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Important Bird Areas **AMERICAS**

ST LUCIA

Donald Anthony & Alwin Dornelly

The Vulnerable St Lucia Amazon (*Amazona versicolor*) is endemic to St Lucia, its breeding range is confined to the Government Forest Reserve (LC002) with an estimated global population of 800-1200 individuals.

Photo: Tseng Chiu-wen Hank



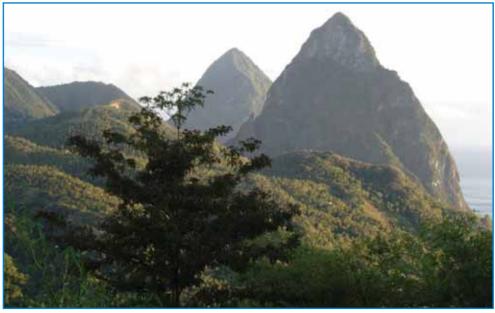
Country facts at a glance

Area:	616 km ²
Population:	170,650
Capital:	Castries
Altitude:	0–950 m
Number of IBAs:	5
Total IBA area:	17,886 ha
IBA coverage of land area:	25%
Total number of birds:	162
Globally threatened birds:	5
Globally threatened birds in IBAs:	5
Country endemics:	5

General introduction

St Lucia is in the Windward Islands of the Lesser Antilles and lies between Martinique (to France), 28 km to the north, and St Vincent, 31 km to the south. It is 45 km long (north to south) and 21 km at its widest. St Lucia is a mountainous, volcanic island with a main axial ridge that stretches from La Sorciere in the north to Saltibus in the south. Mount Gimie is the island's tallest mountain. Two spectacular pitons (volcanic plugs) rise from the sea in the south-west of the island—Gros Piton (798 m) and Petit Piton (743 m). The Pitons are a Caribbean landmark and are designated a World Heritage Site due to their unique beauty and geology. The island's forested mountainous and hilly interior is incised by steep valleys resulting from the numerous streams that emanate in this rugged terrain although there are also some broad, fertile valleys. St Lucia's tropical climate has two seasons: a dry season from December to May, and a wet season from June to November, although there appears to be increasing variance from this norm. Rainfall is highest in the wet, mountainous interior and lowest in the dry coastal zone resulting in wet tropical forest (primary and secondary) cloaking the main ridge with scrub forest and dry woodland (mostly now degraded) along the coast. A small area of elfin woodland is found at the top of Mount Gimie. Land use can be classified as forest (c.35%), agriculture (c.29%, and primarily permanent crops such as banana), residential, commercial and industrial.

"Almost 35% of St Lucia is still under some form of forest cover, over a third of which is legally protected."



The Pitons (LC003) are cores of two lava-dome volcanoes, the IBA supports the Endangered St Lucia Black Finch (*Melanospiza richardsoni*) and 14 Lesser Antilles restricted-range birds. Photo: Donald Anthony

Conservation and protected area system



Government legislation for biodiversity conservation in St Lucia includes the 1980 Wildlife Protection Act (which provides for the protection of wildlife and the establishment of wildlife reserves), the 1984 Fisheries Act (which provides for the creation of marine reserves), and the 1983 Forest, Soil and Water Conservation Act (which contains provisions governing the declaration of forest reserves and protected forests on private land).

Almost 35% of St Lucia is still under some form of forest cover. Over a third of this (c.7690 ha) is protected within the Government Forest Reserve IBA (LC002). The remaining forest is mostly privately owned. There is no protection afforded the dry coastal forest. The St Lucia National Trust -a quasi-governmental organization under the 1975 National Trust Act-has management authority for some offshore islets, and a few parks and protected areas amounting to c.255 ha. The St Lucia iguana (Iguana iguana), St Lucia whiptail (Cnemidophorus vanzoi) and White-breasted Thrasher (Ramphocinclus brachyurus) projects –lead by Durrell Wildlife Conservation Trust in collaboration with the Forestry department -are providing a focus for research activities within the unprotected dry forest habitat (especially on the east coast). These initiatives started in 2002 with funding from Durrell. Forestry Department and Durrell are implementing a monitoring program for the Endangered White-breasted Thrasher throughout its St Lucian range, but with a particular focus on the habitat changes resulting from the hotel and resort development at Praslin Bay –the center of the species' abundance. A pilot project using distance-sampling to determine the population of the Vulnerable St Lucia Parrot (Amazona versicolor) was field-tested by staff of the Forestry Department and Durrell during 2007. Both the parrot and thrasher surveys include components to estimate populations of other selected forest bird species.

"The mongoose, an alien invasive species, has been held responsible for the probable extinction of the Critically Endangered and endemic Semper's Warbler."

Agricultural expansion (especially banana cultivation), residential, hotel and resort developments, and roads are the main causes of deforestation and habitat degradation of St Lucia's dry forest, wet tropical forest, mangroves, littoral vegetation and wetlands (and thus are the main threats to the IBAs). Most livestock are tethered but sheen. goats and cattle do have a localized impact, especially on the dry woodlands which are also sometimes affected by dry-season fires lit by farmers and others. Of potentially greater impact to the island's biodiversity are the alien invasive predators including mongoose (Herpestes auropunctatus), rats (Rattus spp.), pigs (Sus scrofa), and Giant African snail (Achalina sp.) The actual impact of these alien invasives has not been quantified although the mongoose has been identified as a cause for the probable extinction of the (Critically Endangered) ground-dwelling Semper's Warbler (Leucopeza semperi). Hurricanes are an ever-present threat: the last one to hit the island was Hurricane Allen in 1980 which damaged or destroyed over 80%of the island's forest. The increasing destruction, degradation and fragmentation of habitats is significantly reducing their resilience to the impacts of stochastic events such as hurricanes, and also the forecasted effects of global climate change.



Ornithological importance



Over 160 species of bird have been recorded from St Lucia, 97 of which breed. The island is internationally important for its resident populations of six globally threatened and Near Threatened bird species as well as its restricted-range birds. Semper's Warbler (*Leucopeza semperi*) is considered Critically Endangered but is only possibly still extant. The Endangered White-breasted Thrasher (*Ramphocinclus brachyurus*) is better known, being confined to the dry forests on the east coast, although its habitat is currently unprotected and is a major conservation priority for the island. The Near Threatened, migratory Buff-breasted Sandpiper (*Tryngites subruficollis*) has also been recorded from St Lucia on three occasions but has not been used to identify

IBAs. Twenty-three (of the 38) Lesser Antilles Endemic Bird Area (EBA 030) restricted-range birds occur in this country. Five of these are endemic to the island, namely St Lucia Amazon (Amazona versicolor), St Lucia Warbler (Dendroica delicata), Semper's Warbler, St Lucia Black Finch (Melanospiza richardsoni) and St Lucia Oriole (Icterus laudabilis). A number of endemic subspecies of birds are present on the island, the most threatened being the Rufous Nightjar (Caprimulgus rufus otiosus) which is local and uncommon in the unprotected dry forests of the east coast. The Lesser Antillean Flycatcher (Myiarchus oberi santaeluciae) is also uncommon, but is relatively secure within the well protected wet forests.



IBA overview

St Lucia's five IBAs cover 17,886 ha or 25% of the island's land area (Table 1, Figure 1). The critical habitat components of three of these IBAs are formally designated as protected areas. The remaining two IBAs, North-east coast (LC001) and Mandele Dry Forest (LC004) are unprotected in terms of their critical forest habitat, but both enjoy some protection of their marine and wetland areas. Approximately 70% of the land area of St Lucia's IBAs is formally protected, and the Government Forest Reserve IBA (LC002) protects 30% of St Lucia's remaining forest.

The IBAs have been identified on the basis of 25 key bird species, the majority of which occur in two or more of the IBAs. However, some of the moist forest dependent species are found only in the Government Forest Reserve IBA. This protected IBA supports the entire breeding population of St Lucia Amazon (Amazona versicolor), and a large percentage of the St Lucia Black Finch (Melanospiza richardsoni) population. It also protects all but one of the restricted-range birds that occur on St Lucia. Of greatest concern is the White-breasted Thrasher LC001 and Mandele Dry Forest; LC004, which encompass c.97.5% of the species' St Lucia population), but the bird's dry forest habitat in

(Ramphocinclus brachyurus). It occurs in two IBAs (North-east coast;

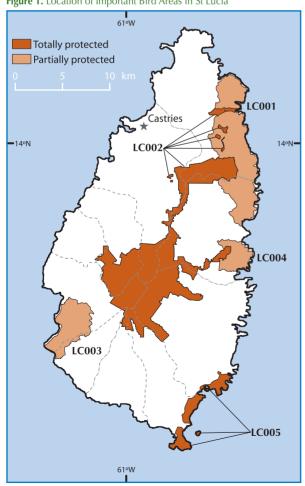


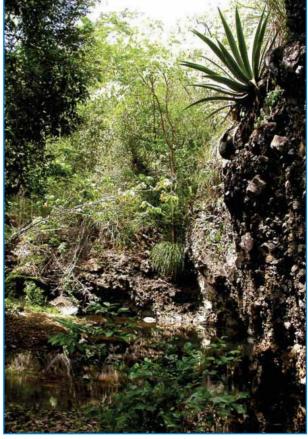
Table 1. Important Bird Areas in St Lucia

		The second second				_	_	_		100		
IBA code	IBA name	Adm unit	Area (ha)		A1			A2	A3	A4		
				CR	EN	VU	NT			A4i	A4ii A4iii A4iv	
LC001	North-east coast	Dauphin, Dennery	4,314		2		1	X				
LC002	Government Forest Reserve	Anse-La-Raye, Babonneau, Cannaries,	7,974	1	1	2	1	X				
		Dennery, Laborie, Micoud, Soufriere										
LC003	Pitons Management Area	Choiseul, Soufriere	1,617		1		1	X				
LC004	Mandele Dry Forest	Dennery, Praslin	826		2	1	1	X				
LC005	Point Sables National Park	Vieux Fort	3,155		1					X	X	



Figure 1. Location of Important Bird Areas in St Lucia





Dry forest at Louvet River, Mandele Dry Forest IBA (LC004), the center of abundance for Dry Irles at Davet New, Manuele Dry Friest IDA (LCOV4), the Center the Endangered White-breasted Thrasher (Ramphocinclus brachyurus). Photo: Matthew Morton/DWCT



Golf course development at Praslin Bay (LC004) could seriously affect the population of White-breasted Thrasher (Ramphocinclus brachyurus). Photo: Hester Whitehead

Opportunities



There is an urgent need for the formal protection of critical dry forest habitat (probably through purchasing habitat presently in private hands) within the two IBAs that encompass the range of White-breasted Thrasher (Ramphocinclus brachyurus). Such protection would need to be an integral part of a sensitively designed strategic development plan for the east coast dry forests—a plan that takes into account the needs of this region's unique biodiversity. Little is known of the populations of St Lucia's globally threatened or restricted-range birds (apart from St Lucia Amazon; Amazona versicolor and White-breasted Thrasher). Establishing the population status and subsequent monitoring of these priority species is a critical need, and could perhaps be done as an extension to the ongoing St Lucia Amazon and White-breasted Thrasher projects. An assessment of the impacts of invasive alien species, including Shiny Cowbird (Molothrus bonariensis), a brood-parasite of the St Lucia Oriole (Icterus laudabilis) would also provide important inputs to site management strategies. State, pressure and response variables at each IBA should be monitored annually to provide an objective status assessment and highlight management interventions that might be required to maintain these internationally important biodiversity sites.

Further information



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