Lower

***Rationale*** **-** Good quality deciduous seasonal forest on a steep hill, with several extremely tree rare species including *Myrciaria floribunda*, *Croton corylifolius*, *Eugenia tapacumensis*, and *Comocladia dodonaea.*

***Management needs*** **-** Ensure the natural forest cover on this hill is not removed. This will require engagement with the private land owners.

**23. Cactus Valley** Conservation Importance – Lower

***Rationale*** **-** A small site extending to only 3.5 hectares, but considered to be one of the best sites for cacti in Saint Lucia.

***Management needs*** **-** Conduct survey to confirm continued existence and significance of this area, in light of recent residential developments. If the area is still biologically valuable, develop management guidelines and negotiate with local developers to preserve this small site as a local nature site.

**24. Anse La Liberté** Conservation Importance – Lower

***Rationale*** **-** Recovering deciduous seasonal forest on National Trust land, with potential to be a good reserve for the native biodiversity associated with this underprotected forest type..

***Management needs*** **-** Facilitate the recovery of natural forest in this National Trust property.

**25. Hewanorra Ponds** Conservation Importance – Lower

***Rationale*** **-** An important man-made site for migratory birds.

***Management needs*** **-** Maintain current condition and biological values of this small site. Prevent any developments that may alter inflow or drainage of this wetland, or pollute its water supply. Monitor migrant birds and threats and pressures on this habitat.



# 4. Priority forest species for conservation

All indigenous species are important, but **Table 5** presents a shortlist of XX species of outstanding importance for people, the significant benefits they bring to the forest ecosystem, and/or high risk of extinction. These not only warrant special attention in Saint Lucia's overall forest management strategy, but some of them could be monitored as indicators of whether the country's conservation policies are working. This list is necessarily very selective, however, because many more species on Saint Lucia are known fit at least one of these criteria.

**Table 4** A selection of priority species in need of conservation attention

List compiled by J. Daltry, M. Morton, R. Graveson and M. Ivie. (*) Species known or expected to be inside Forest Reserves.

| Scientific name | Common names | Justification | Comments | Management Needs |
|---|---|---|---|---|
| **PLANTS** | | | | |
| (*) *Asplundia rigida* | Ti kannou, Sidjinn (Lyenn) | Economic importance | Grows in rainforest, chiefly in the Forest Reserve.<br>A palm-like epiphyte.<br>Extremely common. | Conserve forest habitat.<br>Harvesting can continue at current level. |
| *Bernardia laurentii* | | Qualifies as globally threatened.<br>National endemic | Only on the summit of Petit Piton. | Preserve native vegetation on Petit Piton - prevent fires and halt planting of exotic ornamental species on the piton. |
| *Carapa guianensis* | Andiroba, Brazilian mahogany , Bois caille, Bois rouge | Commercial importance<br>Ecological importance<br>Very rare on Saint Lucia | Timber has a wide range of uses (furniture, flooring, etc)<br>Important food plant for amazon parrots and agoutis.<br>This tree has not been seen inside the Forest Reserve. | Potential to be cultivated as a native timber tree in relatively flat semi-evergreen seasonal-wet areas (techniques for cultivation have been developed in other countries).<br>Offers an opportunity for local livelihoods - oil from seeds can be processed into soaps, candles, etc.<br>Should conserve its remaining semi-evergreen seasonal forest habitat around Chassin). |
| *Cedrela odorata* | Cigar-box wood, Red cedar, Acajou | Globally threatened (VU).<br>Commercial potential | In great demand for its timber in Saint Lucia, mainly for furniture.<br>Not seen inside the Forest Reserve. | Need to maintain its semi-evergreen seasonal-wet forest in the Soufriere area, and (to a lesser extent) in the Parish of Choiseul (both SW Saint Lucia).<br>Potential to be cultivated in moderately wet areas as a native plantation tree |
| (*) *Clusia major* (also called *C. rosea)* and (*) *Clusia plukenetii* | Pitch apple, Strangling fig, Awali (Lyenn) | Economic importance<br>Ecological importance | *Clusia major* is quite widespread in lower rainforests and semi-evergreen forests, inside and outside of the Forest Reserve.<br>*Clusia plunkenetii* is in deciduous and semi-evergreen seasonal forests mostly outside of the Forest Reserve (but may be inside the Forest Reserve areas with deciduous seasonal forest).<br>Aerial roots of both species are harvested (under license in the Forest Reserve) for basket weaving.<br>Harvesting does not appear to damage the tree.<br>Parrots feed on *Clusia* fruits. Parrot experts have indicated that collection of these 'lianas' disturbs nesting parrots (but there is little hard evidence to support this). | Conserve deciduous and semi-evergreen seasonal forests.<br>Continue licensing collectors in permitted areas, but ideally not in known parrot nesting areas.. |
| (*) *Coccothrinax barbadensis* | Latannier palm, Latannyé | Commercial importance<br>Becoming rare in the wild | Used in broom production for local consumption and export.<br>Becoming rare in the wild chiefly due to overexploitation, but SLFD is addressing this through establishing commercial plantations.<br>Occurs in coastal deciduous seasonal forests. May occur in the Forest Reserves with deciduous seasonal forest. | Prevent further over-exploitation and, increasingly, conserve deciduous seasonal forest habitat on the Atlantic coast.<br>Further development of commercial plantations on private land could help relieve pressure on wild stocks. |

| Scientific name | Common names | Justification | Comments | Management Needs |
|---|---|---|---|---|
| (*) *Dacryodes excelsa* | Gommier, Candlewood, Gonmyé. | Ecological importance<br>Commercial importance<br>Regional endemic | Important component of the Lower Montane Rainforest (in Forest Reserve), Wood good for furniture and general carpentry.<br>Resin collected (but less valuable than Lansan)<br>Food plant (and nesting tree) for Saint Lucia amazon. | Has potential for developing a *sustainable* resin harvesting industry.<br>Continue to preserve rainforest. In selectively logged areas, always leave large, mature trees undisturbed for parrot nesting. |
| *Guaiacum officinale* | Lignum vitae, Gayak | Globally threatened (EN)<br>Very rare on Saint Lucia | Known on deciduous seasonal hill at Louvet and Mount des Bottes (Northeast ).<br>Can be cultivated, but very slow-growing (and international trade governed by CITES). | Conserve deciduous seasonal forests in NE Saint Lucia<br>Potential to plant this species to restore deciduous seasonal forests and future commercial use. |
| *Juniperus barbadensis var. barbadensis* | Pencil cedar | National endemic subspecies<br>Globally threatened (CR) | World's last population is on Petit Piton. | Conserve native vegetation on Petit Piton: prevent fires and spread of exotic ornamentals.<br>Opportunity to cultivate this species as a native Christmas tree (replace foreign *Cupressus lusitanica*). |
| (*) *Lobelia santa-luciae* | Saint Lucia lobelia | National endemic<br>May qualify as globally threatened<br>A flagship for elfin shrublands | Occurs only in elfin shrublands on Mount Gimie range. | Conserve peaks of Mount Gimie range (inside Forest Reserve) |
| (*) *Passiflora laurifolia* | Ponm dilyenn (Lyenn) | Economic importance<br>Ecological importance | Common in deciduous and semi-evergreen seasonal forests<br>Should be in the seasonal forests in the Forest Reserve (not confirmed)<br>Parrots feed in fruits.<br>Lianas harvested for basket weaving.<br>Unknown whether this species is as important, or sustainable, as the other species called 'lyenn'. | Conserve semi-evergreen forest habitat.<br>Investigate use and sustainability of this species as a source of 'lyenn'. |
| (*) *Pouteria pallida* | Pennepis | Globally threatened (EN)<br>Ecological importance<br>Regional endemic | Food plant (and nesting tree) for Saint Lucia amazon.<br>Still common on Saint Lucia. | Continue to conserve lower level of lower montane rainforest in the Forest Reserve (up to 600m) and semi-evergreen seasonal forest, especially close to rivers<br>In selectively logged areas, always leave large, old trees standing for parrot nesting. |
| (*) *Pouteria semecarpifolia* | Contweven | Globally threatened (VU)<br>Ecological importance<br>Regional endemic | Food plant (and nesting tree) for Saint Lucia amazon<br>Still common on Saint Lucia. | Continue to conserve lower montane rainforest in the Forest Reserve (up to 600m)<br>Quite rare and should never be logged. |
| (*) *Protium attenuatum* | Incense wood, Lansan | Economic importance<br>Ecological importance<br>Globally threatened? (listed DD).<br>Regional endemic | St Lucia is probably its last stronghold - still common in Forest Reserve (lower montane rainforest)<br>Food plant for Saint Lucia amazon | Conserve lower montane rainforest, especially the Barre de Lisle strip and semi-evergreen seasonal forest.<br>Opportunity to develop sustainable resin management with tappers to use this resource (and to enlist their assistance to protect it). |
| (*) *Schefflera attenuata* | Fijé Di Mon | Regional endemic | Important fruiting tree for birds and bats. | Conserve all cloud montane forest areas on |

| Scientific name | Common names | Justification | Comments | Management Needs |
|---|---|---|---|---|
| | | Ecological importance | | ridges if Mount Gimie range and Piton Esprit. |
| (*) *Sideroxylon foetidissimum* | Yellow mastic, Akoma | Ecological importance<br>Rare. | Uncommon in the wild throughout its range. Now very rare in Saint Lucia<br>Fruits edible for humans, and eaten by birds<br>In deciduous seasonal forest (including the Forest Reserve). | Conserve deciduous seasonal forest habitat - including the Forest Reserve parcels in Maquis/ Petite Anse area, on Gros Piton and Grande Anse – to promote the recovery of this rare tree. |
| (*) *Zanthoxylum flavum* | Arkokwa | Globally threatened (VU)<br>Valuable timber<br>Rare on Saint Lucia. | Now very rare in Saint Lucia<br>In deciduous seasonal forest (including the Forest Reserve). | Conserve deciduous seasonal forests and enable recovery of this species: naturally occurs from Petit Anse as far south as Mon Repos (including the Forest Reserve parcels in Maquis area)<br>Potential to grow this native tree in plantations in drier areas. |
| **ANIMALS** | | | | |
| **Mammals** | | | | |
| (*) *Sturnira lilium luciae* | Little yellow-shouldered bat | National endemic subspecies<br>Ecological importance. | Feed mainly on fruits (role in seed dispersal), also nectar, pollen (role in pollination) and insects.<br>Declines of this species on other islands, have been attributed to loss of forest habitat (poor at using agricultural areas). | Requires continued protection of natural rainforest in the Forest Reserve. |
| (*) *Monophyllus plethodon luciae* | Lesser Antillean long-tongued bat | Regional endemic<br>Ecological importance.<br>Socio-economic importance. | A cave-roosting bat – at risk from quarrying and any other developments that affect its caves.<br>Often roosts in association with other native bats<br>Important role in pollinating plants, including commercial fruit crops. | Locate and protect roosting caves.<br>(NB for all bats, more work is needed to locate, protect and monitor all roosts, especially species that congregate in large numbers. Many of the most important roosts are coastal) |
| (*) *Noctilio leporinus* | Greater fishing bat | Rare | Appears uncommon and patchily distributed over the island,.<br>May be sensitive to pollution of water.<br>Roost in sea caves and in hollows in mature, large trees (native and non-native, e.g., including silk cottonwood *Ceiba pentandra*, balata *Manilkara bidentata*, red mangrove *Rhizophora mangle* and royal palms *Roystonea* spp). Suitable roost sites appear to be relatively limited. | Locate and protect roosting caves and trees.<br>Leave large, dead trees standing where possible. |
| **Birds** | | | | |
| (*) *Amazona versicolor* | Saint Lucia amazon (parrot), Jacquot | National endemic species<br>Globally threatened (VU)<br>Flagship species for rainforests<br>Ecological importance<br>Attracts tourists | Important in forest tree dispersal.<br>A Parrot Reserve was established in the Central Forest Reserve, but does not include all key nesting areas.<br>Population is increasing rapidly, due to successful conservation programme to tackle hunting (collection for pet trade).<br>Prefer large old trees for nesting. May depend on trees with deep crevices to avoid egg predation by pearly-eyed thrashers.<br>Diet includes Blue Mahoe (currently grown in plantations)<br>Raid fruit crops outside of the Forest Reserve. | Requires continued protection of natural rainforest in the Forest Reserve: Known nesting areas in the southern Central Forest Reserve should have minimal disturbance.<br>Large old trees should not be logged<br>Develop strategy to addressing conflict with farmers (likely to increase with growing parrot population and shift from bananas to other crops). |
| *Caprimulgus rufus otiosus* | Saint Lucia nightjar | National endemic subspecies | Depends on deciduous seasonal forest outside the Forest Reserve. | Localised control of mongooses, pigs and other alien predators could be beneficial. |

| Scientific name | Common names | Justification | Comments | Management Needs |
|---|---|---|---|---|
| | | Qualifies as globally threatened<br>Declining | Threatened by alien mammals (mongooses, cats, probably opossums)<br>Use short forest. | Habitat could be created by clearing patches to form shorter forest growth (a potential side-benefit of selecting logging and of removing alien tree species - see below). |
| *Cichlherminia lherminieri sanctaeluciae* | Forest thrush | National endemic subspecies<br>Globally threatened (VU)<br>Very rare | Inhabits deciduous seasonal and semi-evergreen seasonal forests – both under threat in Saint Lucia. | Depends on maintenance of natural deciduous seasonal and semi-evergreen seasonal forest outside the Forest Reserve. |
| (*) *Icterus laudabilis* | Saint Lucia oriole | National endemic species<br>Globally near-threatened (NT) | Quite adaptable - occupies a variety of forest types.<br>Appears to be declining, but causes are unknown. (Nest parasitism and secondary poisoning with insecticides are two hypotheses). | Depends on continued protection of high quality natural forest in the Forest Reserve.<br>Identify cause of decline. |
| (*) *Leucopeza semperi* | Semper's warbler | National endemic species<br>Globally threatened (CR) - feared extinct | Reason for decline unknown – probably alien invasive predators. | If still exists, this bird will depend on continued protection of natural rainforest in the Forest Reserve. |
| (*) *Melanospiza richardsoni* | Saint Lucia black finch | National endemic species<br>Globally threatened (EN) | Needs forests (deciduous seasonal, semi-evergreen seasonal or wet) with dense undergrowth<br>Patchy distribution and declining on Saint Lucia, putatively due to loss of suitable forest habitat (and competition with the bullfinch in more degraded areas). | Depends on continued protection of high quality natural forest, especially deciduous seasonal forest, both in and outside the Forest Reserve.<br>Identify habitat factors or other factors that explain its patchy distribution (e.g. MSc project) |
| (*) *Ramphocinclus brachyurus sanctaeluciae* | White-breasted thrasher | National endemic subspecies<br>Globally threatened (EN)<br>Flagship species for deciduous seasonal forests<br>Decreasing | Two main populations in Northeast and (especially) Eastern deciduous seasonal forests. Few are in the current Forest Reserve system (eastern end of Dennery Waterworks).<br>Need mature deciduous seasonal forest with large trees.<br>Intolerant of forest fragmentation and poor at crossing roads.<br>Also threatened by alien mammals (mongooses, cats, probably opossums). | FD advised to acquire or otherwise help ensure protection and restoration of deciduous seasonal forest areas especially Mandele area (East) and Povert to La Ti Tanse (Northeast).<br>Localised control of mongooses and other alien predators could be beneficial. |
| (*) *Troglodytes aedon mesoleucus* | Saint Lucia wren | National endemic subspecies<br>Declining | Entirely in deciduous seasonal forests | Depends on preservation of deciduous seasonal forest mostly outside the Forest Reserve. |
| **Reptiles** | | | | |
| * *Boa constrictor orophias* | Saint Lucia boa, Tet chyenn | National endemic subspecies<br>Ecological importance<br>Globally threatened (qualifies as VU)<br>Economic importance | The natural forest 'top predator'<br>Some economic value for snake oil industry (to treat rheumatism), but the practice of taking fat from live snakes is inhumane and there are better alternative cures.<br>Some indications that this species is declining.<br>Protected by law. | Stop issuing licences to harvest snake oil, unless this can be demonstrated to be done in a sustainable and humane way. |
| (*) *Bothrops caribbaeus* | Saint Lucia fer de lance<br>Saint Lucia pitviper, Sepan | National endemic<br>Globally threatened (qualifies as VU)<br>Declining<br>Ecological importance | May have beneficial role in controlling mongooses (which endanger other wildlife)<br>Potentially dangerous to humans (including forest workers and tourists on trails), but very few bites per year.<br>The best way to minimise human-snake conflict is to keep the | To prevent extinction, recommend setting aside (remote) areas where people do not need to go and these snakes will not be persecuted<br>Forest workers should be given training and |

| Scientific name | Common names | Justification | Comments | Management Needs |
|---|---|---|---|---|
| | | Economic potential<br>Medical importance | two spatially separated as much as possible.<br>Venom products may be commercially valuable. | appropriate clothing to reduce injuries (to them and the snakes). |
| *Cnemidophorus vanzoi* | Saint Lucia whiptail lizard, Zandoli tè | National endemic<br>Globally threatened (VU – qualifies as EN)<br>Ecological importance<br>Flagship for the offshore islands. | Probably used to occur throughout Saint Lucia, but disappeared from the mainland due to alien mammals (e.g. mongooses).<br>Now survive only on offshore islands, including Maria islands (wildlife reserve).<br>Prey species for the Saint Lucia racer, *Liophis ornatus.* | Must prevent the Maria Islands, Praslin and Rat Islands from being invaded by any alien species (animals and plants). |
| (*) *Iguana cf iguana* | Saint Lucia iguana, Gwo zandoli, Leza | National endemic<br>Globally threatened (qualifies as CR)<br>A flagship species for deciduous seasonal forests<br>Tourism potential | None/ very few in current Forest Reserve system (and even these need the nesting areas outside of the reserve).<br>Favour mature deciduous seasonal forest with large trees, and ravines.<br>Threatened by alien green iguanas (below), dogs and feral pigs.<br>Need to maintain contiguous forest cover to the nesting areas - iguanas are more vulnerable to dogs and other predators when they are on the ground. | Localised alien mammal control may help, especially in nesting areas (e.g. Grande Anse, Louvet).<br>FD's reserves in NE should be well conserved to set a good example to neighbouring landowners.<br>FD to acquire or otherwise help ensure (e.g. through co-management agreements with local owners and developers) protection of deciduous seasonal forest areas in NE Saint Lucia.<br>Migration corridors should be kept forested for iguanas to reach the (limited) nesting sites. |
| *Liophis ornatus* | Saint Lucia racer, Saint Lucia grass snake , Kouwès | National endemic<br>Globally threatened (EN, but qualifies as CR) | Entire world population is on Maria Major (wildlife reserve).<br>Probably used to occur throughout Saint Lucia, but disappeared from the mainland due to alien mammals (e.g. mongooses).<br>The current population is probably too small to be viable. | Crucial to preserve Maria Major and prevent it from being invaded by alien species that may kill the racers or disrupt the island ecosystem.<br>Develop in situ or ex-situ programmes to increase the population (e.g., reintroduction to other predator-free islands). |
| (*) *Sphaerodactylus microlepis* | Saint Lucia pygmy gecko | National endemic<br>Globally threatened (qualifies as VU) | Population fragmented and probably declining due to alien invasive animals. | Ensure offshore islands are kept free of alien invasive mammals, especially the Maria Islands.<br>Localised control of alien predators (e.g., mongooses) could be very beneficial.<br>Identify habitat factors or other factors that explain its patchy distribution (an MSc project) |
| **Insects** | | | | |
| (*) *Ateuchus luciae* and *Pseudocanthon iuanalaoi* | Dung beetles | National Endemic species | Important in disposing of faeces.<br>Possibly under threat from invasive African dung beetle *Onthophagus gazellae.* | |
| (*) *Chloronia antillicnsis* | Dobsonfly | Only Antillean species of its Order. Known only from Dominica and Saint Lucia. | Larvae inhabit high elevation streams and are sensitive to water quality. | |
| (*) *Dynastes hercules reidi* | Saint Lucia hercules beetle, | Local endemic subspecies (shared with Martinique). | Saint Lucia population needs reevaluation (may be upgraded to a full species). | Allow rotten stumps and trees (standing or fallen) to remain. |

| Scientific name | Common names | Justification | Comments | Management Needs |
|---|---|---|---|---|
| | Siye Bois | Economic potential. | Owing to its large size, collectors are interested in buying live or preserved specimens. Could be sold to tourists.<br>Conservation status unknown – none were found during 2009 entomological survey, but adults reported to emerge in December.<br>Larvae feed on rotten wood and take a year or more to develop.<br>Reported to be associated with Bwa Dou tree | Potential livelihood opportunity (selling beetles to tourists and overseas collectors), if managed sustainably.<br>Evaluate taxonomic status of the Saint Lucia population |
| *Megastylulus pivai* and *Stylulus isabelae* | Ground beetles | National endemic at generic (*Megastylulus pivai*) or species (*S. isabelae*) level | Eyeless soil dwellers known only from Ravine Chabot, not recovered in 2009 | Biology unknown |
| (*) *Paraclymntemnestra lineata* | Longhorn beetle | National endemic at generic level | Large and very rare species<br>Wet Forests<br>Wood borer | |
| *Phyllophaga lackwelderi* | May beetle, white grub | National Endemic species | Soil dwelling larvae feed on roots<br>Abundant on eastern coast in deciduous seasonal forest<br>Adults fly to lights.<br>Biomass may exceed that of any native vertebrate species | Larvae may be a pest in sugar cane and even banana, requires study<br>Adults probably important to insectivores during emergences |

# 5. Threats to Forest Biodiversity

## 5.1. Forest Threat Analysis

Numerous threats to Saint Lucia's forests and their biodiversity were identified during the present project (e.g. Clarke, 2009; Daltry, 2009; Graveson, 2009a, 2009b; Morton, 2009a, 2009b; Toussaints *et al.*, 2009); many of which echoed concerns raised by previous studies (e.g. Towle & Towle, 1991).

To construct a clearer overview of the current factors that threaten forests, and their relative importance, the author facilitated a workshop at the Forestry Department on 15 October 2009 to gather the expert opinions of senior Forestry Department personnel and other experts from the environmental sector. To ensure no major threats were overlooked, a list of all possible threat categories were taken from IUCN's Conservation Measures Partnership (see www.conservationmeasures.org for full descriptions with examples).

The participants were divided into three groups and each group was asked to discuss a cluster of threats to determine whether they were applicable to Saint Lucia's forests and to describe some examples. The following simple scoring system was devised to help the participants rank the threats in terms of their importance:

Scores for assessing each threat

0 Not a threat.
1 Minor threat (requiring monitoring, but not specific management).
2 Moderate threat (requiring specific management actions to address it).
3 Major threat (requiring immediate and intensive management).



Every group was then asked to present their findings to the rest of the workshop participants, which resulted in some revisions based on audience feedback. **Table 5** shows the main findings of this process.

What is most striking from this assessment is the relatively low number of major threats (subcategories scoring 3) affecting forests in the Forest Reserves compared with forested areas on private land. This tells us that the Forest Reserve is working remarkably well to achieve its purpose of protecting forests, and areas within this network are reasonably secure. This exercise has been conducted for protected areas worldwide, and such a low number of major threats is unusual in an area of this size and proximity to many settlements. This finding is to the credit of the Forestry Department.

**Table 5** suggests that forested areas outside of the Forest Reserves are at approximately four times more risk from major threats, a significant and alarming difference. Preserving forests and forest resources on private land now warrants as much if not more attention than the Forest Reserves to avoid catastrophic losses.

Nevertheless, any threats that scored two or three in either location are, according to the workshop participants, very serious and demand more concerted attention than is currently being given. Some of the most critical, immediate threats, are explored further below the table.

**Table 5** General Assessment of Threats to Saint Lucia's Forested Areas

Assessment conducted by: Adams Toussaint, Alfred Prospere, Rebecca Rock, Timotheus Jn Baptiste. Allwin Dornelly, Michael Andrew, Anita James, Pius Haines, Odetta James, Nerius Mitchell, Roger Graveson, Karla van Eynde, Matthew Morton, David (Stylo) Lewis, Caroline Eugene, and Jenny Daltry.

| CATEGORY/ Subcategory | Score | |
|---|---|---|
| | Forest Reserves | Outside Forest Reserves |
| **1. RESIDENTIAL AND COMMERCIAL DEVELOPMENT** | | |
| Housing and Urban Areas | 0 | 3<br>Urban development plans in North East quarter (deciduous seasonal forests) |
| Commercial and Industrial Areas | 0 | 2<br>Cul de Sac (important wetland and freshwater swamp forest) at risk. Landfill in Deux Glo. |
| Tourism and Recreation Areas | 1 | 3<br>Le Paradis development, marinas, high-footprint developments planned at Louvet and Grande Anse. |
| **2. AGRICULTURE & AQUACULTURE** | | |
| Annual and Perennial Non-Timber Crops | 2<br>Marijuana gardens in secondary forest in Forest Reserves. | 3<br>Conversion of mid-level forests [lowland montane rainforest and semi-evergreen seasonal deciduous forest] to gardens. |
| Wood and Pulp Plantations | 1<br>Selective and well-managed. | 0 |
| Livestock Farming and Ranching | 1<br>Some problems in Northern Range. | 3<br>Free-ranging cattle and pigs are a major problem in places such as Grande Anse. |
| Marine and Freshwater Aquaculture | 0 | 0 |
| **3. ENERGY PRODUCTION AND MINING** | | |
| Oil and Gas Drilling | 0 | 1<br>Proposed oil refinery. |
| Mining and Extraction | 1<br>Soil mining. | 2<br>Quarries, soil mining and, on beaches, sand mining (affecting turtle nesting beaches e.g. Grande Anse. |
| Renewable energy | 0 | 1<br>Geothermal exploration in Sulphur Springs. |
| **4. TRANSPORTATION AND SERVICE CORRIDORS** | | |
| Roads and Railroads | 3<br>Proposed tunnel at Barre de Lisle. | 3<br>Ravine poison disaster during road construction in 1965. |
| Utility Lines | 1<br>(monitored) | 1<br>(monitored) |
| Shipping Lanes | 0 | 0 |
| Flight Paths | 2<br>Helicopter tours over island disturb parrots during breeding season. | 1<br>Helicopter tours disturb parrots. |
| **5. BIOLOGICAL RESOURCE USE** | | |
| Hunting and Collecting Terrestrial Animals | 2<br>Species targeted included protected species e.g. agouti (non-native), opossum (non-native) and birds. The full extent and intensity is not known. | 2<br>As left. |

| CATEGORY/ Subcategory | Score | |
|---|---|---|
| | Forest Reserves | Outside Forest Reserves |
| Gathering Terrestrial Plants and Plant Products | 2 - 3<br>Collection of gum resin (*Dacryodes excelsa*), vines, bamboo, poles (for making brooms), latannye palm leaves (to make brooms). Score of 3 specifically given to collection of L'encens, *Protium attenuatum* resin, which can kill the tree. | 2<br>Collection of gum resin (*Dacryodes excelsa*), vines, bamboo, poles (for making brooms), latannye palm leaves (to make brooms). |
| Logging | 1<br>Some harvesting of poles. | 3<br>Harvesting of mangroves e.g. Mankote (Pointe-Sable National Park) |
| Fishing and Aquatic Resource Harvesting | 2<br>Use of toxins to poison water sources to catch crayfish and fish. | 2<br>Use of toxins to poison water sources to catch crayfish and fish. |
| **6. HUMAN INTRUSIONS AND DISTURBANCE** | | |
| Recreational Activities | 1<br>Risks from fires | 2<br>e.g. cooking fires on offshore islands and beaches presents a risk of forest fires. |
| Work and Other Activities | 2<br>Eradication of marijuana fields. | 2 |
| War, Civil Unrest and Military Exercises | 0 | 0 |
| **7. NATURAL SYSTEM MODIFICATIONS** | | |
| Fire & Fire Suppression | 1<br>As right, but less frequent. | 3<br>Linked to recreation and agriculture. Some deliberate burning in specific areas |
| Dams & Water Management/Use | 1 | 3<br>e.g. for golfcourses. Private lands with their own water sources are at a high premium. |
| Other Ecosystem Modifications | 0 | 3<br>Diversion and desilting of rivers, drainage of swampy areas impacting on bird life. Hotel developments; quarrying – all impacting on wildlife. [NB some duplication with categories above] |
| **8. INVASIVE AND OTHER PROBLEMATIC SPECIES AND GENES** | | |
| Alien Invasive Species – animals | 3<br>Feral pigs, mongooses, feral cats, rats. Also alien anole lizard *(Anolis watts*i) displacing native anole lizard (*Anolis luciae)*. | 3<br>Feral pigs, mongooses, feral cats, rats. Also alien lizard (*Anolis wattsi*) replacing native lizard. Alien green iguana (*Iguana iguana*) threatens native iguana. Feral monkeys? |
| Alien Invasive Species – plants | 1<br>Bamboo | 3<br>e.g. *Coccinia grandis* and the glue tree *Cordia obliqua.* |
| Problematic Native Species | 0 | 2<br>Saint Lucia amazon parrot raids fruit farms. Bats are a nuisance in houses. Shiny cowbird impacts other birds. |
| Introduced Genetic Material | 0 | 0 |
| Species Hybridization | | 0 - 3<br>(Score of 3 specifically given to alien green iguana, which has potential to hybridize with the endemic iguana) |
| **9. POLLUTION** | | |
| Household Sewage and Urban Waste Water | 0 | 3<br>Affects mangroves and rivers, harming aquatic life. |
| Industrial and Military Effluents | 0 | 1<br>Pumice mining and minor industrial chemical waste |
| Agricultural & Forestry | 1 | 3 |

| CATEGORY/ Subcategory | Score | |
|---|---|---|
| | Forest Reserves | Outside Forest Reserves |
| Effluents | | Agrochemicals, especially on banana plantations. Effluent from pig and poultry farms. |
| Garbage & Solid Waste | 2 | 3<br>Block drains and causes flooding. Associated with rodents. |
| Airborne Pollutants | 0 | 0 |
| Excess Energy (heat, light, noise etc) | 0 | 1<br>[Participants cited helicopter noise, but this was covered under category 4] |
| **10. GEOLOGICAL EVENTS** | | |
| Volcanoes | 1<br>Potentially massive threat, but unlikely/ infrequent. | 1<br>Potentially massive threat, but unlikely/ infrequent. |
| Earthquakes and Tsunamis | 0<br>Potentially big threat, but unlikely/ infrequent. | 0<br>Potentially big threat, but unlikely/ infrequent. |
| Landslides and Avalanches | 1<br>Natural hazard | 2<br>Exacerbated by human activities. |
| **11. CLIMATE CHANGE AND SEVERE WEATHER** | | |
| Habitat Shifting and Alteration | 3<br>Climate Change could/will lead to changes in habitats and hence species composition, including loss of montane habitats (and their species). | 3<br>Climate Change could/will lead to changes in habitats and hence species composition, including loss of montane habitats (and their species). |
| Climate Variability | 2<br>Causes change in species composition. | 2<br>Causes change in species composition. |
| *No. of subcategories classed as Major Threats* | 4 | 16 |
| *No. of subcategories classed as Moderate Threats* | 7 | 10 |



## 5.2. Discussion of Selected Major Threats to Saint Lucia's Forests

### *5.2.1. Development on private land (Threat Category 1)*

At least half of Saint Lucia's forests are under private control, and participants of the threat analysis drew particular attention to the mounting threats to forests in the North East and East (see the uppermost priority areas in sections 3.2 and 3.3 and on **Figures 2** and **3**). These areas constitute at least half of Saint Lucia's non-crown land forests, very large parcels of which have already been sold or promised to developers. Importantly, these are Deciduous Seasonal Forests, a forest type that is severely under-represented in the current protected area system.

Experience from Saint Lucia and other islands suggests that most modern developers will, if permitted to do so, clear most of the natural forest from the plots and construct large scale tourists resorts, holiday homes or luxury housing, with a number of recreational amenities such as golfcourses and marinas. Native vegetation cover is typically removed and replaced with exotic ornamentals, propagated in local nurseries or imported from overseas. Such developments are often promoted as a way of making jobs or adding to national prestige.

There are several possible approaches to ensuring that at least some of these forests will be preserved, which could be mixed and matched according to the situation.

***Regulation***

Regulation is the most widely used tool for retaining native vegetation on private land in developed countries. This is cost effective when assets and values are seriously under threat and any further damage may result in irreversible losses, and when preventing these losses has considerable benefits. Regulations may include, for example, prohibiting the felling of trees above a certain girth without a permit from the Forestry Department, requiring owners of large plots to retain a minimum percentage under natural vegetation cover, or preventing forests from being cleared within a specific distance from a ravine. Such regulations are commonly used in developed countries.

Many suitable regulations already exist under the current Forestry, Soil and Water Conservation Act, but are applicable to Crown Land only: Could these be extended to include private land, under a revised Act? New regulations can cause ill feeling among landholders when they are perceived to impinge on property rights, however, and national governments throughout the West Indies commonly give developers considerable free rein to avoid the risk of losing them to other countries competing for their investment.

***Biodiversity offsets***

This is a powerful approach that requires landowners or developers to make a direct, positive contribution to conservation to offset the negative impacts of their actions. Government permission to develop an area would be contingent on them paying for or setting aside an equivalent area for the purposes of nature conservation. For a country where the main development pressures come from the relatively wealthy owners and developers of large estates, this should be a workable compromise. The Forestry Department could take an important role in assessing and proposing suitable offset areas.



***Land purchase***

Land purchase effectively adds land to the public reserve system, which according to the Threat Analysis above, could automatically give its forests four times more protection. If the government needs complete control of land (certainty), if the land offered is large in area and next to existing reserves, and if the land has a high ecological value, then this may be the best option. Land should ideally be purchased with government funding, but money to buy land on behalf of the nation could be raised from the private sector, or from special land purchase schemes such as The Nature Conservancy (www.nature.org), World Land Trust (www.worldlandtrust.org) and Arcadia Land Trust (http://www.fauna-flora.org/arcadia.php).

One difficulty is that Saint Lucia's land prices are very high, especially in the sought-after dry forest zone near the coast, and it would be difficult for either the government or other sponsors to out-bid what a developer would offer. In 2009, for example, 500 acres (202 hectares) of Marquis Estate was advertised for US$10 million, or $20,000 per hectare. The same price tag would buy 50,000 hectares of Amazonian rainforest ($200 per hectare) with a much higher diversity of species per unit area. International donors may regard Saint Lucia as a relatively poor investment for its conservation return.

The cost of managing the area in perpetuity,. by the government or a designated trust, also needs to be factored into the equation. Land purchases may therefore be limited to relatively small plots with

exceptionally high conservation value. This is further complicated by the fact that most forested areas in Saint Lucia take the form of large estates that are commonly sold in large blocks.

***Conservation easements***

Voluntary agreements can be effective at conserving biodiversity on land where owners are conservation minded. Often these landholders do not consider other forms of development as the main use of their land – they are not driven primarily by economic incentives. A number of landowners in Saint Lucia have bequeathed lands to the National Trust to run, rather than sell them to developers.

***Private nature reserve***

Private land owners, particularly those with an interest in tourism, could be encouraged and assisted to actively manage part of the land for nature-based tourism. This could be practiced in any of the forest types on Saint Lucia, as all forest types support interesting and attractive wildlife (especially birds).

***Conservation incentives***

For landowners that want or need the land to generate revenue, other innovative mechanisms can be developed to make the forests a competitive land use option for the landowner and the country. Some of approaches used in other developing countries are summarized below and could be mixed and matched according to the situation. While these do not involve a direct financial transaction to the landowner, they may need investment in education and training on management issues relating to biodiversity conservation.



Payment for Environmental Services: Owners of forests are financially paid for the environmental benefits that the forests bring to society at large or to specific industries. This has been successfully practiced in Costa Rica, under the Forestry Law of 1996, where the program is financially supported by taxes on fossil fuels. New proposals have also been developed involving the private sector, such as paying for drinking and irrigation water (SCBD, 2001). Payments can be scaled according to the forestry land use type.

**Table 6** Example of Payment for Environmental Services – Costa Rica

Amount paid for environmental services and commitment period for each forestry land use type in the Costa Rice government's Payment of Environmental Services scheme (SCBD, 2001).

| Forest Land use type | Total amount paid over a five year period (US$ per ha) | Annual payments as percentage of total for years 1-5 (years) | | | | | Period of commitment (years) |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | |
| Reforestation | 565 | 50% | 20% | 15% | 10% | 5% | 15 |
| Natural Forest Management | 344 | 50% | 20% | 10% | 10% | 10% | 5 |
| Natural Forest Preservation or Regeneration | 211 | 20% | 20% | 20% | 20% | 20% | 10 |

REDD and other forms of carbon-linked revenue: van Eynde (2009) presented an excellent analysis of various options suitable for Saint Lucia, which could be applied to private land as well as crown land.

Timber and NTFP production: Saint Lucia's forests contain a high diversity of timber and non-timber species, but this diversity comes at the price of the low abundance and patchy distribution of most species. For this reason, the sustainable management of mixed tropical forests for timber purposes

alone yields generally low financial returns. For small scale, private operations, the best financial returns come from harvesting both timber and non-timber forest products, either by the owners themselves, or through concessions granted to other users (SCBD, 2001).

Tax incentives: Tax incentives target those landholders with large tax bills, with a percentage of their taxes waived in reward for an agreement to retain land under natural forest cover. While there is a cost to the country, from reduced revenue from certain individuals, this approach tends to be more appealing and affordable to the Government than a direct land purchase.

# Annex I Species Checklists

Table A Seed Plants (Angiosperms and Gymnosperms) of Saint Lucia

Table B Ferns and their allies (Pteridophytes) of Saint Lucia

Table C Beetles of Saint Lucia

Table D Flies of Saint Lucia

Table E Dragonfllies of Saint Lucia

Table F Reptiles and Amphibians of Saint Lucia

Table G Birds of Saint Lucia (excluding vagrant records)

Table H Mammals of Saint Lucia

Table A Seed Plants (Angiosperms and Gymnosperms) of Saint Lucia

* Species not collected since 1930s. Data from Graveson (2009a)

| Scientific name | Common names | Status |
|---|---|---|
| Acanthaceae | | |
| *Asystasia gangetica* | Chinese Violet. | Alien |
| *Avicennia germinans* | Manng Salé. Black Mangrove. | |
| *Avicennia schaueriana* | Manng Salé. Black Mangrove. | |
| *Barleria lupulina* | Hophead Philippine Violet. | Alien |
| *Blechum pyramidatum* | Zo Nwè. Fonn San. | |
| *Dicliptera martinicensis* | | Caribbean endemic |
| *Hemigraphis alternata* | Red Flame Ivy. | |
| *Justicia pectoralis* | Chapantyé. | |
| *Justicia periplocifolia* | | Caribbean endemic |
| *Justicia secunda* | St. John's Bush. | |
| **Justicia carthaginensis* | | |
| *Odontonema cuspidatum* | Firespike. | Alien |
| *Odontonema nitidum* | Chapantyé Gwan Bwa. | Caribbean endemic |
| *Ruellia tuberosa* | Ti Patat. | |
| *Ruellia tweediana* | Mexican Petunia. | Alien |
| *Teliostachya alopecuroidea* | | |
| *Thunbergia alata* | Black-Eyed Susan Vine. | Alien |
| *Thunbergia fragrans* | | Alien |
| *Thunbergia grandiflora* | Trumpet Vine. | Alien |
| Agavaceae | | |
| *Agave caribaeicola* | Lang Béf. Lapit Century Plant. | Less. Ant. endemic |
| *Furcraea tuberosa* | | Caribbean endemic |
| *Yucca aloifolia* | Spanish Bayonet. | Alien |
| Aizoaceae | | |
| *Sesuvium portulacastrum* | | |
| *Trianthema portulacastrum* | | |
| Amaranthaceae | | |
| *Achyranthes aspera* | Man-Better-Man. | |
| *Alternanthera brasiliana* | | Alien |
| *Alternanthera flavescens* | | Alien |
| *Alternanthera olivacea* | | Caribbean endemic |
| *Alternanthera paronychioides* | | |
| *Alternanthera sessilis* | | |
| *Alternanthera tenella* | | |
| *Amaranthus blitum* | | Alien |
| *Amaranthus cruentus* | (Red, Purple) Amaranth. | Alien |
| *Amaranthus dubius* | Zèpina Blan. | |
| *Amaranthus hybridus* | Zèpina. | Alien |
| *Amaranthus spinosus* | | |
| *Amaranthus viridis* | | |
| *Blutaparon vermiculare* | | |
| *Celosia argentea* | Cockscomb. | Alien |

| Scientific name | Common names | Status |
|---|---|---|
| *Celosia argentea* | | Alien |
| *Cyathula prostrata* | | Alien |
| *Dysphania ambrosioides* | Semen Contwé. | Alien |
| *Gomphrena serrata* | | |
| **Iresine angustifolia* | | |
| *Iresine diffusa* | | |
| *Lithophila muscoides* | | |
| *Microtea debilis* | Alatoukay. | |
| Amaryllidaceae | | |
| *Crinum asiaticum* | Poison Bulb. | Alien |
| *Crinum bulbispermum* | | Alien |
| *Crinum zeylanicum* | | Alien |
| *Eucharis amazonica* | | Alien |
| *Hippeastrum puniceum* | Easter Lily. | Alien |
| *Hymenocallis caribaea* | Lonyon Gli. Spider Lily. | Caribbean endemic |
| *Zephyranthes citrina* | Rain Lily. | Alien |
| Anacardiaceae | | |
| *Anacardium occidentale* | Ponm Acajou. Nwa. Cashew. | Alien |
| *Comocladia dodonaea* | Bwa Di Hou. | Caribbean endemic |
| *Mangifera indica* | Mango. | Alien |
| *Spondias mombin* | Mouben. Hog Plum. | Alien |
| Annonaceae | | |
| *Annona glabra* | Fey) Manmà. Kajouka. Manjé Kwab. | |
| *Annona montana* | Kachiman. | |
| *Annona muricata* | Kòsòl. Soursop. | Alien |
| *Annona reticulata* | Kachiman Blan. Custard Apple. | Alien |
| *Annona squamosa* | Ponm Kannél. Sugar Apple. | Alien |
| *Cananga odorata* | Ylang-Ylang. | Alien |
| *Guatteria caribaea* | Kòsòl Mawon. Ti Kachiman Bwa. | Caribbean endemic |
| *Oxandra laurifolia* | | Caribbean endemic |
| Apiaceae | | |
| *Eryngium foetidum* | Chadon Beni. | |
| *Hydrocotyle verticillata* | Pawasol Djab. Pawasol Demou. | |
| Apocynaceae | | |
| *Allamanda cathartica* | Yellow Allamanda. | Alien |
| *Asclepias curassavica* | Kòtòn Kadwiv. Milk Weed. | Alien |
| *Catharanthus roseus* | Kaka Poul. Periwinkle. | Alien |
| *Cryptostegia madagascariensis* | Lèt Makak. Zong Makak. | Alien |
| *Gonolobus iyanolensis* | | St. Lucia endemic |
| *Marsdenia macrophylla* | | |
| *Matelea maritima* | | |
| *Metastelma parviflorum* | | |
| *Nerium oleander* | Lowyé Wouj. Oleander. | Alien |

| Scientific name | Common names | Status |
|---|---|---|
| *Plumeria alba* | Frangipani. | Caribbean endemic |
| *Rauvolfia viridis* | Bwa Let. | |
| *Rhabdadenia biflora* | | |
| *Tabernaemontana citrifolia* | Bwa Let. | |
| *Thevetia peruviana* | Yellow Oleander. | Alien |
| *Ilex macfadyenii* | | Caribbean endemic |
| *Ilex nitida* | | |
| *Ilex sideroxyloides* | Ti Siton. | Caribbean endemic |
| Araceae | | |
| *Alocasia cucullata* | 'Pot Plant'. | Alien |
| *Alocasia macrorrhizos* | Malanga. Giant (Upright) Tayo. | Alien |
| *Anthurium cordatum* | Sidjinn. | Caribbean endemic |
| *Anthurium cordatum x hookeri* | Sidjinn. | |
| *Anthurium grandifolium* | Sidjinn. | Caribbean endemic |
| *Anthurium guildingii* | Sidjinn. | Less. Ant. endemic |
| *Anthurium hookeri* | Sidjinn. | |
| *Anthurium palmatum* | Sidjinn. | Less. Ant. endemic |
| *Anthurium willdenowii* | | No recent collection |
| *Caladium bicolor* | Koko Shak. | Alien |
| *Colocasia esculenta* | Dasheen. Dasheen Chou. Dasheen Wouj. Dasheen Blan Danma. Kalalou. | Alien |
| *Dieffenbachia seguine* | Kann Wivyé. Kann Bwilé. Dumbcane. | |
| *Epipremnum pinnatum* | Golden Pothos. | Alien |
| *Landoltia punctata* | Duckweed. | |
| *Monstera adansonii* | | |
| *Montrichardia arborescens* | | |
| *Philodendron consanguineum* | | Alien |
| *Philodendron lingulatum* | | Caribbean endemic |
| *Philodendron scandens* | | |
| *Pistia stratiotes* | Chapo Ma. Water Lettuce. | Alien |
| *Syngonium podophyllum* | Arrowhead Vine. | Alien |
| *Typhonium trilobatum* | | Alien |
| *Xanthosoma sagittifolium* | Tayo. Tannia. | Alien |
| *Xanthosoma violaceum* | Chou Jamaik. Chou Blan. Chou Bouton. Purple-Stem Tannia. | Alien |
| Araliaceae | | |
| *Oreopanax capitatus* | Fijé Sek. | |
| *Schefflera attenuata* | Fijé Di Mòn. | Less. Ant. endemic |
| Arecaceae | | |
| *Acrocomia aculeata* | Ti Koko. | |
| *Aiphanes minima* | Gwigwi. | Caribbean endemic |
| *Coccothrinax barbadensis* | Latanyé. | Caribbean endemic |
| *Cocos nucifera* | Koko. Coconut. | |
| *Geonoma interrupta* | Goglèt. | Less. Ant. endemic |
| *Prestoea acuminata* | Palmis. | Caribbean endemic |
| *Ptychosperma macarthurii* | Macarthur Palm. | Alien |
| *Roystonea oleracea* | Royal Palm. | Alien |
| *Sabal causiarum* | Puerta Rican Hat Palm. | Alien |
| *Sabal mauritiiformis* | | Alien |
| *Syagrus amara* | Gwou-Gwou. | Less. Ant. endemic |
| Aristolochiaceae | | |
| *Aristolochia trilobata* | Twef. | |
| Asteraceae | | |
| *Acmella uliginosa* | | |
| *Ageratum conyzoides* | Zèb A Mouton. Labonn Fanm. Latifi. | |
| *Ambrosia hispida* | | Alien |
| *Baccharis pedunculata* | | |
| *Bidens alba* | | |
| *Bidens cynapiifolia* | Zèb A Zédjwi. | |
| *Bidens pilosa* | Zèb A Zédjwi. | |
| *Bidens reptans* | | |
| *Centratherum punctatum* | Magéwit. | |
| *Chaptalia nutans* | Fèy Do Blan. | |
| *Chromolaena trigonocarpa* | | Less. Ant. endemic |
| *Chromolaena odorata* | | |
| *Clibadium erosum* | | |
| *Condylidium iresinoides* | | |
| *Conyza bonariensis* | | |
| *Conyza canadensis* | | Alien |
| *Conzya laevigata* | | |
| *Cosmos sulphureus* | | Alien |
| *Critonia macropoda* | | Less. Ant. endemic |
| *Eclipta prostrata* | Konngolala. | |
| *Egletes commixta* | | |
| *Egletes prostrata* | | |
| *Elephantopus mollis* | Tèt Nèg. | |
| *Eleutheranthera ruderalis* | | |
| *Emilia fosbergii* | | |
| *Emilia sonchifolia* | | Alien |
| *Epaltes brasiliensis* | Kamami. | |
| *Erechtites hieraciifolius* | | |
| *Erigeron karvinskianus* | | Alien |
| *Fleischmannia microstemon* | | |
| *Hebeclinium macrophyllum* | | |
| *Koanophyllon celtidifolia* | Bwa Flambo. | |
| *Lagascea mollis* | | |
| *Melanthera nivea* | | |
| *Mikania cordifolia* | | |
| *Mikania micrantha* | Kacho. | |
| *Mikania latifolia* | | Less. Ant. endemic |
| *Neurolaena lobata* | Zèb A Pik. | |

| Scientific name | Common names | Status |
|---|---|---|
| *Parthenium hysterophorus* | Matnitjen. | |
| *Pectis ciliaris* | | |
| *Pectis elongata* | Sitonnèl. | |
| *Pectis humifusa* | | Caribbean endemic |
| *Pluchea carolinensis* | Tabak Djab. | |
| **Pluchea odorata* | | |
| *Porophyllum ruderale* | | |
| *Pseudelephantopus spicatus* | Tèt Nèg. | |
| *Pseudelephantopus spiralis* | Tèt Nèg. | |
| *Rolandra fruticosa* | Tèt Nèg. | |
| *Sonchus oleraceus* | | Alien |
| *Sphagneticola trilobata* | Venvenn Kawayib. | |
| *Spilanthes urens* | | |
| *Struchium sparganophorum* | | |
| *Synedrella nodiflora* | | |
| *Tithonia diversifolia* | | Alien |
| *Tithonia rotundifolia* | | Alien |
| *Tridax procumbens* | | |
| *Verbesina gigantea* | | |
| *Vernonia arborescens* | | |
| *Vernonia cinerea* | | Alien |
| *Wedelia calycina* | Bwa Sousouwi. Bwa Sòlèy. | |
| **Wulffia baccata* | | |
| *Zinnia elegans* | | Alien |
| Balanophoraceae | | |
| *Helosis cayennensis* | | |
| Balsaminaceae | | |
| *Impatiens balsamina* | Busy Lizzie. | Alien |
| *Impatiens walleriana* | Busy Lizzie. | Alien |
| Basellaceae | | |
| *Anredera leptostachys* | Djéwi Tout. | |
| *Basella alba* | Zèpina. Spinach. | Alien |
| Begoniaceae | | |
| *Begonia humilis* | | |
| *Begonia vincentiana* | Bread and Cheese. | Less. Ant. endemic |
| Bignoniaceae | | |
| *Amphilophium paniculatum* | | |
| *Crescentia cujete* | Kalbas. | |
| *Cydista aequinoctialis* | | |
| *Macfadyena uncata* | | |
| *Macfadyena unguis-cati* | | |
| *Spathodea campanulata* | African Tulip Tree. | Alien |
| *Tabebuia heterophylla* | Pòwyé. White Cedar. | |
| *Tabebuia pallida* | Pòwyé. White Cedar. | Less. Ant. endemic |
| *Tanaecium crucigerum* | | |
| *Tecoma stans* | | Alien |
| Boraginaceae | | |

| Scientific name | Common names | Status |
|---|---|---|
| *Bourreria succulenta* | | |
| *Cordia alliodora* | Sip. | |
| *Cordia collococca* | Sip. | |
| *Cordia curassavica* | Maho Nwè. | |
| **Cordia globosa* | | |
| *Cordia martinicensis* | Maho Nwè. | Less. Ant. endemic |
| *Cordia nesophila* | Maho Nwè. | Less. Ant. endemic |
| *Cordia obliqua* | Glue. | Alien |
| **Cordia polycephala* | | |
| *Cordia reticulata* | Sip. | Less. Ant. endemic |
| *Cordia sebestena* | | Alien |
| *Cordia sulcata* | Sip Blan. | |
| *Heliotropium angiospermum* | Kwèp Kodenn. | |
| *Heliotropium curassavicum* | | |
| *Heliotropium indicum* | | |
| *Heliotropium ternatum* | | |
| *Tournefortia bicolor* | | |
| *Tournefortia filiflora* | | Caribbean endemic |
| *Tournefortia volubilis* | | |
| Brassicaceae | | |
| *Cardamine flexuosa* | | Alien |
| *Lepidium virginicum* | | Alien |
| *Nasturtium officinale* | Kouso. Water Cress. | Alien |
| Bromeliaceae | | |
| *Aechmea lingulata* | Kawata. | |
| *Aechmea smithiorum* | Kawata. | Less. Ant. endemic |
| *Billbergia pyramidalis* | | Alien |
| *Bromelia karatas* | Kawata. | |
| *Catopsis floribunda* | Kawata. | |
| *Guzmania lingulata* | Kawata. | |
| *Guzmania megastachya* | Kawata. | Caribbean endemic |
| *Guzmania plumieri* | Kawata. | Less. Ant. endemic |
| *Pitcairnia angustifolia* | Kawata. | Caribbean endemic |
| *Tillandsia fasciculata* | Kawata. | |
| *Tillandsia polystachya* | Kawata. | |
| *Tillandsia recurvata* | | |
| *Tillandsia tenuifolia* | | |
| *Tillandsia usneoides* | | |
| *Tillandsia utriculata* | Kawata. | |
| *Vriesea antillana* | | Less. Ant. endemic |
| *Werauhia ringens* | Kawata. | |
| Burmanniaceae | | |
| *Gymnosiphon niveus* | | Caribbean endemic |
| Burseraceae | | |
| *Bursera simaruba* | Gonmyé Modi. | |
| *Dacryodes excelsa* | Gonmyé. | Caribbean endemic |
| *Protium attenuatum* | Lansan. | Less. Ant. endemic |

| Scientific name | Common names | Status |
|---|---|---|
| Cactaceae | | |
| *Acanthocereus tetragonus* | Tèt Anglés. | |
| *Melocactus intortus* | | Caribbean endemic |
| *Opuntia dillenii* | Watjèt. | |
| *Opuntia triacanthos* | | Caribbean endemic |
| *Pereskia aculeata* | Barbados Gooseberry. | |
| *Pilosocereus royenii* | | |
| *Rhipsalis baccifera* | | |
| Campanulaceae | | |
| *Centropogon berterianus* | | Less. Ant. endemic |
| *Hippobroma longiflora* | | Alien |
| *Lobelia cirsiifolia* | | Less. Ant. endemic |
| *Lobelia cliffortiana* | | |
| *Lobelia santa-Luciae* | | St. Lucia endemic |
| Canellaceae | | |
| *Canella winterana* | Bwa Kannèl. | |
| Cannacaeae | | |
| *Canna indica* | Toloman. | Alien |
| *Canna glauca* | | |
| Capparaceae | | |
| *Capparis baducca* | | |
| *Capparis cynophallophora* | Black Willow. | |
| *Capparis flexuosa* | | |
| *Capparis hastata* | | |
| *Capparis indica* | Bwa Puant. | |
| **Capparis odoratissima* | | Less. Ant. endemic |
| *Morisonia americana* | | |
| Caricaceae | | |
| *Carica papaya* | Papay. Papaya. | Alien |
| Caryophyllaceae | | |
| *Drymaria cordata* | | |
| Celastraceae | | |
| *Crossopetalum rhacoma* | | |
| *Elaeodendron xylocarpum* | | |
| *Gyminda latifolia* | | |
| *Hippocratea volubilis* | | |
| *Maytenus guyanensis* | | |
| *Maytenus laevigata* | | Caribbean endemic |
| *Schaefferia frutescens* | | |
| Chloranthaceae | | |
| *Hedyosmum arborescens* | | |
| Chrysobalanaceae | | |
| *Chrysobalanus cuspidatus* | Kaka Wat. | Less. Ant. endemic |
| *Chrysobalanus icaco* | Ponm Zikak. Fatpòk. | |
| *Hirtella pendula* | Pann Zòwèy. Zikak Fwans. | Less. Ant. endemic |
| *Hirtella triandra* | | |
| *Licania leucosepala* | | |
| *Licania ternatensis* | Bwa Dimas. | Less. Ant. endemic |
| Cleomaceae | | |
| *Cleome aculeata* | | Alien |
| *Cleome gynandra* | | Alien |
| *Cleome rutidosperma* | | Alien |
| *Cleome spinosa* | Tamadoz Mawon. | |
| *Cleome viscosa* | | Alien |
| *Cleome aculeata* | | |
| Clusiaceae | | |
| *Calophyllum antillanum* | Galba. | Caribbean endemic |
| *Chrysochlamys caribaea* | Bwa Mang. Palitivyé Wouj. | St. Lucia endemic |
| *Clusia major* | Awali. | Less. Ant. endemic |
| *Clusia plukenettii* | Awali. | Less. Ant. endemic |
| *Marila racemosa* | Bwa Pwa. | Less. Ant. endemic |
| **Symphonia globulifera* | | |
| *Tovomita plumieri* | Palitivyé Jòn. | Less. Ant. endemic |
| Colchicaceae | | |
| *Gloriosa superba* | | Alien |
| Combretaceae | | |
| *Buchenavia tetraphylla* | Zolivyé. | |
| *Conocarpus erectus* | Paltivyé Wouj. | |
| *Laguncularia racemosa* | Manng Blan. Paltivyé. | |
| *Quisqualis indica* | | Alien |
| *Terminalia catappa* | Zamann. Almond. | Alien |
| Commelinaceae | | |
| *Callisia filiformis* | | |
| *Callisia fragrans* | | Alien |
| *Callisia repens* | | |
| *Commelina diffusa* | Zèb Gwa. | |
| *Commelina erecta* | Zèb Gwa. | |
| *Cyanotis cristata* | | Alien |
| *Gibasis geniculata* | | |
| *Tradescantia pallida* | | Alien |
| *Tradescantia spathacea* | Moses-in-the-Cradle. | Alien |
| *Tradescantia zebrina* | | Alien |
| *Tripogandra serrulata* | | |
| Connaraceae | | |
| *Rourea surinamensis* | | |
| Convolvulaceae | | |
| **Convolvulus nodiflorus* | | |
| *Cuscuta americana* | Lyenn San Pyè. | |
| *Evolvulus antillanus* | | Caribbean endemic |
| *Evolvulus convolvuloides* | | |
| *Evolvulus nummularius* | | |
| *Ipomoea asarifolia* | | Alien |
| *Ipomoea batatas* | | Alien |
| *Ipomoea cairica* | | Alien |

| Scientific name | Common names | Status |
|---|---|---|
| *Ipomoea carnea* | | Alien |
| *Ipomoea hederifolia* | | |
| *Ipomoea imperati* | | |
| *Ipomoea nil* | | |
| *Ipomoea obscura* | | |
| *Ipomoea ochracea* | | Alien |
| *Ipomoea pes-caprae* | Patat Bòd Lanmè. | |
| *Ipomoea quamoclit* | | Alien |
| *Ipomoea repanda* | | Caribbean endemic |
| *Ipomoea setifera* | Patat Mawon. | |
| *Ipomoea tiliacea* | Lyenn Dous. | |
| **Ipomoea triloba* | | Caribbean endemic |
| *Ipomoea violacea* | | |
| *Ipomoea philomega* | | |
| *Jacquemontia pentanthos* | | |
| *Jacquemontia solanifolia* | | Caribbean endemic |
| *Merremia aegyptia* | | |
| *Merremia dissecta* | Noyò. | |
| *Merremia quinquefolia* | | |
| *Merremia tuberosa* | | Alien |
| *Merremia umbellata* | | |
| *Operculina hamiltonii* | | |
| *Poranopsis paniculata* | | Alien |
| *Stictocardia tiliifolia* | | Alien |
| *Turbina corymbosa* | | Alien |
| Costaceae | | |
| *Costus arabicus* | | |
| *Costus scaber* | | Alien |
| *Costus speciosus* | | Alien |
| *Costus spicatus* | | Alien |
| Crassulaceae | | |
| *Bryophyllum pinnatum* | Kawakté Lézòm. Leaf-Of-Life. | Alien |
| Cucurbitaceae | | |
| *Cayaponia americana* | | Caribbean endemic |
| *Coccinia grandis* | | Alien |
| *Cucumis melo* | Ti Konkonm. | Alien |
| *Cucumis anguria* | Ti Konkonm. | Alien |
| *Cucurbita moschata* | Jonmou. Pumpkin. | Alien |
| *Lagenaria siceraria* | Gouj. Squash. | Alien |
| *Luffa aegyptiaca* | Tochon. | Alien |
| *Melothria pendula* | Konmonm Kouli. | |
| *Momordica charantia* | Konmonm Kouli. | Alien |
| *Psiguria umbrosa* | | |
| *Sicydium tamnifolium* | | |
| Cunoniaceae | | |
| *Weinmannia pinnata* | Tanmawen Montan. | |
| Cupressaceae | | |

| Scientific name | Common names | Status |
|---|---|---|
| *Juniperus barbadensis* | Pencil Cedar. | Less. Ant. endemic |
| Cyclanthaceae | | |
| *Asplundia insignis* | | Less. Ant. endemic |
| *Asplundia rigida* | Sidjinn. | Less. Ant. endemic |
| *Cyclanthus bipartitus* | | |
| Cymodoceaceae | | |
| *Syringodium filiforme* | Manatee Grass. | |
| Cyperaceae | | |
| *Abildgaardia ovata* | | |
| *Bulbostylis antillana* | | Caribbean endemic |
| *Carex polystachya* | | |
| **Cladium jamaicense* | | |
| *Cyperus alopecuroides* | | |
| *Cyperus articulatus* | Gwenn Djiné. | |
| *Cyperus compressus* | | |
| *Cyperus digitatus* | | |
| *Cyperus elegans* | | |
| *Cyperus esculentus* | | |
| **Cyperus hermaphroditus* | | |
| *Cyperus involucratus* | | Alien |
| *Cyperus iria* | | Alien |
| *Cyperus laxus* | | |
| *Cyperus ligularis* | | |
| *Cyperus luzulae* | | |
| *Cyperus odoratus* | | |
| *Cyperus planifolius* | | |
| *Cyperus polystachyos* | | |
| *Cyperus rotundus* | | |
| *Cyperus sphacelatus* | | |
| *Cyperus surinamensis* | | |
| *Cyperus aggregatus* | | |
| *Eleocharis flavescens* | | |
| *Eleocharis geniculata* | | |
| *Eleocharis interstincta* | | |
| *Eleocharis mutata* | | |
| *Eleocharis retroflexa* | | |
| *Fimbristylis complanata* | | |
| *Fimbristylis cymosa* | | |
| *Fimbristylis dichotoma* | | |
| *Fimbristylis ferruginea* | | |
| *Fimbristylis littoralis* | | Alien |
| *Fimbristylis quinquangularis* | | Alien |
| *Fuirena umbellata* | | |
| *Kyllinga brevifolia* | | |
| *Kyllinga polyphylla* | | Alien |
| *Kyllinga pumila* | | |
| *Machaerina restioides* | | Caribbean endemic |

| Scientific name | Common names | Status |
|---|---|---|
| *Rhynchospora ciliata* | | |
| *Rhynchospora contracta* | | |
| *Rhynchospora holoschoenoides* | | |
| *Rhynchospora longifolia* | | |
| *Rhynchospora marisculus* | | |
| *Rhynchospora polyphylla* | | |
| *Rhynchospora radicans* | | |
| *Rhynchospora tenerrima* | | |
| *Rhynchospora tenuis* | | |
| *Scleria latifolia* | Zèb A Kouto. | |
| *Scleria lithosperma* | | |
| *Scleria melaleuca* | Zèb A Kouto. | |
| *Scleria microcarpa* | Zèb A Kouto. | |
| *Scleria mitis* | Zèb A Kouto. | |
| *Scleria scindens* | Zèb A Kouto. | |
| *Scleria secans* | Zèb A Kouto. | |
| Dichapetalaceae | | |
| *Tapura latifolia* | Bwa Kòt Wouj. | Less. Ant. endemic |
| Dilleniaceae | | |
| *Pinzona coriacea* | Lyenn Chasè. | |
| Dioscoraceae | | |
| *Dioscorea alata* | Bandja. | Alien |
| *Dioscorea altissima* | | |
| *Dioscorea polygonoides* | Yanm Matwiten Djab. | |
| Ebenaceae | | |
| *Diospyros revoluta* | Babawa. | Caribbean endemic |
| Elaeocarpaceae | | |
| *Sloanea dentata* | | Less. Ant. endemic |
| *Sloanea caribaea* | Chatannyé. | |
| Erythroxylaceae | | |
| *Erythroxylum havanense* | Bwa Vinet. | |
| *Erythroxylum squamatum* | Bwa Gwiv. | |
| Euphorbiaceae | | |
| *Acalypha alopecuroides* | | |
| *Acalypha arvensis* | | |
| *Acalypha elizabethiae* | | St. Lucia endemic |
| *Acalypha indica* | | Alien |
| *Acalypha poiretii* | | Alien |
| **Actinostemon caribaeus* | | Caribbean endemic |
| *Argythamnia polygama* | | |
| *Bernardia corensis* | | |
| *Bernardia laurentii* | | St. Lucia endemic |
| *Caperonia palustris* | | |
| **Cnidoscolus urens* | | |
| *Croton bixoides* | Ti Bonm Blan. Gwo Bonm. | Caribbean endemic |
| *Croton corylifolius* | | |
| *Croton flavens* | Ti Bonm Koupayou. | |
| *Croton guildingii* | Ti Bonm Wouj. | |
| *Croton hircinus* | Ti Bonm Lélé. | |
| **Croton hirtus* | | |
| *Croton lobatus* | | |
| *Croton niveus* | | |
| *Dalechampia scandens* | | |
| *Euphorbia articulata* | | Caribbean endemic |
| *Euphorbia cyathophora* | | Alien |
| *Euphorbia dussii* | | Less. Ant. endemic |
| *Euphorbia graminea* | | Alien |
| *Euphorbia heterophylla* | | |
| *Euphorbia hirta* | Zeb Malnonmen. | |
| *Euphorbia hypericifolia* | | |
| *Euphorbia hyssopifolia* | | |
| *Euphorbia lasiocarpa* | | |
| *Euphorbia mesembrianthemifolia* | | |
| *Euphorbia oerstediana* | | |
| *Euphorbia ophthalmica* | | |
| *Euphorbia prostrata* | | |
| *Euphorbia serpens* | | |
| *Euphorbia thymifolia* | | |
| *Euphorbia tithymaloides* | | Alien |
| *Gymnanthes hypoleuca* | Bwa Sadin. | |
| *Hevea brasiliensis* | Rubber Tree. | Alien |
| *Hippomane mancinella* | Medsinnyé Modi. | |
| *Hura crepitans* | | Alien |
| *Jatropha gossypiifolia* | Zèb Zòtòlan. | |
| *Jatropha integerrima* | | Alien |
| *Jatropha multifida* | | Alien |
| *Plukenetia volubilis* | | |
| **Richeria grandis* | | Caribbean endemic |
| *Ricinus communis* | | Alien |
| *Sapium caribaeum* | Lagli. | Less. Ant. endemic |
| *Tragia volubilis* | | |
| Fabaceae-Caesalpinioideae | | |
| *Bauhinia monandra* | | Alien |
| *Bauhinia multinervia* | | Alien |
| *Caesalpinia bonduc* | Kannik. | |
| *Caesalpinia pulcherrima* | Flè Makata. | Alien |
| *Chamaecrista glandulosa* | Ti Tanmawen. | Caribbean endemic |
| *Chamaecrista nictitans* | | |
| **Chamaecrista obcordata* | | Caribbean endemic |
| **Crudia glaberrima* | | |
| *Delonix regia* | Flanboyan. | Alien |
| *Haematoxylum campechianum* | Kanpèch. | |
| *Hymenaea courbaril* | Koubawi. Stinking Toe Tree. | |
| *Peltophorum pterocarpum* | | Alien |

| Scientific name | Common names | Status |
|---|---|---|
| *Senna alata* | Kasialata. | Alien |
| *Senna bicapsularis* | Kaka Bétjé. Soumatjé. | |
| *Senna hirsuta* | | |
| *Senna obtusifolia* | Soumatjé. | |
| *Senna occidentalis* | Kafé Zèpyant. | |
| *Senna siamea* | | Alien |
| *Senna sophera* | | |
| *Swartzia caribaea* | Kas. Miskad Mawon. | Less. Ant. endemic |
| *Tamarindus indica* | Tamarind.Tanmawen. | Alien |
| Fabaceae-Faboideae | | |
| *Abrus precatorius* | Gwenn Légliz. | Alien |
| *Aeschynomene americana* | | |
| *Aeschynomene evenia* | | |
| *Aeschynomene sensitiva* | | |
| *Aeschynomene viscidula* | | |
| *Alysicarpus vaginalis* | | Alien |
| *Andira sapindoides* | | Less. Ant. endemic |
| *Cajanus cajan* | Pwa Angòl. Pigeon Pea. | Alien |
| *Calopogonium caeruleum* | | |
| *Calopogonium mucunoides* | Pwa Blé. | |
| *Canavalia campylocarpa* | Pwa Agoul. | |
| *Canavalia rosea* | Sea Bean. | |
| *Centrosema plumieri* | | |
| *Centrosema virginianum* | | |
| *Centrosema pubescens* | | |
| *Chaetocalyx scandens* | | |
| *Clitoria falcata* | | |
| *Clitoria ternatea* | | Alien |
| *Coursetia caribaea* | | |
| *Crotalaria incana* | Chakchak. | |
| *Crotalaria lotifolia* | Chakchak. | |
| *Crotalaria pallida* | Chakchak. | Alien |
| *Crotalaria retusa* | Chakchak. | |
| *Crotalaria spectabilis* | Chakchak. | Alien |
| **Crotalaria stipularia* | | |
| *Crotalaria zanzibarica* | | Alien |
| *Crotolaria verrucosa* | | Alien |
| *Dalbergia ecastaphyllum* | | |
| *Dalbergia monetaria* | | |
| *Desmodium adscendens* | | |
| *Desmodium axillare* | | |
| *Desmodium barbatum* | Pistach Mawon. | |
| *Desmodium incanum* | Sweethearts. | |
| *Desmodium incanum* | | |
| *Desmodium procumbens* | | |
| *Desmodium scorpiurus* | | |
| *Desmodium tortuosum* | | |

| Scientific name | Common names | Status |
|---|---|---|
| *Desmodium triflorum* | | |
| *Desmodium velutinum* | | Alien |
| *Dussia martinicensis* | Ponmyé. Bwa Gamel. | |
| *Erythrina fusca* | Mòtèl. | Alien |
| *Erythrina poeppigiana* | Mòtèl. | Alien |
| *Erythrina corallodendron* | Mòtèl. | |
| *Flemingia strobilifera* | Zèb Sèk. | Alien |
| *Galactia longiflora* | | Less. Ant. endemic |
| *Galactia rubra* | | Less. Ant. endemic |
| *Gliricidia sepium* | Glory Cedar. | Alien |
| *Indigofera hirsuta* | | Alien |
| *Indigofera suffruticosa* | La Indigo. | |
| *Indigofera tinctoria* | La Indigo. | Alien |
| **Indigofera spicata* | | Alien |
| *Lablab purpureus* | Pwa Boukousou. Pwa Senm. | Alien |
| *Lonchocarpus heptaphyllus* | Savonnèt Gwan Fey. | |
| *Lonchocarpus punctatus* | Ti Savonnèt. | |
| *Machaerium lunatum* | | |
| *Macroptilium atropurpureum* | | |
| *Macroptilium lathyroides* | | |
| *Mucuna pruriens* | Pwa Gwaté. Gwenn Zyé Bouwik. | Alien |
| *Mucuna pruriens* | Kafé Gwo Bouwo. Kafé Mal Kochon. | Alien |
| *Mucuna sloanei* | Pwa Gwat. Gwenn Zyé Bouwik. | |
| *Mucuna urens* | Pwa Gwat. Gwenn Zyé Bouwik. | |
| *Neonotonia wightii* | | Alien |
| *Ormosia monosperma* | Dédéfouden. Pwa Bwa Wawi. Gwenn Zyé Bouwik. | |
| *Pachyrhizus erosus* | Yam Bean. | |
| *Phaseolus lunatus* | Pwa Chous. Pwa Senm. Lima Bean. | Alien |
| *Piscidia carthagenensis* | Bwa Gulo. | |
| *Pterocarpus officinalis* | Swamp Redwood. | |
| *Pueraria phaseoloides* | Kudzu. | Alien |
| *Rhynchosia minima* | | |
| *Rhynchosia phaseoloides* | | |
| *Sesbania sericea* | | Alien |
| *Sophora tomentosa* | | |
| *Stylosanthes guianensis* | | Alien |
| *Stylosanthes hamata* | | |
| *Tephrosia cinerea* | | |
| *Tephrosia noctiflora* | | Alien |
| **Tephrosia candida* | | Alien |
| *Tephrosia senna* | | |
| *Teramnus labialis* | | |
| *Vigna hosei* | Ti Pwa Jòn. | Alien |
| *Vigna luteola* | Pwa Zombi. | |
| *Vigna unguiculata* | | Alien |
| *Zornia microphylla* | | Caribbean endemic |

| Scientific name | Common names | Status |
|---|---|---|
| Fabaceae-Mimosoideae | | |
| *Acacia nilotica* | Zakasya. | Alien |
| *Adenanthera pavonina* | Dalmawi. | Alien |
| *Calliandra calothyrsus* | | Alien |
| *Calliandra slaneae* | Minizyé. Myann Fwans. | Less. Ant. endemic |
| *Calliandra tergemina* | Bwa Patat. Bwa (Lyenn) Myan. | |
| **Calliandra purpurea* | | (dubious id) |
| *Desmanthus virgatus* | | |
| *Entada polystachya* | Manyòk Chapèl. | |
| *Inga ingoides* | Kakoli. | |
| *Inga laurina* | Pwa Dou. | |
| *Leucaena leucocephala* | | Alien |
| *Mimosa camporum* | | |
| *Mimosa casta* | Kwòk Chyen. | |
| *Mimosa ceratonia* | Kwòk Chyen. | |
| *Mimosa debilis* | | |
| *Mimosa pigra* | | Alien |
| *Mimosa pudica* | Mari Hont. Ti Mari. | |
| *Mimosa quadrivalvis* | Schrankia Leptocarpa De Candolle. | |
| *Neptunia plena* | | |
| *Pithecellobium jupunba* | Dalmawi. | |
| *Pithecellobium unguis-cati* | Bebel. | |
| *Samanea saman* | Masav. Saman. | Alien |
| *Senegalia riparia* | Zanmouwèt. | |
| *Senegalia tamarindifolia* | | |
| *Vachellia farnesiana* | Zakasya. | |
| *Vachellia macracantha* | Zakasya. | |
| Gentianaceae | | |
| *Enicostema verticillatum* | Lanng Poul. | |
| *Voyria aphylla* | | |
| *Voyria tenella* | | |
| Gesneriaceae | | |
| *Alloplectus cristatus* | | |
| *Besleria filipes* | | Less. Ant. endemic |
| *Besleria lutea* | | Caribbean endemic |
| *Columnea scandens* | | |
| *Gesneria ventricosa* | | Caribbean endemic |
| *Nautilocalyx melittifolius* | | Caribbean endemic |
| *Seemania sylvatica* | | Alien |
| Heliconiaceae | | |
| *Heliconia bihai* | Balizyé. | |
| *Heliconia caribaea* | Balizyé. | Caribbean endemic |
| *Heliconia psittacorum* | Bird-Of-Paradise. | Alien |
| *Heliconia wagneriana* | | Alien |
| Hydrocharitaceae | | |
| *Egeria densa* | | Alien |
| *Limnobium laevigatum* | | |
| *Thalassia testudinum* | Turtle Grass. | |
| Hypoxidaceae | | |
| *Curculigo scorzonerifolia* | | |
| *Hypoxis decumbens* | | |
| Iridaceae | | |
| *Eleutherine bulbosa* | | |
| *Trimezia martinicensis* | Koko Chat. | |
| Lamiaceae | | |
| *Clerodendrum aculeatum* | | |
| *Clerodendrum chinense* | | Alien |
| *Clerodendrum indicum* | Zèb A Lonng Kou. | Alien |
| *Clerodendrum paniculatum* | | Alien |
| *Clerodendrum x speciosum* | | Alien |
| *Gmelina philippensis* | | Alien |
| *Hyptis atrorubens* | | |
| *Hyptis capitata* | | |
| *Hyptis mutabilis* | | |
| *Hyptis pectinata* | | |
| *Hyptis suaveolens* | | |
| *Hyptis verticillata* | | |
| *Leonotis nepetifolia* | Gwo Ponpon. | Alien |
| *Leonurus japonicus* | | Alien |
| **Leucas martinicensis* | | |
| *Marsypianthes chamaedrys* | Konmonmi Mawon. | |
| *Ocimum basilicum* | Bazilik. | Alien |
| *Ocimum campechianum* | Fonbwazen. | |
| *Ocimum gratissimum* | Bwa Gazon. (Mal) Fonbwazen. | Alien |
| *Plectranthus amboinicus* | Gwo Dite. | |
| *Pogostemon cablin* | Patchouli. | Alien |
| *Salvia lamiifolia* | | Less. Ant. endemic |
| *Salvia micrantha* | | |
| *Salvia occidentalis* | Zo Kayal. | |
| *Scutellaria purpurascens* | | |
| *Solenostemon scutellarioides* | Coleus. | Alien |
| Lauraceae | | |
| *Aniba bracteata* | Lowyé Jòn. | |
| *Aniba ramageana* | Lowyé Kannèl. | Less. Ant. endemic |
| *Beilschmiedia pendula* | Lowyé Wouj. | |
| *Cassytha filiformis* | Lyenn San Pyè. | |
| *Cinnamomum elongatum* | | Caribbean endemic |
| *Cinnamomum verum* | Kannèl. Cinnamon. | Alien |
| *Endlicheria sericea* | Lowyé Fè. | |
| *Licaria sericea* | | Less. Ant. endemic |
| *Nectandra coriacea* | Lowyé Gwi. | |
| *Nectandra membranacea* | Lowyé Sann. Lowyé Gwan Fey. | Caribbean endemic |
| *Nectandra patens* | | Caribbean endemic |
| *Ocotea cernua* | Lowyé Gwo Gwenn. Lowyé Ti Fèy. | |

| Scientific name | Common names | Status |
|---|---|---|
| *Ocotea eggersiana* | Lowyé Ti Fèy. | Less. Ant. endemic |
| *Ocotea falcata* | | Less. Ant. endemic |
| *Ocotea imrayana* | | Less. Ant. endemic |
| *Ocotea jacquini* | Lowyé Gwo Gwenn. | Less. Ant. endemic |
| *Ocotea leucoxylon* | Lowyé Mabwé. | |
| *Persea urbaniana* | Lowyé Zabòka. | Caribbean endemic |
| Lentibulariaceae | | |
| *Utricularia alpina* | | |
| Linderniaceae | | |
| *Lindernia crustacea* | | Alien |
| *Lindernia diffusa* | | |
| Loganiaceae | | |
| *Spigelia anthelmia* | Zèb A Vè. | |
| Loranthaceae | | |
| *Dendropemon caribaeus* | Anho Bwa. | Caribbean endemic |
| *Psittacanthus americanus* | Anho Bwa. | |
| *Psittacanthus martinicensis* | Anho Bwa. | Less. Ant. endemic |
| Lythraceae | | |
| *Ammannia baccifera* | | Alien |
| *Ammannia latifolia* | | |
| *Cuphea carthagenensis* | | |
| **Cuphea crudyana* | | St. Lucia endemic |
| **Cuphea micrantha* | | |
| Magnoliaceae | | |
| *Talauma dodecapetala* | Bwapen Mawon. | Less. Ant. endemic |
| *Bunchosia polystachia* | | |
| *Byrsonima spicata* | Bwa Tan (Si). | |
| *Byrsonima trinitensis* | Bwa Tan Wouj. | Less. Ant. endemic |
| *Heteropterys platyptera* | Lyenn Tè. | Less. Ant. endemic |
| *Heteropterys purpurea* | | |
| *Malpighia coccigera* | Ti Minizyé. | Caribbean endemic |
| *Malpighia emarginata* | Siwiz. Cherry. | |
| **Malpighia linearis* | | |
| *Stigmaphyllon bannisterioides* | | |
| *Stigmaphyllon convolvulifolium* | | |
| **Stigmaphyllon emarginatum* | | Caribbean endemic |
| *Stigmaphyllon puberum* | | |
| Malvaceae | | |
| *Abelmoschus moschatus* | Gonbo Modi. | Alien |
| *Bastardia viscosa* | | |
| *Ceiba pentandra* | Fwonmajé. | |
| *Corchorus aestuans* | | |
| *Corchorus hirsutus* | | |
| *Corchorus hirtus* | | |
| *Corchorus siliquosus* | | |
| *Gossypium hirsutum × barbadense complex* | Kòtòn. Kòtòn Wouj. Cotton. | Alien |
| *Guazuma ulmifolia* | Bwa Lonm. | |
| *Herissantia crispa* | | |
| *Malachra alceifolia* | | |
| **Malachra capitata* | | |
| *Malachra fasciata* | | |
| *Malvastrum americanum* | | |
| *Malvastrum coromandelianum* | | |
| *Malvaviscus penduliflorus* | | Alien |
| *Melochia nodiflora* | | |
| **Melochia pyramidata* | | |
| *Melochia tomentosa* | | |
| *Ochroma pyramidale* | Bwa Flo. | |
| *Pavonia paludicola* | | |
| *Pavonia spinifex* | | |
| *Pseudoabutilon umbellatum* | | |
| *Quararibea turbinata* | Bwa Lélé. Swizzlestick Tree. | Caribbean endemic |
| *Sida acuta* | Balyé Wonzè. | |
| *Sida ciliaris* | | |
| *Sida cordifolia* | | |
| *Sida glomerata* | | |
| *Sida jamaicensis* | | |
| *Sida rhombifolia* | Balyé Wonzè. | |
| *Sida spinosa* | | |
| *Sida urens* | | |
| *Sterculia caribaea* | Maho Kochon. | Less. Ant. endemic |
| *Talipariti elatum* | Blue Mahoe. | Alien |
| *Talipariti tiliaceum* | Maho Mang. Maho Gonbo. | Alien |
| *Thespesia populnea* | Maho Bòd Lanmè. | |
| *Triumfetta lappula* | Tèt Nèg. | |
| *Triumfetta rhomboidea* | | |
| *Triumfetta semitriloba* | Tèt Nèg. | |
| *Urena lobata* | Pikan Kouzen. | |
| *Urena sinuata* | Pikan Kouzen. | |
| *Waltheria indica* | | |
| **Wercklea tulipiflora* | | Less. Ant. endemic |
| **Wissadula contracta* | | |
| Marantaceae | | |
| *Calathea allouia* | Topi Tanbou. Koko Tanbou. | |
| *Calathea lutea* | | Alien |
| *Maranta arundinacea* | Mouchas Babad. Djitan. Arrowroot. | Alien |
| Marcgraviaceae | | |
| *Marcgravia lineolata* | | Less. Ant. endemic |
| *Marcgravia trinitatis* | | |
| *Marcgravia umbellata* | | Less. Ant. endemic |
| Melastomataceae | | |
| *Aciotis aequatorialis* | | |
| *Charianthus alpinus* | | Less. Ant. endemic |

| Scientific name | Common names | Status |
|---|---|---|
| *Clidemia hirta* | Kaka Mèl. | |
| *Clidemia umbrosa* | | Caribbean endemic |
| *Conostegia icosandra* | | |
| **Henriettea lateriflora* | | Alien |
| *Henriettia triflora* | | Less. Ant. endemic |
| *Heterotis rotundifolia* | | Alien |
| *Miconia cornifolia* | Bwa Kòt. Bwa Savann. | Less. Ant. endemic |
| *Miconia furfuracea* | Bwa Senn. | Less. Ant. endemic |
| *Miconia globulifera* | | Less. Ant. endemic |
| *Miconia laevigata* | | Less. Ant. endemic |
| *Miconia luciana* | Bwa Senn. | St. Lucia endemic |
| *Miconia mirabilis* | Bwa Kòt. | |
| *Miconia racemosa* | | |
| *Miconia secunda* | Bwa Senn. | St. Lucia endemic |
| **Miconia striata* | | Less. Ant. endemic |
| **Miconia trichotoma* | | Caribbean endemic |
| *Nepsera aquatica* | | |
| *Pterolepis glomerata* | | |
| *Tetrazygia angustifolia* | | Caribbean endemic |
| *Tetrazygia discolor* | | Less. Ant. endemic |
| *Tibouchina chamaecistus* | | Less. Ant. endemic |
| *Tibouchina pilosa* | | Alien |
| Meliaceae | | |
| *Azadirachta indica* | Neem. | Alien |
| *Carapa guianensis* | | |
| *Cedrela odorata* | Acajou. Red Cedar. | |
| *Guarea glabra* | Acajou Gwan Bwa. | |
| *Guarea kunthiana* | | |
| *Guarea macrophylla* | Bwa Di Woz. | |
| *Melia azedarach* | Chinaberry. | Alien |
| *Trichilia pallida* | | |
| Menispermaceae | | |
| *Cissampelos pareira* | Aymanyad. | |
| *Hyperbaena domingensis* | | |
| Molluginaceae | | |
| *Mollugo nudicaulis* | | Alien |
| *Siparuna sanctae-luciae* | Bwa Kaka. | St. Lucia endemic |
| Moraceae | | |
| *Castilla elastica* | Kaochou. Rubber Tree. | Alien |
| *Ficus americana* | Fijé Ti Fèy. | |
| *Ficus citrifolia* | Fijé. | |
| *Ficus insipida* | Fijé. | |
| *Ficus nymphaeifolia* | Fijé. | |
| *Ficus pumila* | | Alien |
| *Ficus trigonata* | Fijé. | |
| *Maclura tinctoria* | Bwa Dowanj. | |
| Musaceae | | |

| Scientific name | Common names | Status |
|---|---|---|
| *Musa textilis* | Manila Hemp. Abaca. | Alien |
| Myrsinaceae | | |
| *Ardisia elliptica* | Popgun Tree. | Alien |
| *Ardisia obovata* | | Caribbean endemic |
| *Cybianthus antillanus* | Bwa Diwi. | Less. Ant. endemic |
| *Cybianthus parasiticus* | | Less. Ant. endemic |
| *Cybianthus rostratus* | Bwa Diwi. | Less. Ant. endemic |
| *Myrsine coriacea* | Bwa Diwi. | |
| *Stylogyne lateriflora* | Zabwiko Mawon. | Caribbean endemic |
| *Stylogyne canaliculata* | | Dubious taxon |
| Myrtaceae | | |
| *Calyptranthes forsteri* | Bwa Di Blas Blan. Bwa Di Fer. | |
| *Calyptranthes elegans* | | Less. Ant. endemic |
| *Eugenia biflora* | | |
| *Eugenia confusa* | Bwa Heti. | |
| *Eugenia cordata* | | |
| *Eugenia greggii* | | Less. Ant. endemic |
| *Eugenia lambertiana* | | |
| *Eugenia ligustrina* | Bwa Heti. | |
| *Eugenia monticola* | Bwa (Di Bas) Ti Fèy. | |
| *Eugenia pseudopsidium* | | |
| *Eugenia tapacumensis* | | |
| *Eugenia trinitatis* | | Less. Ant. endemic |
| *Eugenia coffeifolia* | | |
| *Eugenia duchassaingiana* | | Less. Ant. endemic |
| *Eugenia oerstediana* | Bwa Di Bas Gwi. | |
| *Marlierea guildingiana* | | |
| *Myrcia antillana* | Bwa Di Bas Wouj. | Less. Ant. endemic |
| *Myrcia citrifolia* | Bwa Gwiyé . Blackberry. | |
| *Myrcia deflexa* | Bwa Kwéyòl. | |
| *Myrcia fallax* | Bwadfè. | |
| *Myrcia leptoclada* | | |
| *Myrcia platyclada* | | |
| *Myrcia ramageana* | | Less. Ant. endemic |
| *Myrcia splendens* | Bwa (Di Bas) Ti Fèy. | |
| *Myrcianthes fragrans* | | |
| *Myrciaria floribunda* | | |
| *Pimenta racemosa* | Bwaden. Bay Leaf. | |
| *Plinia pinnata* | | |
| *Psidium guajava* | Gwiyav. Guava. | |
| *Psidium sartorianum* | | |
| *Siphoneugena densiflora* | | |
| *Syzgium cumini* | Java Plum. | Alien |
| *Syzygium jambos* | Ponm Woz. | Alien |
| Nyctaginaceae | | |
| *Boerhavia coccinea* | Patagon. | |
| *Boerhavia diffusa* | Patagon. | |

| Scientific name | Common names | Status |
|---|---|---|
| **Boerhavia erecta* | | |
| *Guapira fragrans* | Mapou. | |
| *Guapira suborbiculata* | Ti Mapou. | Less. Ant. endemic |
| *Mirabilis jalapa* | Four o'Clock. | Alien |
| *Pisonia aculeata* | | |
| Nymphaceae | | |
| *Nymphaea amazonum* | Chapo Dlo. Water Lily. | |
| *Nymphaea ampla* | Chapo Dlo. Water Lily. | |
| Ochnaceae | | |
| *Ouratea guildingii* | | |
| *Sauvagesia erecta* | | |
| Olacaceae | | |
| *Ximenia americana* | | |
| Oleaceae | | |
| *Chionanthus compactus* | Bwadfè. | |
| *Forestiera rhamnifolia* | Kaka Wavèt. | |
| *Jasminum fluminense* | | Alien |
| *Jasminum laurifolium* | | Alien |
| *Ligustrum japonicum* | | Alien |
| Onagraceae | | |
| *Ludwigia erecta* | Jiwòf Glo. | |
| *Ludwigia hyssopifolia* | Jiwòf Glo. | |
| *Ludwigia octovalvis* | Jiwòf Glo. | |
| **Ludwigia leptocarpa* | | |
| Orchidaceae | | |
| *Bletia patula* | | Alien |
| *Brachionidium sherringii* | | Caribbean endemic |
| *Cranichis muscosa* | | |
| *Cranichis ovata* | | Caribbean endemic |
| *Cyclopogon cranichoides* | | |
| *Cyclopogon elatus* | | |
| *Epidendrum anceps* | | |
| *Epidendrum antillanum* | | Caribbean endemic |
| *Epidendrum boricuarum* | | Caribbean endemic |
| *Epidendrum carpophorum* | | |
| *Epidendrum ciliare* | Eye-Lash Orchid. | |
| *Epidendrum nocturnum* | | |
| *Epidendrum pallidiflorum* | | Less. Ant. endemic |
| *Epidendrum ramosum* | | |
| *Epidendrum rigidum* | | |
| *Epidendrum rubroticum* | | Less. Ant. endemic |
| *Epidendrum strobiliferum* | | |
| **Epidendrum miserrimum* | | |
| *Epidendrum revertianum* | | Less. Ant. endemic |
| *Eulophia alta* | Lonyon Djab. | |
| *Habenaria alata* | | |
| *Habenaria monorrhiza* | | |
| *Ionopsis utricularioides* | | |
| *Isochilus linearis* | | |
| *Jacquiniella globosa* | | |
| *Leochilus puertoricensis* | | Caribbean endemic |
| **Lepanthes dussii* | | |
| *Liparis nervosa* | | |
| *Malaxis massonii* | | |
| *Maxillaria coccinea* | | Caribbean endemic |
| *Microchilus hirtellus* | | Caribbean endemic |
| *Microchilus plantagineus* | | Caribbean endemic |
| *Octomeria graminifolia* | | Caribbean endemic |
| *Oeceoclades maculata* | | Alien |
| *Oncidium altissimum* | | Caribbean endemic |
| *Pelexia adnata* | | |
| *Pleurothallis pruinosa* | | |
| *Pleurothallis ruscifolia* | | |
| *Pleurothallis sieberi* | | Less. Ant. endemic |
| **Pleurothallis testifolia* | | |
| *Polystachya concreta* | | |
| *Ponthieva petiolata* | | Caribbean endemic |
| *Prescottia oligantha* | | |
| *Prescottia stachyodes* | | |
| **Psilochilus macrophyllus* | | |
| *Sacoila lanceolata* | | |
| *Scaphyglottis modesta* | | |
| *Scaphyglottis punctulata* | | |
| *Scaphyglottis dunstervillei* | | |
| *Spathoglottis plicata* | | Alien |
| *Specklinia aristata* | | |
| *Spiranthes torta* | | |
| *Stelis scabrida* | | Less. Ant. endemic |
| *Trichocentrum cebolleta* | | |
| *Trichocentrum luridum* | | |
| *Trichosalpinx dura* | | |
| *Triphora surinamensis* | | |
| *Vanilla mexicana* | | |
| *Vanilla planifolia* | Vanni. Vanilla. | Alien |
| *Wullschlaegelia calcarata* | | |
| Orobanchaceae | | |
| *Alectra aspera* | | |
| Oxalidaceae | | |
| *Oxalis barrelieri* | | |
| *Oxalis corniculata* | Ti Siwèt. | |
| *Oxalis debilis* | | |
| *Oxalis frutescens* | | |
| Papaveraceae | | |
| *Argemone mexicana* | | |

| Scientific name | Common names | Status |
|---|---|---|
| **Bocconia frutescens* | | |
| Passifloraceae | | |
| *Passiflora andersonii* | | Less. Ant. endemic |
| *Passiflora cuneata* | | |
| *Passiflora edulis* | Passion Fruit. | Alien |
| *Passiflora foetida* | Kòkian. | |
| *Passiflora laurifolia* | Ponm Di Lyenn. | |
| *Passiflora pallida* | | |
| *Passiflora quadrangularis* | Babadin. | Alien |
| *Passiflora rubra* | | |
| *Passiflora serratodigitata* | | |
| *Passiflora suberosa* | | |
| Phyllanthaceae | | |
| *Hieronyma caribaea* | Bwa Damand. | |
| *Margaritaria nobilis* | Bwa Mil Bwanch. Bwa Zo Bèf. | |
| *Phyllanthus amarus* | Gwenn Anba Fèy Blan. | |
| *Phyllanthus caroliniensis* | | |
| *Phyllanthus niruri* | | |
| *Phyllanthus urinaria* | Gwenn Anba Fèy Blan. | Alien |
| Phytolaccaceae | | |
| *Petiveria alliacea* | Fèy Douvan. Mawi Pouwi. | |
| *Phytolacca rivinoides* | Lanng Bèf. Agouman (Gwan Bwa). | |
| *Rivina humilis* | | |
| *Trichostigma octandrum* | | |
| Pinaceae | | |
| *Pinus caribaea* | Caribbean Pine. | Alien |
| Piperaceae | | |
| *Peperomia emarginella* | | |
| *Peperomia hernandiifolia* | | |
| **Peperomia hirtella* | | Less. Ant. endemic |
| *Peperomia magnoliifolia* | | |
| *Peperomia myrtifolia* | | Caribbean endemic |
| *Peperomia nigropunctata* | | |
| *Peperomia obtusifolia* | | |
| *Peperomia pellucida* | Zèb Akouwès. | |
| *Peperomia rotundifolia* | Ti Kako. | |
| **Peperomia serpens* | | |
| *Peperomia smithiana* | | Less. Ant. endemic |
| *Peperomia tenella* | | |
| *Peperomia trifolia* | | |
| *Peperomia urocarpa* | | |
| *Piper aequale* | | |
| *Piper amalago* | Bwa Mal Lèstomak. | |
| *Piper dilatatum* | Malenbé. Bwa Mal Lèstomak. | |
| *Piper dussii* | | Less. Ant. endemic |
| *Piper glabrescens* | | |
| *Piper peltatum* | Chapo Glo. | |

| Scientific name | Common names | Status |
|---|---|---|
| Plantaginaceae | | |
| *Bacopa monnieri* | Kwinin Pavé. | |
| *Mecardonia procumbens* | | |
| *Micranthemum umbrosum* | | |
| *Plantago major* | Planten. | Alien |
| *Russelia equisetiformis* | | Alien |
| *Scoparia dulcis* | Balyé Dou. | |
| Plumbaginaceae | | |
| *Plumbago scandens* | | |
| Poaceae | | |
| *Andropogon bicornis* | | |
| *Andropogon glomeratus* | | |
| *Anthephora hermaphrodita* | | |
| *Arthrostylidium venezuelae* | | |
| **Arundo donax* | | Alien |
| *Axonopus compressus* | | |
| *Bambusa vulgaris* | | Alien |
| *Bothriochloa bladhii* | | Alien |
| *Bothriochloa pertusa* | | Alien |
| *Bouteloua americana* | | |
| **Cenchrus brownii* | | (dubious id) |
| *Cenchrus echinatus* | | |
| **Cenchrus incertus* | Zèb Kolan. | (dubious id) |
| *Chloris barbata* | Zèb A Bab. | |
| *Chloris radiata* | | |
| **Chloris ciliata* | | |
| *Chrysopogon zizanioides* | Voytivé. | Alien |
| *Coix lacryma-jobi* | Job's Tears. | Alien |
| *Cymbopogon citratus* | Sitonnèl. Lemon Grass. | Alien |
| *Cynodon dactylon* | | Alien |
| *Dactyloctenium aegyptium* | | Alien |
| *Dichanthium annulatum* | | Alien |
| *Diectomis fastigiata* | | |
| *Digitaria insularis* | | |
| *Digitaria setigera* | | Alien |
| **Digitaria bicornis* | | |
| **Digitaria longiflora* | | Alien |
| *Echinochloa colona* | | |
| *Echinochloa polystachya* | | |
| **Echinochloa guadeloupensis* | | Caribbean endemic |
| *Eleusine indica* | | Alien |
| *Eragrostis amabilis* | | Alien |
| *Eragrostis cilianensis* | | Alien |
| *Eragrostis ciliaris* | | Alien |
| *Eragrostis pilosa* | | Alien |
| **Eragrostis prolifera* | | |
| *Eriochloa aristata* | | |

| Scientific name | Common names | Status |
|---|---|---|
| *Gynerium sagittatum* | Wozo. | |
| *Hymnachne amplexicaulis* | | |
| *Hyparrhenia rufa* | | Alien |
| *Ichnanthus nemorosus* | | |
| *Ichnanthus pallens* | | |
| *Isachne disperma* | | Caribbean endemic |
| *Ischaemum rugosum* | | Alien |
| *Ischaemum timorense* | | Alien |
| *Lasiacis divaricata* | Ti Banbou. Banbou Fwans. | |
| *Lasiacis sorghoidea* | Ti Banbou. Banbou Fwans. | |
| *Leptochloa fusca* | | |
| *Leptochloa panicea* | | |
| *Leptochloa virgata* | | |
| *Lithachne pauciflora* | | |
| *Megathyrsus maximus* | Zèb Djiné. Guinea Grass. | Alien |
| *Melinis repens* | | Alien |
| *Olyra latifolia* | | |
| *Oplismenus hirtellus* | | |
| *Oplismenus hirtellus* | | |
| *Orthoclada laxa* | | |
| **Panicum hirsutum* | | |
| *Panicum laxum* | | |
| *Panicum pilosum* | | |
| *Panicum trichanthum* | | |
| *Panicum trichoides* | | |
| *Paspalidium geminatum* | | |
| *Paspalum arundinaceum* | | |
| *Paspalum conjugatum* | | |
| *Paspalum distichum* | | |
| **Paspalum fasciculatum* | | |
| *Paspalum fimbriatum* | | |
| *Paspalum laxum* | | |
| *Paspalum millegrana* | | |
| *Paspalum nesiotes* | | Less. Ant. endemic |
| **Paspalum notatum* | | |
| *Paspalum nutans* | | |
| *Paspalum orbiculatum* | | |
| *Paspalum paniculatum* | | |
| *Paspalum plicatulum* | | |
| *Paspalum saccharoides* | | |
| **Paspalum setaceum* | | |
| *Paspalum urvillei* | | Alien |
| *Paspalum vaginatum* | | |
| *Paspalum virgatum* | | |
| *Pennisetum purpureum* | Elephant Grass. | Alien |
| *Pennisetum setaceum* | | Alien |
| **Pennisetum polystachion* | | Alien |

| Scientific name | Common names | Status |
|---|---|---|
| *Pharus lappulaceus* | | |
| *Phragmites australis* | | Alien |
| *Rottboellia cochinchinensis* | | Alien |
| *Schizachyrium brevifolium* | | |
| *Schizachyrium microstachyum* | | |
| *Schizachyrium salzmannii* | | |
| *Setaria barbata* | | Alien |
| *Setaria parviflora* | | |
| *Setaria setosa* | | |
| **Setaria paniculifera* | | |
| *Sorgum halepense* | | Alien |
| *Spartina patens* | | Alien |
| *Sporobolus indicus* | | |
| *Sporobolus jacquemontii* | | |
| *Sporobolus tenuissimus* | | |
| *Sporobolus virginicus* | | |
| *Stenotaphrum secundatum* | | |
| *Thysanolaena maxima* | | Alien |
| *Tripsacum andersonii* | | Alien |
| **Urochloa adspersa* | | |
| *Urochloa distachya* | | |
| *Urochloa fusca* | | |
| *Urochloa mutica* | | Alien |
| *Urochloa plantaginea* | | |
| *Urochloa reptans* | | Alien |
| Podocarpaceae | | |
| *Podocarpus coriaceus* | Lowyé Woz. | |
| Polygalaceae | | |
| *Polygala paniculata* | Diten Manyòk. | |
| *Securidaca diversifolia* | Lyenn Pak. | |
| *Antigonon leptopus* | | Alien |
| *Coccoloba ascendens* | | |
| *Coccoloba dussii* | | Caribbean endemic |
| *Coccoloba pubescens* | Bwa Gwan Fèy. | Caribbean endemic |
| *Coccoloba swartzii* | Bwa Lanmowi. Wézinyé. | |
| *Coccoloba uvifera* | Wézen. Siwiz. Sea Grape. | |
| *Coccoloba venosa* | | |
| *Persicaria glabra* | | |
| *Persicaria punctata* | | |
| *Triplaris americana* | | Alien |
| Pontederiaceae | | |
| *Eichhornia crassipes* | Water Hyacinth. | Alien |
| Portulacaceae | | |
| *Portulaca halimoides* | | |
| *Portulaca oleracea* | Koupyé. | |
| *Portulaca pilosa* | Chouvalyé Wonzé. | |
| *Portulaca quadrifida* | | Alien |

| Scientific name | Common names | Status |
|---|---|---|
| *Talinum fruticosum* | | |
| *Talinum paniculatum* | | |
| *Drypetes glauca* | | Caribbean endemic |
| Rhamnaceae | | |
| *Colubrina elliptica* | Mabi. | |
| *Gouania lupuloides* | Lyenn Savon. | |
| *Krugiodendron ferreum* | Bwa Di Fè. | |
| *Ziziphus mauritiana* | Koko Kouli. Dunks. | Alien |
| Rhizophoraceae | | |
| *Cassipourea guianensis* | Bwa Di Fè. Bwa Lay. | |
| *Rhizophora mangle* | Manng Wouj. Red Mangrove. | |
| Rosaceae | | |
| *Rubus rosifolius* | Fonbwèz. | Alien |
| Rubiaceae | | |
| *Chimarrhis cymosa* | Bwa Wivyé. | |
| *Chiococca alba* | Kalkan. Kikado. | |
| *Chione venosa* | Manba. | |
| *Chomelia fasciculata* | | Less. Ant. endemic |
| *Diodia virginiana* | | |
| *Erithalis fruticosa* | Bwa Flanbo. | |
| **Exostema caribaeum* | | |
| *Exostema sanctae-Luciae* | China. | Less. Ant. endemic |
| *Faramea occidentalis* | Ti Kafé. | |
| *Genipa americana* | Jénipa. | |
| *Geophila repens* | | |
| *Gonzalagunia spicata* | | |
| *Guettarda crispiflora* | | |
| *Guettarda odorata* | Bwa Djèt. | |
| *Guettarda scabra* | Bwa Madanm. | |
| *Hillia parasitica* | Jasmen Bwa. | |
| *Ixora ferrea* | Bwa Dlo Savann Ti Kafé Mawon. | |
| *Ixora finlaysoniana* | | Alien |
| *Malanea macrophylla* | | |
| *Margaritopsis microdon* | Bwa Genton. | |
| *Mitracarpus hirtus* | | |
| *Morinda citrifolia* | Kòsòl Chyenn. Noni. | Alien |
| *Notopleura guadalupensis* | | |
| *Notopleura uliginosa* | | |
| *Oldenlandia corymbosa* | | Alien |
| *Oldenlandia lancifolia* | | Alien |
| *Palicourea crocea* | Bwa Kilibwi. | |
| *Psychotria berteroana* | | |
| *Psychotria mapourioides* | | |
| *Psychotria muscosa* | | Less. Ant. endemic |
| *Psychotria nervosa* | Ti Kafé Mawon. | |
| *Psychotria pleeana* | | Less. Ant. endemic |
| *Randia aculeata* | Bwa Lans. | |
| *Randia nitida* | | |
| *Richardia scabra* | | |
| *Rondeletia parviflora* | | Less. Ant. endemic |
| *Rosenbergiodendron formosum* | | Alien |
| *Rudgea citrifolia* | Bwa Lay. | Less. Ant. endemic |
| *Schradera exotica* | | Caribbean endemic |
| *Spermacoce confusa* | | |
| *Spermacoce tetraquetra* | | |
| *Spermacoce densiflora* | Ti Makònèt. | |
| *Spermacoce ocymifolia* | | |
| *Spermacoce ovalifolia* | Ti Makònèt. | |
| *Spermacoce prostrata* | | |
| *Spermacoce remota* | Ti Makònèt. | |
| *Spermacoce verticillata* | Ti Makònèt. | |
| *Vangueria madagascariensis* | Tanmawen Dezenn. | Alien |
| Ruppiaceae | | |
| *Ruppia maritima* | | |
| Ruscaceae | | |
| *Sansevieria hyacinthoides* | (Both species) Lanng Bèlmè. | Alien |
| *Sansevieria trifasciata* | Mother-In-Law's Tongue | Alien |
| Rutaceae | | |
| *Amyris elemifera* | | |
| *Citrus aurantiifolia* | Siton. Lime. | Alien |
| *Triphasia trifolia* | Sitonnèl. Sweet Lime. | Alien |
| *Zanthoxylum caribaeum* | Lépini Wouj. | |
| *Zanthoxylum flavum* | Arkokwa. | |
| **Zanthoxylum martinicense* | | |
| *Zanthoxylum microcarpum* | Lépini. | |
| *Zanthoxylum monophyllum* | Lépini. | |
| *Zanthoxylum punctatum* | | Caribbean endemic |
| *Zanthoxylum spinifex* | Bwa Bandé. | |
| Sabiaceae | | |
| *Meliosma herbertii* | | |
| *Casearia decandra* | Bwa Koko Kawèt. | |
| **Casearia guianensis* | | |
| **Casearia sylvestris* | | |
| *Prockia crucis* | | |
| Santalaceae | | |
| *Dendrophthora macrostachya* | Anho Bwa. | Less. Ant. endemic |
| *Phoradendron anceps* | Anho Bwa. | |
| **Phoradendron hexastichum* | | |
| **Phoradendron martinicense* | | |
| *Phoradendron piperoides* | Anho Bwa. | |
| *Phoradendron quadrangulare* | Anho Bwa. | |
| *Phoradendron trinervium* | Anho Bwa. | |
| *Phoradendron chrysocladon* | Anho Bwa. | |
| *Phoradendron tetrapterum* | Anho Bwa. | |

| Scientific name | Common names | Status |
|---|---|---|
| Sapindaceae | | |
| *Allophylus racemosus* | | |
| **Cardiospermum corindum* | | |
| *Cardiospermum microcarpum* | | |
| *Cupania triquetra* | | |
| *Cupania americana* | | |
| *Dodonaea viscosa* | | |
| *Dodonaea angustifolia* | | |
| *Exothea paniculata* | | |
| *Paullinia cururu* | Lyenn Pèsi. | |
| *Paullinia pinnata* | Lyenn Pèsi. | |
| *Paullinia vespertilio* | | Less. Ant. endemic |
| Sapotaceae | | |
| *Chrysophyllum argenteum* | Bwi. Bwi Kayamit. | |
| *Manilkara bidentata* | Balata. | |
| *Micropholis crotonoides* | Balata. | |
| *Micropholis guyanensis* | Fèy Dowé. | |
| *Pouteria multiflora* | Pennépis. | |
| *Pouteria pallida* | Balata Chyen. | Less. Ant. endemic |
| *Pouteria semecarpifolia* | Kontwévan. | Less. Ant. endemic |
| *Sideroxylon foetidissimum* | Akoma. | |
| *Sideroxylon obovatum* | | |
| Schlegeliaceae | | |
| *Schlegelia axillaris* | | Caribbean endemic |
| Schoepfiaceae | | |
| *Schoepfia schreberi* | | |
| Scrophulariaceae | | |
| *Bontia daphnoides* | Sea Olive. | |
| *Capraria biflora* | Dité Péyi. | |
| Simaroubaceae | | |
| *Picramnia pentandra* | Bwa Moudong. | |
| *Picrasma excelsa* | Sip Amé. | |
| *Simarouba amara* | Bwa Blan. | |
| Smilacaceae | | |
| *Smilax guianensis* | Boyo Djab. | Less. Ant. endemic |
| *Smilax oblongata* | Boyo Djab. | Less. Ant. endemic |
| Solanaceae | | |
| *Acnistus arborescens* | Bwa Mou Limou. | |
| *Browallia americana* | | |
| *Capsicum annuum* | | |
| *Capsicum frutescens* | Piman Gwiv. Bird Pepper. | Alien |
| *Cestrum alternifolium* | | |
| *Cestrum latifolium* | | |
| *Cestrum laurifolium* | | |
| *Cestrum megalophyllum* | | |
| *Datura inoxia* | | |
| *Datura stramonium* | Joy Juice. | Alien |
| *Lycianthes pauciflora* | | |
| *Physalis angulata* | Pok Pok. | |
| *Physalis pubescens* | | |
| *Solanum americanum* | Agouman. | |
| *Solanum capsicoides* | Ponm Pwézon. | |
| *Solanum jamaicense* | | |
| *Solanum lanceifolium* | | |
| *Solanum racemosum* | | |
| *Solanum torvum* | Béléjenn Djab. | |
| Staphyleaceae | | |
| *Turpinia occidentalis* | Bwa Lat. | |
| Styracaceae | | |
| *Styrax glabrus* | Sip Zowanj. | |
| Symplocaceae | | |
| *Symplocos martinicensis* | Bwa Blé. Zolivyé. | |
| Theaceae | | |
| *Freziera undulata* | | Less. Ant. endemic |
| *Ternstroemia oligostemon* | Miwiz. | Caribbean endemic |
| *Ternstroemia peduncularis* | Zabwiko Pwanti. Zabwiko Blan. | Caribbean endemic |
| Theophrastaceae | | |
| *Jacquinia arborea* | Flanbo Blan. | Caribbean endemic |
| Thymelaeaceae | | |
| *Daphnopsis americana* | Maho Pimen. | |
| *Daphnopsis macrocarpa* | Maho Pimen Gwan Bwa. | St. Lucia endemic |
| Turneraceae | | |
| *Piriqueta cistoides* | | |
| *Turnera subulata* | Politician's Plant. | Alien |
| *Turnera ulmifolia* | | Alien |
| Ulmaceae | | |
| *Celtis iguanaea* | | |
| *Trema lamarckiana* | | |
| *Trema micranthum* | | |
| *Boehmeria ramiflora* | | |
| *Boehmeria nivea* | Koko Bel Mennwit. China Grass. | Alien |
| *Cecropia schreberiana* | Bwa Kannon. | Caribbean endemic |
| *Laportea aestuans* | | |
| *Phenax sonneratii* | Zoti. | Alien |
| *Pilea caribaea* | Zoti Blan. | Less. Ant. endemic |
| *Pilea inaequalis* | | Caribbean endemic |
| *Pilea involucrata* | | |
| *Pilea microphylla* | | |
| *Pilea nummulariifolia* | | |
| *Pilea semidentata* | | Caribbean endemic |
| *Pilea parietaria* | | |
| **Urera caracasana* | | |
| Verbenaceae | | |
| *Aegiphila martinicensis* | Bwa Kabwit. | |

| Scientific name | Common names | Status |
|---|---|---|
| *Citharexylum spinosum* | Bwa Kòtlèt. | |
| *Cornutia pyramidata* | Bwa Kasav. | |
| *Duranta stenostachya* | | |
| *Lantana arubensis* | Ti Bonbon. | |
| **Lantana involucrata* | | (dubious id) |
| *Lantana strigocamara* | Jiwòf Flè. Bwa Wa Tou. Pis A Bed. | |
| *Lantana radula* | | |
| *Lippia alba* | Twa Tas. | |
| *Petrea volubilis* | Lyenn Wid. | Caribbean endemic |
| *Phyla fruticosa* | | |
| *Priva lappulacea* | Ti Dayi. | |
| *Stachytarpheta cayennensis* | Vèvenn Latjé Wat. | |
| *Stachytarpheta jamaicensis* | Vèvenn Latjé Wat. | |
| *Stachytarpheta urticifolia* | Vèvenn Latjé Wat. | Alien |
| *Tectona grandis* | Teck. Teak. | Alien |
| *Vitex divaricata* | Bwa Léza. | |
| Vitaceae | | |
| *Cissus obovata* | Godmò. | Caribbean endemic |
| *Cissus verticillata* | Godmò. | Alien |
| *Vitis tiliifolia* | | Alien |
| Zingiberaceae | | |
| *Alpinia zerumbet* | Shell Ginger. | Alien |
| *Curcuma longa* | Tjitima. Turmeric. | Alien |
| *Curcuma xanthorrhiza* | Jenjanm Dou. Kashibou. | Alien |
| *Hedychium coronarium* | Lavann. Lavender. | Alien |
| *Renealmia alpinia* | | |
| *Renealmia pyramidalis* | | Less. Ant. endemic |
| **Renealmia occidentalis* | | |
| *Zingiber zerumbet* | Bitter Ginger. | Alien |
| Zygophyllaceae | | |
| *Guaiacum officinale* | Gayak. | |
| *Kallstroemia maxima* | | |
| *Kallstroemia pubescens* | | |



Table B Ferns and their allies (Pteridophytes) of Saint Lucia

Data from Graveson (2009b)

| Family/ Scientific name | Status |
|---|---|
| Anemiaceae | |
| *Anemia adiantifolia* | |
| Aspleniaceae | |
| *Asplenium auritum* | |
| *Asplenium cristatum* | |
| *Asplenium cuneatum* | |
| *Asplenium obtusifolium* | |
| *Asplenium pumilum* | |
| *Asplenium salicifolium* | |
| *Asplenium serra* | |
| *Asplenium serratum* | |
| Blechnaceae | |
| *Blechnum fragile* | |
| *Blechnum occidentale* | |
| *Blechnum ryanii* | Less. Ant. endemic |
| *Blechnum serrulatum* | |
| *Salpichlaena volubilis* | |
| Cyatheaceae | |
| *Alsophila imrayana* | |
| *Alsophila muricata* | Less. Ant. endemic |
| *Cyathea arborea* | |
| *Cyathea grandifolia* | |
| *Cyathea tenera* | |
| *Dennstaedtiaceae* | |
| *Dennstaedtia dissecta* | |
| Dennstaedtiaceae | |
| *Hypolepis repens* | |
| *Pteridium arachnoideum* | |
| Dryopteridaceae | |
| *Elaphoglossum apodum* | |
| *Elaphoglossum crinitum* | |
| *Elaphoglossum herminieri* | |
| *Elaphoglossum latifolium* | |
| *Elaphoglossum martinicense* | Caribbean endemic |
| *Elaphoglossum petiolatum* | |
| *Elaphoglossum plumieri* | Caribbean endemic |
| *Megalastrum subincisum* | |
| *Olfersia cervina* | |
| *Polysichopsis muscosa* | |
| *Stigmatopteris rotundata* | |
| Gleicheniaceae | |
| *Dicranopteris flexuosa* | Less. Ant. endemic |
| *Gleichenella pectinata* | |
| *Sticherus bifidus* | |
| Hymenophyllaceae | |
| *Hymenophyllum fucoides* | |
| *Hymenophyllum hirsutum* | |
| *Hymenophyllum lanatum* | |

| Family/ Scientific name | Status |
|---|---|
| *Hymenophyllum polyanthos* | |
| *Trichomanes alatum* | Caribbean endemic |
| *Trichomanes angustifrons* | |
| *Trichomanes crispum* | |
| *Trichomanes hymenoides* | |
| *Trichomanes hymenophylloides* | |
| *Trichomanes krausii* | |
| *Trichomanes lineolatum* | |
| *Trichomanes membranaceum* | |
| *Trichomanes osmundoides* | |
| *Trichomanes pinnatum* | |
| *Trichomanes polypodioides* | |
| *Trichomanes punctatum* | |
| *Trichomanes rigidum* | |
| *Trichomanes trigonum* | Less. Ant. endemic |
| Lindsaeaceae | |
| *Lindsaea lancea* | |
| *Lindsaea quadrangularis* | |
| *Lonchitis hirsuta* | |
| Lomariopsidaceae | |
| *Lomariopsis sorbifolia* | Caribbean endemic |
| *Nephrolepis biserrata* | |
| *Nephrolepis brownii* | Alien |
| *Nephrolepis rivularis* | |
| Lycopodiaceae | |
| *Huperzia acerosa* | |
| *Huperzia aqualupiana* | |
| *Huperzia dichotoma* | |
| *Huperzia linifolia* | |
| *Huperzia taxifolia* | |
| *Huperzia wilsonii* | |
| *Lycopodiella cernua* | |
| Marattiaceae | |
| *Danaea alata* | Caribbean endemic |
| *Danaea antillensis* | Less. Ant. endemic |
| Oleandraceae | |
| *Oleandra articulata* | |
| Ophioglossaceae | |
| *Ophioglossum harrisii* | |
| Polypodiaceae | |
| *Campyloneurum brevifolium* | |
| *Campyloneurum cf. angustifolium* | |
| *Campyloneurum phyllitidis* | |
| *Campyloneurum repens* | |
| *Cochlidium seminudum* | |
| *Cochlidium serrulatum* | |
| *Lellingeria suspensa* | |
| *Microgramma lycopodioides* | |
| *Microgramma piloselloides* | |
| *Micropolypodium taenifolium* | Caribbean endemic |
| *Neurodium lanceolatum* | |
| *Niphidium crassifolium* | |
| *Pecluma pectinata* | |
| *Phlebodium aureum* | |
| *Pleopeltis astrolepis* | |
| *Pleopeltis polypodioides* | |
| *Serpocaulon dissimile* | |
| *Serpocaulon loriceum* | |
| *Serpocaulon triseriale* | |
| *Terpsichore aspleniifolia* | |
| Psilotaceae | |
| *Psilotum nudum* | |
| Pteridaceae | |
| *Acrostichum aureum* | |
| *Acrostichum danaeifolium* | |
| *Adiantopsis radiata* | |
| *Adiantum fragile* | Caribbean endemic |
| *Adiantum latifolium* | |
| *Adiantum obliquum* | |
| *Adiantum tetraphyllum* | |
| *Adiantum villosum* | |
| *Ananthacorus angustifolius* | |
| *Anetium citrifolium* | |
| *Hemionitis palmata* | |
| *Pityrogramma calomelanos* | |
| *Pityrogramma chrysophylla* | Caribbean endemic |
| *Polytaenium dussianum* | |
| *Polytaenium feei* | |
| *Pteris arborea* | |
| *Pteris longifolia* | |
| *Pteris tripartita* | Alien |
| *Pteris vittata* | Alien |
| *Vittaria lineata* | |
| Saccolomataceae | |
| *Saccoloma inaequale* | |
| Schizaeaceae | |
| *Anemia adiantifolia* | |
| Selaginellaceae | |
| *Selaginella flabellata* | |
| *Selaginella plana* | Alien |
| *Selaginella rotundifolia* | Less. Ant. endemic |
| *Selaginella substipitata* | |
| *Selaginella tenella* | |
| Tectariaceae | |
| *Tectaria heracleifolia* | |
| *Tectaria incisa* | |
| *Tectaria plantaginea* | |
| *Tectaria trifoliata* | |
| Thelypteridaceae | |
| *Macrothelypteris torresiana* | Alien |
| *Thelypteris balbisii* | |
| *Thelypteris clypeolutata* | Less. Ant. endemic |
| *Thelypteris decussata* | |
| *Thelypteris dentata* | Alien |
| *Thelypteris extensa* | Alien |
| *Thelypteris germaniana* | |
| *Thelypteris glandulosa* | |
| *Thelypteris hispidula* | Caribbean endemic |
| *Thelypteris nephrodioides* | |
| *Thelypteris opposita* | |
| *Thelypteris pennata* | |
| *Thelypteris poiteana* | |
| *Thelypteris reticulata* | |
| *Thelypteris sancta* | |
| *Thelypteris tetragona* | |
| Woodsiaceae | |
| *Diplazium cristatum* | |
| *Diplazium limbatum* | |
| *Diplazium striatum* | |
| *Hemidictyum marginatum* | |

Table C Beetles of Saint Lucia

Unpublished data from M. Ivie

| Scientific name | Status |
|---|---|
| **Carabidae** | |
| *Aspidoglossa schach (Fabricius)* | |
| *Aspidoglossa cribrata Putzeys* | |
| *Clivina (Paraclivina) marginipennis Putzeys* | Alien |
| *Clivina (Paraclivina) tuberculata Putzeys* | Alien |
| *Clivina (Semiclivina) oblita Putzeys* | |
| *Halocoryza arenaria (Darlington)* | |
| *Micratopus n. sp.* | |
| *Megastylulus pivai Giachino & Sciaky* | Saint Lucia endemic |
| *Stylulus isabelae Giachino & Sciaky* | Saint Lucia endemic |
| *Pentagonica maculicornis Bates* | |
| *Pentagonica flavipes LeConte* | |
| *Dyscolus luciae (Liebherr)* | Saint Lucia endemic |
| *Glyptolenus chalybaeus (Dejean)* | Alien |
| *Anchonoderus humeralis Bates* | |
| *Calleida amethystine (Fabricius)* | Alien |
| *Colliuris sp.* | |
| *Pachyteles sp.* | |
| *Cicindella suturalis Fabricius* | |
| *Brasiella argentata (Fabricius)* | |
| *Lebia marginicollis Dejean* | |
| *Lebia sp* | |
| *Apenes marginalis Dejean* | |
| *Apenes variegata Dejean* | |
| *Apenes n. sp. Ball and Shpley* | Saint Lucia endemic |
| *Thalpius sp.* | |
| *Perileptus dentifer Darlington* | Caribbean endemic |
| *Phloeoxena n. sp.* | Saint Lucia endemic? |
| *Athrostictus paganus Dejean* | |
| *Selenophorus alternans* | |
| *Selenophorus discopunctatus Dejean* | |

| Scientific name | Status |
|---|---|
| *Selenophorus sinuatus Gyllenhall* | Caribbean endemic |
| *Selenophorus latior Darlington* | Caribbean endemic |
| *Selenophorus striatopunctatus Putzeys* | |
| *Selenophorus parvus Darlington* | Caribbean endemic |
| *Selenophorus chalybeus Dejean* | Caribbean endemic |
| *Selenophorus n.sp. nonseriatus* | Saint Lucia endemic? |
| *Loxandrus sp. #1 bicolored* | ? |
| *Loxandrus n.sp. #2 black flightless* | Saint Lucia endemic |
| *Paratachys (Eotachys) bleoides (Jennel)* | Alien |
| *Paratachys sp. 1* | |
| *Paratachys sp. 2* | |
| *Paratachys sp. 3* | |
| *Paratachys sp. 4* | |
| *Paratachys sp. 5* | |
| *Paratachys sp. 6* | |
| *Mioptachys n. sp.* | Saint Lucia endemic? |
| **Haliplidae** | |
| *Haliplus gravidus Aubé* | |
| **Dytiscidae** | |
| *Copelatus posticatus Fabricius* | |
| *Copelatus sp.* | |
| *Laccophilus proximus Say* | |
| *Laccophilus sp. not proximus* | |
| *Hydrovatus pustulatus Melsheimer* | |
| *Megadytes fraternus Sharp* | |
| *Thermonectes basilaris (Harris)* | |
| *Celina sp.* | ? |
| **Noteridae** | |
| *Suphisellus binotatus (Fleutiaux & Sallé)* | Caribbean endemic |
| *Mesonoterus? sp.* | ? |
| *Notomicrus sp.* | ? |

| Scientific name | Status |
|---|---|
| **Rhysodidae** | |
| *Clinidium n. sp.* | Saint Lucia endemic |
| **Hydrophilidae** | |
| *Berosus stribalus d'Orchymont* | Caribbean endemic |
| *Enochrus bartlettii Short* | Caribbean endemic |
| *Hydrophilus intermedius Jac.DuVal* | |
| *Hydrobiomorpha phallica (d'Orchymont)* | |
| *Helochares abbreviatus* | |
| *Enochrus aequalis (Sharp)* | |
| *Dactylosternum abdominalis (Fabricius)* | |
| *Phaenonotum exstriatum (LeConte)* | |
| *Ceryon variegatus Sharp* | |
| *Paracymus delatus Wooldridge* | Caribbean endemic |
| *Pelosoma sp.* | ? |
| *Aculomicrus n.sp.* | Saint Lucia endemic? |
| *Omicrus palmarum (Schwarz)* | Caribbean endemic |
| *Hydrophidid genus?* | |
| *Oosternus costatum Sharp* | |
| *Tropisternus lateralis (Fabricius)* | |
| *Tropisternus sp.* | |
| *Paracymus confusus Wooldridge* | |
| **Histeridae** | |
| *Peromalus sp.* | ? |
| *Omalodes sp.* | ? |
| *Euspilotus sp. #1* | ? |
| *Euspilotus sp. #2* | ? |
| *Bacanius sp. #1* | ? |
| *Bacanius? sp. #2* | ? |
| *Bacanius? sp. #3* | ? |
| *Bacanius? sp. #4* | ? |

| Scientific name | Status |
|---|---|
| *Bacanius? sp. #5* | ? |
| *Aeletes sp.* | ? |
| *Teretriosoma sp.* | ? |
| *Hololepta sp.* | ? |
| *Hister servus Erichson* | |
| **Hydraenidae** | |
| *Hydraena guadelupennsis d'Orchymont* | |
| **Ptiliidae** | |
| *Ptiliid # 1+* | |
| *Ptiliid # 2* | |
| *Ptiliid # 3* | |
| *Ptiliid # 4* | |
| **Leiodidae** | |
| *Zeadolopus sp. #1 smooth striae* | Saint Lucia endemic? |
| *Zeadolopus sp. #2 impressed striae* | Saint Lucia endemic? |
| *Zeadolopus sp. #3 no striae* | Saint Lucia endemic? |
| *Aglyptinus sp. #1 small black* | Saint Lucia endemic? |
| *Aglyptinus sp. #2 large brown* | Saint Lucia endemic? |
| *Aglyptinus sp. #3 brown w/ setae on elytra* | Saint Lucia endemic? |
| *Aglyptinus sp. #4 metallic* | Saint Lucia endemic? |
| *Dissochaetus sp.* | Saint Lucia endemic? |
| *Creagrophorus sp.* | Saint Lucia endemic? |
| **Scydmaenidae** | |
| *Scydmaenus sp.* | Saint Lucia endemic? |
| *Microscydmus sp.* | Saint Lucia endemic? |
| *Euconnus sp. 1* | Saint Lucia endemic? |
| *Euconnus sp. 2* | Saint Lucia endemic? |
| *Euconnus sp. 3* | Saint Lucia endemic? |
| *Euconnus sp. 4* | Saint Lucia endemic? |
| *Euconnus sp. 5* | Saint Lucia endemic? |
| *Euconnus sp. 6* | Saint Lucia endemic? |
| **Staphylinidae** | |
| *Adinopsis myllaenoides Kraatz* | |
| *Atheta conformis Erichson* | |
| *Gnypetosoma basalis Cam.* | |
| *Gnypetosoma sanctae-luciae Cam.* | Saint Lucia endemic |
| *Gyrophaena oblita Shp.* | |
| *Myllaena fragilis Shp.* | |
| *Myllaena indefatigabilis Cam.* | Saint Lucia endemic |
| *Stethusa lurida Erichson* | |
| *Pseudespeson crassulus (Fauvel)* | Less. Antill. endemic |
| *Espeson moratus Schauf.* | |
| *Lispinus catena Sharp* | |
| *Clavilispinus megacephalus (Fauvel)* | |
| *Clavilispinus exiguus (Erichson)* | |
| *Clavilispinus politus (Sharp)* | |
| *Tannea tenellus (Erichson)* | |
| *Nacaeus nigrifrons (Chevrolat and Fauvel)* | |
| *Thoracophorus exilis (Erichson)* | Caribbean endemic |
| *Thoracophorus guadelupensis Cameron* | |
| *Thoracophorus simplex Wendeler* | Caribbean endemic |
| *Anotylus insignitus (Gravenhorst)* | |
| *Carpelimus beattyi Blackwelder* | Caribbean endemic |
| *Carpelimus correctus Blackwelder* | |
| *Carpelimus flavipes Erichson* | |
| *Oxytelus incisus Motschulsky* | |
| *Platystethus spiculus Erichson* | |
| *Trogactus (Carpelimus) cornucopius Blackwelder* | Caribbean endemic |
| *Astenus cinctiventris Shp.* | |
| *Lithocharis dorsalis Er.* | |
| *Lithocharis limbata Erichson* | |
| *Lithocharis secunda Blackwelder* | Caribbean endemic |
| *Lithocharis sororcula Kr.* | Caribbean endemic |
| *Lathrobium nitidum Erichson* | |
| *Medon johni Blackwelder* | Caribbean endemic |
| *Scopaeus antennalis Cam.* | Caribbean endemic |
| *Scopaeus arena Blackwelder* | Saint Lucia endemic |
| *Scopaeus boxi Blackwelder* | Saint Lucia endemic |
| *Scopaeus potamus Blackwelder* | Saint Lucia endemic |
| *Scopaeus pygmaeus Erichson* | Caribbean endemic |
| *Scopobium anthracinum Cam.* | Less. Antill. endemic |
| *Stilomedon connexum (Sharp)* | |
| *Sunius debilicornis Woll.* | |
| *Sunius oblitus Erichson* | |
| *Thinocharis exilis (Erichson)* | |
| *Thinocharis smithi Cameron* | Less. Antill. endemic |
| *Piestus erythropus Erichson* | |
| *Piestus penicillatus Dalman* | |
| *Piestus pygmaeus Laporte* | |
| *Piestus sulcatus Gravenhorst* | |
| *Belonuchus amplus Blackwelder* | Saint Lucia endemic |
| *Belonuchus mundus Erichson* | Less. Antill. endemic |
| *Cafius bistriatus (Erichson)* | |
| *Diochus nanus Erichson* | |
| *Neobisnius funerulus Cameron* | Less. Antill. endemic |
| *Holisus debilis Erichson* | Caribbean endemic |
| *Holisus guildingi Erichson* | Caribbean endemic |
| *Neobisnius ludicrus Erichson* | |
| *Neohypnus (Xantholinus) illucens Erichson* | |
| *Philonthus ventralis (Gravenhorst)* | |
| *Coproporus cacao Blackwelder* | |
| *Coproporus ebonus Blackwelder* | Caribbean endemic |
| *Coproporus pulchellus (Erichson)* | |
| *Coproporus sharpi Cam.* | Less. Antill. endemic |
| **Passalidae** | |
| *Passalus unicornis Lepeltier and Audinet-Serville* | |
| *Spasalus crenatus (Macleay)* | |
| **Trogidae** | |
| *Omorgus suberosus (Fabricius)* | Alien |
| **Hybosoridae** | |
| *Germarostes rufopiceus (Arrow)* | Less. Antill. endemic |

| Scientific name | Status |
|---|---|
| *Ceratocanthus n.sp.* | Saint Lucia endemic |
| **Geotrupidae** | |
| *Neoathyreus ?lanei Martínez* | |
| **Scarabaeidae** | |
| *Aphodius cuniculus* | Alien |
| *Nialaphodius nigritus* | Alien |
| *Ataenius luteomargo* | Alien? |
| *Ataenius attenuator* | Alien? |
| *Ataenius liogaster* | Alien? |
| *Ataenius morator* | Alien? |
| *Ataenius strigicauda* | Alien? |
| *Ataenius scutellaris* | Alien? |
| *Ataenius sp? beattyi-camenis group* | Saint Lucia endemic? |
| *Ataenius carinator Harold* | **or Alien** |
| *Iguazua blackwelderi (Chapin)* | |
| *Saprosites exaratus Fleutiaux & Sallé* | Less. Antill. endemic |
| *Ateuchus luciae Matthews* | Saint Lucia endemic |
| *Pseudocanthon iuanalaoi Matthews* | Saint Lucia endemic |
| *Onthophagus gazellae (F.)* | Alien |
| *Chalepides barbatus (F.)* | |
| *Dynastes hercules reidi Chalumeau* | Less. Antill. endemic |
| *Cyclocephala tridentata (F.)* | |
| *Cyclocephala melanocephala (F.)* | |
| *Tomarus ebenus DeGeer* | |
| *Tomarus cuniculus (F.)* | |
| *Phileurus valgus (Linneaus)* | |
| *Phileurus didymus (Linneaus)* | |
| *Rutela striata antiqua Ohaus* | Less. Antill. endemic |
| *Anomala luciaeBlanchard* | Less. Antill. endemic |
| *Leucothyreus luciae B33* | Saint Lucia endemic |
| *Paragymnetis rudolphi Frölich* | Saint Lucia endemic |
| *Phyllophaga blackwelderi Saylor* | Saint Lucia endemic |
| *Phyllophaga n. sp.* | Saint Lucia endemic |
| **Scirtidae** | |
| *Cyphon sp. 1* | |
| *Cyphon sp. 2* | |
| *Ora sp.1* | |
| *Ora sp.2* | |
| *Ora sp.3* | |
| *Ora sp.4* | |
| *Scirtes sp.1* | |
| **Buprestidae** | |
| *Neotrachys fennahi Théry* | Less. Antill. endemic |
| *Acmaeodera villiersi Descarpentiers* | Less. Antill. endemic |
| *Polycesta depressa Linn.* | Caribbean endemic |
| *Chrysobothris n.sp.* | Saint Lucia endemic |
| *Aphanisticus cochinchinae* | Alien |
| *Spectralia n.sp.* | Saint Lucia endemic? |
| *"Micrasta" uniformis* | Caribbean endemic |
| **Elmidae** | |
| *Hexanchorus caraibus Coquerel* | Less. Antill. endemic |
| *Hexacylloepus smithi(?) Grouvelle* | Less. Antill. endemic |
| *Hexacylloepus n. sp.* | Saint Lucia endemic |
| **Limnichidae** | |
| *Corrinea n.sp.* | Saint Lucia endemic? |
| **Heteroceridae** | |
| *Tropicus sp.* | |
| **Cneoglossidae** | |
| *Cneoglossa n.sp* | Saint Lucia endemic |
| **Ptilodactylidae** | |
| *Lachnodactyla sp.* | Saint Lucia endemic? |
| *Ptilodactyla sp. #1* | Saint Lucia endemic? |
| *Ptilodactyla sp. #2* | Saint Lucia endemic? |
| *Ptilodactyla sp. #3* | Saint Lucia endemic? |
| *Ptilodactyla sp. #4* | Saint Lucia endemic? |
| *Ptilodactyla sp. #5* | Saint Lucia endemic? |
| *Ptilodactyla sp. #6* | Saint Lucia endemic? |
| *Ptilodactyla sp. #7* | Saint Lucia endemic? |
| *Ptilodactyla sp. #8* | Saint Lucia endemic? |
| *Ptilodactyla sp. #9* | Saint Lucia endemic? |
| *Ptilodactyla sp. #10* | Saint Lucia endemic? |
| **Chelonariidae** | |
| *Chelonarium sp.* | |
| **Callirhipidae** | |
| *Callirhipis lherminieri LaPorte* | Less. Antill. endemic |
| **Elateridae** | |
| *Chalcolepidius validus Candèze* | Less. Antill. endemic |
| *Lygelater ignitus Fabricius* | |
| *Ignelater luminosus Illiger* | Caribbean endemic |
| *Pyrophorus mellifluus Costa* | Caribbean endemic? |
| *Pyrophorus mellitus Costa* | Saint Lucia endemic? |
| *Lissomus sp.* | |
| *Dicrepidius sp. #1* | |
| *Dicrepidius sp. #2* | |
| *Elaterid #1* | |
| *Elaterid #2* | |
| *Elaterid #4* | |
| *Elaterid #3* | |
| *Elaterid #5* | |
| *Elaterid #6* | |
| *Elaterid #7* | |
| *Elaterid #8* | |
| **Eucnemidae** | |
| *Eucnemid #1* | |
| *Eucnemid #2* | |
| *Eucnemid #3* | |
| *Eucnemid #4* | |
| *Eucnemid #5* | |
| *Eucnemid #6* | |
| **Lampyridae** | |
| *Aspisoma insperatum E. Olivier* | ? |
| *Photinus santaelucia McDermott* | Saint Lucia endemic |
| *Aspisoma ignium (L.)* | Alien |
| *Lucidota sp.* | Saint Lucia endemic |
| *Photuris (? Diurnal)* | Saint Lucia endemic |

| Scientific name | Status |
|---|---|
| *Photinus sp. #1* | Saint Lucia endemic |
| *Rhobopus sp.* | Saint Lucia endemic |
| **Lycidae** | |
| *Mesopteron sulphureum (Kleine)* | Saint Lucia endemic |
| **Cantharidae** | |
| *Tylocerus sp.* | Saint Lucia endemic |
| *Tytthonyx sp. #1* | Saint Lucia endemic |
| *Tytthonyx sp. #2* | Saint Lucia endemic |
| *Tytthonyx sp. #3* | Saint Lucia endemic |
| **Dermestidae** | |
| *Attagenus sp.* | |
| **Bostrichidae** | |
| *Amphicerus cornutus (Pallas)* | Alien |
| *Xylomeira tridens (Fabricius)* | Alien |
| *Tetrapriocera longicornis (Olivier)* | Alien |
| *Melalgus caribeanus Lesne* | Less. Antill. endemic |
| *Lyctus carribea Lesne* | Caribbean endemic |
| *Lyctus sp.* | Alien |
| *Dinoderus sp.* | Alien |
| **Anobiidae** | |
| *Ptinus sp.* | |
| *Lasioderma sp.* | |
| *Protheca sp.* | |
| *Tricorynus sp. 1* | |
| *Tricorynus sp. 2* | |
| *Tricorynus sp. 3* | |
| *Petalium sp.* | |
| *Cryptoramorphus ? sp.* | |
| *Cryptorama sp. 1* | |
| *Cryptorama sp. 2* | |
| *Cryptorama sp. 3* | |
| *Calymmaderus sp.* | |
| **Cleridae** | |
| *Neorthopleura murina (Klug)* | |
| *Clerid sp.* | Saint Lucia endemic? |

| Scientific name | Status |
|---|---|
| **Trogositidae** | |
| *Temnochila obscura Reitter* | Less. Antill. endemic |
| *Tenebroides sp. #1* | |
| *Tenebroides sp. #2* | |
| *Colydobius sp.* | |
| **Melyridae** | |
| *Ablechrus sp. #1* | |
| *Ablechrus sp. #2* | |
| *Ablechrus sp. nr. Nigrocoerleus* | Less. Antill. endemic? |
| *Melyrodes n. sp.* | Saint Lucia endemic? |
| **Lymexylidae** | |
| *Atractocerus brasiliensis Lepeletier & Audinet Ser.* | |
| **Smicripidae** | |
| *Smicrips sp.* | |
| **Monotomdae** | |
| *Monotoma sp.* | Alien |
| *Europs sp. 1* | |
| *Europs sp. 2* | |
| **Nitidulidae** | |
| *Carpophilus sp. 1* | |
| *Carpophilus sp. 2* | |
| *Carpophilus sp. 3* | |
| *Euparea luteolus (Fabricius)* | Alien |
| *Lobiopa insularis (Castelnau)* | |
| *Stelidota sp. 1* | |
| *Stelidota sp. 2* | |
| *Colopterus sp. 1* | |
| *Colopterus sp. 2* | |
| *Conotelus sp.* | |
| **Silvanidae** | |
| *Cathartosilvanus sp.* | |
| *Telephanus sp. 1* | Saint Lucia endemic |
| *Telephanus sp. 2* | Saint Lucia endemic |
| *Cathartus sp.* | |

| Scientific name | Status |
|---|---|
| *Ahasverus sp.* | |
| **Laemophloeidae** | |
| *Laemophloeus sp. 1* | |
| *Laemophloeus sp. 2* | |
| *Laemophloeus sp. 3* | |
| *Phloeolaemus sp. 1* | |
| *Phloeolaemus sp. 2* | |
| *Placonotus sp.* | |
| *Dysmerus sp.* | |
| *Lepidophloeus sp.* | |
| *Cryptolestes sp.* | |
| *Laemo? Sp.* | |
| **Phalacridae** | |
| *Acylomus sp. 1* | |
| *Acylomus sp. 2* | |
| *Acylomus sp. 3* | |
| *Xanthacomus sp.* | |
| **Bothrideridae** | |
| *Sosylus sp.* | |
| *Bothrideres sp.* | |
| **Endomychidae** | |
| *Eiodereus sp.* | Alien |
| *"Micropsephodes" sp.* | Saint Lucia endemic? |
| *Adamia n. sp. or n. genus* | Saint Lucia endemic |
| **Erotylidae** | |
| *Ischyrus quadripunctatus (Olivier)* | |
| *Hapalips sp.* | |
| *Loberus sp. #1* | |
| *Toramus sp. #1* | |
| *Toramus sp. #2* | |
| *Platoberus dufaui Grouvelle* | Less. Antill. endemic |
| **Coccinellidae** | |
| *Diomus roseicollis (Mulsant)* | Alien |
| *Diomus sp. 1* | |
| *Diomus sp. 2* | |

| Scientific name | Status |
|---|---|
| *Diomus sp.3* | |
| *Diomus sp. 4* | |
| *Diomus sp. 5* | |
| *Cladis nitidula (Fabricius)* | Caribbean endemic |
| *Nephaspis equuleus Gordon* | Less. Antill. endemic? |
| *Nephaspis sp. 1* | |
| *Nephaspis sp. 2* | |
| *Stethorus caribus Gordon & Chapin* | Caribbean endemic |
| *Pseudoazya trinitatis Marshall* | Alien |
| *Cycloneda sanguinea* | |
| *Coleophora inaequalis (Fabricius)* | Alien |
| *Chilocorus cacti (Linneaus)* | |
| *Coleomegilla sp.* | |
| *Exochomus sp.* | ? |
| *Exoplectra sp.* | ? |
| *Hyperaspis sp.* | |
| *Psyllobora parvinotata Casey* | ? |
| *Delphastus n.sp. nr. nebulosus* | Saint Lucia endemic |
| *Delphastus sp.* | Saint Lucia endemic? |
| *Decadiomus sp. 1* | |
| *Scotoscymnus sp. 1* | |
| *Nephus sp. 1* | |
| *Orthoperus sp.* | |
| *Arthrolips sp. 1* | |
| *Arthrolips sp. 2* | |
| *Holopsis sp.* | |
| *Sericoderus sp.* | |
| *Genus 1? sp.* | |
| *Genus 2? sp.* | |
| **Cerylonidae** | |
| *Philothermus sp.* | |
| *Botrodus sp.* | |
| *Metacerylon sp.* | |
| *Mychocerus sp. 1* | |
| *Mychocerus sp. 2* | |
| **Latridiidae** | |
| *Latridiid sp. #1* | ? |
| *Caserus sp.* | ? |
| **Ciidae** | |
| *Ceracis furcatus* | |
| *Ceracis pullulus Casey* | |
| *Ceracis sp. #1* | |
| *Cis mellei Cockerel* | |
| *Cis cerberrimus Mellié* | |
| *Cis sp. #1* | |
| *Cis sp. #2* | |
| *Cis sp. #3* | |
| *Cis sp. #4* | |
| *Cis sp. #5* | |
| *Cis sp. #6* | |
| *Cis sp. #7* | |
| *Cis sp. #8* | |
| *Scolytocis cariborum Lopes-Andrade* | Less. Antill. endemic |
| **Mycetophagidae** | |
| *Litargus sp. 1* | |
| *Litargus sp. 2* | |
| **Meloidae** | |
| *Pseudozonitis marginata (Fabricius)* | Caribbean endemic |
| *Pseudozonitis obscuricornis (Chevrolat)* | Caribbean endemic |
| **Salpingidae** | |
| *Inopeplus assitans Blackwelder* | Saint Lucia endemic |
| *Inopeplus smooth head dark antennomeres* | Saint Lucia endemic |
| *Serrotibia iviei Escalona* | Saint Lucia endemic |
| *nr. Sosthenes* | Saint Lucia endemic? |
| *Prostomininae sp. #1* | Saint Lucia endemic? |
| *Prostomininae sp. #2* | Saint Lucia endemic? |
| *Prostomininae sp. #3* | Saint Lucia endemic? |
| **Oedemeridae** | |
| *Oxycopis sp. 1* | |
| *Oxycopis nr. quadrilineata* | Saint Lucia endemic |
| *Hypasclera sp. 1* | |
| *Paroxacis sp.* | |
| *Ascalera sp. 1* | Saint Lucia endemic |
| *Ascalera sp. 2* | Saint Lucia endemic |
| *Ascalera sp. 3* | Saint Lucia endemic |
| **Mordellidae** | |
| *Gliptostenoda sp.1* | |
| *Mordellistena sp.1* | |
| *Falsomordellistena sp.1 ?* | |
| *Gliptostenoda sp.2* | |
| *Tolidomordella sp. 1* | |
| *Falsomordellistena sp.2 ?* | |
| *Falsomordellistena sp. 3 ?* | |
| **Rhipiphoridae** | |
| *Macrosiagon sp.1* | |
| *Macrosiagon sp.2* | |
| **Colydiidae** | |
| *Synchita sp.* | |
| *Lasconotus sp.* | |
| *Monoedus sp.* | |
| *Nematidium sp.* | |
| *Eucicones sp.* | |
| *Paha sp.* | |
| *Bitoma sp.* | |
| *Eulachus sp.* | |
| *Plagiope sp.* | Saint Lucia endemic? |
| **Zopheridae** | |
| *Pycnomerus n. sp.* | Saint Lucia endemic |
| *Pycnomerus infimus (Grouvelle)* | Less. Antill. endemic |
| *Pycnomerus uniformis Ivie & Slipinski* | Less. Antill. endemic |
| *Pycnomerus biimpressus Reitter* | |
| **Tenebrionidae** | |
| *Alegoria dilatata* | Alien |

| Scientific name | Status |
|---|---|
| *Ammodonus ciliatus Champion* | |
| *Opatrinus (O.) clathratus* | |
| *Phaleria fulva Fleutiaux & Salle* | |
| *Phaleria testacea Say* | |
| *Uloma parvula Champion* | Less. Antill. endemic |
| *Uloma retusa (Fabricius)* | |
| *Palembus ocularis ?* | Alien |
| *Cymatothes tristis LaPorte* | Alien |
| *Cyrtosoma n.sp.* | Saint Lucia endemic |
| *Zypoetes ?* | ? |
| *Dioedus sp. w/2 seg club* | |
| *Dioedus sp. w/3 seg club* | |
| *Archeoglenes n. sp.* | Saint Lucia endemic |
| *Talanus sp.#1* | Saint Lucia endemic? |
| *Talanus sp.#2* | Saint Lucia endemic? |
| *Ortheolus sp. nr. antillarum (Champion)* | |
| *Patydema s. prob. apicenotatum Champion* | Less. Antill. endemic? |
| *Diaperis maculata Olivier* | |
| *Gondwanocrypticus prob. undatus (Champion)* | Less. Antill. endemic? |
| *Blapstinus (Diastolinus) n.sp.* | Saint Lucia endemic |
| *Lorelus sp.* | |
| *Lorelopsis sp.* | |
| *Lorelus sp. small eyes* | Saint Lucia endemic |
| *Tyrtaeus rufus* | Alien |
| *Corticeus sp.* | |
| *Alphitobius laevigatus (Fabricius)* | Alien |
| *Rhipidandrus cornutus (Arrow)* | |
| *Zophobas sp.* | Alien |
| *Lystronychus n. sp.* | Saint Lucia endemic |
| *Lobopoda n. sp.#1* | Saint Lucia endemic |
| *Lobopoda n. sp.#2* | Saint Lucia endemic |
| *Statria n. sp.* | Saint Lucia endemic |
| *Adelina sp.* | |

| Scientific name | Status |
|---|---|
| *Cryptozoon n.sp.* | Saint Lucia endemic |
| *Gnatocerus sp.* | Alien |
| *Trachyscleis aphodiodes Latreille* | Alien |
| *Hesiotes n. sp.* | Saint Lucia endemic |
| **Anthicidae** | |
| *Anthicinae sp.* | ? |
| *Mecynotarsus prob. shenklingi Pic* | |
| **Aderidae** | |
| *Zonanthes sp.* | |
| *Ganascus sp. 1* | |
| *Ganascus sp. 2* | |
| *Ganascus sp. 3* | |
| *Pseudariotes sp. 1* | |
| *Pseudariotes sp. 2* | |
| **Cerambycidae** | |
| *Hesperandra glabra(DeGeer)* | |
| *Mallodon spinibarbis(Linnaeus)* | |
| *Solenoptera luciae (Lameere)* | Saint Lucia endemic |
| *Solenoptera canaliculata (Fabricius)* | Less. Antill. endemic |
| *Strongylapsis corticarius (Erichson)* | |
| *Chlorida festiva Linnaeus* | Alien |
| *Achryson surinamum (Linnaeus)* | Alien |
| *Methia necydalea (Fabricius)* | |
| *Bonfilsia n. sp.* | Saint Lucia endemic |
| *Nesanoplium dalensi Chalumeau & Touroult* | Saint Lucia endemic |
| *n. gen. n. sp.* | Saint Lucia endemic |
| *Curtomerus flavus Fabricius* | Alien |
| *Caribbomerus nr. attenuatus* | |
| *Neocompsa cylindricollis (F.)* | |
| *Mionochroma elegans (Olivier)* | Less. Antill. endemic |
| *Mionochroma rufescens* | Caribbean endemic |
| *Eburia n. sp.* | Saint Lucia endemic |
| *Eburia insulana Gahan* | Less. Antill. endemic |
| *Eburia inermis (Fleutiaux & Sallé)* | Less. Antill. endemic |

| Scientific name | Status |
|---|---|
| *Stizocera daudini Chalumeau & Touroult* | Less. Antill. endemic |
| *Elaphidion glabratum* | Caribbean endemic |
| *Ochrus ornatus* | |
| *Taniotes leucogrammus Thompson* | Less. Antill. endemic |
| *Paraclymntemnestra lineata (Fisher)* | Saint Lucia endemic |
| *Oncideres amputator (F.)* | Caribbean endemic |
| *Carnedes n. sp.* | Saint Lucia endemic |
| *Mimestoloides bernardi Breuning* | Less. Antill. endemic |
| *Drycothea guadeloupensis Fleutiaux & Sallé* | Less. Antill. endemic |
| *Trestonia fulgerata Buquet* | Less. Antill. endemic |
| *Cacostola ornata Feutiaux & Sallé* | Less. Antill. endemic |
| *Ecyrus hirtipes (Gahan)* | Caribbean endemic |
| *Adetus lherminieri (Fleutiaux & Sallé)* | Less. Antill. endemic |
| *Descarthia stephenii Hope* | Less. Antill. endemic |
| *Mesestola guadeloupensis Breuning* | Less. Antill. endemic |
| *Desmiphora hirticollis (Olivier)* | |
| *Bisaltes? Reared from Capsicum* | |
| *Steirastoma breve(Sulzer)* | Alien |
| *Oreodera glauca (L.)* | Alien |
| *Lagochierus araeniformis (L.)* | |
| *Oedopeza fleutiauxi (Villiers)* | Less. Antill. endemic |
| *Trypanidium spilmani Villiers* | Less. Antill. endemic |
| *Styloleptus posticalus* | Less. Antill. endemic |
| *Amniscus assimilis (Gahan)* | Less. Antill. endemic |
| *Amniscus similis (Gahan)* | Caribbean endemic |
| *Leptostylopsis martinicensis Villiers* | Less. Antill. endemic |
| *Urgleptes guadeloupensis (Fleutiaux & Sallé)* | |
| *Hypsioma grisea (Fleutiaux & Sallé)* | Less. Antill. endemic |
| **Chrysomelidae** | |
| *Bruchinae #1* | |
| *Bruchinae #2* | |
| *Chalepus prob. n. sp.* | Saint Lucia endemic |
| *Chalepus sangunicollis (Linnaeus)* | |

| Scientific name | Status |
|---|---|
| *Charidotella prob. n. sp.* | Saint Lucia endemic |
| *Charidotella sexpunctata sexpunctata (Fabricius)* | |
| *Chelymorpha cribraria (Fabricius)* | |
| *Deloyala guttata (Olivier)* | |
| *Hilarocassis exclamationis (Linnaeus)* | |
| *Lema ? hamata Lacordaire* | |
| *Lema ? n. sp.* | Saint Lucia endemic |
| *Lema ? vittatipennis Baley* | |
| *Neolema dorsalis (Olivier)* | |
| *Oulema obscura (Fabricius)* | |
| *Cryptocephalus ? ovatus Fleuteaux* | Less. Antill. endemic |
| *Cryptocephalus prob. n. sp. #1 (near perspicax)* | Saint Lucia endemic |
| *Exema prob. n. sp.* | Saint Lucia endemic |
| *Griburius prob. n. sp.* | Saint Lucia endemic |
| *Pachybrachis ? n. sp. 1* | Saint Lucia endemic |
| *Pachybrachis ? n. sp. 2* | Saint Lucia endemic |
| *Pachybrachis scabripennis Jacoby* | Less. Antill. endemic |
| *Triachus n. sp.* | Saint Lucia endemic |
| *"Alethaxius" dominicae Blake* | Less. Antill. endemic |
| *? Tymnes prob. n. sp.* | Saint Lucia endemic |
| *Colaspis luciae Blake* | Saint Lucia endemic |
| *Metachroma n. sp.* | Saint Lucia endemic |
| *Rhabdopterus grenadensis Bowditch* | Less. Antill. endemic |
| *"Aphthona" insularis Blake* | Less. Antill. endemic |
| *"Aphthona" maculipennis Jacoby* | |
| *?Guadeloupena n. sp.* | Saint Lucia endemic |
| *Acalymma innubum (Fabricius)* | |
| *Aedemon prob. n. sp. 1* | Saint Lucia endemic |
| *Aedmon prob. n. sp. 2* | Saint Lucia endemic |
| *Altica sp. near occidentalis (Suffrian)* | |
| *Cerotoma ruficornis ruficornis (Olivier)* | |
| *Chaetocnema perplexa Blake* | Caribbean endemic |
| *Diabrotica luciana Blake* | Saint Lucia endemic |
| *Diabrotica sinuata (Olivier)* | |

| Scientific name | Status |
|---|---|
| *Epitrix fasciata Blatchley* | |
| *Heikertingerella prob. n. sp.* | Saint Lucia endemic |
| *Leptophysa therminieri (Bryant)* | Less. Antill. endemic |
| *Megistops n. sp.* | Saint Lucia endemic |
| *Metrogaleruca obscura (Degeer)* | |
| *Monomacra blakea (Bechyne)* | Saint Lucia endemic |
| *Monotalla prob. n. sp.* | Saint Lucia endemic |
| *Neolochmaea obliterata (Olivier)* | |
| *Omophoita albicollis (Fabricius)* | Caribbean endemic |
| *Syphrea ? smithiana (Csiki)* | Less. Antill. endemic |
| *Systena s-littera Linnaeus)* | |
| *Yingaresca prob. n. sp.* | Saint Lucia endemic |
| *Oomorphus prob. n. sp.* | Saint Lucia endemic |
| **Brentidae** | |
| *Cylas formicarius (F.)* | Alien |
| *Apion s.l. n.sp.1* | Saint Lucia endemic? |
| *Apion n.sp. 2* | |
| *Stereoderma ?exilis Suffrian* | Caribbean endemic |
| *Brentid sp. 1* | |
| *Brentid sp. 2* | |
| **Attelabidae** | |
| *Auletobius sp.* | |
| **Anthribidae** | |
| *Ormiscus lineicollis Chevrolat* | Less. Antill. endemic |
| *Ormiscus sp. 1* | |
| *Homocloeus sp.* | |
| *Acaromimus sp.* | |
| *Euxenus sp.* | |
| *Araecrini genus? sp.* | |
| **Curculionidae** | |
| *Anthonomus nanus Gyllenhal* | |
| *Anthonomus macromalus Gyllenhal* | |
| *Cyrionyx piperis Marshall* | Saint Lucia endemic |
| *Euscepes postfasciatus Fairmaire* | |
| *Diaprepes abbreviatus Linnaeus* | Alien |

| Scientific name | Status |
|---|---|
| *Diaprepes boxi Marshall* | Saint Lucia endemic |
| *Metamasius hemipterus (Linnaeus)* | Alien |
| *Sternochetus mangiferae* | Alien |
| *Macromerus lanipes (Olivier)* | |
| *Cholus martiniquensis Marshall* | Less. Antill. endemic |
| *Cosmopolites sordidus* | Alien |
| *Eustylus hybridus (Rosenschoeld)* | Less. Antill. endemic |
| **Scolytidae** | |
| *Cnemonyx ficus Schwarz* | Caribbean endemic |
| *Cnemonyx vagabundus Wood* | Caribbean endemic |
| *Bothrosternus isolatus Bright* | Caribbean endemic |
| *Cnesinus badius sp. nov.* | Saint Lucia endemic |
| *Chramesus maieri sp. nov.* | Saint Lucia endemic |
| *Chramesus rotundatus (Chapuis)* | Caribbean endemic |
| *Pycnarthrum squamosum sp. nov.* | Saint Lucia endemic |
| *Pycnarthrum hispidum (Ferrari)* | |
| *Scolytodes nitidissimus (Eggers)* | Less. Antill. endemic |
| *Scolytodes atlanticus Bright & Torres* | Caribbean endemic |
| *Scolytodes notatus (Eggers)* | Caribbean endemic |
| *Stevewoodia minutum sp. nov.* | Saint Lucia endemic |
| *Pseudothysanoes magnispinatus Bright & Torres* | Caribbean endemic |
| *Cryptocarenus seriatus Eggers* | |
| *Cryptocarenus heveae Hagedorn* | Alien? |
| *Hypothenemus atomus Hopkins* | |
| *Hypothenemus collinus sp. nov.* | Saint Lucia endemic |
| *Hypothenemus sp. nov #22* | ? |
| *Hypothenemus columbi Hopkins* | |
| *Hypothenemus crudiae (Panzer)* | |
| *Hypothenemus birmanus (Eichhoff)* | |
| *Hypothenemus erectus* | |
| *Hypothenemus brunneus (Hopkins)* | |
| *Hypothenemus pubescens* | |
| *Hypothenemus squamosus (Hopkins)* | |
| *Hypothenemus eruditus Westwood* | |

| Scientific name | Status |
|---|---|
| *Hypocryphalus mangiferae (Stebbing)* | |
| *Xyleborinus buscki (Hopkins)* | Less. Antill. endemic |
| *Dryocoetoides capucinus (Eichhoff)* | |
| *Dryocoetoides cristatus (Fabricius)* | |
| *Coptoborus vespatorius (Schedl)* | |
| *Coptoborus exilis (Schedl)* | |
| *Theoborus theobromae Hopkins* | |
| *Xyleborus affinis Eichhoff* | |
| *Xyleborus ferrugineus Fabricius* | |
| *Xyleborus caraibicus Eggers* | |
| *Xyleborus spinulosus Blandford* | |
| *Xyleborus volvulus (Fabricius)* | |
| *Xylosandrus compactus (Eichhoff)* | |
| *Ambrosiodmus obliquus (LeConte)* | |
| *Sphenocerus antillicus sp. nov.* | Saint Lucia endemic |

| Scientific name | Status |
|---|---|
| *Araptus hymenaeae (Eggers)* | |
| *Araptus squamosus sp. nov.* | Saint Lucia endemic |
| *Araptus elegans sp. nov.* | Saint Lucia endemic |
| *Araptus sp. 1* | |
| *Pityophthorus silvaticus sp. nov.* | Saint Lucia endemic |
| *Pityophthorus woodruffi sp. nov.* | Saint Lucia endemic |
| *Pityophthorus pudens (Blackman)* | Caribbean endemic |
| *Pityophthorus sp. 1* | |
| *Pityophthorus sp. 2* | |
| *Corthylus sp. 1* | |
| *Corthylus sp. 2* | |
| *Monarthrum ferrugineum sp. nov.* | Saint Lucia endemic |
| *Microcorthylus sp.* | |
| *Coccotrypes advena Blandford* | Alien |
| *Coccotrypes cyperi (Beeson)* | Alien |

| Scientific name | Status |
|---|---|
| *Pagiocerus frontalis (Fabricius)* | |
| *Premnobius cavipennis Eichhoff* | or Alien |
| *Monarthrum praeustum (Eggers)* | Caribbean endemic |
| *Hylocurus sp. 1* | |
| *Cnesinus guadeloupensis Eggers* | Less. Antill. endemic |
| *Cnesinus strigicollis LeConte* | Caribbean endemic |
| *Xyleborus posticus Eichhoff* | |
| *Hylocurus sp. 2* | |
| **Platypodidae** | |
| *Euplatypus parallelus (Fabricius)* | |
| *Euplatypus pulicarius (Chapuis)* | |
| *Teloplatypus ustulatus (Chapuis)* | |



Table D Flies of Saint Lucia

Unpublished data from M. Ivie, R. Winton, J. Runyon and Stephen D. Gaimari.

| Scientific name | Status |
|---|---|
| **Agromyzidae** | |
| *Liriomyza sativae* | ? |
| *Calycomyza opaca* | ? |
| **Asilidae** | |
| *Efferia nigrimystaceus* | ? |
| *Ommatius dimidiatus* | ? |
| **Cecidomyiidae** | |
| *Contarinia lycopersici* | ? |
| **Ceratopogonidae** | |
| *Culicoides pusillus* | ? |
| *Culicoides trilineatus* | ? |
| **Chamaemyiidae** | |

| Scientific name | Status |
|---|---|
| *Toropamecia caribbea Cogan* | ? |
| *Leucopis bella Loew* | ? |
| *Leucopis n.sp.C* | ? |
| *Melaleucopis simmondsi Sabrosky* | ? |
| **Chironomidae** | |
| *Diplosmittia harrisoni* | ? |
| *Pseudosmittia digitata* | ? |
| **Chloropidae** | |
| *Goniaspis lucia* | ? |
| **Clusiidae** | |
| Sobarocephala sp. | |
| Culicidae | |

| Scientific name | Status |
|---|---|
| *Aedes (Ochlerotatus) taeniorhynchus* | ? |
| *Aedes (Ochlerotatus) tortilis* | ? |
| *Aedes (Stegomyia) aegypti* | ? |
| *Anopheles (Nyssorhynchus) aquasalis* | ? |
| *Anopheles (Nyssorhynchus) argyritarsis* | ? |
| *Culex (Culex) nigripalpus* | ? |
| *Culex (Culex) quinquefasciatus* | ? |
| *Culex (Melanoconion) atratus* | ? |
| *Culex (Melanoconion) idottus* | ? |
| *Culex (Melanoconion) madininensis* | ? |
| *Mansonia (Mansonia) titillans* | ? |
| *Psorophora (Janthinosoma) ferox* | ? |

| Scientific name | Status |
|---|---|
| *Uranotaenia (Uranotaenia) lowii* | ? |
| *Wyeomyia (Wyeomyia) grayii* | ? |
| *Wyeomyia (Wyeomyia) pertinans* | ? |
| **Dolichopodidae** | |
| *Thrypticus minutus* | ? |
| *Xanthina acuticornis Robinson* | Less. Antill. endemic? |
| *Achradocera apicalis (Aldrich)* | Caribbean endemic |
| *Asyndetus bredini Robinson* | Less. Antill. endemic |
| *Asyndetus syntormoides Wheeler* | |
| *Asyndetus n.sp. nr fratellus* | Saint Lucia endemic? |
| *Asyndetus nr. interruptus (Loew)* | Saint Lucia endemic? |
| *Chrysotus n.sp. nr. callichromus* | Saint Lucia endemic? |
| *Chrysotus excisis Robinson* | |
| *Chrysotus hirsutus Aldrich* | |
| *Chrysotus lamellicaudatus Robinson* | Less. Antill. endemic |
| *Chrysotus mediocaudatus Robinson* | Less. Antill. endemic |
| *Chrysotus mexinanus Robinson* | |
| *Chrysotus minumus Robinson* | Less. Antill. endemic |
| *Chrysotus orichalceus Gosseries (=niger Aldrich)* | Less. Antill. endemic |
| *Chrysotus proximus Robinson* | Less. Antill. endemic |
| *Chrysotus pseudoniger Robinson* | Less. Antill. endemic |
| *Chrysotus xiphostoma Robinson* | Less. Antill. endemic |
| *Diaphorus angustifrons Robinson* | Less. Antill. endemic |
| *Diaphorus contiguus Aldrich* | |
| *Diaphorus flavipes Aldrich* | |
| *Diaphorus parvulus Aldrich* | Caribbean endemic |
| *Paraclius dominicensis Robinson* | Less. Antill. endemic |
| *Paraclius filifer Aldrich* | |
| *Paraclius quadrinotatus Aldrich* | |
| *Paraclius n.sp. nr. discifer* | Saint Lucia endemic? |
| *Paraclius n.sp. nr. bellus* | Saint Lucia endemic? |
| *Paraclius n.sp. nr. sarcionoides* | Saint Lucia endemic? |
| *Tachytrechus n.sp. nr. perornatus* | Saint Lucia endemic? |
| *Enlinia bredini Robinson* | Less. Antill. endemic |

| Scientific name | Status |
|---|---|
| *Enlinia patellitarsis Robinson* | Less. Antill. endemic |
| *Enlinia n.sp. nr. larondei* | Saint Lucia endemic? |
| *Enlinia n.sp. nr. sordida* | Saint Lucia endemic? |
| *Enlinia n.sp. nr. larondei #2* | Saint Lucia endemic? |
| *Enlinia n.sp.* | Saint Lucia endemic? |
| *Enlinia n.sp. nr. panamensis* | Saint Lucia endemic? |
| *Harmstonia n.sp.* | Saint Lucia endemic? |
| *Cymatopus bredini Robinson* | Less. Antill. endemic |
| *Thinophilus ochrifacies Van Duzee* | |
| *Cryptopygiella musaphila Robinson* | Less. Antill. endemic |
| *Medetera n.sp. nr. crassicauda* | Saint Lucia endemic? |
| *Medetera pseudonigripes Robinson* | Less. Antill. endemic |
| *Medetera archboldi/steyskali (female)* | Less. Antill. endemic |
| *Thrypticus delicatus Robinson* | Less. Antill. endemic |
| *Thrypticus minutus Parent* | |
| *Dactylomyia decora (Aldrich)* | |
| *Neurigona n.sp* | . Saint Lucia endemic? |
| *Nanomyina n.sp. nr. barbata?* | Saint Lucia endemic? |
| *Micromorpus albipes (Zetterstedt)* | |
| *Peloropeodes n.sp. nr. debilis* | Saint Lucia endemic? |
| *Peloropeodes n.sp. nr. similis* | Saint Lucia endemic? |
| *Peloropeodes dominicensis* | Less. Antill. endemic |
| *Peloropeodes frater (Aldrich)* | Less. Antill. endemic |
| *Amblypsilopus luteus Robinson* | Less. Antill. endemic |
| *Amblypsilopus n.sp. nr. luteus* | Saint Lucia endemic? |
| *Amblypsilopus unifasciatus (Say)* | |
| *Condylostylus graenicheri (Van Duzee)* | |
| *Condylostylus longicornis (Fabricius)* | |
| *Condylostylus similis (Aldrich)* | |
| *Sympycnus n.sp. nr. dominicensis* | Saint Lucia endemic? |
| **Drosophilidae** | |
| *Zygothrica vitticlara* | ? |
| *Drosophila antillea* | ? |
| *Drosophila insularis* | ? |
| **Ephydridae** | |

| Scientific name | Status |
|---|---|
| *Philygria (Nostima) negruzca* | ? |
| *Philygria (Nostima) simuliflavida* | ? |
| **Lauxaniidae** | |
| *Physoclypeus hendeli* | ? |
| *Deceia cf. crevecoueri (Coquillett)* | ? |
| *Poecilominettia n.sp. (zebroides-grp)* | ? |
| *Sapromyza octopuncta Wiedemann* | ? |
| *Marmarodeceia marmorata (Malloch)* | ? |
| *Poecilominettia n.sp.1 (grata-grp)* | ? |
| *Poecilominettia n.sp.2 (grata-grp)* | ? |
| *Melanomyza (Melanomyza) n.sp.* | ? |
| *Trisapromyza cf. vittigera (Coquillett)* | ? |
| *Sapromyza sororia Williston* | ? |
| *Sapromyza n.sp. (sororia-grp)* | ? |
| *Xenochaetina n.sp.* | ? |
| **Micropezidae** | |
| *Grallipeza sp.* | ? |
| **Phoridae** | |
| *Dorhniphora cornuta* | ? |
| *Dorhniphora divaricata* | ? |
| **Pipunculidae** | |
| *Tomosvaryella tuberculata* | ? |
| **Sphaeroceridae** | |
| *Robustagramma luciense* | ? |
| *Rachispoda luciana* | ? |
| **Stratiomyidae** | |
| *Brachycara slossonae (Johnson)* | ? |
| *Cyphomyia dominicana James* | ? |
| *Hermetia illucens (Linnaeus)* | ? |
| *Merosargus sp.* | ? |
| *Pachygaster sp.1* | ? |
| *Pachygaster sp.2* | ? |
| *Sargus sp. nr. fasciatus Fabricius* | ? |
| **Syrphidae** | |
| *Pseudodorus clavatus* | ? |

| Scientific name | Status |
|---|---|
| *Ocyptamus dimidiatus* | ? |
| *Ocyptamus sp.nov.?* | ? |
| *Toxomerus floralis* | ? |
| *Toxomerus pictus* | ? |
| *Toxomerus arcifer (Loew)* | ? |
| *Toxomerus dispar (Fabricius)* | ? |

| Scientific name | Status |
|---|---|
| *Ornida obesa* | ? |
| *Palpada vinetorum* | ? |
| *Eristalis agrorum* | ? |
| *Anastrepha obliqua* | ? |
| **Tanypezidae** | |
| *Neotanypeza flavicalx Enderlein* | ? |

| Scientific name | Status |
|---|---|
| **Tephritidae** | |
| *Tomoplagia incompleta (Williston)* | ? |

Table E Dragonflies of Saint Lucia

Unpublished data from F. Sibley

| Scientific name | Status |
|---|---|
| **Lestidae** | |
| *Lestes forficula Rambur 1842* | |
| *Lestes tenuatus Rambur 1842* | |
| **Protoneuridae** | |
| *Protoneura ailsa Donnelly 1961* | Lesser Antillean endemic |
| **Coenagrionidae** | |
| *Argia concinna (Rambur 1842)* | Lesser Antillean endemic |
| *Enallagma coecum (Hagen 1861)* | |
| *Ischnura capreolus (Hagen 1861)* | |
| *Ischnura ramburii (Selys 1850)* | |
| *Telebasis corallina (Selys 1876)* | |
| **Aeshnidae** | |
| *Gynacantha nervosa Rambur 1842* | |
| *Triacanthagyna caribbea Williamson 1923* | |
| *Triacanthagyna septima (Selys 1857)* | |
| *Triacanthagyna trifida (Rambur, 1842)* | |

| Scientific name | Status |
|---|---|
| **Libellulidae** | |
| *Brachymesia furcata (Hagen 1861)* | |
| *Brachymesia herbida (Gundlach 1889)* | |
| *Dythemis sterilis Hagen 1861* | |
| *Erythemis vesiculosa (Fabricius 1775)* | |
| *Erythrodiplax berenice (Drury 1773)* | |
| *Erythrodiplax umbrata (Linnaeus 1758)* | |
| *Miathyria marcella (Selys 1857)* | |
| *Micrathyria aequalis (Hagen 1861)* | |
| *Micrathyria didyma (Selys 1857)* | |
| *Orthemis macrostigma (Rambur 1842)* | Lesser Antillean endemic |
| *Pantala flavescens (Fabricius 1798)* | |
| *Tholymis citrina Hagen 1867* | |
| *Tramea abdominalis (Rambur 1842)* | |
| *Tramea insularis Hagen 1861* | |

Table F Reptiles and Amphibians of Saint Lucia

* Species not seen since 1960 or earlier. Data from Daltry (2009).

| Scientific Name | Common Names | Status |
|---|---|---|
| AMPHIBIA | | |
| *Bufo marinus* | Cane toad, Kwapo | Alien |
| *Eleutherodactylus johnstonei* | Johnstone's whistling frog, Ti tolin | Saint Lucia endemic |
| **Eleutherodactylus martinicensis* | Martinique whistling frog, Gounouy | Alien/ Lesser Antillean endemic |
| *Scinax ruber* | Red-snouted tree frog | Alien |
| **Leptodactylus fallax* | Mountain chicken, Kwapo | Lesser Antillean endemic |
| REPTILIA | | |
| *Caretta caretta* | Loggerhead | (pantropical, marine) |
| *Chelonia mydas* | Green turtle, Toti blan, Toti vè | (pantropical, marine) |
| *Dermochelys coriacea* | Leatherback turtle, Toti cerkeil | (pantropical, marine) |
| *Eretmochelys imbricata* | Hawksbill turtle, Toti karet | (pantropical, marine) |
| *Anolis extremus* | Barbados anole, Zanndoli | Alien/ Lesser Antillean endemic |
| *Anolis luciae* | Saint Lucia anole, Zanndoli | Saint Lucia endemic |
| *Anolis wattsi wattsi* | Watts' anole, Zanndoli | Alien/ Lesser Antillean endemic |
| *Cnemidophorus vanzoi* | Saint Lucia whiptail, Zando | Saint Lucia endemic |
| *Gymnophthalmus pleii* | Rough-scaled worm lizard, Zanndoli tè, Choféy solèy, Koylèv-tè | Lesser Antillean endemic |
| *G. p. luetkeni* | Saint Lucia worm lizard | Saint Lucia endemic |
| *G. p. nesydrion* | Maria Islands worm lizard | Saint Lucia endemic |
| *Hemidactylus mabouia* | House gecko, Mabouya | Alien? |
| *Hemidactylus palaichthus* | Antilles leaf-toed gecko, Rock gecko | |
| *Iguana cf iguana* | Saint Lucia iguana, Léza | Saint Lucia endemic |
| *Iguana iguana* | Green iguana, Léza | Alien |
| **Mabuya mabouya* | Southern Antillean skink, Mabouya | Lesser Antillean endemic |
| **Sphaerodactylus elegantulus* | Antiguan pygmy gecko | Lesser Antillean endemic |
| *Sphaerodactylus microlepis* | Saint Lucia pygmy gecko | Saint Lucia endemic |
| *S. m. microlepis* | Saint Lucia pygmy gecko | Saint Lucia endemic |
| *S. m. thomasi* | Maria Islands pygmy gecko | Saint Lucia endemic |
| **Sphaerodactylus vincenti* | Central Lesser Antillean pygmy gecko | Alien/ Lesser Antillean endemic |
| *Thecadactylus rapicaudus* | Forest gecko | |
| *Boa constrictor orophias* | Boa constrictor | |
| *B. c. orophias* | Saint Lucia boa, Tet chyenn | Saint Lucia endemic |
| *Bothrops caribbaeus* | Saint Lucia fer-de-lance, Sepan | Saint Lucia endemic |
| **Clelia errabunda* | Saint Lucia cribo, Cribo | Saint Lucia endemic |
| *Leptotyphlops bruilei* | Saint Lucia thread snake | Saint Lucia endemic |
| *Liophis ornatus* | Saint Lucia racer, Kouwès | Saint Lucia endemic |

Table G Birds of Saint Lucia (excluding vagrant records)

* Species not seen since 1970 or earlier. M = Migrant, R= Resident. Data from Toussaint *et al.* (2009).

| Scientific name | Common name | Status | Residency |
|---|---|---|---|
| *Pluvialis dominica* | American Golden-Plover | | M |
| *Falco sparverius* | American Kestrel | | R |
| *Haematopus palliates* | American Oystercatcher | | R |
| *Setophaga ruticilla* | American Redstart | | M |
| *Anas americana* | American Wigeon | | M |
| *Orthorhyncus cristatus* | Antillean Crested Hummingbird | Caribbean endemic | R |
| *Euphonia musica* | Antillean Euphonia | Caribbean endemic | R |
| *Puffinus lherminieri* | Audubon's Shearwater | | R |
| *Calidris bairdii* | Baird's Sandpiper | | M |
| *Coereba flaveola* | Bananaquit | | R |
| *Riparia riparia* | Bank Swallow | | M |
| *Turdus nudigenis* | Bare-eyed Thrush | | R |
| *Hirundo rustica* | Barn Swallow | | M |
| *Megaceryle alcyon* | Belted Kingfisher | | R |
| *Cypseloides niger* | Black Swift | | M |
| *Mniotilta varia* | Black-and-white Warbler | | M |
| *Pluvialis squatarola* | Black-bellied Plover | | M |
| *Nycticorax nycticorax* | Black-crowned Night-Heron | | R |
| *Tiaris bicolor* | Black-faced Grassquit | | R |
| *Rissa tridactyla* | Black-legged Kittiwake | | M |
| *Himantopus mexicanus* | Black-necked Stilt | | M |
| *Dendroica striata* | Blackpoll Warbler | | M |
| *Vireo altiloquus* | Black-whiskered Vireo | | R |
| *Anas discors* | Blue-winged Teal | | M |
| *Dolichonyx oryzivorus* | Bobolink | | M |
| *Geotrygon mystacea* | Bridled Quail-dove | | R |
| *Onychoprion anaethetus* | Bridled Tern | | M |
| *Buteo platypterus* | Broad-winged Hawk | | R |
| *Sula leucogaster* | Brown Booby | | R |
| *Anous stolidus* | Brown Noddy | | R |
| *Pelecanus occidentalis* | Brown Pelican | | R |
| **Tryngites subruficollis* | Buff-breasted Sandpiper | | M |
| *Dendroica tigrina* | Cape May Warbler | | M |
| *Fulica caribaea* | Carib Grackle | | |
| *F. c. inflexirostris* | | Saint Lucia endemic | R |

| Scientific name | Common name | Status | Residency |
|---|---|---|---|
| *Quiscalus lugubris* | Caribbean coot | | M |
| *Elaenia martinica* | Caribbean Elaenia | Caribbean endemic | R |
| *Progne dominicensis* | Caribbean Martin | Caribbean endemic | R |
| *Bubulcus ibis* | Cattle Egret | | R |
| *Petrochelidon pyrrhonota* | Cliff Swallow | | M |
| *Columbina passerina* | Common Ground-dove | | R |
| *Gallinula chloropus* | Common Moorhen | | R |
| *Chordeiles minor* | Common Nighthawk | | R |
| *Sterna hirundo hirundo* | Common Tern | | M |
| *Zenaida auriculata* | Eared Dove | | R |
| *Streptopelia decaocto* | Eurasian Collared-Dove | Alien | R |
| *Cichlherminia lherminieri* | Forest Thrush | Less. Ant. endemic | |
| *C. l. sanctaeluciae* | | Saint Lucia endemic | R |
| *Sicalis luteola* | Grassland Yellow-Finch | | R |
| *Ardea herodias* | Great Blue Heron | | M |
| *Casmerodius albus* | Great Egret | | R and M |
| *Puffinus gravis* | Greater Shearwater | | M |
| *Tringa melanoleuca* | Greater Yellowlegs | | M |
| *Butorides virescens* | Green Heron | | R |
| *Eulampis holosericeus* | Green-throated Carib | Caribbean endemic | R |
| *Tyrannus dominicensis* | Grey Kingbird | | R |
| *Cinclocerthia gutturalis* | Grey Trembler | Less. Ant. endemic | R |
| *C. g. macrorhyncha* | | Saint Lucia endemic | |
| **Gelochelidon nilotica* | Gull-billed Tern | | M |
| *Limosa haemastica* | Hudsonian Godwit | | M |
| *Charadrius vociferous* | Killdeer | | M |
| *Larus atricilla* | Laughing Gull | | M |
| *Calidris minutilla* | Least Sandpiper | | M |
| **Sternula antillarum* | Least Tern | | M |
| *Contopus latirostris* | Lesser Antillean Pewee | Less. Ant. endemic | |
| *C. l. oberi* | Saint Lucia Pewee | Saint Lucia endemic | R |
| *Loxigilla noctis* | Lesser Antillean Bullfinch | Less. Ant. endemic | |
| *L. n. sclateri* | | Saint Lucia endemic | R |
| *Myiarchus oberi* | Lesser Antillean Flycatcher | Less. Ant. endemic | |
| *M. o. sanctaeluciae* | | Saint Lucia endemic | R |

| Scientific name | Common name | Status | Residency |
|---|---|---|---|
| *Saltator albicollis* | Lesser Antillean Saltator | Less. Ant. endemic | R |
| *Chaetura martinica* | Lesser Antillean Swift | Less. Ant. endemic | R |
| *Aythya affinis* | Lesser Scaup | | M |
| *Tringa flavipes* | Lesser Yellowlegs | | M |
| *Egretta caerulea* | Little Blue Heron | | R |
| *Egretta garzetta* | Little Egret | | M |
| *Fregata magnificens* | Magnificent Frigatebird | | R |
| *Coccyzus minor* | Mangrove Cuckoo | | R |
| *Sula dactylatra* | Masked Booby | | R |
| *Nomonyx dominicus* | Masked Duck | | R |
| *Falco columbarius* | Merlin | | M |
| *Parula americana* | Northern Parula | | M |
| *Anas acuta* | Northern Pintail | | M |
| *Anas clypeata* | Northern Shoveler | | M |
| *Seiurus noveboracensis* | Northern Waterthrush | | M |
| *Pandion haliaetus* | Osprey | | R and M |
| *Seiurus aurocapilla* | Ovenbird | | M |
| *Margarops fuscatus* | Pearly-eyed Thrasher | Caribbean endemic | |
| *M. f. klinikowski* | | Saint Lucia endemic | R |
| *Calidris melanotos* | Pectoral Sandpiper | | M |
| *Falco peregrinus* | Peregrine Falcon | | M |
| *Podilymbus podiceps* | Pied-billed Grebe | | M |
| *Protonotaria citrea* | Prothonotary Warbler | | M |
| *Porphyrio martinica* | Purple Gallinule | | R |
| *Eulampis jugularis* | Purple-throated Carib | Less. Ant. endemic | R |
| *Phaethon aethereus* | Red-billed Tropicbird | | R |
| *Sula sula* | Red-footed Booby | | R |
| *Larus delawarensis* | Ring-billed Gull | | R |
| *Columba livia* | Rock Pigeon | Alien | R |
| *Sterna dougallii dougallii* | Roseate Tern | | M |
| *Thalasseus maximus* | Royal Tern | | M |
| *Geotrygon montana* | Ruddy Quail-dove | | R |
| *Arenaria interpres* | Ruddy Turnstone | | M |
| *Caprimulgus rufus* | Rufous Nightjar | | |
| *C. r.otiosus* | Saint Lucia Nightjar | Saint Lucia endemic | R |
| *Myadestes genibarbis* | Rufous-throated Solitaire | Caribbean endemic | |
| *M. g. sanctaeluciae* | | Saint Lucia endemic | R |
| *Amazona versicolor* | Saint Lucia Amazon | Saint Lucia endemic | R |
| *Melanospiza richardsoni* | Saint Lucia Black Finch | Saint Lucia endemic | R |
| *Icterus laudabilis* | Saint Lucia Oriole | Saint Lucia endemic | R |

| Scientific name | Common name | Status | Residency |
|---|---|---|---|
| *Dendroica delicata* | Saint Lucia Warbler | Saint Lucia endemic | R |
| *Troglodytes aedon* | House Wren | | |
| *T. a. mesoleucus* | Saint Lucia Wren | Saint Lucia endemic | R |
| *Calidris alba* | Sanderling | | M |
| *Thalasseus sandvicensis* | Sandwich Tern | | M |
| *Margarops fuscus* | Scaly-breasted Thrasher | Less. Ant. endemic | |
| *M. f. schwartzi* | | Saint Lucia endemic | R |
| *Patagioenas squamosa* | Scaly-naped Pigeon | Caribbean endemic | R |
| *Charadrius semipalmatus* | Semipalmated Plover | | M |
| *Calidris pusilla* | Semipalmated Sandpiper | | M |
| **Leucopeza semperi* | Semper's Warbler | Saint Lucia endemic | R |
| *Molothrus bonariensis* | Shiny Cowbird | | R |
| *Limnodromus griseus* | Short-billed Dowitcher | | M |
| *Crotophaga ani* | Smooth-billed Ani * | | R |
| *Egretta thula* | Snowy Egret | | R |
| *Tringa solitaria* | Solitary Sandpiper | | M |
| *Puffinus griseus* | Sooty Shearwater | | M |
| *Sterna fuscata* | Sooty Tern | | M |
| *Porzana carolina* | Sora | | R |
| *Actitis macularius* | Spotted Sandpiper | | M |
| *Calidris himantopus* | Stilt Sandpiper | | M |
| *Egretta tricolor* | Tricoloured Heron | | R |
| *Mimus gilvus* | Tropical Mockingbird | | R |
| *Calidris mauri* | Western Sandpiper | | M |
| *Numenius phaeopus* | Whimbrel | | M |
| *Ramphocinclus brachyurus* | White-breasted Thrasher | Less. Ant. endemic | |
| *R. b. sanctaeluciae* | | Saint Lucia endemic | R |
| *Calidris fuscicollis* | White-rumped Sandpiper | | M |
| *Phaethon lepturus* | White-tailed Tropicbird | | R |
| *Tringa semipalmata* | Willet | | M |
| *Dendroica petechia* | Yellow Warbler | | |
| *D. p. babad* | | Saint Lucia endemic | R |
| *Coccyzus americanus* | Yellow-billed Cuckoo | | M |
| *Nyctanassa violace* | Yellow-crowned Night-heron | | R |
| *Dendroica coronata* | Yellow-rumped Warbler (Myrtle) | | M |
| *Vireo flavifrons* | Yellow-throated Vireo | | M |
| *Zenaida aurita* | Zenaida Dove | | R |

Table H Mammals of Saint Lucia

* Species not seen since 1881 or earlier. Data from Clarke (2009).

| Scientific Name | Common Names | Status |
|---|---|---|
| *Didelphis marsupialis* | Southern opossum | Alien |
| *Noctilio leporinus* | Greater fishing bat | |
| *Pteronotus davyi* | Davy's naked-backed bat | |
| *Ardops nichollsi* | Tree bat | Lesser Antillean endemic |
| *A. n. luciae* | | Lesser Antillean endemic |
| *Artibeus jamaicensis* | Jamaican fruit bat | |
| *A. j. jamaicensis* | | Caribbean endemic |
| *Brachyphylla cavernarum* | Antillean fruit bat | Caribbean endemic |
| *B.c. cavernarum* | | Lesser Antillean endemic |
| *Monophyllus plethodon* | Insular long-tongued bat | |
| *M. p. luciae* | | Lesser Antillean endemic |
| *Sturnira lilium* | Little yellow-shouldered bat | Lesser Antillean endemic |
| *S. l. luciae* | Saint Lucia yellow-shouldered bat | Saint Lucia endemic |
| *Tadarida brasiliensis* | Brazilian free-tailed bat | |
| *Molossus molossus* | Common free-tailed bat | |
| *M. m. molossus* | | Lesser Antillean endemic |
| *Dasyprocta leporina* | Brazilian agouti | Alien |
| *Herpestes javanicus* | Small asian mongoose | Alien |
| *Sus scrofa* | Pig | Alien |
| *Rattus rattus* | Black rat | Alien |
| *Rattus norvegicus* | Brown rat | Alien |
| *Mus musculus* | House mouse | Alien |
| | Saint Lucian giant rice rat | Saint Lucia endemic |