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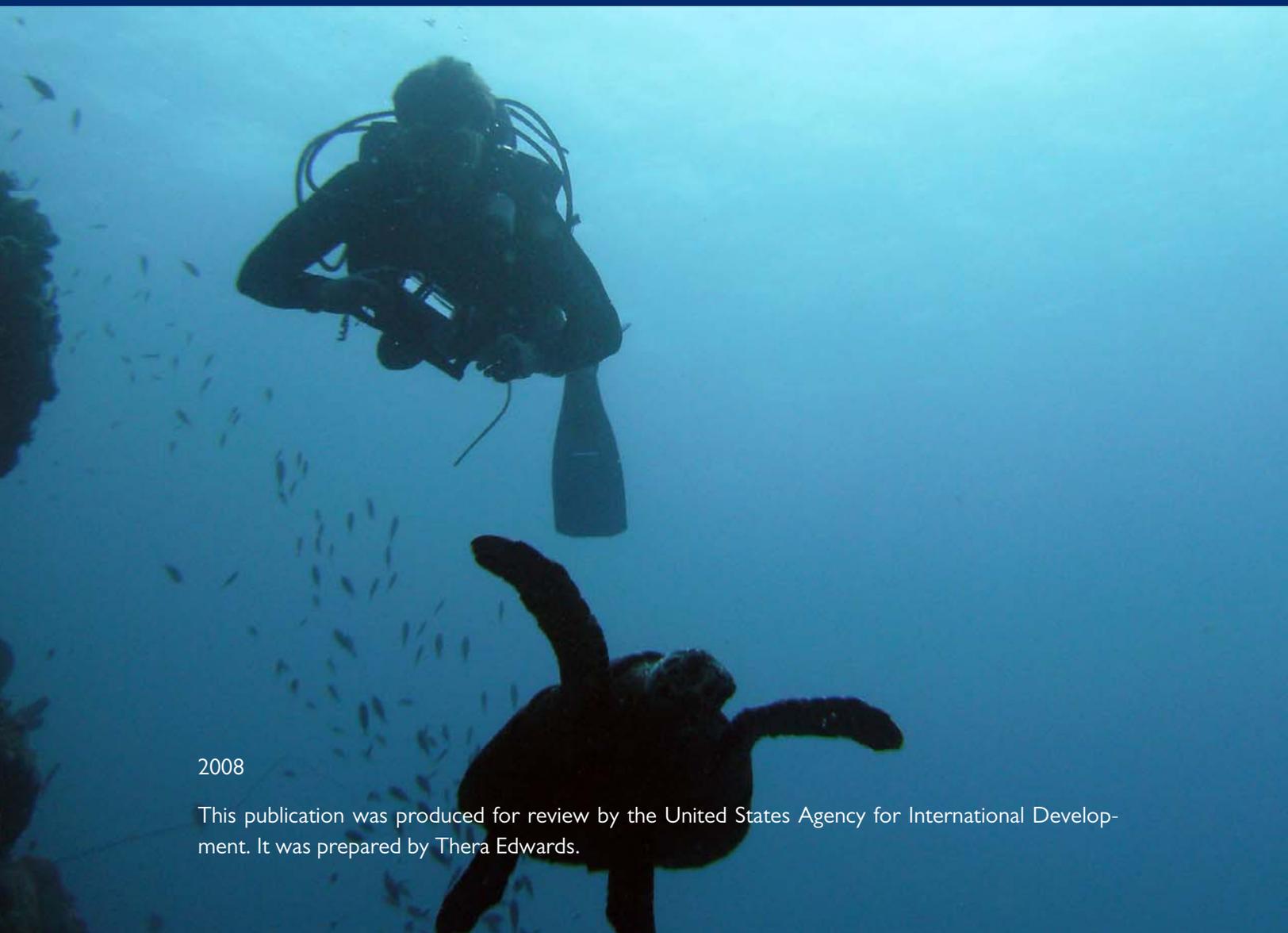
# FAA 118/119 TROPICAL FORESTS AND BIODIVERSITY ASSESSMENT

ANTIGUA & BARBUDA, DOMINICA, GRENADA, ST. KITTS & NEVIS, ST. LUCIA  
AND ST. VINCENT & THE GRENADINES

(2008)

2008

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**2008**

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# LIST OF ACRONYMS

ADP	Agricultural Diversification Programme
AGRRA	Atlantic and Gulf Rapid Reef Assessment
BOD	Biological Oxygen Demand
CARICOM	Caribbean Community
CARICOMP	Caribbean Marine Productivity Program
CARSEA	Caribbean Sea Ecosystem Assessment
CBD	Convention on Biological Diversity
CBO	Community Based Organization
CCCCC	Caribbean Community Climate Change Centre
CCDC	Caribbean Coastal Data Centre
CIDA	Canadian International Development Agency
CITES	Convention on International Trade in Endangered Species of Wild Flora and Fauna
CLME	Caribbean Large Marine Ecosystem
CMA	Caribbean Marine Atlas
CNWH	Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere
CoML	Census of Marine Life
CPACC	Caribbean Programme for Adaptation to Climate Change
CREP	Caribbean Region Environment Programme
CRFM	Caribbean Regional Fisheries Mechanism
CRP	Caribbean Regional Programme
DCA	Development Control Authority
DHTA	Dominica Hotel and Tourism Association
DNA	Deoxyribonucleic Acid
EAG	Environmental Advisory Group
EC	Eastern Caribbean Currency
EIA	Environmental Impact Assessment

ENGO	Environmental Non Government Organization
EU	European Union
EUREPGAP	Euro-Retailer Produce Working Group Good Agricultural Practices
FAA	Foreign Assistance Act
FAO	Food and Agriculture Organization of the United Nations
FEE	Foundation for Environmental Education
GDP	Gross Domestic Product
GEF	Global Environment Facility
IDB	Inter-American Development Bank
IOC	Intergovernmental Oceanographic Commission
IODE	International Oceanographic Data and Information Exchange
IPCC	Inter Governmental Panel on Climate Change
IR	Intermediate Result
IUCN	The International Union for the Conservation of Nature and Natural Resources (since 1999 World Conservation Union)
LAC	Latin America and the Caribbean
LBS	Land Based Source of Pollution
MACC	Mainstreaming Adaptation to Climate Change
MARPOL	International Convention for the Prevention of Pollution from Ships
MEA	Multilateral Environmental Agreements
MMA	Marine Management Area
MOU	Memorandum of Understanding
NBSAP	National Biodiversity Strategy and Action Plan
NCM	National Coordinating Mechanism
NCSA	National Capacity Self Assessment
NGO	Non Government Organization
NPA	National Programme of Action
OECS	Organization of Eastern Caribbean States
OPAAL	OECS Protected Areas and Associated Livelihoods Project

PA	Protected Area
PEASIRMM	Preliminary Environmental Assessment for Sustainable Island Resource Management Mechanism Project
PERB	Protecting the Eastern Caribbean Region's Biodiversity Project
POPs	Persistent Organic Pollutants
SGP	Small Grants Programme
SO	Strategic Objective
SOW	Scope/Statement of Work
SPAW	Protocol Concerning Specially Protected Areas and Wildlife to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region
UN	United Nations
UNCCD	United Nations Convention to Combat Desertification
UNCLOS	United Nations Convention on the Law of the Sea
UNEP	United Nations Environment Programme
UNESCO	United Nations Educational, scientific and Cultural Organization
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
UWI	University of the West Indies

# EXECUTIVE SUMMARY

This report fulfils FAA Section 118/119 reporting requirements for the use biodiversity earmark funds in Antigua & Barbuda, Dominica, Grenada, St. Lucia, St. Christopher (St. Kitts) & Nevis and St. Vincent & the Grenadines through the United States Agency for International Development (USAID). The report using best available information, key informant interviews and site visits documents the status tropical forests and biodiversity in their broadest definitions. The current social, economic and political context is described to assist the reader in framing the biodiversity and tropical forestry threats and opportunities. To this end Gross Domestic Product at Constant Factor Prices is given for as many years of the period 2003- 2007 (the intervening period between the last formal FAA 118/119 report for the Caribbean and the current report) as available. The most recent International Monetary Funds (IMF) country reports were used as the method was consistent affording comparison between the countries assessed. For all countries data supplied by respective Fisheries Divisions for fisheries production is used as a measure of ecosystem services and the ex-vessel or landed market value of production is used as a measure of the value of biodiversity. Ongoing initiatives of donors, non-government organisations and governments are outlined to show actions currently being undertaken and to show linkages for partnership in needed actions. Indirect and direct threats are listed and where possible analytical frameworks or cause and effect sequences are set out. Finally actions to address the threats identified are recommended with particular attention to points of interface with USAID's broad objectives.

The Eastern Caribbean region is endowed with a rich biodiversity, which, partly due to its isolation within the Caribbean Sea, has resulted in relatively high rates of national and regional endemism. A survey of the world's biodiversity hotspots identified the Caribbean as the fifth ranking "hotspot" and one of the highest priorities in any global strategy for biodiversity conservation and sustainable management (Source: Conservation International)

Much of the terrestrial landscape in the Lesser Antilles has been heavily modified particularly in the "low" islands (e.g. Antigua and Barbuda). Antigua and Barbuda are notable for their relatively few protected areas and absence of ecosystem diversity in existing protected areas. In contrast Grenada, Dominica and St Lucia have much of their wet forest protected but minimal or no protection for dry forests. The lack of congruence between nation building and the sustainable use of natural resources remains the biggest hurdle to attaining the goals of sustainable development in these countries.

Common to all countries assessed is the need for comprehensive ecosystem assessment and species inventory. However, the Organisation of Eastern Caribbean States (OECS) Protecting the Eastern Caribbean Region's Biodiversity project (in a number of country project requests for proposals ) has included biodiversity inventory components. Persons interviewed pointed out the lack of information to inform decision making. All countries have identified keystone faunal species for conservation: Antigua and Barbuda, the Racer Snake and Barbuda Warbler, Dominica the Crapaud or Mountain Chicken (a frog), Grenada, the Grenada Dove, St. Lucia, the St Lucia Wren and St Lucia Nighthjar, St. Kitts and Nevis, Sea Turtles and in St. Vincent, the Iguana and the St. Vincent Parrot.

With respect to international conventions all countries had prepared National Biodiversity Strategies and Action Plans (NBSAP) in fulfilment of their obligations under the Convention on Biological Diversity (CBD) however in St. Kitts and Nevis the NBSAP had not been finalised and sent for approval by Cabinet as of May 2008. In the islands where the NBSAPs had been finalises the governments were seeking to implement the identified actions. For the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) all islands kept records

of required species but were behind in reporting obligations. It seemed that collection of data for reporting and/or collation of results should be addressed.

Each country had legislation relevant to biodiversity and the environment however there were updates and or new legislation that were pending (proposed, in draft, or awaiting cabinet approval). With the exception of Antigua and Barbuda, legislation was chiefly compiled through consulting the relevant volumes of Consolidated Index of Statutes and Subsidiary Legislation in the UWI Cave Hill Law Library.

# INTRODUCTION

## PURPOSE

The purpose of this assessment was to 1) help USAID Barbados comply with country analysis requirements set out under the Foreign Assistance Act, Sections 118(e)<sup>1</sup> and 119(d)<sup>2</sup> for tropical forest and biodiversity, and 2) make recommendations to USAID/Barbados on program opportunities that address conservation in a cross-sectoral context in its new 5-year Country Assistance Strategy (CAS) as well as ongoing program decisions.

For clarification the key elements of the biodiversity code, the FAA sections, components of the analysis as well as definitions of forestry and biodiversity are set out below.

There are four key criteria in the biodiversity code:

1. The program must have an explicit biodiversity objective
2. Activities must be identified based on an analysis of threats to biodiversity
3. The program must monitor associated indicators for biodiversity conservation
4. Site-based programs must impact biologically significant areas

### FAA Sections 118 and 119 Requirements

- Country Analysis Requirements.—Each country development strategy statement or other country plan prepared by the Agency for International Development shall include an analysis of—
- The actions necessary in that country to achieve conservation and sustainable management of tropical forests and/or biodiversity, and
- The extent to which the actions proposed for support by the Agency meet the needs thus identified.

The analysis should:

- Employ a watershed, landscape, integrated or ecosystem approach to areas (can be urban or peri-urban) within a sphere of influence from a nucleus of some natural and/or protected area
- Establish links between activity and conservation outcome supported by data and documentation

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<sup>1</sup> For tropical forests, Section 118(e) of the FAA requires that “Each country development strategy statement or other country plan prepared by the US Agency for International Development shall include an analysis of (1) The actions necessary in that country to achieve conservation and sustainable management of tropical forests, and (2) The extent to which the actions proposed for support by the Agency meet the needs thus identified.”

<sup>2</sup> Similar language exists for biodiversity conservation in FAA Section 119(d): “Country Analysis Requirements. -- Each country development strategy statement or other country plan prepared by the US Agency for International Development shall include an analysis of (1) the actions necessary in that country to conserve biological diversity, and (2) the extent to which the actions proposed for support by the Agency meet the needs thus identified.”

- Fill gaps in data where possible
- Allocate resources if possible
- Identify ways to monitor links and results

For the purposes of this analysis the following definitions will be used:

Biological diversity, or biodiversity, is the variety and variability of living organisms broadly including a wide diversity of plant and animal species, communities, and ecosystems. The Earth's biodiversity consists of genes, species, and ecological processes making up terrestrial, marine, and freshwater ecosystems that both support and result from this diversity.

A forest is best defined as an ecosystem or assemblage of ecosystems dominated by trees and other woody vegetation. Forests (according to the U.S. National Vegetation Classification system) consist of trees with overlapping crowns forming 60% to 100% cover. Woodlands are more open, with 25% to 60% cover.

## METHOD

Ms. Thera Edwards was hired as a Biodiversity Consultant to conduct the assessment. She was assisted by Mr Arun Madiseti. (See Scope of Work in Appendix 1 and professional background descriptions in Appendix 2). The assessment builds on a previous analysis of threats to biodiversity and program options for USAID/Jamaica (Edwards, 2006) The last formal I18-I19 analysis for the Caribbean was carried out in 2005 by Chemonics (Catterson, Gardner and Huth, May 2005).

A number of key documents, legislation and policies were reviewed. The information from these documents was supplemented by key informant interviews (See List of Person Consulted in Appendix 3) and site visits to forests and other areas of biological significance (See Site Visit List in Appendix 4). In addition to presenting the current status of the selected sectors, actions to address identified issues are set out. The recommended actions seek to minimize conflicts between different uses of the land; to ensure the protection of coastal and wetland areas; to conserve and protect water resources and catchments; to protect coastal, marine and terrestrial ecosystems; to maintain ecological balances; to ensure the participation of local populations; to allow natural resources to be used wisely and sustainably; and to ensure integrated and inter-sectoral linkages. The economic, social and environmental importance of forests and land resources should as far as possible be reflected in and factored into all activities and initiatives.

# ANTIGUA & BARBUDA

Antigua's climate can be described as Tropical maritime climate with average monthly maximum temperatures ranging from 27.9°C to 30.5°C. Drought is a customary feature of Antigua and Barbuda's climatic composition. The country has three geological regions namely: The Volcanic Region, The Central Plain and The Limestone Region. The population is estimated at 83,005 for Antigua and 1,325 for Barbuda

## STATUS OF BIODIVERSITY

### ECOSYSTEM DIVERSITY

The islands of the Eastern Caribbean, including Antigua and Barbuda, serve as an important link in the seasonal migration of numerous birds. Several species of thrushes, vireos, cuckoos and warblers migrate through the area during the late summer-autumn season, and migrants are completely dependent on habitat provided by the islands. Antigua and Barbuda also serve as a critical stopover site for numerous shore birds that migrate along the Trans-Atlantic route between North and South America

Mangroves and related wetlands, and seabird nesting sites on offshore islands are considered critical habitats for bird conservation. Other critical areas include marine wetlands, coral reefs and sea grass beds.

In the 1980's it was estimated that wetland systems constituted approximately 11% of Antigua and Barbuda's total land area, amounting to almost 5000 hectares of wetland (de Albuquerque and McElroy 1995). Thirty six mangrove sites exist around the islands ranging from small single species stands to larger complex systems.

These systems consisted largely of salt ponds with adjacent mangrove forests typically populated by four species of mangroves – *Rhizophora mangle*, *Avicennia germinans*, *Laguncularia racemosa* and *Conocarpus erectus* (Red, Black, White and Button Mangrove respectively). Barbuda's Codrington Lagoon makes up a significant portion of this. This system covers almost the entire West and Northern sections of the island and is approximately 7.5 miles long by 2.5 miles wide. It is actually comprised of two lagoon systems – the larger Codrington Lagoon and Goat Island Flashes which is smaller and shallower than Codrington

### SPECIES DIVERSITY

Antigua and Barbuda is home to numerous endemic and globally threatened species, including the critically endangered Antiguan racer snake (*Alsophis antiguae*), the hawksbill turtle (*Eretmochelys imbricata*), and the vulnerable West Indian whistling duck (*Dendrocygna arborea*). In addition, 22 plant species are listed as being endemic to the Lesser Antilles (one of which, *Pectis ericifolia*, may be endemic to Barbuda). An additional 73 species are classified as rare in the country.

Approximately 182 species of birds have been recorded for Antigua and Barbuda. About two-thirds are migratory; one-third are year-round residents. Twenty of the approximately 60 residents are considered endemic to the West Indies sub-region, and in some cases, are restricted to the Lesser Antilles. There are possibly 2 single-island endemic sub-species: the Broad-winged Hawk (*Buteo platypterus insulicola*) and a Barbuda endemic sub-species or race of the Adelaide's Warbler (*Dendroica ruficauda*). The breeding populations of the Roseate Tern and the Magni-

ificent Frigatebird represent a substantial percentage of the global populations. The IUCN Red List for the country is contained in Appendix 5. The freshwater fish of Antigua and Barbuda are listed in Appendix 6.

## GENETIC DIVERSITY

Agriculture benefits greatly from the characteristics of The Antiguan Honey Bees and crops such as Hot Peppers, and Antigua Black Pineapple.

## ECOSYSTEM SERVICES

The Antiguan Honey Bees produce very pure honey that requires no pasteurization. In addition to the honey they produce the bees pollinate plants and trees. Fisheries are a major part of ecosystem services and the catch production is used as an indicator. Results are set out in Table 1 below. Graphs of production and associated value for Antigua and Barbuda and the other islands assessed are shown in Appendix 7.

TABLE 1. ANTIGUA & BARBUDA FISHERIES PRODUCTION AS LANDINGS (METRIC TON)

Type	2003	2004	2005	2006	2007
Fish (All types)	1875	1728	2162	2280	2257
Lobster	243	245	309	318	318
Conch	469	554	528	494	517
Total	2587	2527	2999	3092	3092

Source: Antigua & Barbuda Fisheries Division

## VALUES AND ECONOMICS OF BIODIVERSITY AND FORESTS

Crops such as Hot Pepper, Black Pineapple and Sea Island Cotton have the potential to generate good revenue. Sea grass beds are common in shallow coastal areas around both islands and are an important nursery area for juvenile fish and invertebrate species. There are 25 fisheries landing sites in Antigua and 4 in Barbuda. Codrington Lagoon is particularly important to Barbuda's economy as it provides an ideal environment for juvenile species of important commercial species of fish and lobster. Barbuda's economy is largely based on the lobster fishery.

TABLE 2. ANTIGUA & BARBUDA FISHERIES PRODUCTION VALUE (EC\$)

Type	2003	2004	2005	2006	2007
Fish (All Types)	25,131,800	23,247,500	33,599,000	35,263,800	40,669,000
Lobster	5,346,000	5,390,000	8,157,600	8,395,200	9,444,600
Conch	1,110,587	1,300,053	1,239,040	1,159,253	1,289,053
TOTAL	\$31,588,387	\$29,937,553	42,995,640	44,818,253	51,402,653

Source : Antigua & Barbuda Fisheries Division

## STATUS OF TROPICAL FORESTS

Cater (1944), on the basis of the rainfall distribution on Antigua, summarized the original forest to have consisted of seven major types:

1. Mangrove woodland
2. Littoral woodland
3. Cactus scrub
4. Thorn woodland
5. Deciduous seasonal forest
6. Semi-evergreen seasonal forest
7. Evergreen seasonal forest

Atkins in 1980 defined forest classes as set out in Table 3 below:

TABLE 3. ANTIGUA AND BARBUDA – NATIONAL FOREST CLASS DEFINITIONS

National class	Definition
Moist forest	Closed forest (>40% canopy cover, with trees > 5m tall)
Dry woodland	Closed forest (>40% canopy cover, with trees > 5m tall)
Cactus scrub	Open forest (10-40% canopy cover, with trees > 5m tall)
Mangroves	Closed forest (>40% canopy cover, with trees > 5m tall)
Shrubs	Other wooded land (5-10% canopy cover, with trees and/or shrubs > 5m tall, or >10% canopy cover with trees and/or shrubs < 5m tall)

The most recent mapping of forests is shown in Figure 1 below.

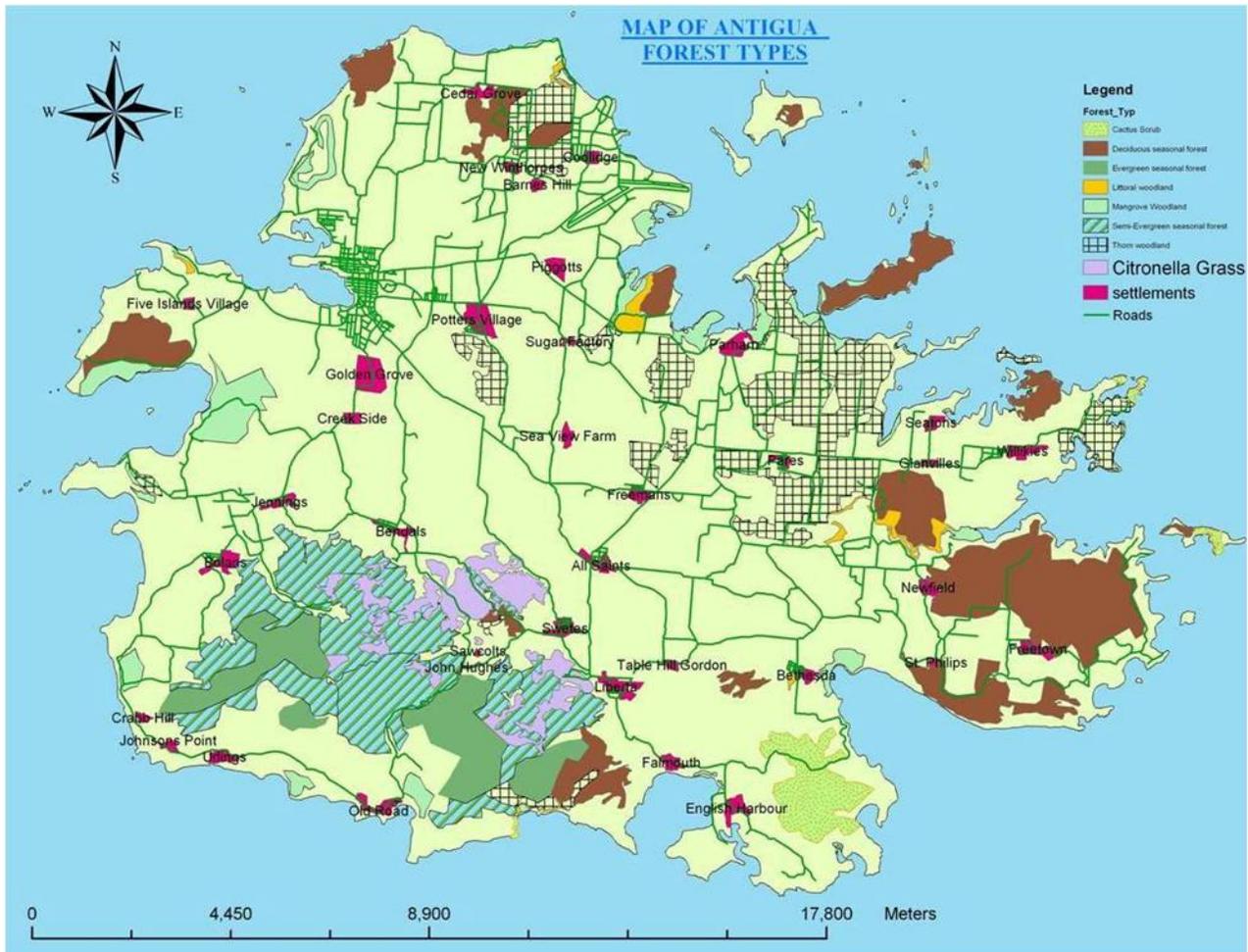


Figure 1. Map showing the distribution of Forests in Antigua

## SOCIAL, ECONOMIC AND POLITICAL CONTEXT

Antigua and Barbuda's service-based economy grew by 3.8% in 2007, experiencing its third consecutive year of strong growth. Construction, banking and insurance, communications, and wholesale and retail trade sectors were the main contributors to economic growth, which was driven by a construction boom in hotels and housing, as well as projects related to the 2007 Cricket World Cup. The tourism and hospitality sector has largely recovered after the decrease in tourism following the September 11, 2001 terrorist attacks. It posted a strong performance in 2004, and in 2005 the sector was estimated at 50% of GDP. To lessen its vulnerability to natural disasters and economic shocks, Antigua has sought to diversify its economy by encouraging growth in transportation, communications, Internet gambling, and financial services.

Total GDP and contribution to GDP of selected sectors for the country at Constant Factor (1990) Cost sourced from the latest IMF country report is as set out in Table 4.

TABLE 4. GDP OF ANTIGUA AND BARBUDA AT CONSTANT FACTOR PRICE (MILLION \$EC)

Sector	2003	2004	2005 (estimate)	2006 (preliminary)
Total	1,728.4	1,840.4	1,978.7	2,274.2
Forestry	0.9	0.9	0.9	0.9
Fishing	32.6	34.1	36.0	38.5
Hotels & Restaurants	173.4	185.2	194.1	204.8

The number of tourist arrivals to both islands for the period 2003 -2007 is presented in Table 5 below. Cruise ship arrivals increased by 42.6 % between 2006 and 2007.

TABLE 5. ANTIGUA & BARBUDA TOURISM ARRIVAL FIGURES 2003-2007

Visitor	2003	2004	2005	2006	2007
Stay Over	182,423	245,797	245,384	253,669	261,786
Cruise	385,686	522,753	466,851	471,623	672,788
Total	568,109	768,550	712,235	725,292	934,574

Source: Caribbean Tourism Organization

## INSTITUTIONS, POLICIES, LAWS AFFECTING CONSERVATION

### INSTITUTIONS

The Ministry of Agriculture, Lands, Marine Resources and Agro-Industry has the broadest and longest standing involvement in natural resource management issues. The Fisheries and Forestry Division within that ministry are the two principal government agencies charged with gathering most of the primary data on the biological resources of Antigua and Barbuda.

The Fisheries Division has responsibility for development of the fisheries sub-sector, monitoring fish-stocks and marine resources, as well as a regulatory role in policing fishing practices. The Division has been given powers under the Marine Areas Act (1972) to restrict fishing in certain areas and to preserve habitats, flora and fauna, natural beauty or shipwrecks in marine areas.

The Forestry Division has responsibility for managing the country's forest and woodland areas and for reforestation. The primary instrument for management of the upper watersheds is the Forestry Ordinance (cap 99 1941), which provides for the establishment of forest reserves, the granting of permits for harvesting forest resources and for clearing, etc.

The Environment Division initially set up within the Ministry of Tourism and Environment in 1996 was mandated by the Cabinet to inter alia, identify and coordinate the implementation of national commitments to International Environmental Agreements, including the coordination of implementation of recommendations of the National Coordinating Mechanism; develop and implement a national environmental awareness program; develop and implement projects related to the rehabilitation and protection of the environment; coordinate the development of environmental legislation; and to coordinate the process of conducting EIAs.

The National Parks Authority (NPA) is a financially self-sufficient statutory body with a Board of Directors. It was established through the National Parks Act. This act provides procedures for the designation of any area of land or water as a national park. The NPA is mandated to 'preserve, protect, manage and develop the natural physical and ecological resources and the historical and cultural heritage of Antigua and Barbuda'.

The Development Control Authority, administered under the Ministry of Works Environment and Communications, has responsibility for regulating the use and development of land for urban, economic and infrastructure development. The National Physical Development Plan lays out clear policy for land resource development in Antigua and Barbuda. This plan proposes to retain much of the upper watersheds (and their forest cover) as conservation areas and recognizes the importance of the remaining wetlands, proposing to conserve these areas as much as possible.

The National Solid Waste Management Authority handles the disposal of solid waste for the island.

The National Coordinating Mechanism (NCM) was developed as a forum for the co-coordinated follow-up, at the national level, to all Environmental Conventions ratified by the Government of Antigua and Barbuda.

## LEGISLATION

The islands have a number of legislative acts governing environment which are listed in Appendix 8. The principal acts are:

The Land Acquisition Act, Cap 333 passed in 1958

The Beach Control Act, cap 45. 1958, amended in 1989. The powers under this act have been subsumed under the new Physical Planning Act 2003, but there is no evidence of it as being repealed

The Beach Protection Act cap 46. 1957

The Bush Fire Act, Cap 62. 1901, last amended in 1989

The Marine Areas (preservation/enhancement) Act, cap 259.1972, last amended in 1989, much of its provisions are adequately covered now under the Fisheries Act and the Marine Areas (Act 1972). Two Marine Reserves have been designated under this Act (Diamond Reef –off the North-West coast of Antigua and Palaster Reef –off the South coast of Barbuda.

The Public Utilities Act, cap 359.1973 gives the Antigua Public Utilities Authority the exclusive right to supply, and distribute water in Antigua/Barbuda. It establishes general control over watercourses, but does not address watersheds or their management in any way or form.

The National Parks Act, Cap 290. 1984 and makes provision for the preservation, protection, management and development of the natural, physical, ecological, historical and cultural heritage of Antigua & Barbuda.

The Forestry Act, cap 178. 1941. This present Act is very out dated and there is certainly a need to enact the Draft Forestry and Wildlife Act which has been on the table for the last ten years.

Fisheries Act, cap 173 1983. The act had regulations passed in 1990. There is a Draft Fisheries Act, Draft Fisheries regulations, Draft High Seas Fishing Act and Regulations, Draft Lobster Standards and Draft Seafood Regulations

The Physical Planning Act, 2003.

The Environmental Protection and Management Bill 2005

## **GOVERNMENT, NGO AND DONOR PROGRAMS AND ACTIVITIES**

### **GOVERNMENT**

#### **ENVIRONMENTAL DIVISION**

Environmental Division is currently implementing a project aimed at controlling the invasive Citronella Grass. Project funds were limited hence it was not possible to attempt a large area so a small demonstration site was selected. Strategic Sustainable Island Resource Management Plan is still pending.

#### **THE NATIONAL PARKS AUTHORITY**

The National Parks Authority is still without natural resource management staff hence their activities are confined to the heritage aspect of their mandate.

#### **FISHERIES DIVISION**

Management plan for the proposed MPA at Willoughby Bay is still pending. Monitoring of coral reefs needs to be completed to give an updated status report.

#### **FORESTRY DEPARTMENT**

The department has recognized the threat and adverse effect on native species of the invasive Fire Ants and Cuban Tree Frog however the impact of these species cannot be determined quantitatively as no baseline studies were done. The department notes that GIS capacity and vehicles are a constraint to their operation.

### **NON-GOVERNMENT ORGANISATIONS**

#### **ENVIRONMENTAL ADVISORY GROUP**

The main operational Environmental NGO in Antigua and Barbuda is the Environmental Advisory Group (EAG). The EAG started as a Friendly Society but is currently registered as a Not-For-Profit company. Its main areas of activity are; Conservation of the Antigua Racer, Species Population censuses, Jumby Bay Hawksbill Project, advocacy & lobbying and public education and awareness through such initiatives as the "Floating Classroom".

## **THREATS TO BIODIVERSITY AND FORESTRY**

The FAA 118/119 conducted in 2006 identified a number of threats. New threats are set out below:

## DIRECT

- Emerging invasive species. (Fire Ants and Cuban Tree Frogs)
- Sand mining in Barbuda. Mining has been so intensive that in one area the water table has been exposed and in another the dunes protecting the land from the sea were removed causing flooding in 2007. The inundation with sea water also caused salt intolerant plants inland to die.
- Coastal Development. Planning permission given for a new hotel built on Barbuda against the recommendation of the EIA and the decision of the Barbuda Council.
- Oil Spills. Antigua Public Utilities Authority (APUA) facility in Barbuda has no infrastructure in place to contain oil seepage and spills from generators. The result is anoxic mud and dead scrub vegetation in the land between the facility and Codrington Lagoon.
- Sewage. In Barbuda latrines are the main system for sewage disposal. A plant was to be built but the proposed site was found to be unsuitable by the Barbuda Council and to date there have been no alternate proposals.



FRANCES FULLER

Figure 2. Clearing of land used as a nesting site by birds for development, Antigua (March 2008)



FRANCES FULLER

Figure 3. Emerald Cove Development, Antigua showing mangrove clearing (November, 2007)



IMAGES DOMINICA

Figure 4. APUA Oil spill, Barbuda (May, 2008)



IMAGES DOMINICA

**Figure 5. Water table exposed during sand mining, Barbuda. (May, 2008)**

## INDIRECT

- Development of Management Plans for mangrove areas that serve as marine nursery areas and/or key conservation areas for birdlife (Hanson Bay, Pinchin Bay, York’s Salt Pond, Valley Church)
- Inadequate protection of ecologically significant areas. Codrington Lagoon since being designated a Ramsar site in 2006 has had no further protective action. The Lagoon supports commercial and sport fishing as well as a Lobster hatchery and fishery with some 300-1000 Lbs of Lobster being exported weekly to Guadeloupe.

## ACTIONS NEEDED TO CONSERVE BIODIVERSITY

The threats identified above are presented in a modified Threat Reduction Assessment Table. The suggested actions point towards directions rather than presenting 100% reduction statements. The actions to lead to 100% reduction can be developed by country experts with more specialized knowledge.

**TABLE 6. SUMMARY OF THREATS TO BIODIVERSITY AND FORESTS IN ANTIGUA & BARBUDA WITH PROPOSED ACTIONS TO ADDRESS THESE THREATS**

Threats	Criteria Ranking			Total Ranking	Suggested Actions
	Area	Intensity	Urgency		
Invasive Species	3	5	6	14	Structured eradication and control programmes
Weak Enforcement	6	4	3	13	Dedicated unit within relevant ministry to deal environmental of-

TABLE 6. SUMMARY OF THREATS TO BIODIVERSITY AND FORESTS IN ANTIGUA & BARBUDA WITH PROPOSED ACTIONS TO ADDRESS THESE THREATS

Threats	Criteria Ranking			Total Ranking	Suggested Actions
	Area	Intensity	Urgency		
					fences.
Outdated Legislation	7	3	2	12	Support for legislative drafting and review of draft legislation
Incomplete biological data	8	1	1	10	Biological surveys of selected taxa (Insect survey could be important as insects are both beneficial (Bees) and harmful (Crop pests) causing economic losses  Ecosystem surveys (reefs, decapods and mangroves),
Institutional Capacity	4	2	4	10	Staff support in natural resources management for National Parks Authority (Peace Corps or some other similar mechanism)
Sand Mining (limits set by Barbuda Council being exceeded and enforcement non-existent)	2	7	8	17	Sand mining policy and guideline developed and strictly enforced.
Coastal Development	5	8	7	20	EIA recommendations need to be enforced and not overridden.
Oil Spills at APUA site in Barbuda	1	6	5	12	Clean energy options. Solar and wind generation of power.

## USAID PROPOSED STRATEGY & PROGRAMME

The table below lists thematic areas for USAID activity in keeping with the Agency's four approaches to conservation viz Community based natural resources management (NRM), protected areas, enterprise development and policy development. These approaches coupled with the Agency's commitment to habitat conservation will form the foundation for proposed strategies.. It should be noted that some of the actions are carried over from the 2006 FAA I18/I19 assessment as the need still exists.

The strategy to be employed in Antigua and Barbuda should focus on the areas of policy and habitat conservation as the islands do not have a lot of scope for community based enterprises. Fishing is the closest livelihood activity to the biodiversity base and can be used as a launch for coastal and wetland conservation. The islands have a heavy reliance in tourism through beaches and boating. Thus the connection between land-based activities, coastal and marine health and tourist satisfaction should be used.

### PROPOSED ACTIVITIES FOR ANTIGUA & BARBUDA

#### Mapping of marine and coastal habitats and resource assessment

- Map and construct database of all marine and coastal resources including reefs, mangroves, decapods, sea grass beds, beaches and fishing areas
- Forest reserve survey, mapping and legal establishment should be completed as a priority

#### Tourism Analysis

- Visitor survey to elicit information on perceptions of natural resources and environmental issues
- Capacity analysis at the national and site level to determine threshold for Antigua and Barbuda's tourism product with respect to size of country and natural resource base

#### Institutional Strengthening

- Support for enactment of enabling legislation
- Technical staff hired
- Training (short courses, professional exchange programmes within Caribbean)

#### Protected Areas / National Parks System Review

- National parks needs to move from a heritage/archaeology emphasis to a more integrated approach that makes provisions for environmental and conservation objectives

#### International Certification

- FEE – Green Key  
The GreenKey® is a diploma awarded companies within tourism: hotels, youth hostels, conference- and holiday centers, campsites, holiday houses, leisure facilities and restaurants. To obtain the GreenKey the company has to fulfill a long list of environmental requirements. These requirements are contained in a number of criteria. Besides pure environmental demands, the criteria include demands on policy and action plans.
- FEE – Blue Flag  
The Blue Flag is a voluntary and exclusive eco-label awarded to beaches and marinas. The Blue Flag works towards sustainable development at beaches and marinas through publicly awarding sites that meet strict criteria dealing with water quality, environmental education and information, environmental management, and safety and other services. A few of the issues covered in the criteria include: sions for waste and recycling, zoning of activities, and environmental education activities for a variety of

## PROPOSED ACTIVITIES FOR ANTIGUA & BARBUDA

people. The Programme has also recently started a voluntary scheme for private boat owners called the Individual Blue Flag, which boaters can fly if they have signed and agreed to follow an environmental code of conduct.

- Green Globe  
Green Globe is the global Benchmarking, Certification and improvement system for sustainable travel & tourism

### Sustainable Resource Use

- Map and construct database of all marine and coastal resources (ecosystems and species) including reefs, mangroves, Sea Grass beds, beaches and fishing areas
- Identification of suitable areas for sand mining and establishment of sustainable extraction limits (with particular reference to Barbuda)
- Biological inventory of understudied taxa

### Natural Defence Mechanisms Protected

- Preservation of sand dunes around fringe of Barbuda
- Maintenance of mangrove and coastal community integrity to support fisheries and promote good coastal water quality

## EXTENT TO WHICH PROPOSED ACTIVITIES MEET NEEDS

The proposed activities are recommended based on site visits, interviews and an assessment of actions taken since the last assessment. Some threats such as sand mining and solid waste disposal remain issues in Barbuda with even more dramatic effects than before. Policies and legislation remain stalled and environmental problems to be address by them continue. While the Barbuda Land Act has been passed, it has not come into full operation. As a result the activities set out above will go a far way in addressing localized issues as well as wider systemic issues.

## THREATS FROM PROPOSED ACTIVITIES

The activities proposed if implemented with the full stakeholder support at all levels should pose no threats to biodiversity, forests or the goodwill enjoyed by USAID.

# DOMINICA

Dominica's climate is classified as humid tropical marine, with average temperatures of 27°C (80°F). Because of the island's rugged topography micro-climatic variability exist within very short distances. Seven volcanic centres form the interior of the island. The island has a series of complex mountain ranges characterized by very rugged and steep terrain. Current population is estimated at 71,242. The rugged inland terrain coupled with the establishment of national parks and forest reserves has lead to settlement being concentrated in coastal areas with Roseau and its environs having the highest density.

## STATUS OF BIODIVERSITY

### ECOSYSTEM DIVERSITY

In the NBSAP the natural vegetation is delineated into 7 communities, namely: Coastal Swamp, Littoral Woodland, Dry Scrub Woodland, Deciduous/Semi-evergreen Forest (including Grassland and savannah sub-types), Rain Forest, Montane Rain Forest, and Elfin Woodland. Fumarole vegetation associated with geothermal areas is also present. However Evans and James (1997) describe the following communities; Elfin Woodland, Montane thicket, Rain Forest, Coastal Woodland, Swampland, Lakes, Rivers, Coastal Beach, Cliffs and modified communities namely, Plantations, Grasslands and Gardens. There are points of intersection between the two systems.

### SPECIES DIVERSITY

Dominica boasts a phenomenal plant diversity of approximately 155 families, 672 genera and 1226 species of vascular plants. The number of indigenous species includes Pteridophytes (194), Gymnosperms (1), Monocotyledons (518) and Dicotyledons (1,445). Dominica has several plant species which are recorded as endemic to the island, e.g. *Sabinea carinalis* (Bwa Kwaib) the National Flower of Dominica. Eighteen species of wild terrestrial mammals have been recorded for Dominica. These include twelve native species of bats, one species of opossum, one species of feral pig, and four species of rodents including the agouti. Nineteen species of reptiles have been recorded for Dominica consisting of fifteen terrestrial species and four marine species. The fifteen terrestrial reptiles include ten lizard species, four sub-species of snake and one tortoise species. Of the ten species of lizards, the Ground Lizard (*Ameiva fuscata*) and the Tree Lizard (*Anolis oculatus*) are endemic. The amphibian fauna in Dominica consists of four species of frogs, one of which is endemic to the island. The most prominent is *Leptodactylus fallax*, a large frog commonly referred to as the Crapaud or Mountain Chicken, which is endemic to Dominica and Montserrat. The other amphibian species are three species of small (tree) frogs consisting of one single-island endemic species *Eleutherodactylus amplinympha* – that is restricted to higher elevations on Dominica, and two regionally endemic species, viz. the Tink Frog (*Eleutherodactylus martinicensis*) and Johnstone's Whistling Frog (*E. johnstonei*). The freshwater fish of Dominica are listed in Appendix 6. The terrestrial and freshwater decapod crustaceans in Dominica include eleven species of freshwater shrimps and twenty species of freshwater/terrestrial/ semi-terrestrial crabs. None of the crustaceans are endemic to the island and most are widely distributed in the Caribbean.

The IUCN Red List for Dominica can be found in Appendix 5.

### GENETIC DIVERSITY

There are a number of plants, bats, and birds on Dominica that are currently considered as different “sub-species” or “races” (in the case of animals) and “varieties”, “morphs”, “forms”, or “groups” (in the case of plants). All or none of these may be split into endemic species as real, taxonomic work is done on each on a case-by-case basis. For the animals, the divide at the sub-species level is often between Dominica and the other Lesser Antillean islands, and a number of cases can be found among the resident birds. Plants also show the same type of inter-island variation, but they also show variation within Dominica across habitats along an elevational and rain fall gradient

### ECOSYSTEM SERVICES

Due to its rugged terrain the islands foremost ecosystem services are tied to the numerous rivers which proliferate all over. This results in a number of spectacular waterfalls which are sites for tourist to visit as well as locals to en-

joy. These rushing rivers also are harnessed for Hydro-electric power (estimated at 40% of electricity production). Fisheries data for Dominica are set out in Table 7 below.

TABLE 7. FISHERIES PRODUCTION AS LANDINGS FOR DOMINICA (LBS)				
2003	2004	2005	2006	2007
1,462,213	1,278,042	1,153,372	1,725,469	1,695,195
Source: Fisheries Division, Dominica				

## VALUES AND ECONOMICS OF BIODIVERSITY AND FORESTS

The production and value of landings over time can be found in graphs presented in Appendix 7

## STATUS OF TROPICAL FORESTS

Dominica has done an exceptional job of protecting the rain forest, montane thicket, and elfin forests that are located from 1,800 feet above sea level to the summits of the mountains. However, there is virtually no protected dry forest anywhere on the island. The only exception is Cabrits National Park, but 100% of the forest in this small national park is secondary forest, and all of this is dominated by non-native, planted timber species. The 2000 national forest classes and coverage are shown in Table 8.

TABLE 8. NATIONAL FOREST CLASSES AND COVERAGE	
National Classes 2000	2000(1000 ha)
Montane Cloud Forest	0.25
Evergreen Montane Shrubland	1.07
Montane Rain Forest	3.04
Submontane Rain Forest	23.63
Disturbed Submontane Rain Forest	8.40
Lowland/Submontane Seasonal Evergreen Forest	5.68
Lowland Drought Deciduous Shrub/Semi- Deciduous	5.55
Seasonally Flooded R.F./W.L./G.L	0.25
Total forest	47.88

## SOCIAL, ECONOMIC AND POLITICAL CONTEXT

Dominica's economy has always been based on the utilization of its land resources and on the productive initiatives of the labor force. The GDP for the country sourced from the latest IMF country report is as set out in Table 9

TABLE 9. GDP OF DOMINICA AT CONSTANT FACTOR PRICE (MILLION \$EC)

Sector	2003	2004	2005 (estimate)	2006 (preliminary)
Total	1,728.	1,840.4	1,978.7	2,274.2
Forestry	3.5	3.5	3.5	3.5
Fishing	8.8	8.9	9.3	10.4
Hotels & Restaurants	10.2	11.3	12.1	13.9

The figures for tourist arrivals 2003-2007 (Table 10) and visits to eco-tourism sites 2003-2005 (Tables 11 -13) suggest that most tourists that go to Dominica visit at least one of the eco-tourism sites. The Emerald Pool and Trafalgar Falls are the most popular, Cabrits and Indian River are distant second and the other locations share the rest of visitors.

TABLE 10. DOMINICA TOURISM ARRIVAL FIGURES 2003-2007

Visitor	2003	2004	2005	2006	2007
Stay Over	72,948	80,081	79,257	83,916	54,606
Cruise	177,044	383,614	301,294	379,503	349,388
Total	249,992	463,695	380,551	463,419	403,004

Source: Caribbean Tourism Organization

TABLE 11. NUMBER OF VISITORS TO ECO-TOURISM SITES IN DOMINICA (2003)

Sites	Site Pass	Day Pass	Weekly Pass	Resident	Children	Exemption	Total
Freshwater & Boeri Lake	1,810	191	524	2,110	47	30	4,712
Soufriere Sulphur Springs	2,637	60	328	4,048	62	48	7,183
Emerald Pool	53,821	233	739	5,988	214	311	61,306
Trafalgar Falls	61,744	429	783	3,539	313	185	66,993
Middleham Falls	3,552	126	343	716	25	21	4,783
Cabrits	4,951	206	505	7,866	41	400	13,969
Indian River	14,249	181	531	1,029	63	75	16,128
Syndicate	233	13	13	55	0	0	314

Boiling Lake	2,133	37	408	872	1	0	3,451
<b>TOTALS</b>	<b>145,130</b>	<b>1,476</b>	<b>4,174</b>	<b>26,223</b>	<b>766</b>	<b>1,070</b>	<b>17,8839</b>

**TABLE 12. VISITOR FIGURES FOR ECO-TOURISM SITES (2004)**

Sites	Site Pass	Day Pass	Weekly Pass	Resident	Children	Exemption	Total
Freshwater & Boeri Lake	2,422	265	524	2,758	35	14	6,018
Soufriere Sulphur Springs	7,296	136	275	8,861	49	57	16,674
Emerald Pool	109,560	466	666	5,595	235	210	116,732
Trafalgar Falls	122,058	463	700	6,888	455	279	130,843
Middleham Falls	6,060	160	465	1,167	16	5	7,873
Cabrits	5,674	239	454	7,444	52	103	13,966
Indian River	16,344	180	348	2,156	10	132	19,170
Syndicate	387	5	18	12	0	0	422
Boiling Lake	2783	57	407	1037	1	17	4,302
<b>TOTALS</b>	<b>272,584</b>	<b>1,971</b>	<b>3,857</b>	<b>35,918</b>	<b>853</b>	<b>817</b>	<b>316,000</b>

**TABLE 13. VISITOR FIGURES FOR ECO-TOURISM SITES (2005)**

Sites	Site Pass	Day Pass	Weekly Pass	Resident	Children	Exemption	Total
Freshwater & Boeri Lake	4,121	283	493	4,214	46	11	9,168
Soufriere Sulphur Springs	3,954	178	511	9,606	93	50	14,392
Emerald Pool	70,633	260	589	5,604	197	216	77,499
Trafalgar Falls	88,563	426	750	6,513	290	87	96,629
Middleham Falls	4,263	207	478	1,048	33	1	6,030
Cabrits	5,111	116	640	7,821	54	276	14,018
Indian River	9,559	110	372	2,272	52	139	12,504
Syndicate	204	4	8	188	2	0	406
Boiling Lake	2,378	93	249	1,221	8	6	3,955
<b>TOTALS</b>	<b>188786</b>	<b>1677</b>	<b>4090</b>	<b>38487</b>	<b>775</b>	<b>786</b>	<b>234,601</b>

## INSTITUTIONS, POLICIES, LAWS AFFECTING CONSERVATION

Environmental management and conservation is promoted through the Ministry of Agriculture, Fisheries and Forestry (previously Ministry of Agriculture, Fisheries and Environment). The ministry has 5 divisions/units and one major funded project; the European Union funded Agricultural Diversification Project (EU/ADP). The divisions are:

- Policy Formulation and Administration Unit
- Agriculture Division
- Fisheries Division
- Forestry, Wildlife and Parks Division
- Waitukubuli National Trail Project

The Environmental Coordinating Unit (ECU) formerly in linked with the Ministry is now in the Ministry of Health and Environment.

National legislation, impacting on environment, biodiversity and forests are set out in a list found in Appendix 8. The country does not have any formal environmental policy or management plan. The national priorities for environmental management are seen as; biodiversity – conservation and sustainable use, poverty alleviation and sustainable development and land use management including zoning (agriculture, settlement), and land use planning.

As a signatory to the St. Georges Declaration of Principles for Environmental Sustainability in the OECS (SGD) in April 2001 Dominica is following through on its commitment to developing a National Environmental Management Strategy by initiating the development of the strategy.

In keeping with the high priority placed on biodiversity Dominica has prepared a National Biodiversity Strategy and Action Plan.

## GOVERNMENT, NGO AND DONOR PROGRAMS AND ACTIVITIES

Kalan Ickes and Saara J. DeWalt of Clemson are utilizing Clemson's research station, the Archbold Tropical Research and Education Centre (ATREC) for their research programs.

Funding was made available through the London Zoological Society and the Darwin Initiative to establish a captive breeding facility which is near completion in the Roseau Botanical Gardens. A molecular diagnostic lab and staff trained were provided through an EU Stabex program. The virus affecting the Crapaud was determined in 2006. In addition captive breeding is ongoing in the UK. This captive breeding in conjunction with an ongoing field survey and the facility in Roseau should begin to raise sufficient numbers of frogs for release.

Chuck Knapp, a Postdoctoral Research Fellow at CRES, is working to establish a comparative ecological study of Lesser Antilles Iguana in disturbed and undisturbed habitats in Dominica, the species stronghold. Lesser Antilles iguanas are native to most islands in the Northern Lesser Antilles and, like other Caribbean Iguanas, are threatened by humans and their domestic animals. In addition, Lesser Antilles iguanas are threatened by competition and possibly introgression with introduced common iguanas, native to the Southern Lesser Antilles and Central and South America. Thus, CRES is also studying interactions between Lesser Antilles and other Iguanas in areas where the two species are found in close contact.

Current Agricultural Diversification Programme in Dominica supports a major reform of the banana industry in parallel with the efforts to diversify both agriculture and the economy as a whole

Weather resistant agriculture such as Greenhouses has been extensively promoted, however the emphasis has been towards conventional farming practices. This raises cause for concern as to the long term sustainability of production i.e. the ability of the soil to sustain production.

There are steps being taken for a total standardization of the herbal products industry through the Bureau of Standards. The development of sustainable extraction and conservation practices to ensure long term commercial production is supported.

16 sites selected for support under the EU Ecotourism Development Program (EDTP), through the Ministry of Tourism, have been completed with trails, facility upgrades and/or creation, local community involvement and signage.

Implemented through the Ministry of Tourism, Green Globe benchmark certification has been achieved however slow progress and lack of completion of other requirements has meant no full certification.

Currently 20% of Dominica's landmass is protected through national parks or forest reserves; there are two MPA's the Soufriere Scotts Head Marine Reserve (SSMR) in the south, and the Cabrits National Park Marine Section in the north. Through the OPAAL project a management plan for the Cabrits is ready and going to Parliament, the plan's framework pays particular attention to the development of sustainable livelihoods in the area. A management structure is already in place for the SSMR however gaps in the framework have meant that the efficient operation and management of the reserve have been hampered.

Since 2006 650 farmers have been certified as Tesco Natures Choice compliant, 200 have attained EUREPGAP certification and numbers are growing. Fair Trade Organization (FTO) supplies the following United Kingdom grocery chains Waitrose, Adsa, and Sainsbury. The FTO has implemented an organic waste composting plan using organic agricultural and domestic waste. A processing plant has been constructed and in the past 18 months (to May 2008) has produced in excess of 30,000lbs of compost.

The FTO is trying to implement an agricultural component in primary and secondary schools; however lack of funding has prevented the full potential from being recognized. Three greenhouses have been constructed at schools in outlying communities showing agriculture at work. Annually 3 college students are chosen from the State college agriculture program for placement in the Dominica FTO.

## THREATS TO BIODIVERSITY AND FORESTRY

Since the last report the following threats remain.

### DIRECT

- Hurricanes
- Insect pests such as Black Fly and Pink Mealy Bug
- Land based sources of pollution affecting marine environment

### INDIRECT

- Legislative reform
- Availability of scientific information

## ACTIONS NEEDED TO CONSERVE BIODIVERSITY

The threats identified above are presented in a modified Threat Reduction Assessment in Table .14

TABLE 14. SUMMARY OF THREATS TO BIODIVERSITY AND FORESTS IN DOMINICA WITH PROPOSED ACTIONS TO ADDRESS THESE THREATS

Threats	Criteria Ranking			Total Ranking	Suggested Actions
	Area	Intensity	Urgency		
Hurricanes and other natural disasters	7	7	1	15	Adaptation programmes for agriculture sector to include agricultural systems, soil conservation
Plant pest and Diseases	5	5	3	13	Agriculture Programme promoting reduced use of agro-chemicals and protecting indigenous planting material
Land based sources of pollution	6	4	5	15	Project to address multiple sources of pollution
Unresponsive legislation	4	2	4	10	CITES legislation not enacted or existing legislation amended.  Issues such as bioprospecting not addressed.
Availability of scientific information.  <i>Research conducted but results not communicated to local institutions or technical skills transferred via training</i>	3	1	2	6	Policy developed to guide activities of overseas research programmes.
Parrots killed as agricultural pests	1	3	7	11	Action plan to reduce resource competition
Loss of Iguana habitat	2	6	6	14	Conservation of dry forests

## USAID PROPOSED STRATEGY & PROGRAM

The table below lists thematic areas for USAID activity in keeping with the Agency's approaches to conservation. These approaches coupled with the Agency's commitment to habitat conservation will form the foundation for the strategy. The strategy to be employed in Dominica should focus on the areas of policy, habitat conservation and livelihoods. The island has a heavy reliance on eco-tourism/ nature tourism while still maintaining an agricultural sector. Thus the connection between land-based activities such as farming, coastal and marine health for dive tourism and agricultural production should be optimized.

Legislative compliance with MEAs such as CITES remains inadequate as the last annual report files was in 2002. No biennial reports have been submitted for 2003-04 and 2005-06.

### PROPOSED ACTIVITIES FOR DOMINICA

#### Agriculture Sector Support

- Use of hydroponics systems
- Adoption of mixed systems (fruit trees intercropped with other crops)
- Expansion of organic farming
- Integrated Pest Management promoted to reduce use of harmful agro-chemicals.
- Citrus Blight resistant rootstock developed to preserve crop genetic resources in local Citrus

#### Monitoring of Coastal and Marine Areas

- Monitoring and assessment of land based sediments in the marine environment especially from quarries. This is still a major concern.
- Monitoring of sea turtles and protection of nesting sites

#### Protect dry forest habitat of the Iguana

- Gap analysis to ensure that all necessary natural communities are included in protected area network

#### Legislative compliance

- CITES legislation and reporting. Finalization of legislation and enactment required urgently as well as system to ensure timely reporting.
- Bioprospecting legislation needed to safeguard genetic resources

#### Parrot Conservation

- Explore options for Citrus to be harvested before ripening (and hence before eaten by Parrots) and processed. Mixed peels and other preserves. Thus farmers will have reduced losses and small rural enterprises can be developed.

#### International Environmental Certification

- FEE – Green Key

The GreenKey® is a diploma awarded companies within tourism: hotels, youth hostels, conference- and holiday centers, campsites, holiday houses, leisure facilities and restaurants. To obtain The GreenKey the company has to fulfill a long list of environmental requirements.

- FEE – Blue Flag

The Blue Flag is a voluntary and exclusive eco-label awarded to beaches and marinas. The Blue Flag works towards sustainable development at beaches and marinas through publicly awarding sites that meet strict criteria dealing with water quality, environmental education and information, environmental management, and

## PROPOSED ACTIVITIES FOR DOMINICA

safety and other services.

- Green Globe

Green Globe is the global Benchmarking, Certification and improvement system for sustainable travel & tourism

### Conservation of Turtles, Iguanas and

- Training of local persons in government or NGOs in conservation techniques (field assessment, breeding etc)
- Dry forest area protected through appropriate legal mechanism to ensure habitat for Iguana conserved
- Community conservation efforts for Turtles coordinated to ensure all groups trained and roles and responsibilities defined. La Plaine and Riviere Cyrique are potential pilot communities. La Plaine has had some support from the USDA

## EXTENT TO WHICH PROPOSED ACTIONS MEET NEEDS

The agricultural sector in Dominica continues to require support to redefine itself post Banana and to improve its resilience to natural disasters and disease. This land based sector also needs to reduce its impact on other ecosystems (freshwater and marine) by reducing sediment load and chemical run-off.

## THREATS FROM PROPOSED ACTIVITIES

No threats are envisioned from the activities proposed.

# GRENADA

The State of Grenada, which includes the islands of Carriacou and Petit Martinique and several small uninhabited islands, is located in the Caribbean Sea between latitudes 11 059' north and 120 20' north and longitudes 610 36' north and 610 48' west. Grenada is the largest island with a total land area of 312 km<sup>2</sup> and a coastline of approximately 211 km. Carriacou, located 24 km to the northeast of Grenada, has a total land area of just 34 km<sup>2</sup>, while Petit Martinique, located just beyond Carriacou, has a total land area of 2.3 km<sup>2</sup>. Grenada lies in the humid tropical zone of the northeast trade winds, and the seasonal shift in these winds gives rise to a wet season (June to December) and a dry season (January to May). The frequency, duration and intensity of rainfall vary considerably throughout the island, with the least rainfall in the lowlands of the northeast and southwest and the most rainfall in the inland mountainous areas. The climate is affected mainly by the subtropical cyclone belt and the Inter-Tropical Convergence Zone. Grenada is predominately of volcanic origin, and the soils of Grenada are dominated by clay loams (84.5%), along with clays (11.6%) and sandy loams (2.9%). Agricultural problems tend to arise from the shallowness, high erodibility, and low moisture retention capacity of the clay loams.

## STATUS OF BIODIVERSITY

## ECOSYSTEM DIVERSITY

The following terrestrial vegetation zones have been identified:

- Cloud Forest (montane thicket, palm break and elfin woodlands)
- Rain Forest and Lower Montane Rain Forest
- Evergreen and Semi-evergreen Forests
- Deciduous Forest and Cactus Scrub
- Littoral Woodlands
- Mangroves

Cloud forests exist on the upper summits of the highest mountains, where precipitation is above 4,000 mm per year and relative humidity and exposure increases. The formation consists of Elfin Woodlands in association with Palm Break and scattered tree ferns.

Rain Forests and Lower Montane Rain Forests occur below the cloud forests where rainfall exceeds 2,500 mm per year, temperature higher and exposure less than above. The two formations have little differences in floristic composition. The Upper Montane Forest contains smaller trees than the Lower Montane Forests. *Dacryodes excelsa* is the dominant species, reaching heights of 30 m - 35 m.

Evergreen and semi-evergreen forests are found in areas where rainfall averages 2,000 mm - 2,500 mm per year. Morne Delice Hill, a 20 ha forest block is an intact area of moist forest. It is located in the south of the island in a cloud tract and gets more rain than expected. *Tabebuia pallida*, *Manilkara bidentata*, *Bursera simaruba* and Bois bonde are the principal species.

Deciduous forests occupy the lower elevations. Rainfall in these areas ranges from 1000 mm to 2000 mm per year for five months. They exist in the north and south in a degraded condition.

Littoral Woodlands are found along the coast but most have been wiped out. *Conocarpus erectus*, *Jacquinia barbosca* and *Tabebuia* form the edge of the Levera Woodland. Behind is a mixture of species including *Coccolobis uvifera*, *Pisonis fragrans*, *Hipponame manchinella* and *Erithalis fruticosa*.

In the coastal and marine environments the following ecosystems are present:

- Sea Grass Beds: These exist in the Telescope area and within the barrier type reef extending from Grenville Bay to Prickly Bay in the south; at Carriacou in the L'Esterre Bay and Manchineel Bay and within the reef at North Bay, Isle de Rhonde. The main species are Turtle Grass, *Thalassia testudinum* and Manatee Grass, *Syringodium filiforme*. Other marine plants include various species of green, blue green, brown and red algae.
- Coral reefs: Most of the reefs around Grenada and the Grenadines, especially along the East and South East Coast are in varying stages of degradation and recuperation. The islands adjacent to Levera Bay have reef systems with Sugar Loaf being in the best state of recovery and dominated by Elkhorn coral (*Acropora palmata*). Preliminary Data shows areas of living reef along the East Coast which are basically a combination of various species of branching and boulder coral in varying stages of degradation and recovery. There is one barrier type reef stretching from Telescope Point to Marquis Islands with Elkhorn coral, Finger coral

(*Porites porites*) and some boulder coral including Mustard, and Brain Coral. Small fringing reefs mainly of Elkhorn coral exist along the south east and south coast to Point Salines. These reefs show some signs of recovery but most of them remain overgrown with algae. On the north West Coast, the reef at Red Rock, originally dominated by Elkhorn coral has suffered much physical damage probably from strong storm swells (Ground Sea) which frequently hit the area. Reefs also exist at Beausejour and Mollinere, but Mollinere is being steadily degraded by overuse mainly by tourists (snorkeling and scuba diving). At Grand Anse, the three fathoms reef is badly degraded; however, the six fathoms reef which consists of a combination of hard and soft coral is still in good condition. Large barrier reefs occur along the East coasts of Carriacou, Petit Martinique and some of the smaller islets of the Grenadines. These are strongly dominated by Elkhorn corals in the shallow areas and boulder coral in the fore reef. Saline and White Islands have an excellent reef system and presently have the best species combination in the area.

### SPECIES DIVERSITY

There is no information available on threatened or endangered plant species. However, three endemic species of plants are known, the Grand Etang Fern (*Danaea* sp.), the Cabbage Palm (*Oxeodoxa oleracea*) and one endemic tree species (*Maythenus grenadensis*). Grenada's terrestrial wildlife is thought to consist of four amphibian species, eight species of lizard and five species of snake, 150 species of birds (Groome, 1970), of which 18 species are thought to be threatened or endangered, four native species of terrestrial mammals and 11 native species of bats (Groome, 1970).

The dry forest found in the south and north of the island is considered prime habitat for two endangered and endemic species of birds - the Grenada Dove (*Leptotila wellsi*) and the Grenada Hook-billed Kite (*Chondrohierax uncinatusmurus*). Grenada is also home to four bird species which are endemic to the Lesser Antilles; the Grenada flycatcher (*Myiarchus nugator*), the Scaly-breasted Thrasher (*Margarops fuscus*), the Lesser Antillian Bullfinch (*Loxigilla noctis*), and the Lesser Antillian Tanager (*Tangara cucullata*). Several species have become extinct in Grenada since the arrival of the Europeans, including the Manatee (*Trichecus manatus*), the Grenada Parrot (*Amazona* sp.), the Agouti (*Dasyprocta albida*), Neuweid's Moon Snake (*Pseudoboa neuweidi*) Shaw's Racer (*Liophis melanotus*) and the Morocoy Tortoise (*Geochelone carbonaria*). Fresh water animals ranging from fishes to snails to insects and worms can be found in Grenada. Not much is known or documented on these animals. A list of freshwater fish can be found in Appendix 6. The IUCN Red List can be found in Appendix 5.

### ECOSYSTEM SERVICES

A variety of sea weeds or sea moss (red marine algae) mainly *Gracilaria* sp. is harvested at notable sand-mud locations at Calliste, Conference, Pearls and Telescope as well as locations at Carriacou and Isle de Ronde. The algae are processed into a milk based beverage primarily for local consumption, though some of the dried plants are exported on a small scale to other islands. Sustainable harvesting of *Gracilaria* has been maintained at Calliste, St. George's. The overall production from fisheries is presented in Table 15.

TABLE 15. FISHERIES PRODUCTION AS LANDINGS FOR GRENADA (LBS)

TYPE	2003	2004	2005	2006
Fish	5461871	4383229	4414176	4729513
Conch	78155	64943	35980	4618

TABLE 15. FISHERIES PRODUCTION AS LANDINGS FOR GRENADA (LBS)

TYPE	2003	2004	2005	2006
Fish	5461871	4383229	4414176	4729513
Lobster	57199	42985	50390	32532
Turtle	16608	14082	12399	6839
		240		
Total	5613833	4505478	4512945	4773502

Source: Fisheries Division, Grenada

### VALUES AND ECONOMICS OF BIODIVERSITY AND FORESTS

The value of fisheries in Grenada is set out in table 16 below. The value of the production of fishing industry of Grenada over time can be seen in a graph found in Appendix 7.

TABLE 16. FISHERIES PRODUCTION VALUE FOR GRENADA (EC\$)

TYPE	2003	2004	2005	2006
Fish (All types)	25,163,505.08	20,863,598.35	22,577,106.80	25,888,437.26
Conch	326,872.00	289,231.25	209,392.75	27,709.50
Lobster	526,504.65	341,839.75	454,923.88	288,498.72
Turtle	82,237.75	69,579.13	63,474.25	34,205.00
Squid		1,078.88		
Total	26,099,119.48	21,565,327.36	23,304,897.68	26,238,850.48

Source: Fisheries Division, Grenada

A number of non-timber forest products such as bark and seeds are sold in local markets. See figure below.



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Figure 6. Street stall with Sea Moss, Mauby Bark and other non-timber forest products. Grenville, Grenada (May, 2008)

## STATUS OF TROPICAL FORESTS

Miller, et al (1988), stated that about 4,800 ha of nominally forested land belongs to the Government, including the Grand Etang forest Reserve and Crown Lands. Eschweiler (1982), using aerial photographs, estimated the area in Grenada and Carriacou that are covered by forests and woodlands as 9,800 acres (3966 ha) and 7,360 acres (2979 ha) respectively (See Table 12). FAO figures indicated a 4.3 % increase in natural forest cover between 1980 and 1990 and an annual deforestation percentage of 0.6%. The main forest types based on Beard's classification are cloud forests, Rain and Lower Montane rain forests, Evergreen and Semi-evergreen forests, Deciduous forests, Littoral woodlands and Cactus Scrub, and Mangroves.

TABLE 17. FOREST TYPES AND COVERAGE (FROM ESCHWEILER)

Forest Type	Area (acres)
Montane Rain Forest ( <i>Elfin woodlands/Palm Brake</i> )	4,170 (1688 ha)
Closed Evergreen Forests ( <i>Secondary rain Forests/ Lower Montane rain forests</i> )	5,630 (2278 ha)
Moist Deciduous and Semi-Deciduous Forests	4,330 (1752 ha)
Abandoned crop land and grazing land	7,000 (2832 ha)
Scrub / Cactus Vegetation	3,030 (1226 ha)

Mangrove Swamps	470 (190 ha)
Inland Swamps	70 (28 ha)
<b>Total</b>	<b>24730 .....</b>

The main forest regions are the Grand Etang forest Reserve (1748 ha), Mt. St. Catherine (573 ha), Levera (220 ha), Annandale watershed (202 ha) and Morne Delice (about 40ha). The coverage of these principal areas is set out in Table 18

TABLE 18. COVERAGE IN AREA OF PRINCIPAL FOREST AREAS				
Forest Region	Location	Area	Government	Private
Grand Etang Forest Reserve	Grenada	1,748	11526	222
Annandale Watershed	“	202	202	-
Mt.Hope/Claybony water catchment	“	262		262
Mt. St. Catherine	“	573		
Morne Delice	“	40		40
Levera	“	220	48	172
High North	Carriacou	136		136



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**Figure 7. Grand Etang, Grenada. (May, 2008)**

**Note boles of trees showing effects of defoliation sustained during Hurricane Ivan**

Grenada contains 21 pockets (190 ha) of mangroves along the Eastern coastline from Levera to Telescope, and along the eastern coastline from Requin to True Blue. They form a thin fringe at Mt. Hartman Bay, Worburn Bay and Calivigny. The largest areas are at Levera, Conference, Upper Pearls, Westerhall and Calivigny. Four species of mangroves are found - Red mangrove (*Rhizophora mangle*), Black mangrove (*Avicennia racemosa*), the Button mangrove (*Conocarpus erectus*) and White mangrove (*Laguncularia racemosa*).

## **SOCIAL, ECONOMIC AND POLITICAL CONTEXT**

The latest estimate (2001) of Grenada's population showed 102,560 residents of the country, with an annual rate of population growth for the last ten years of 0.6%. Grenada is relatively mountainous with most of the settlements located within 1 km of the coast. There are two urban centers, St. George's the Capital (in the Parish of St. George) the town in the southwest and Grenville (in the Parish of St. Andrew) in the east. These two parishes account for about 59% of the population

The Country Poverty Assessment Report (PAR) constitutes the single most comprehensive document on the socio economic status of the Grenadian economy. The survey revealed that 32 % of the population corresponding to 28.8 % of households are classified as poor based on a poverty line of E.C. \$3,262 per annum per adult. 13 % of the population, corresponding to 10.5 % of households is classified as indigent being unable to meet the costs of supplying their minimum requirement for food. The study also revealed that the poor have limited access to health services, education, adequate housing and social services and that higher incidences of poverty are among the youth, aged, women and female households in the rural economy.

The Gross Domestic Product for the period 2003-2006 at constant factor price is presented in Table 19 below

**TABLE 19. GDP OF GRENADA AT CONSTANT FACTOR PRICE (MILLION \$EC)**

Sector	2003	2004	2005	2006
Total	975.1	949.8	1,101.4	1,142.3
Forestry	3.1	2.5	2.4	2.5
Fishing	27.9	23.4	24.7	25.9
Hotels and Restaurants	85.4	76.0	45.5	25.9

Tourism arrival figures for the period 2003-2007 can be found in Table 20

**TABLE 20. GRENADA TOURISM ARRIVAL FIGURES 2003-2007**

Visitor	2003	2004	2005	2006	2007
Stay Over	142,335	133,865	98,244	118,490	129,118
Cruise	146,925	229,800	275,082	218,838	270,932
Total	289,260	363,665	373,326	337,328	400,050

Source: Caribbean Tourism Organization

## **INSTITUTIONS, POLICIES, LAWS AFFECTING CONSERVATION**

In Grenada the management of biological diversity is under the jurisdiction of several governmental and quasigovernmental agencies each having a legal mandate for its area of responsibility, and guided by policy prescribed by the government. Environmental management is coordinated by a single individual who is supported by an Environmental Coordinating Committee. It seems that there are some twenty two institutions involved in some way or another with environmental affairs. The main agencies are the Forestry Department, Fisheries Division and the Environmental Affairs Department. There are over 70 pieces of legislation that protect and manage Grenada's forests, soil and water conservation and direct planning, development, use of lands; provide for beach protection, management of fisheries, protection of marine reserves; protection of wildlife and habitats; control of pesticides, pollution and waste management. The plethora of institutions and laws leads to duplication of jurisdiction, confusion in roles and responsibilities. None withstanding the numerous laws that exist, enabling legislation for the MEAs that have been signed and ratified is needed. This is borne out with respect to Conch and Turtle as CITES listed species. A list of relevant environmental legislation can be found in Appendix 8. Key legislation include the following:

- Beach Protection Act
- Birds and Other Wildlife Act;

- Fisheries Act;
- Forest Soil and Water Conservation Act;
- Grand Etang Forest Reserve Act;
- Land Development Control Authority Act;
- National Parks and Protected Areas Act;
- Pesticide Control Act;
- Public Health Act;
- Territorial Waters and Marine Boundaries Act;
- Town and Country Planning Act;
- Wild Animals and Birds Sanctuary Act.

A review of the existing legislation pertaining to forests in 1999 noted that no laws exist with respect to Mangrove protection.

## GOVERNMENT, NGO AND DONOR PROGRAMS AND ACTIVITIES

Since the inception of the Barbados Plan of Action in 1994, the Government of Grenada has instituted the following major initiatives:

- National Biodiversity Strategy and Action Plan;
- Forest Policy and Action Plan;
- Tourism Master Plan;
- First National Communication on Climate Change;
- National Physical Development Plan;
- National Disaster Plan;
- National Hazard Mitigation Policy;
- The Physical Planning Development and Control Act;
- The National Building Code;
- Integrated Watershed and Coastal Zone Management Plan;
- The establishment of the Multipartite Consultation Committee;
- The establishment of the Sustainable Development Council;
- The signing of the St. George's Declaration;
- The elaboration of the Draft Energy Policy;
- Solid and Liquid Generated Waste Management Strategy;

In addition various committees were established along several of the focus areas in the Barbados Plan of Action namely:

- The National Climate Change Committee;
- The Biodiversity Consultation Committee;
- The Biosafety Committee;
- The National Economic Council;
- The National Assessment Team for Poverty Eradication;
- The Environmental Management Committee;
- The NEMS Steering Committee.

### FORESTRY DEPARTMENT

The Forest Policy of 2002 based on stakeholder consultation shifted the emphasis from commercial logging to conservation with emphasis on watershed protection. Thus harvesting of non-timber forest products for craft making is allowed along with limited selected removal of trees. However there are weak areas in this system as the Governor General can by means of a proclamation sell any land in a protected area one the National Parks Advisory Committee is in agreement. This was the central issue surrounding the sale of lands in Mt Hartman which includes Grenada Dove habitat. Public outcry and a scientific assessment of the Dove and its habitat lead to the proposed boundaries being shifted and land of similar acreage being given to the developer.



Figure 8. Sign from Grenada Dove - Dry Forest Biodiversity Conservation Campaign, Grenada (May, 2008)

## FISHERIES DIVISION

The Fisheries Division is trying to get an assessment of Conch stocks. The Caribbean Regional Fisheries Mechanism has been asked to provide technical assistance. While there is no trade in Turtles there is local consumption. Management constitutes a closed season from May 1 to August 31 annually, size limits, a no take on eggs and nests as well as Leatherbacks. Two marine protected areas (MPAs) have been designated however they are not being properly managed.

## NGOS

Ocean Spirit is an NGO of volunteers that assist in data collection during Turtle nesting season. Tasks include tagging, counting eggs in clutches, measuring size and determining migration patterns.

## THREATS TO BIODIVERSITY AND FORESTRY

### DIRECT

- Natural Disasters (Floods, landslides, tsunamis, storm surges, earthquakes, hurricanes, volcanoes and fires)  
A particular hazard is Kick 'em Jenny, which is an active submarine volcano located approximately nine (9) kilometers off the north coast of Grenada and between the Islands of Grenada and Carriacou. Kick 'em Jenny is the most active volcano in the Eastern Caribbean having erupted at least twelve times since its discovery in 1939. Kick 'em Jenny lies approximately 180 meters below sea level, and the last recorded major activity was in 2001. Two major earthquakes were experienced in 1997 recording 5.7 and 5.9 on the Richter scale.
- Fires (major fires in 1990 and 2002)
- Marina and other coastal construction
- Land based sources of pollution (sewage released from St George into coastal waters, domestic and agricultural waste)



Figure 9. Levera Lake and Billboard advertising an Eco-Resort development at the lake, Grenada. (May, 2008)

## INDIRECT

- Delimitation of Exclusive Economic Zone. (Negotiations underway with Trinidad and Venezuela)
- Lack of a land use policy



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Figure 10. Solid Waste Dump, Grenada (May, 2008)

## ACTIONS NEEDED TO CONSERVE BIODIVERSITY

Table 21 summarizes threats to biodiversity and forests and suggests some actions to address these threats.

TABLE 21. SUMMARY OF THREATS TO BIODIVERSITY AND FORESTS IN GRENADA WITH PROPOSED ACTIONS TO ADDRESS THESE THREATS

Threats	Criteria Ranking			Total Ranking	Suggested Actions
	Area	Intensity	Urgency		
Natural disasters	6	6	1	13	Disaster mitigation programme
Fires	1	4	2	7	Bush fire education and training
Coastal construction	3	5	6	14	Specific policy for coastal zone
Land based sources of pollution	2	3	5	10	Targeted interventions:

TABLE 21. SUMMARY OF THREATS TO BIODIVERSITY AND FORESTS IN GRENADA WITH PROPOSED ACTIONS TO ADDRESS THESE THREATS

Threats	Criteria Ranking			Total Ranking	Suggested Actions
	Area	Intensity	Urgency		
					Sewage sources Agricultural sources Domestic sources
Delimitation of EEZ	4	1	3	8	Technical assistance including legal
None existent land use policy	5	2	4	11	Short term technical assistance to develop land use policy

## USAID PROPOSED STRATEGY & PROGRAM

The Box below sets out the activities proposed for Grenada. Activities centre around policy development and community based natural resource management.

### PROPOSED ACTIVITIES FOR GRENADA

#### Disaster Mitigation and Readiness Programme

- Develop ability of Grenada to withstand shocks from natural disasters
- Develop post disaster recovery plan based on priority areas of action. Effects of Hurricane Ivan still very visible

#### Bush Fire Project

- Public awareness programme for country
- Training in fire fighting including community fire response

#### Land Use Policy

- Clearly articulated policy of land use developed (zoning, activities, responsible agency, enforcement). Policy would provide an opportunity to identify conservation areas through resource assessment, critical habitat and earmark areas suitable for different classes of development.
- Plan could be by parish or theme so that it can have one part setting out objectives and goals and other stand alone parts which can be written and approved incrementally so that action can start without the entire plan being prepared.

#### Coastal Zone Policy

- Coastal zone policy needed separate and apart from land use policy to deal with issues of resource protection (loss of habitat, ecosystem preservation etc)
- Guidelines for coastal development prepared. Permissible area, classes of construction etc to be defined

## PROPOSED ACTIVITIES FOR GRENADA

### Land-based Sources of Pollution Strategy

- Sewage system to be improved to deal with release of untreated sewage into coastal waters especially around St George

### Institutional and legal arrangements for environmental management

- Review institutional framework for environmental management to rationalize number of agencies, jurisdiction, legislation etc. This could be a Short Term Technical Assistance activity as man power is very limited within the government and the activity will require dedicated effort.
- Prepare management plans for protected areas.

### Exclusive Economic Zone

- Technical assistance to define boundary. Has implications for fisheries, shipping and other maritime activity
- Legal assistance as well as negotiation support to have early resolution with other concerned parties

## EXTENT TO WHICH PROPOSED ACTIONS MEET NEEDS

Grenada has a number of direct and indirect threats that are tied directly to policy, legislation or operationalising existing provisions (e.g. MPAs declared but not effectively managed)

## THREATS FROM PROPOSED ACTIVITIES

No immediate threats are envisaged however if legal and policy initiatives are to be supported Strategic Environmental Assessments should be mandatory to examine their effects.

# ST KITTS AND NEVIS

St. Christopher and Nevis are two islands of an extended archipelagic clustering of oceanic islands in the Eastern Caribbean known collectively as the Lesser Antilles. St. Kitts (called this as a shortened version of St. Christopher since the eighteenth century) and Nevis have together an uniqueness derived in part from the country's distinctive, dramatic and spacious landscape profile. Each island, one larger, one smaller, is dominated by a single, fairly youthful volcanic cone surrounded by fertile slopes, called glacia, falling away almost uniformly but always gracefully towards the sea in all directions. There is little of the flatness of a Barbados, only a touch of the dryness of an Antigua, and none of the mountainous irregularity of a Grenada, a St. Vincent, a St. Lucia or a Dominica — with their convoluted interior terrain and radiating ridges, spurs and deep, isolated valleys, bound together by a narrow coastal strip of densely-populated land which guards the few entries to the central areas. The two islands are separated physically by a ocean channel known as the "Narrows," which is neither wide nor deep but has many implications notably, the unique kind of binary "Federation" under which the two officially operate as one.

Both islands have a tropical marine climate, heavily influenced by steady northeast trade winds, yielding small variations in temperature throughout the year. Rainfall over the main landmass of St. Kitts is relatively plentiful.

With its central mountain range extending from Mt. Liamuiga, at 3,792 feet (1,156 m) elevation to the peak of the South East Range at 2,953 feet (901 m), the uplift effect produces an annual average of 64 inches (1,625 mm). Except for the Southeast Peninsula (SEP), rainfall is fairly well distributed throughout the island although there are some seasonal variations, with a wet period from August to November and dry period from mid-January to about April. On the Southeast Peninsula precipitation varies from 39 inches (1,000 mm) on the peaks to 34 inches (864 mm) at Cockleshell. Islands like Nevis with one or more high peaks manufacture their own local weather, creating a range of micro-climates which vary greatly with height, location and orientation. Nevis has several projecting masses, with Nevis Peak at 3,232 feet (985 m) the dominant feature, which cause a marked upward deflection of westerly moving, moisture-laden air. This rising sea air is cooled by expansion, and the moisture is condensed so that orogenic cloud formations and often heavy precipitation result. A typical feature of central mountain peaks in the Eastern Caribbean islands is a cap of "trade wind clouds" which masks their summits day after day and is only occasionally dissipated in very still or very dry weather. More than one-half of Nevis receives less than 50 inches (1,270 mm) of rainfall per year, with the average rainfall being 46 inches (1,170 mm). Mean annual rainfall varies from 29.66 inches (753 mm) at New River on the windward side to 51.60 inches (1,310 mm) at Hamilton's Estate on the western slope of Nevis Peak.

The 2001 census gives the population of St Kitts as 34,930 and the population of Nevis as 11,181, representing an intercensal growth rate of 13.5% between 1991 and 2001.

## STATUS OF BIODIVERSITY

### ECOSYSTEM DIVERSITY

Beard 1946 described the following vegetation formations on St Kitts.

Rain Forest—two relatively small areas of first-class undamaged rain forest were located in St. Kitts, the one lying in the head-waters of the Wingfields River and the other above Mansion Estate." Where relatively undisturbed, Gommier (*Dacryodes excelsa*) was the principal species, with an understory of regenerating Gommier, and palms. Beard attributed disturbance to hurricanes. Palms were reported to compose 55 percent of the stems counted in Beard's sample plot, at the disturbed Mansion Estate site.

Dry Evergreen Forest—identified as secondary forest occupying lands below the rain forest. Twenty-one species were enumerated by Beard and included many intolerant, pioneer species.

Palm Brake—was found above elevations ranging from 1,200 to 1,800 feet. Beard reported, "The forest is dominated by palms (always the Mountain cabbage, *Euterpe globosa*) which form over 60 percent of the total crop." Tree ferns (15 percent) and small trees (25 percent) made up the balance of the stems in Beard's sample. Approximately 10 tree species were shown to grow in association with palms, and Beard reported 800 stems per acre.

Elfin Woodland—tropical alpine meadow reported by Cater. Beard indicates this type occurring above 2,000 feet elevation. He describes it as "a low, gnarled tangled growth, usually about 12 feet high, loaded with moss and epiphytes and matted with lianes." Beard identified about 10 woody plants in this type.

Dry Scrub Woodland—principally isolated to the Southeast Peninsula and has been heavily impacted by past use. Beard identified 39 species and indicates this to have been originally a deciduous seasonal forest.

Nevis has, according to the Beard system of classification had six vegetation zones. They are: rain forest, dry evergreen forest, montane thicket, palm brake, elfin woodland and dry scrub woodland.

Rain Forest and Humid Forest—substantial stand of tall forest is on the northwestern side of the mountain above Jessops. The dominant species are the Mountain cabbage palm (*Euterpe globosa*), Gumlin (*Dacryodes excelsa*), and Burrwood (*Sloanea truncata*). The humid forest zone surrounds the mountain and resembles the rain forest in species content with smaller trees with a less dense canopy. This allows more luxuriant herbaceous ground vegetation to form. Redwood (*Coccoloba diversifolia*) is more prominent in this zone. In both zones, the species diversity is low (approximately 25 distinct species).

Elfin Woodland—The summit of Nevis Peak is covered with low, gnarled, tangled growth. This forest is usually less than three meters high and laden with moss and epiphytes and matted with lianas. Woody plants are very low growing due to very high wind exposure, and herbaceous plants are quite common. The most common plant is a bromeliad that appears to be an undescribed species of *Guzmania*. Orchids, mosses, ferns, aroids and grasses are also abundant

Montane Thicket—Beard discovered only a thin belt of montane thicket on Nevis, located just above the rain forest on the west side of the mountain. This area is dominated by Weedee (*Podocarpus coriaceus*) and Mountain cabbage palm

Palm Brake—Palm brake is a band of montane forest located on very steep slopes or in areas exposed to high winds. This zone is dominated by Mountain cabbage palm, and the rest of the forest consists of Tree Ferns (*Cyathea arborea*) and small trees. This ecosystem occurs on the mountain slopes above 550 m on the eastern and southern slopes and above 700 m on the northern and western slopes; this band extends almost to the summit where it is replaced by elfin woodland. Palms and tree ferns are dominant because their trunks are flexible and can bend with heavy winds. Other more rigid trees must remain small or be blown over.

Dry Scrub Woodlands—The low hills of Nevis (e.g., Round Hill and Saddle Hill) consist of patchy, scrub woodland. The prominent trees are various species of Acacia and Cassia. Also present are century plant (*Agave americana*), Prickly Pear cactus (*Opuntia rubescens*), and Pope's head or Barrel Cactus (*Euphorbia pulcherrima*) (Merrill, 1958). Most of the southern coast of the island from the Bath Plain to Indian Castle consists of cactus scrub woodland.

Dry Evergreen Forest—The lower slopes of Nevis Peak that extend north and east are covered with an evergreen forest of small trees. The most prominent trees are White Cedar (*Tabebuia heterophylla*), Black Mast (*Diospyros ebenaster*) and Loblolly (*Pisonia fragrans*).

Bruce Potter in 1999 reclassified the vegetation of St Kitts and Nevis. That system recognized thirty six (36) unique forest types, associations and alliances. The comparison of that system of classification, Beards and two other studies is presented in Appendix 7

## SPECIES DIVERSITY

There are two species of amphibians known for St. Kitts:

- (1) a tree frog (*Eleutherodactylus johnstonei*), a Lesser Antillean endemic (although introduced to Jamaica and parts of South America); and
- (2) the marine toad (*Bufo marinus*), widespread in the Caribbean,

The Crapaud, or mountain chicken, *Leptodactylus fallax*, is recorded for St. Kitts, but is presumed to have succumbed to the mongoose.

Three species of amphibians are known from Nevis:

- (1) the tree frog, (*Eleutherodactylus johnstonei*),
- (2) the recently introduced Cuban Tree Frog (*Osteopilus septentrionalis*), and
- (3) the marine toad.

Ten, possibly eleven, terrestrial reptile species or sub-species have been recorded, two of which are extinct.

The tortoise (*Geochelone carbonaria*) occurs throughout much of tropical America. Presumed to have been introduced from South America by Amerindians, it occurs on both islands, though it is very rare in the wild.

Four species of gecko occur on St. Kitts:

- the Common Woodslave (*Hemidactylus mabouia*) and the Giant Woodslave (*Thecadactylus rapicauda*) occur throughout the Lesser Antilles;
- *Sphaerodactylus sabanus* and *S. sputator* are endemic to St. Kitts-Nevis, and St. Eustatius.

There are two Anolis lizards:

- (1) the green lizard (*Anolis bimaculatus bimaculatus*), a subspecies endemic to St. Kitts, Nevis and St. Eustatius;
- (2) *A. wattsi schwartzi*, also endemic to these three islands.

A Ground Lizard (*Ameiva erythrocephala*) is endemic to St. Kitts, Nevis and St. Eustatius). Burdon (1920) reported a shiny, bronze lizard (possibly *Mabouia mabouya*) that appears to have gone extinct since there have been no recent reports of this or any similar species from St. Kitts.

The country has two snakes:

(1) a blind snake (*Typhlops monastus*) is fairly common, even if not commonly seen, in both St. Kitts and Nevis. The species occurs in Montserrat, Barbuda, Antigua, St. Kitts and Nevis—*T. monastus geotomus* being the subspecies occurring in this country, as well as in Antigua and Barbuda. There are local reports of a second species or morph of blind snake on St. Kitts, though no similar reports are known from Nevis. It is described as silvery-grey in color, versus the brownish pink coloration of *T. monastus*. In addition to color differences, *T. monastus* is found in wetter habitat on the slopes and in the moist forests, while the grey snake occurs in drier habitat, especially in the coastal areas. Specimens of both taxa should be collected for comparative taxonomic study.

(2) A Racer snake, *Alsophis rufiventris* has been recorded for both islands; however, there have not been any confirmed sightings for several years and it may have been extirpated by mongoose. There have been interesting reports within the last four years of the occasional sighting of a small brown snake in the village of Cayon, located on the northeast coast of St. Kitts (K. Orchard, pers. Comm. to B Potter). *A. rufiventris* is extant on St. Eustatius and Saba.

Both St Kitts and Nevis have Green Monkeys which are currently reported as being in a 2: 1 ratio with humans



THERA EDWARDS

**Figure 11. Green Vervet Monkey in Mango Tree at Bird Rock Beach Hotel, St. Kitts (May, 2008)**

In the marine ecosystem survey in 2007 made the following observations.

### **Fish**

In general, the condition of the near shore marine life is unhealthy and out of balance, evidenced by high macro-algal and low coral cover, abundant small herbivorous fish, and very few large predator fish such as grouper and large snappers. The cause is likely a combination of overfishing, sedimentation from overgrazed land, and pollution transported through ocean currents.

### **Algae**

While there are abundant algae for fish to feed on, it appears there is a pattern of nutrient loading, high algal growth, and sedimentation settling which creates a mat of algae that suffocate and kills corals. Herbivorous fish, which usually clean corals of their algae, offer no relief because they do not prefer the matted algae. Some healthy algal-eating *Diadema* (sea urchin) populations were observed.

### **Coral**

Surveyors observed few large, reef-building corals (i.e. *Montastrea*). There were many dead corals turned over and coral rubble. Surveyors observed an over-abundance of colorful sponges and soft corals, which seem to take over when hard corals die. Small, healthy coral recruits (<10 years old) were abundant in the shallow (< 10 ft.) areas of Whitehouse Bay. These small corals are highly vulnerable to sedimentation, pollution and general disturbance, but are also a valuable resource because they harbor genetic diversity and are the source materials for new coral

growth. Coral recruits such as these provide an opportunity to save and expand coral populations in protected coral nurseries if they are professionally transplanted prior to any seabed disturbance.

Coral infection / bleaching

There is a great deal of stress, bacterial infections and algal overgrowth on both hard and soft corals and sponges. Conditions observed include mucus; brown spotting, and discoloration of sea fans, coral blushing and bleaching.

The IUCN red list for St Kitts and Nevis may be found in appendix 5.

## ECOSYSTEM SERVICES

Table 22 below sets out fisheries production as landings disaggregated for St Kitts and Nevis. Long term trends in fisheries production can be seen graphically in Appendix 7.

**TABLE 22. FISHERIES PRODUCTION AS LANDINGS FOR ST KITTS (KGS) AND NEVIS (LBS)**

St Kitts					
Product	2003	2004	2005		
Fish	197,547	280,268	257,635		
Conch	43,974	61,213	67,843		
Lobster	2488	3832	26,314		
Miscellaneous Species	56,735	69,136	30,776		
TOTAL	300,564	414,449	382,568		
Nevis					
Product	2003	2004	2005	2006	2007
Fish	471,995	497,050	466,680	501,750	402,500
Conch	94,895	66,225	55,830	109,060	128,800
Lobster	81,665	77,095	71,185	52,960	38,675
Miscellaneous Species	54,840	24,180	4,630	-	-
TOTAL	561,920	664,550	598,325	663,770	569,975
Squid			610		

Source: Fisheries Division St Kitts and Fisheries Division, Nevis

## VALUES AND ECONOMICS OF BIODIVERSITY AND FORESTS

Tables 23 and 24 below set out the value of fisheries landings for St Kitts (only 3 months of data was accessed as an illustration) and Nevis. Long term trends for value can be found in a graph in Appendix 7.

**TABLE 23. EX VESSEL VALUE (EC\$) OF FISHERIES LANDINGS FOR ST KITTS FOR A THREE MONTH PERIOD (YEAR NOT GIVEN)**

St Kitts		
Product	Total Weight	Value
Fish	160,220	1,388,220.00
Conch	33,720	236,040.00
Lobster	18,340	220,080.00
Miscellaneous Species	16,780	134,240.00
<b>TOTAL</b>	<b>212,280</b>	<b>1,44,882.00</b>

Source: Fisheries Division, St Kitts



Thera Edwards

**Figure 12. SCUBA tanks at fishing beach, Nevis (May, 2008)**  
 SCUBA gear used to extend fishing effort (depth and time underwater) for Conch and Lobster

TABLE 24. VALUE OF LANDINGS FOR NEVIS FOR 2004 -2007 (EC\$)

Product	2004	2005	2006	2007
Fish	3,451,890.00	3,909,015.00	3,995,370.00	3,189,805.00
Conch	397,350.00	446,640.00	854,280.00	1,012,200.00
Lobster	951,475.00	883,820.00	675,005.00	1,380,445.00
Miscellaneous Species	157,730.00		-	-
TOTAL	4,958,445.00	5,239,475.00	5,484,655	5,582,460.00
Squid		6,100.00		

Source: Fisheries Division, St Kitts

## STATUS OF TROPICAL FORESTS

No figures were obtained but the extent of forests in St Kitts and Nevis can be seen in Figures 2 and 3 respectively.

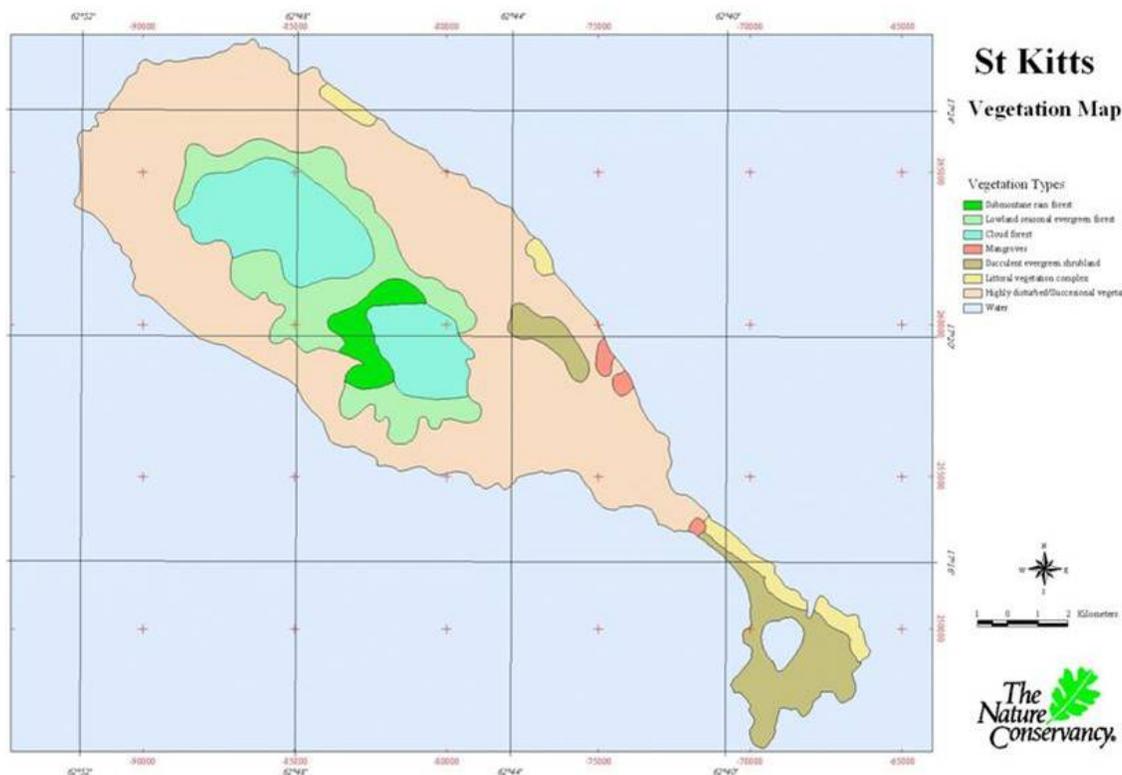


Figure 13. Vegetation Map of St Kitts

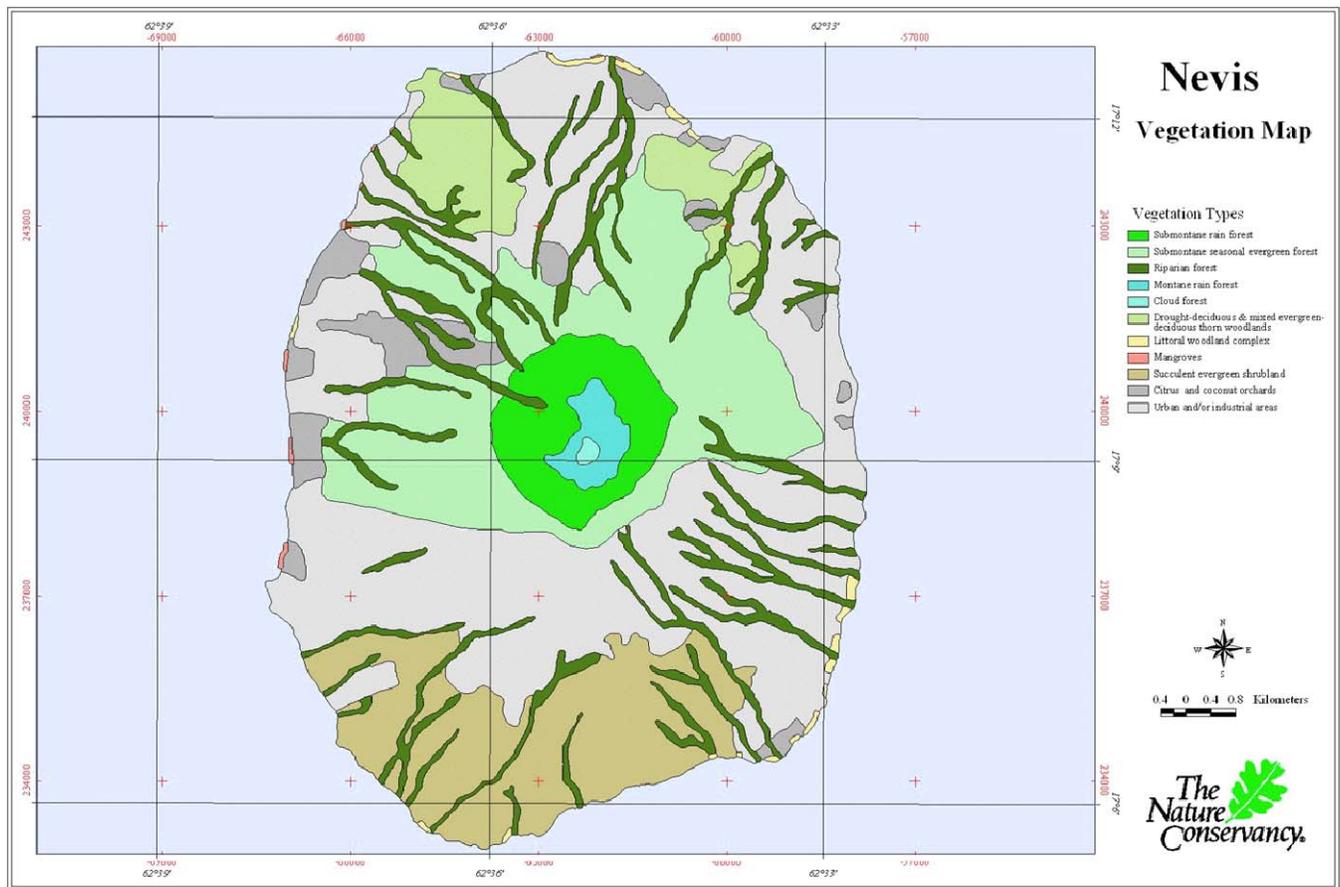


Figure 14. Vegetation Map of Nevis

## SOCIAL, ECONOMIC AND POLITICAL CONTEXT

Until recently St Kitts was the only remaining sugar monoculture in the Eastern Caribbean; faced with continuing reductions in sugar market, the Government has embarked on a program to diversify the agriculture sector and stimulate development of other sectors, especially tourism and light manufacturing and crafts. Tourism is gradually replacing agriculture as the major economic sector and is an important source of foreign exchange. Prior to development of Frigate Bay resort area in 1972, tourism focused on small, locally-owned hotels and guest houses.

Agriculture (Vegetable crops, Citrus, Cattle, Sheep, Goats, Pigs (many free-grazing)), tourism, fisheries, boat building, commercial trading, construction trades and a very small manufacturing sector form the economic base of Nevis. Tourism is concentrated along the Pinneys Beach area from Charlestown to Newcastle and in the Gingerland area between approximately 800 and 1,000 feet. The federation's GDP figures for 2003-2006 are found in Table 25.

TABLE 25 GDP OF ST. KITTS AND NEVIS AT CONSTANT FACTOR PRICE (MILLION \$EC)

Sector	2003	2004	2005 (estimate)	2006 (preliminary)
Total	1,728.	1,840.4	1,978.7	2,274.2

TABLE 25 GDP OF ST. KITTS AND NEVIS AT CONSTANT FACTOR PRICE (MILLION \$EC)

Sector	2003	2004	2005 (estimate)	2006 (preliminary)
Forestry	0.5	0.5	0.5	0.5
Fishing	7.8	10.2	11.6	12.0
Hotels & Restaurants	31.2	40.6	44.0	45.8

Tourist arrivals for stay over, excursion, yacht and cruise arrivals for 2003-2007 are shown in Table 26.

TABLE 26. ST. KITTS & NEVIS TOURISM ARRIVAL FIGURES 2003-2007

Visitor	2003	2004	2005	2006	2007
Air (Stay over & Excursion)	94,056	121,277	131,399	136,752	ND
Yacht & Cruise	150,429	254,535	215,351	203,075	ND
Total	244,485	375,812	346,750	339,827	ND

Source: St. Kitts & Nevis Statistics Office

## INSTITUTIONS, POLICIES, LAWS AFFECTING CONSERVATION

### INSTITUTIONS

The main institutions that control some aspect of biodiversity, forest or environment are the following:

- Development Control and Planning Board
- Pesticide Control Board
- Solid Waste Management Corporation
- Public Health Department
- Nevis Island Authority
- National Conservation Commission and the Department of the Environment
- Fisheries Divisions (St Kitts and Nevis have separate divisions)
- Forestry Departments (Forestry is administered through the Department of Agriculture)
- Frigate Bay Corporation
- Water Department

## LAWS

The following are the core laws that impact biodiversity and forests. There are a number of other laws that pertain to biodiversity and environmental matters. These may be viewed in appendix 8.

Forestry Act (Cap. 92)

Merchant Shipping Act, No. 24 of 2002

Plant Protection (Cap. 97)

Public Health (Cap. 226)

The Fisheries Act No. 4 of 1981

The Maritime Areas Act No. 3 of 1984

The National Conservation and Environment Protection Act No. 5 of 1987

The Pesticides and Toxic Chemical Control Act No. 18 of 1999

The Port Authority Act No. 8 of 1981

The most central law to biodiversity and forests is The National Conservation and Environment Protection Act No. 5 of 1987

The matters addressed by The National Conservation and Environment Protection Act are as follows:

- (a) the better management and development of the natural and historic resources of Saint Christopher and Nevis for purposes of conservation;
- (b) the establishment of national parks, historic and archaeological sites and other protected areas of natural or cultural importance including the Brimstone Hill Fortress National Park;
- (c) the establishment of a Conservation Commission.

Section 3 of the Act allows the Minister for development, in consultation with the Conservation Commission to designate any land or marine area to be classified as a national park, nature reserve, botanic garden, marine reserve, historic site, scenic sites or an area of special concern where such area meets one or more of the purposes and objectives provided in section 4 of the Act.

The purposes and objectives specified in section 4 of the Act are:

- (a) to preserve biological diversity of wild flora and fauna species that may be endemic, threatened, or of special concern and the land and marine habitats upon which the survival of these species depend;
- (b) to protect selected examples of representative or unique biological communities, both on land and in marine areas, and their physical environments;
- (c) to sustain natural areas important for protection and maintenance of life-support systems (air, water) and basic ecological processes including water recharge and soil re-generation;
- (d) to protect selected natural sites of scenic beauty or of special scientific, ecological historic or educational value, including sites that are already degraded and need protection for restoration or sites that may become de-

graded if not protected; or

(e) to maintain or restore historic sites of cultural, archaeological, scientific or educational value or interest.

The National Conservation Commission appointed under the Act holds protected areas, historic buildings or monuments in trust for the benefit of the people of Saint Christopher and Nevis according to section 9 of the Act. One of the functions of the Conservation Commission provided for in section 10 of the Act is to advise the Minister on the conservation of the natural beauty, topographic features, historic buildings, sites and other monuments of Saint Christopher and Nevis.

The National Conservation Commission is also required by section 13 of the Act to prepare a management plan which, according to section 14 of the Act should include information, to the extent possible, of a description of the manner and time frame within which various management measures will be undertaken.

## MULTILATERAL ENVIRONMENTAL AGREEMENTS

The following agreements have been ratified and their date of signing is indicated.

- Cartagena Convention on Law of the Sea – June 1999;
- International Convention on the Prevention of Marine Pollution (MARPOL) – 1998;
- United Nations Convention to Combat Desertification – June 30, 1998;
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) – May 15, 1994;
- United Nations Framework Convention on Climate Change – March 1994;
- Convention on Biodiversity – January 1993;
- Montreal Protocol on Substances that Deplete the Ozone Layer – August 10, 1992.

## GOVERNMENT, NGO AND DONOR PROGRAMS AND ACTIVITIES

### FISHERIES

#### ST KITTS

In St Kitts the Fisheries Division carefully manages the resources due to the proximity other islands especially non OECS countries such as St Eustacius and Saba. At the Saba Bank a traditional fishing area negotiation of fishing rights is ongoing. There have been proposals for MMAs but these have not got off the ground.

The division is still relying on an outdated Conch and Lobster assessment for guidance. In the meantime there is evidence of stocks being under pressure especially in inshore areas. While some may argue that new target species only transfer pressure the division is trying to direct effort towards the Giant Squid as an alternate species.

The department would like to develop marine reserves, fishing priority areas, yacht mooring areas and dive sites.

## NEVIS

The division issues local permits for Lobster and Crab and CITES permits for Conch. Reef fishing remains the main type of fishing. Seine fishing has to be closely monitored as small diameter meshes are often used. Lobster fisheries have to be monitored for the taking of undersize individuals as there is no closed season. The guideline for Conchs is that the shell should have a flare. Shells without flares are deemed juvenile. There is an open fishery for Turtles though a size limit is set.

The Division coordinates Sea Turtle monitoring and maintains an index beach.

The division would like to see the use of biodegradable traps which can break down when traps become “ghosts” allowing fish to escape.

## AGRICULTURE

### ST KITTS

The Department of agriculture is concerned with the agrobiodiversity losses of genetic material for such plants as Wild Yams, fruit trees such as Fat Pork, Mammee Apple and Cashew. Introduced pests such as the African Giant Snail are of concern. While the Green Monkeys which are in a 2:1 ratio with humans are a serious crop pest. Pollinators such as Bees and Butterflies have become less populous due to the use of agro-chemicals. A number of other diseases and pests such as the Hibiscus Mealy Bug, Tropical Box Tick, Bacterial Ring Spot, Bunch Top and Fruit Fly were cited as threats.

### NEVIS

There has been loss of agricultural lands to housing. Lethal Yellowing has decimated the Coconut trees in Nevis. A number of introduced animals pose threats. These include the Giant African Snail, Fire Ants, Cuban Tree Frogs and Leaf Hoppers. Fruits such as the local Mango which is noted among connoisseurs need to be reestablished in orchards as the trees are dwindling.

## WATER

In St Kitts there is no water master plan. Most (70%) water is obtained from groundwater sources through some 30 wells. The rest (30%) is sourced from springs. Domestic water use accounts for 50% of water produced while the other 50% is split between Tourism (15%), agriculture (10%), commercial (10%) and the remaining 15% is unaccounted for (Halla Sahely, pers comm.). In Nevis there is a water shortage during the dry season (in May 2008 during the in country visit Nevis was experiencing water lock-offs.).

IWCAM demonstration project slated for Basseterre Valley Aquifer.

## LEGAL DEPARTMENT

Solid Waste Management Bill, CITES Bill, Plant preservation Bill, MARPOL Bill among other environmental legislation in draft form. There is a draft National Biosafety Framework of St Christopher and Nevis.

## NGOS

### ST KITTS

- Ross University School of Veterinary Medicine, Dr Kimberly Stewart conducts formal Sea Turtle monitoring.

### NEVIS

- Nevis Turtle Group
- Sand Watch Group (Lyn Jeffers School)
- Nevis Historical and Conservation Society

## THREATS TO BIODIVERSITY AND FORESTRY

### DIRECT

The Peninsula Marine Ecosystem Week report in 2007 listed the following threats”

- Anchor and anchor chain damage in Seagrass beds and on coral reef was observed at most surveyed locations. Only a few abandoned fish traps were observed and most were not endangering the reef at the time of observation.
- Overall there was slightly better visibility and growth of small, healthy corals near shore (<30ft) than further out (30-60 ft). This suggests there may be other and greater sedimentation and runoff contributors than erosion from overgrazed land on the peninsula. It is very possible that runoff from inadequately treated sewage as well as industrial, urban, harbor and cruise ship sources from adjacent harbors, especially Basseterre and Charlestown, is impacting the coral reef ecosystem of the peninsula.
- Lab results from surface water samples taken during dive surveys from Whitehouse Bay further support this inference, indicating no significant levels of bacteria were detected at time of testing.
- Marine debris, especially plastic, is established as a serious problem throughout St. Kitts. Debris reaches near shore waters from storm water drains and ghauts that empty directly into coastal areas, as well as from offshore and local vessel traffic, which are also sources of oil discharges.
- Signs of over-fishing are clear. The direct removal of fish (includes crustaceans and mollusks) is occurring at a faster rate than some species can reproduce to keep population sizes healthy. Increased fishing pressure reduces large predators (grouper, snapper) and species diversity, resulting in a bottom-heavy (herbivorous), incomplete food web. Surveyors witnessed a lack of large predator fish, lack of large lobsters, and many large piles of conch shells (only one live conch seen).

The author saw and had the following reported as a threat:

- Extensive coastal development

Interviewees listed the following

- Removal of Seagrass beds by developers

- Bulldozing of mangroves
- Loss of agrobiodiversity/genetic resources

## INDIRECT

- Non declaration of marine management areas.



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Figure 15. Coastal development, St. Kitts (May, 2008)



Thera Edwards

Figure 16. Several coastal development projects, SE Peninsula St. Kitts (May, 2008)

## ACTIONS NEEDED TO CONSERVE BIODIVERSITY

The threats identified in St Kitts and Nevis are listed in Table 27 along with some suggested actions.

TABLE 27. SUMMARY OF THREATS TO BIODIVERSITY AND FORESTS IN ST LITTS & NEVIS WITH PROPOSED ACTIONS TO ADDRESS THESE THREATS

Threats	Criteria Ranking			Total Ranking	Suggested Actions
	Area	Intensity	Urgency		
Solid Waste	3	2	2	7	Project to address solid waste disposal. Public education should be a strong component. Basseterre should be focal area
Sewage	2	3	4	9	Sewage collection and treatment to be addressed. Coastal waters off Basseterre affected especially after rains
Coastal development	5	5	5	15	Clear policy on development based on carrying capacity and

					features of target sites.
Fishery pressure	6	6	6	18	<ol style="list-style-type: none"> <li>1. MMAs set up and management plans produced.</li> <li>2. Review of fishing waters</li> <li>3. Resource assessment for all classes of fish, lobster and conch</li> </ol>
Habitat destruction	4	4	3	11	<ol style="list-style-type: none"> <li>1. Guidelines for developers</li> <li>2. Offsets (Seagrass replanting)</li> </ol>
Loss of agrobiodiversity	1	1	1	3	<ol style="list-style-type: none"> <li>1. Collection of material and conservation through germplasm collection</li> <li>2. Tissue culture for rapid propagation</li> </ol>

## USAID PROPOSED STRATEGY & PROGRAM

The activities proposed for St Kitts center around livelihoods, habitat conservation and policy development. The fisheries sector with its issues of fishing ground rights, habitat degradation (Seagrass Beds, Mangroves, Reefs), pollution, outdated resource assessments, CITES harvested species (Turtles, Conch) and lack of MMAs provides an area for consolidated impact through diverse activities.

### PROPOSED ACTIVITIES FOR ST KITTS AND NEVIS

#### Coastal Water Quality

- Use model of USAID CWIP project to address different aspects of coastal water quality (Solid Waste, Urban Drains, Sewage collection and treatment)

#### Coastal Development

- Development limits to be set and guideline promulgated
- Offsets and restoration requirements for developers

#### Fisheries

- MMA establishment (declaration and development of management plan)
- Resource assessments and development of new limits with review of procedures

#### Agrobiodiversity

- Identification of threatened native species
- Collection and propagation of material

## EXTENT TO WHICH PROPOSED ACTIONS MEET NEEDS

The actions proposed will meet a number of needs identified during interviews and site visits.

## THREATS FROM PROPOSED ACTIVITIES

No threats are envisaged for the activities proposed. Even though preliminary work has been done towards the declaration of MMAs any new impetus should have a SWOT analysis or some such assessment to identify any potential issues.

# ST. LUCIA

Dominated by high peaks and rain forests in the interior, the 616- square-kilometer island is known for the twin peaks of Gros Piton and Petit Piton on the southwestern coast, its soft sandy beaches, and its magnificent natural harbors. Mount Gimie, the highest peak, is located in the central mountain range and rises to 958 meters above sea level, a contrast that is also evident in the abrupt climatic transition from coastal to inland areas. The steep terrain also accentuates the many rivers that flow from central St. Lucia to the Caribbean. Fertile land holdings, which support banana farming, are scattered throughout the island.

St. Lucia has a tropical, humid climate moderated by northeast trade winds that allow for pleasant year-round conditions. Mean annual temperatures range from 26° C to 32° C at sea level and drop to an average of 13° C in the mountain peaks. The abundant annual rainfall accumulates to approximately 200 centimeters, with most precipitation occurring during the June to December wet season.

## STATUS OF BIODIVERSITY

### ECOSYSTEM DIVERSITY

The forest ecosystem is made up of five (5) natural vegetation types: rainforest, lower montane rainforest, montane thicket/elfin woodland, secondary forest and dry scrub woodland. Each vegetation type has its own unique characteristics and serves as a habitat type for various wildlife species.

The freshwater habitats in St. Lucia include thirty-seven (37) major rivers, some temporary and permanent streams, a few marshes, swamps, underground springs, flood plains, inland mangroves. The freshwater ecosystems in St. Lucia are home to birds, fish, shrimp, insects and molluscs. Many of the birds which nest and forage in the wetlands are migratory but a number of them are resident of the island. Little is known about the freshwater fish. See Appendix 6 for a list of freshwater fish species.

Most of the island's mangrove areas have been declared marine reserves under the Fisheries Act (No.10 of 1984).

### SPECIES DIVERSITY

The flora of St. Lucia is very rich and diverse, comprising at least 1,310 species of flowering plants, cycads and gymnosperms, of which 105 plants are known to have medicinal properties and value and 241 are recorded as forest tree species. There are also 118 fern species and of these, eighty-five (85) species belong to the family, Polypodiaceae. Seven (7) fern species are considered endemic to St. Lucia, most of which are found within the forest.

There are twenty-seven (27) plants listed as being endangered, of which *Tetrazygia angustifolia* and *Myrcia leptocel-da* require immediate protection because they face immediate risk of extinction due to their limited habitat, which is threatened by urban development. Studies conducted to date show that only nine (9) flora endemics are found in St. Lucia, with *Cuphea crudyana* now extinct, last seen 200 years ago.

The fauna of St. Lucia is very unique, though not plentiful in reptiles and mammals. Over 150 birds are known to reside in St. Lucia whether as resident species, migratory species and occasional visitors. The island is home to five (5) endemic bird species which includes the national bird of St. Lucia, *Amazona versicolor* and two (2) endemic sub-species, the white-breasted thrasher (*Ramphocinclus brachyurus*) and St. Lucia nightjar (*Caprimulgus rufus*) which are also endangered.

There are seventeen (17) reptiles present within the forest and terrestrial ecosystem, of which five (5) are endemic to this country. Two (2) of the well-known endemics are the St. Lucia whiptail (*Cnemidophorus vanzoi*) and the St. Lucia racer (*Liophis ornatus*) which are both protected and have a safe habitat on the Maria Island Nature Reserve. Of the seventeen (17) reptiles recorded in St. Lucia, the snake species, 'Cribo' (*Clelia clelia*) is recorded as being extinct. It has not been seen during this century. A total of nine (9) mammals exist within the forest, one (1) of which, the St. Lucia muskrat (*Megalomys luciae*) is said to be extinct. Only four (4) amphibians are found in St. Lucia, with one (1), the mountain chicken (*Leptodactylus fallax*), reported to be extinct.

Three (3) species of turtles are known to nest in St. Lucia. These are the hawksbill, leatherback and green turtles. There have been a number of unconfirmed reports of sightings of loggerhead turtles in St. Lucia waters and hatchlings of this species found on beaches. The leatherback is the least common and the green turtle the most common.

## ECOSYSTEM SERVICES

Fisheries production has been used to illustrate ecosystem services in the table below.

TABLE 28. FISHERIES PRODUCTION AS LANDINGS FOR ST LUCIA (TONS)

Type	2003	2004	2005	2006	2007
Fish	1050.66	1102.1	948.95	1051.97	1152.76
Conch	47.51	45.6	41.96	34.71	41.01
Lobster	23.37	10.6	15.34	9.36	12.66
Other	325.46	361.6	379.95	343.98	302.29
Total	1446.99	1519.9	1386.20	1440.03	1508.72

Source: Fisheries Division, St Lucia

## VALUES AND ECONOMICS OF BIODIVERSITY AND FORESTS

The value of the fishing landings is used to illustrate the contribution of biodiversity to the economy.

TABLE 29. VALUE OF FISHERIES LANDINGS FOR ST LUCIA (EX VESSEL PRICES IN EC\$)

Type	2003	2004	2005	2006	2007
Fish	11,165,122.35	12,106,763.66	10,973,358.22	13,922,64.79	14,580,912.95
Conch	1,043,389.00	1,087,667.00	1,013,155.00	854,909.00	1,071,677.00
Lobster	827,555.71	416,532.71	593,301.28	381,695.90	497,728.27
Other	2,731,229.60	2,821,205.96	3,347,301.36	3,102,886.26	3,409,778.61
Total	15,767,296.66	16,432,169.32	15,927,116.86	18,261,648.79	19,560,096.83

Source: Fisheries Division, St Lucia

## STATUS OF TROPICAL FORESTS

There are fourteen (14) units of forest reserves totaling 7,500 hectares: 256 hectares of exotic plantation forests; 198 hectares of wetlands ecosystem and twenty-three (23) protected areas. Table 31 below clearly illustrates changes in land use and the decline in forest woodlands.

TABLE 30. LAND USE IN ST LUCIA (ACRES)

Classes of Land Use Reclassified	Census Year			
	1974	1986	1996	2007
1. Agricultural land	49,028	48,849	42,880	24,530
1.1. Cropland and permanent meadows and pastures	20,492	19,002	8,322	6,810
1.2. Permanent/medium term crops	28,635	39,169	34,433	17,005
2. Forest and woodland	19,002	8,322	6,810	3,713
3. Other land	3,971	1,754	1,638	1,961
Total	72,001	58,925	51,328	30,204

## SOCIAL, ECONOMIC AND POLITICAL CONTEXT

The total GDP and GDP of selected sectors is used to benchmark the economic climate. It should be noted that while the direct contribution of fishing to GDP ranges from 0.75% to 1.5% a further 2% is realized through indirect activities such as fuel stations, cooperatives, marketing and service providers (engine servicing, boat repairs).

TABLE 31. GDP OF ST LUCIA AT CONSTANT FACTOR PRICE (MILLION \$EC)

Sector	2003	2004	2005	2006	2007(preliminary)
Total	1,230.5	1,277.0	1,333.1	1,398.9	1,422.5
Forestry	11.9	9.1	8.5	10.5	10.8
Fishing	1.2	1.1	1.1	1.1	1.0
Hotels & Restaurants	161.4	170.9	181.7	176.7	163.6

St Lucia showed a 69.7 % increase in cruise arrivals in 2007 over 2006.

TABLE 32. ST. LUCIA TOURISM ARRIVAL FIGURES 2003-2007

Visitor	2003	2004	2005	2006	2007
Stay Over)	276,948	298,431	317,939	302,510	287,435
Cruise	393,240	481,279	394,364	359,593	610,165
Total	670,188	779,710	712,303	662,103	897,600

Source: Caribbean Tourism Organization

## INSTITUTIONS, POLICIES, LAWS AFFECTING CONSERVATION

The Department of Forests and Lands (DOFL) is the main government department responsible for the management of forests, soil, water and wildlife of St. Lucia. This responsibility is given to the Department of Forests and Lands through the existing legislation and regulations: the Forest, Soil and Water Conservation Act (1946) the Wildlife Protection Act (1980) and the Timber Industry Development Board Ordinance (1963). However, there are other governmental departments and non-governmental organizations and community-based organizations involved in natural resource and biodiversity management.

The Department of Fisheries (DOF), a sub-section under the Ministry of Agriculture, Forestry, Fisheries and the Environment (MAFFE) is the lead agency for development and management of fisheries. However, the Department of Fisheries has become involved in a number of coastal zone related issues not specifically fisheries related, since currently, there is no existing establishment designed to specifically function as a coastal zone management department/unit.

Mangrove areas are jointly managed by Forestry (vegetation) and Fisheries (water).

Currently, there is no formalized mechanism for incorporation of Environmental Impact Assessments (EIAs) into the planning process. A full list of environmental legislation can be found in Appendix 8.

## GOVERNMENT, NGO AND DONOR PROGRAMS AND ACTIVITIES

### GOVERNMENT

## **FORESTRY DEPARTMENT**

Department would like to acquire dry forest lands for protection of White Bearded Thrasher, Whiptail, Nightjar and Iguana. Much of the dry forest is privately owned so most of the dialogue is between private land owners and developers. Promotion of non-timber forest product harvesting especially in buffer zones for livelihoods. A current project seeks to determine selective logging/timber production limits. The department would like to set aside some lands for use by farmers.

## **FISHERIES DIVISION**

CITES legislation has been just completed and approved by Cabinet and is to be sent to Parliament. The division has some joint activities with Forestry for wetlands protection. The use of Fish Aggregating Devices (FADs) is being employed.

## **AGRICULTURE**

The Propagation Division has been involved in Mushroom production using cultures purchased overseas. The unit would like to undertake work with Orchids as they are threatened by habitat loss and exploitation. Development pressure on the land has resulted in declining numbers of traditional fruit trees. The Division wants to respond actively to prevent loss of indigenous plant materials (fruits and flowers).

## **NGOS**

### **DEBARRAS TURTLE GROUP**

Turtle watching has been conducted on the Grande Anse beach for more than a decade, every Saturday from about March to August, under the direction of the Saint Lucia Naturalists' Society, a non-governmental organization and the Department of Fisheries of the Ministry of Agriculture, Forestry and Fisheries. This initiative has now been expanded to several days a week (client -dependent), under the supervision of a group from the adjacent community of Desbarras, in a manner that allows members to earn a living by sharing the turtle nesting experience with local and visiting guests, while actively participating in the conservation of sea turtles.

The turtle data collection component assists the Department of Fisheries in the monitoring of one of the major nesting beaches on the island, especially in terms of the leatherback turtle. Data collected are submitted to both the Departments of Forestry and Fisheries for analysis and are also fed into regional databases such as that of the Wider Caribbean Sea Turtle Conservation Network, being coordinated from Barbados. The Group has expressed interest in assisting with turtle monitoring work in other parts of the island and members are keen to see the Grande Anse tour expand to include other aspects, such as bird watching.

([www.slubiodiv.org/Debarras\\_Sea\\_Turtle.pdf](http://www.slubiodiv.org/Debarras_Sea_Turtle.pdf))

### **SOUFIRERE MARINE MANAGEMENT ASSOCIATION**

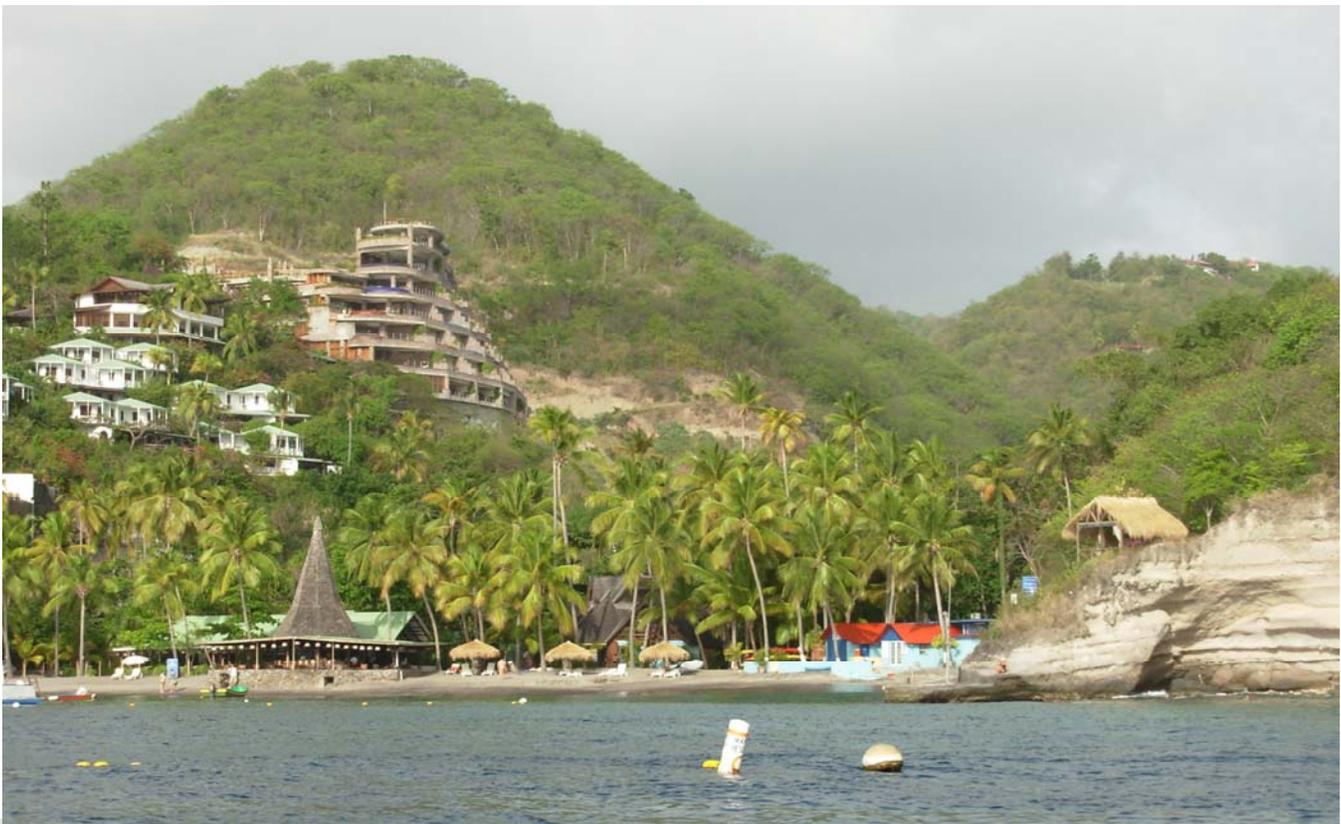
The Soufriere Marine Management Area is run by the Soufriere Marine Management Association which has an advisory committee that focuses on classes of users (divers, water taxis, fishers). The SMMA has begun to look at inland causes of marine problems. Some years the sediment load is so high divers have had to "vacuum" out clogged sea sponges. Sewage treated to irrigation quality standards at hotels has caused algal blooms. As a result projects focus on agricultural activities. In addition the SMMA conducts monitoring of temperatures, salinity, turbidity and reefs. The SMMA is a potential partner for a harmonized project linking land and marine environmental initiatives.

## THREATS TO BIODIVERSITY AND FORESTRY

A number of threats have been documented and reported during interviews. They are as follows:

### DIRECT

- Solid Waste
- Land based pollution of coastal and marine environments
- Recreational carrying capacity of reefs exceeded by divers and snorkelers
- Coastal Development
- Loss of agrobiodiversity



THERA EDWARDS

Figure 17. Resort development on hill above Soufriere Marine Management Area (SMMA), St. Lucia (May, 2008)



THERA EDWARDS

Figure 18. Buildings constructed on foreshore of beach in SMMA, St. Lucia (May, 2008)



THERA EDWARDS

Figure 19. Dense settlement along coastline of SMMA, St. Lucia (May, 2008)

## INDIRECT

- Inadequate policy and legal framework (e.g. Lack of system for EIA information)

## ACTIONS NEEDED TO CONSERVE BIODIVERSITY

Threats to biodiversity and forests are presented in Table 33.

**TABLE 33. SUMMARY OF THREATS TO BIODIVERSITY AND FORESTS IN ST LUCIA WITH PROPOSED ACTIONS TO ADDRESS THESE THREATS**

Threats	Criteria Ranking			Total Ranking	Suggested Actions
	Area	Intensity	Urgency		
Recreational diving./snorkeling	1	2	1	4	FEE Blue Flag
Habitat loss	7	7	6	20	Zoning of land to create special use zones and conservation area (distinct from Protected areas)
Coastal Development	6	6	7	19	Coastal zone management needs to be vested in an institution and a policy developed
Solid Waste	3	3	3	9	Improved public and private management
Loss of native genetic plant material	2	1	2	5	Collection and propagation
Land based sources of pollution	5	5	5	15	Identification of sources and measures to address pollution
Policy and legal framework	4	4	4	12	Development of required laws and policies

## USAID PROPOSED STRATEGY & PROGRAM

### PROPOSED ACTIVITIES FOR ST LUCIA

#### Private Planters Programme for Forests

- Incentives given (tax benefits etc) to private land holders to retain forest lands.
- Conservation easements

#### Development of Forest Management Areas

- Designation of forest management and resources use areas
- Agroforestry systems using fruit trees

## PROPOSED ACTIVITIES FOR ST LUCIA

### Pollution Prevention and Control Programmes

- Identification of sources and types (and where relevant discharge)
- Development of reduction strategies or elimination of pollution

### Policies and Laws

- Build on previous reviews to identify gaps in legal framework
- Drafting support

### Coastal Development

- Coastal policy developed

### Habitat Conservation

- Critical ecosystems and habitats currently not protected/conserved to be identified and appropriate measures taken

### Conservation of native genetic plant material

- Determine species in need of conservation
- Develop propagation protocols



MARCIA CREARY

Figure 20. Reef check transect, St. Lucia (September, 2007)

## EXTENT TO WHICH PROPOSED ACTIONS MEET NEEDS

The actions proposed are very responsive to issues and threats identified while remaining general and adaptable in their scope.

## THREATS FROM PROPOSED ACTIVITIES

No threats are envisioned to biodiversity. The development of incentives for the private sector will require some consultations and dialogue for their development as well as enabling legislation or other legal provision.

# ST VINCENT

St. Vincent and the Grenadines (SVG) consists of the main island of St. Vincent (345 km<sup>2</sup>), and the northern Grenadines (44 km<sup>2</sup>) which includes the islands of Bequia, Mustique, Canouan, Mayreau, Union Island, Palm Island, Petit St. Vincent, and 28 uninhabited islets. The combined population of SVG is approximately 120,519 people (1999 estimate). St. Vincent is mountainous and fertile, and has significant tropical rainforest which provides the

natural habitat for the St. Vincent parrot and other wildlife. The Grenadines, in contrast, consists of low dry islands surrounded by extensive coral reefs.

## STATUS OF BIODIVERSITY

### ECOSYSTEM DIVERSITY

The most widely used vegetation description model was developed by J.S. Beard in 1945 and Howard (1952), and is used to describe the vegetation of the Grenadines.

Rainforests which are described as forest occurring in areas of high rainfall, experiencing over 100mm of rainfall per month with very short dry periods. They occupy small areas between 300 m and 500m in elevation, mainly in the middle to upper watershed basins of the Colonarie, Cumberland and Buccament valleys. The canopy dominants include *Prestoea montana* (on the windward side only), *Dacryodes excelsa*, Lauraceae species, *Meliosina herbertii*, *Micropholis chrysophylloides* and *Sloanea caribaea*;

Elfin Woodlands which occupy summits above 500m on both windward and leeward sides on the central mountain. The trees, due to the conditions of wind and moisture are 4m or less in height, gnarled and covered in moss and epiphytes. The main tree species are *Chorizanthe cocconeus*, *Didymopanax attenuatum*, *Freziera hirsuta*, *Prestoea montana*, *Inga laurina*, *Weinmannia pinnata*, *Ficus* and *Clusia* species; Littoral Woodlands which occupy limited areas adjacent to the sea. The trees seldom exceed 8m in height. Common dominants are *Coccoloba unifera*, *Rheedia* species and *Tabebuia pallid*.

Mangrove Forests which cover approximately 42 Ha in SVG, mainly on Union and Mustique Islands, along with a very small area in the south of St. Vincent. The forests consist of four distinct species of mangroves known loosely as red, black, white and button, (*Rhizophora mangle*, *Avicennia germinans*, *Laguncularia racemosa*, and *Conocarpus erectus*). Interestingly all four species are found together in an area of less than 6Ha at Richmond Beach on Union Island

Secondary Communities consist of the following vegetation types:

Palm Brakes which occupy the area between rainforest and elfin woodland (sometimes referred to as cloud forest) on both sides of the mountains. The formations consist of mainly palms with 70% reaching a height of 12m;

Secondary Rain Forests which are forest lands that have had some major intervention (natural or man-made). They occupy areas between permanent cultivation and rainforest (primary). These forests contain secondary tree species such as *Chimarrhis cymossa*, *Sapium caribeum*, *Inga ignoides*, *Cecropia peltata*, *Freziera hirsuta*, *Ochroma pyramidale*, *Cordia sulcata* and Lauraceae species. These forests are normally denser than primary forest, with smaller tree diameters. However, the more advanced succession stage has a higher number of rainforest species;

Dry Scrub Woodlands which occur in the drier coastal regions of SVG. They occupy uncultivated lands on steep rocky slopes, where lush forest never existed. The vegetation of this forest is most times felled for timber and fuel wood. Dominant tree species include *Bursera simaruba*, *Pisonia fragrans*, *Acrocima* species. Other tree species found in these forest types include: *Tabebuia pallida*, *Swietenia mahogani*, *Hymenaea courbaril*, *Pouteria multiflora*, *Inga laurina*, *Mastichodendron feutidissimum*, *Brosimum alicastrum* and the Lauraceae species. The Kings Hill Forest reserve has this forest type and has remained virtually undisturbed since its creation in 1791, with trees reaching to 20m in

height; and Disturbed Lands (Regeneration) which include the area of La Soufriere which is disturbed by periodic volcanic eruptions resulting in states of succession ranging from bare soil to secondary forest

### SPECIES DIVERSITY

More than 1,150 species of flowering plants, 163 species of ferns, 4 species of amphibians, 16 species of reptiles, 111 species of birds, and 15 species of mammals have been identified in St Vincent.

Four species of amphibians which include the marine toad (*Bufo marinus*), two tree frogs (*Eleutherodactylus johnstonei* and *E. urichi shrevei*) and the pond frog (In later literature the frog *E. urichi shrevei* which was thought to be an endemic subspecies was confirmed to be an endemic species *Eleutherodactylus shrevei*).

There are two lizards and a snake which are endemic to St. Vincent, *Anolis griseus* and *A. trinitatus* and the snake (*Chironius vincenti*). A gecko in Bequia *Sphaerodactylus kirbyi* is also endemic. The CEP lists two other lizards (*Gymnophthalmus underwoodi* and *Sphaerodactylus vincenti*) and the snake (*Mastigodryas bruesi*) as regional endemics.

There are two endemic birds on St. Vincent, the St. Vincent Parrot (*Amazona guildingii*) and the Whistling Warbler (*Catharopezea bishopi*). Two endemic subspecies, the St Vincent (Rufous throated) Solitaire (*Myadestes genibaris*) and the House Wren (*Troglodytes aedon*) are attributed to the island.

### ECOSYSTEM SERVICES

St Vincent maintains records for a variety of marine species in its fisheries division database. Of note is the inclusion of Whales, Whelks and Turtles in production figures. Production for 2003 -2007 can be found in Table 34.

TABLE 34. FISHERIES PRODUCTION AS LANDINGS FOR ST VINCENT (LBS)

Product	2003	2004	2005	2006	2007
Fish (all types inc. Sharks)	1,699,715	1,625,167	1,651,590	1,655,349	2,109,302
Conch	19,601	37,950	14,221	7,907	23,668
Lobster	61,676	84,339	46,193	31,774	19,365
Turtles(Green & Hawksbill)	1,478	0	2,224	1,501	2,118
Whales (Pilot)	1,090	1,720	1,410	900	9,900
Whelks	1,935	0	0	300	0
Total	1,784,405	1,749,176	1,715,638	1,697,731	2,164,353

Source: Fisheries Division, St. Vincent

### VALUES AND ECONOMICS OF BIODIVERSITY AND FORESTS

The contribution of the fisheries sector has increased steadily over the reporting period 2003-2007 rising from EC\$6,879,982 to EC\$10,165,671.

TABLE 35. VALUE OF FISHERIES PRODUCTION (LANDED & MARKETED) FOR ST VINCENT (EC\$)

Product	2003	2004	2005	2006	2007
Fish (all types inc. Sharks)	6,113,356	6,281,162	6,723,821	7,479,903	9,709,
Conch	137,207	242,837	68,711	74,978	158,676
Lobster	619,666	904,305	547,960	374,507	255,519
Turtles(Green & Hawksbill)	2,713	0	8,566	7,628	11,630
Whales (Pilot)	3,780	7,065	5,440	2,000	30,100
Whelks	3,260	0	0	1,300	0
Total	6,879,982	7,435,369	7,344,498	7,940,316	10,165,671

Source: Fisheries Division, St Vincent

## STATUS OF TROPICAL FORESTS

The government has established three Crown Lands Forest Reserves and 24 wildlife reserves. Also, in recent years SVG's marine biodiversity has received even more attention since the establishment of the Tobago Cays Marine Reserve. The coverage of forests in the years 1949, 1984 and 1993 is shown in Table 35. Forest cover has shown a 9.6% decline between 1949 and 1993.

TABLE 36 . FOREST TYPES AND COVERAGE IN ST VINCENT 1949-1993

Type	1949	1984	1993
Rainforest	8218	9208	7759
Dry Scrub Woodland	1491	1326	2179
Elfin Woodland	207	952	457
Palm Brake	4122	1734	518
Regeneration			1776
Total Forest Area	14038	13220	12689

Bequia supports a significant forested area. The predominant species is White Cedar (*Tabebuia pallida*) with Naked Indian (*Bursera simaruba*) as emergents as well as several species of *Acacia* and Cactus. There is also a small area of Black Mangrove at Spring Beach.

Canouan has a small stand of dry woodland on the lee side of Mount Royal which is threatened by a tourist development scheme. Union Island supports large areas of dry scrub forest, 4 to 5 meters in height, with emergents of

naked Indian, *Albizia (Albizia caribae)*, *Guapira fragrans*, *Bouvieria succulenta*, and *Tamarindus* species. The ground cover includes *Aloe vera*, which was probably cultivated at some time. Most of the other islands still support individual trees and scattered patches of forest.

Union island supports the major mangrove areas in the nation, with those of Ashton Harbour and Richmond Beach being the most significant.

Mustique supports about 10 ha of mainly black mangroves in two areas inland. The Mustique Company is enjoined to protect and improve the natural environment, including the mangroves in Lagoon Bay, by the Mustique Company Limited Act of 1989. The company also works to protect the natural vegetation of the island, which has a relatively good vegetative cover.

## SOCIAL, ECONOMIC AND POLITICAL CONTEXT

The population is concentrated mostly in towns and villages along the East, West and the South coasts and in the southern interior of the mainland.

Total GDP and GDP by selected sectors were available for 2003-2005.

TABLE 37. GDP OF ST VINCENT AT CONSTANT FACTOR PRICE (MILLION \$EC)

Sector	2003	2004	2005 (estimate)
Total	650	694	709
Forestry	4	5	6
Fishing	10	10	8
Hotels and Restaurants	19	21	23

TABLE 38. ST. VINCENT TOURISM ARRIVAL FIGURES 2003-2007

Visitor	2003	2004	2005	2006	2007
Stay Over)	78,535	86,727	95,505	97,432	89,637
Cruise	64,965	74,657	69,391	106,474	144,455
Total	143,500	161,384	164,896	203,906	234,092

Source: Caribbean Tourism Organization

## INSTITUTIONS, POLICIES, LAWS AFFECTING CONSERVATION

The Forest Resources Conservation Act (1992) created, for the first time, a specialized forest management agency to manage the nation's forests and watersheds. The Wildlife Protection Act (1987) provides for the protection and management of the nation's wildlife and authorizes the establishment of wildlife reserves for that purpose, and it is under this Act that Saint Vincent and the Grenadines' 24 wildlife reserves have been established. The Fisheries Act

(1986) provides for the management and development of fisheries as well as the protection of special areas designated as marine reserves. A full list of laws is in Appendix 8.

## GOVERNMENT, NGO AND DONOR PROGRAMS AND ACTIVITIES

### GOVERNMENT

Forestry Department

Integrated Forest Management Programme is its 4<sup>th</sup> year of implementation. There is a GIS supported forest mapping and inventory programme currently underway. The department is looking towards preparation of a national forest policy. The Department has focused on conservation of the St Vincent Parrot declared in 1979 as the national bird.

### NGOS

#### NORTH LEEWARD TOURISM ASSOCIATION

The association has cleaned rivers and has plans for mangrove replanting. The association's main activity is a nature tourism enterprise at Richmond with Cabins, a tent camping site and an interpretative centre. The association is potential partner to address the issue of sand mining on the beach at Richmond near their project site.

### DONORS

The EU and FAO have been supporting forest livelihood initiatives.

## THREATS TO BIODIVERSITY AND FORESTRY

### DIRECT

- Sand Mining at Richmond
- Alien species (lizard from Guyana that came across in imported sand)
- Coastal Development
- Erosion (root crop cultivation leads to deep tilling)
- Tran shipment of St Vincent Parrot (birds and eggs)
- Cross Island Road
- International Airport

### INDIRECT

- Updated forest policy needed

## ACTIONS NEEDED TO CONSERVE BIODIVERSITY

TABLE 39. SUMMARY OF THREATS TO BIODIVERSITY AND FORESTS IN ST VINCENT WITH PROPOSED ACTIONS TO ADDRESS THESE THREATS

Threats	Criteria Ranking			Total Ranking	Suggested Actions
	Area	Intensity	Urgency		
Sand mining (women do most of digging)	3	4	7	14	Educational programme Creation of alternate livelihood
Coastal development	7	7	6	20	Policy and action plan to address pressure.
Road construction	5	6	5	16	Best construction practices to minimize environmental impacts
Airport construction	4	5	4	13	Best construction practices to minimize environmental impacts
Erosion	6	3	3	12	Soil conservation methods transferred to farmers
Theft of St Vincent Parrots	2	2	2	6	Training of port security Public awareness
Alien species	1	1	1	3	Assessment to determine species and their extent



THERA EDWARDS

Figure 21. Soil exposed from vegetation clearing for cultivation, St. Vincent



THERA EDWARDS

Figure 22. Hillside agriculture, St. Vincent (May, 2008)

## USAID PROPOSED STRATEGY & PROGRAMME

The programme proposed centers around enterprise creation, community based NRM and policy development.

### PROPOSED ACTIVITIES FOR ST VINCENT

#### Sand Mining at Richmond

- Explore options for creating alternate livelihoods for women involved
- Identify other source sites

#### Coastal Development

- Survey of developments
- Zoning and development of a development policy/strategy for coastal areas

#### Agricultural best practices

- Integrated Pest management
- Soil Conservation Techniques

#### Port Security Biodiversity Training

- Training in species identification
- Training in detection of smuggled animals and products

## EXTENT TO WHICH PROPOSED ACTIONS MEET NEEDS

The activities described above respond to the most widely cited threats. There may be other areas for support such as legislative drafting.

## THREATS FROM PROPOSED ACTIVITIES

No threats are envisaged.

# DISCUSSION

## GENERAL

The assessment conducted revealed that while each included island had country specific issues/threats there were a number of common concerns and threats. Uncontrolled and accelerated coastal development was cited in every island. The need for land planning and or physical development plans was another recurrent observation. It was perceived that the existence of such plans would be a deterrent to the spate of coastal development. Most countries were behind in CITES reporting. Annual reports have been filed by all countries, the most recent being St Lucia in 2006. Grenada has declared that it does not trade and therefore had no reports filed since signing in 1999. St Lucia is the only island with biennial reports giving the status of CITES legislation, regulation and administrative arrangements. The St Vincent report submitted in 2005 was not in the standard format and therefore not placed on record. Only two countries (Antigua and Barbuda and St Lucia) had declared Ramsar sites (See Appendix 9). All countries had declared and/or proposed marine areas. See Appendix 10.

## FISHERIES

The fisheries sector in most islands had issues of resource pressure, territorial water rights and out dated assessments. This sector provides the greatest opportunity for USAID interface due to the number of issues involved viz. habitat degradation and loss, land based sources of pollution, livelihoods, legislation, resource assessment and sustainable use planning, creation of MPAs as well as the fact that the marine environment connects the OECS countries.

## ECONOMICS OF NATURAL RESOURCES

In general countries need to appreciate basic natural resource economic principles of use versus existence value. Examples that come to mind include the catching of whales versus whale watching as a tourist attraction. The preservation of beaches for recreation versus the mining of beach sand in islands such as St. Vincent and Barbuda.

## TOURISM

The figures for number of tourists show a general trend towards an increase in arrivals especially in cruise passengers. Some countries show a drop in numbers in years succeeding hurricanes as a result of infrastructure damage. The increase in arrivals along with the decline of the region's agriculture sector has driven a spate of coastal development in many islands. The main developments are hotels, resorts and other accommodation. In some islands roads, airports and piers are being constructed or expanded to provide better support for the sector. These development projects have been the cause of much concern to a wide cross section of persons due to their impact on coastal areas especially Mangroves and Sea Grass beds or forest areas which are habitat for birds, Iguanas and other keystone species. The lack of adequate EIA assessment, enforcement and physical planning further exacerbates the effects of these developments.

## CLIMATE CHANGE

Whilst climate change is recognized as a present and growing threat which has shown some visible manifestations much of the effects still remain in the realm of predictions or “modeled scenarios”. Models suffer from lack of information and technical capacity to perform analyses. There have been a number of regional projects such as Caribbean Planning for Adaptation to Climate Change (CPACC) and Mainstreaming Adaptation to Climate Change (MACC). However the most directly relevant initiative has been The Caribbean Natural Resources Institute (CANARI) project “Climate Change and Biodiversity in the Insular Caribbean (CCBIC)”, supported by the John D and Catherine T MacArthur Foundation. The overall objective of CCBIC is to develop a research agenda for the next ten years to inform biodiversity management in the insular Caribbean whether for conservation, sustainable livelihoods, resilience building or vulnerability reduction in the light of climate change impacts. The project recognized that livelihoods of Caribbean people are intimately linked with biodiversity whether through social and cultural connections, economic exploitation or traditional use. A number of gaps in existing knowledge were identified. In summary the major gaps were:

- The large variation in the availability of data relating to the spatial extent of coastal and marine ecosystems, inventories of flora and fauna, and the monitoring of ecosystem changes, makes it difficult to go beyond site-specific statements.
- Information on the rate of sea level rise is only available in four islands; and the impact of increased sea surface temperature on biota in seagrass and coral reef areas is little understood.
- Information on coral diseases and invasive species in the region and how they are influenced by climatic factors.
- Trends in algal blooms and plankton distribution patterns in the region and their responses to changes in temperature, salinity, pH, and other climatic factors.
- Basic biology and assessments of little-studied species, including seabirds, waterfowl, and key cetacean species in the Caribbean region, and the influence of climatic factors on them.
- There was a frequent confusion between biodiversity and wildlife. Wildlife is included on the CBD’s biodiversity concept, which includes all living organism, population and managed and non-managed ecosystems.
- Information on the expected impacts of climate change on terrestrial biodiversity in the Caribbean islands was rather scarce and almost absent in the literature found. Not much of the information can be found on cartographic products (i.e., maps).
- There is a marked dispersion of the knowledge on the regional biodiversity. The existence and location of such knowledge is commonly unknown, for instance regarding journals; books; reports; bibliographic and biological databases; maps; genes banks. This situation includes the existing agrobiodiversity, and human and institutional resources.
- There is absence of information on the effectiveness of protected areas under future climate change scenarios. Current management plan of protected areas does not take climate change into account.
- The information on the traditional knowledge of the biodiversity of significance to local and indigenous peoples is limited, dispersed and under risk to be lost.
- There is need for a data portal through which data and information on the impact of CC on the regional biodiversity can be accessed. That facility shall be at least bilingual.
- The regional databases related to the regional biodiversity should be georeferenced, including the altitude.
- Regarding invasive species, there is fragmented information and management experience in the region.

- There is capacity for collecting biological data, although not in all the countries and not for all the taxa. In the biological inventories, many scientists from outside the region have participated. It is needed to develop the local capacities for collecting biodiversity data. Monitoring is a need, but local capacities should be developed, especially those oriented to monitoring the impact of climate change on biodiversity.
- The mining of information has detected databases in just a few countries. More time shall be devoted to find such databases. The databases to be created shall use a uniform structure for facilitating sharing and using the data at the regional level.
- The local capacity is almost non-existing. It should be develop in order to do the research needed on projections of climate change in the region.
- There exists the need to develop a Caribbean information network. The network would collect and bring together the information or links to the information on Caribbean institutions working on climate change and biodiversity Databases, maps, models relevant to the impacts of climate change on biodiversity would be included, too.
- A directory of Caribbean islands researchers on biodiversity (including agrobiodiversity) and climate would be useful, including information on location (country/institution); functional title; qualification; contact information; specialization and areas of research interest/knowledge (e.g., similar to [www.whoiswho.sidsnet.org](http://www.whoiswho.sidsnet.org)).
- A database or directory of institutions of the Caribbean islands with biodiversity related mandates by country and thematic area (e.g., research; administration/regulation; enforcement; management/ conservation and training/education).
- Mechanisms for accessing literature (peer reviewed journals, books, and data) (e.g., through on-line access to scientific literature for low GDP countries [www.oare.oaresciences.org](http://www.oare.oaresciences.org)).
- All approaches to biodiversity adaptation to climate change should consist of “win-win” measures. Actions shall be oriented not only to allow biodiversity to adapt to projected climate change. Such actions shall also solve current environmental problems. An example of win-win action is the protection or conservation of a species or ecosystem so that they could adapt to future impacts of projected climate change, while also preserving the good and services they currently provide to society.
- The impact of GCC on biodiversity will be assessed for natural, agro-and-modified ecosystems. Climate change will impact all the biodiversity in different ways and different intensities. Impacts will not be limited to wildlife.
- The preservation of biodiversity, so that it can adapt to climate change, should occur not only in protected areas but also outside them.
- The analysis of climate change impacts on terrestrial biodiversity should incorporate socio-economic impacts like population pressure and economic pressures on land use intensity, and incomplete legal framework for biodiversity protection.
- Completion of species and vegetation distribution maps at regional and national level.
- Habitat fragmentation assessment and modeling of future status including completion of habitat fragmentation maps for each island.
- Vulnerability assessment (landscapes, ecosystems, habitats, species groups, and species).
- Assessment at the regional and national levels of the vulnerability of protected areas to CC. The purpose would be identifying impacts and threats, and developing protected areas systems and adaptation plans.

- Completion of the information on traditional knowledge of biodiversity that is significant to local and indigenous peoples.
- Phenological studies of the biodiversity to detect the evidence of climate change impacts on species and biological relationships.
- Impacts on biodiversity using models (e.g., on species, groups, and ecosystems) which shall use as inputs the changes in meteorological variables projected by GCM models. Another alternative method to be considered is to accumulate map-based information and to use combinations of overlays as queries for identifying areas of special interest, and then to downscale to such areas the projection of meteorological variables projected by the GCM models outputs. This would allow the specialists to interpret what is plausible or not for the species, group or ecosystem

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# APPENDICES

## APPENDIX I. SOW FOR THE ANALYSIS

### BIODIVERSITY/FORESTRY THREATS ANALYSIS – OECS COUNTRIES

(ST. KITTS & NEVIS; ANTIGUA & BARBUDA; DOMINICA; ST. LUCIA; ST. VINCENT AND GRENADA)

#### 1. OBJECTIVE

This assignment delivers to USAID/Barbados an assessment of threats and opportunities that will a) inform the USAID's program of work in biodiversity conservation; and b) ensure program compliance with sections 118 and 119 of the Foreign Assistance Act (FAA) of 1961, as amended and country strategy guidance under ADS 201.3.4.11 and ADS 204.5. This threats analysis will serve as a planning tool to assist USAID/Barbados and the countries of the Organization of Eastern Caribbean states (OECS) to strengthen their conservation programs, while providing an ongoing evaluation framework for balancing biodiversity conservation and other conservation and land use needs.

#### 2. BACKGROUND

In 2003, USAID through its office in Jamaica conducted the mandated Section 118/119 Biodiversity and Tropical Forestry (BIOFOR) Assessment for Jamaica and the Caribbean region, in relation to its 2005 – 09 strategic development programs for the Caribbean region. A FAA 118-119 Threats Analysis was carried out for Antigua & Barbuda and Dominica in July 2006 to support bilateral activities related to the two countries. USAID's structure in the region has since been modified with USAID/Barbados having sole responsibility to support the countries of the Eastern Caribbean. USAID/Barbados must now undertake a Biodiversity Threats Analysis to support the use of funds under the final year of the current strategy as well as is planned 2009 strategy. This analysis ensures the compliance with the U.S. Foreign Assistance Act (FAA) of 1961 - sections 118 and 119, while providing an analysis of the priority actions needed to conserve biodiversity.

The establishment of conservation priorities, utilizing a threats-based approach, is in keeping with the USAID's biodiversity coding procedures. Biodiversity coding applies to the USAID/Barbados' conservation program since a significant portion of the operating year's budgets going forward is expected to be biodiversity earmarked funds. USAID/Barbados must therefore ensure that when using funds earmarked for biodiversity the activities meet the requirements of the biodiversity code, which has been negotiated between the US Congress and USAID. The code has four components:

- i. The activity must have a biodiversity conservation objective. This can be a primary or secondary objective;
- ii. The activity must address identified threats to biodiversity;
- iii. Activities must impact a biologically significant area;-
- iv. The impact on biodiversity must be monitored.

#### 3. STATEMENT OF WORK

Under the overall direction of the Senior Technical Specialist Trade/USAID/Barbados, the Consultant shall evaluate biodiversity concerns in all six independent countries of the OECS including St. Kitts & Nevis; Antigua & Barbuda, Dominica, St. Lucia, St. Vincent & the Grenadines; and Grenada. This analysis will build on previous work done including: (a) the recommendations of the 2003-2005 BIOFOR/Section 118 assessment reports; (b) the

FAA-118-119 Analysis of Antigua & Barbuda and Dominica carried out in July 2006; (d) Gap Analysis done by The Nature Conservancy in the region; and (d) work done under USAID's Caribbean Open Trade Support Program (COTS). The analysis shall: review and validate key findings and assumptions regarding actions to conserve biodiversity; document critical threats to the biodiversity of each of the six OECS countries biodiversity; and recommend priority interventions needed to reduce threats to each country's biodiversity.

Specific activities to be performed by the Consultant include:

Pre-travel informational meetings and information gathering - Prior to traveling to the field, the contractor is expected to a) hold meetings as necessary with the Bureau Environmental Officer (BEO), and technical experts in the LAC Bureau to ensure full understanding of USAID environmental, and biodiversity requirements; b) gather and get acquainted with background information on St. Kitts & Nevis; Antigua & Barbuda; Dominica; St. Lucia; St. Vincent & the Grenadines; and Grenada in areas related to environmental and biodiversity and which are deemed relevant for the analysis.

Consultant to conduct an overview and general analysis - Upon arrival the Consultant will a) meet with USAID/Barbados' representatives to establish a solid understanding of its program, goals and objectives; b) hold meetings with relevant sector partners and stakeholders including the COTS team, donor agencies, the OECS Secretariat, NGOs, and relevant governments agencies of each of the six countries; c) establish and conduct visits to priority biodiversity conservation sites to validate, and supplement understanding of biodiversity issues.

Assess and summarize biodiversity needs - Based on the analysis of threats and sector needs, the Consultant will prepare a report outlining specific activities that can be undertaken to counter bio-diversity threats.

The report should include:

- a. An overview of the status of biodiversity in St. Kitts & Nevis; Antigua & Barbuda; Dominica; St. Lucia; St. Vincent & the Grenadines; and Grenada, including i) identification of priority species and ecosystem types, with an emphasis on unique aspects of each country's biodiversity; this should include a concise inventory ii) the social political and economic context for sustainable natural resource management and biodiversity conservation;
- b. A summary on the current status of biodiversity by conservation biome (e.g. tropical forests, watersheds and aquatic systems) based on available information;
- c. Updated summary of on-going conservation efforts;
- d. An analysis of the critical threats (recent, current and potential) to the conservation sites and priority/endemic species, including an overview table;
- e. Potential opportunities for USAID/Barbados to contribute to biodiversity conservation, both in the environment and wider program activities, identifying opportunities where USAID/Barbados' comparative advantage are likely to create the greatest impact. USAID/Barbados is currently interested in pursuing opportunities in the marine environment as a priority over terrestrial sites and therefore the recommendations should be prioritized with this in mind by identifying those areas requiring the most immediate attention.

The report should answer the following questions at a minimum:

What are the key biodiversity targets in St. Kitts & Nevis; Antigua & Barbuda; Dominica; St. Lucia; St. Vincent & the Grenadines; and Grenada, in relation to the USAID's strategic program?

How are the biodiversity targets (species, habitats, biomes) threatened (directly and indirectly)?

How can USAID and each of the governments of the six countries meet their respective obligations regarding biodiversity through future programs of work?

What cost-effective approaches and methods can be used for measuring and evaluating program impacts on biodiversity conservation?

What are the priority sites for biodiversity conservation in relation to sites where USAID is working or could work?

Who are the key partners involved that USAID should and can be working with including government, NGO and universities?

#### **4. ILLUSTRATIVE LEVEL OF EFFORT & PERSONNEL**

USAID/Barbados anticipates that this analysis be carried out by the Consultant over a 48 person-day period. The Consultant will be supported by a Bureau Officer who will be available to backstop work being done by the Consultant. The activity is expected to begin April 7 and a draft report submitted on May 23, 2008. Below is an illustrative schedule for the Consultant for the tasks outlined.

<b>Task</b>	<b>Days</b>
Background Research	8
Interview relevant stakeholders	23
Biodiversity and Tropical Forestry Report	15
Debriefing on assessments to USAID.	2
<b>TOTAL</b>	<b>48</b>

The final report should be delivered to USAID/Barbados by June 6, 2008.

The Consultant providing the required short-term technical assistance, including levels of effort, should have the following minimum qualifications:

The qualified candidate will have the following credentials: A minimum of a post graduate degree in Environmental or Earth Sciences; at least ten years working experience; experience with USAID and the requirements for FAA Sections 118 and 119; extensive project management and experience in biodiversity analysis.

#### **5. DELIVERABLES**

The primary deliverable is an analysis report for USAID/Barbados that examines, and prioritizes threats to St. Kitts & Nevis; Antigua & Barbuda; Dominica; St. Lucia; St. Vincent & the Grenadines; and Grenada's biodiversity with a view to informing activity development.

#### **6. RELATIONSHIP & RESPONSIBILITIES**

The Consultant will report directly to the Senior Technical Specialist Trade Team who will provide technical direction on behalf of USAID.

## APPENDIX 2. BIOGRAPHY OF TEAM

### Thera Edwards

Thera Edwards has worked in the environment and agriculture for the past sixteen years in varying capacities. Through these professional assignments she has gained experience in agriculture, conservation, biodiversity, protected areas and watershed management. She values the use of public-private partnerships in achieving environmental transformation and sustainable development and appreciates the contextual issues surrounding land use and land degradation and recognises that interventions occur at multiple levels starting on the ground in communities and extend to institutional arrangements and policies. Her areas of professional specialisation include watershed management, vegetation ecology, biodiversity and teaching.

In the past 7 years her work has focused on environmental management and sustainable development with particular emphasis on watershed, protected areas and biodiversity. During this period between July 2001 and August 2004 she managed The Sustainable Watersheds Branch of The National Environment and Planning Agency in Jamaica.

Thera Edwards has written and co-authored a number of technical papers for presentation at conferences and symposia. She is a current and founding member of the Jamaica Institute of Environmental Professionals and has served on the Institute's council. In addition, she has chaired a working group of the National Integrated Watershed Management Council which she is currently a member of. Miss Edwards has served as National Focal Point for the Integrating Watersheds and Coastal Areas Management in Small Island Developing States of the Caribbean Project (IWCAM).

She holds a M.Sc. degree in Environmental Management from the University of London and a B.Sc. in Environmental Sciences from The University of the West Indies. Currently she is pursuing a Ph.D. in Landscape History at The University of the West Indies.

### Arun Madisetti

Arun Madisetti has been actively involved in marine conservation since 1987, working for governmental agencies in the UK, USA and the Caribbean; he is a scuba instructor and published writer/photographer with a portfolio encompassing images from above and below the water from 3 continents. He has diverse professional experience in marine and fisheries resources assessment and management. In the past 5 years his work has included tourism consulting for various projects in the private sector as well as the EU. He is actively involved in marine conservation and school marine education in the Commonwealth of Dominica where he lives with his family.

He holds a Post Graduate Diploma in Shellfish Biology, Reproduction and Aquaculture and a B.Sc. in Zoology with a major in Marine Zoology. He is a member of the Professional Association of Dive Instructors as an instructor in 10 specialist areas as well as The American Academy of Underwater Sciences.

### APPENDIX 3. PERSONS CONTACTED AND/OR INTERVIEWED

PERSON CONTACTED	INSTITUTIONAL AFFILIATION	CONTACT INFORMATION
<b>Barbados</b>		
Mansfield Blackwood	USAID	<a href="mailto:mablackwood@usaid.gov">mablackwood@usaid.gov</a>
Michael Taylor	USAID	<a href="mailto:mrtaylor@usaid.gov">mrtaylor@usaid.gov</a>
James Goggin	USAID	<a href="mailto:jgoggin@usaid.gov">jgoggin@usaid.gov</a>
Amanda Byer	UWI Cave Hill	<a href="mailto:a_byer@hotmail.com">a_byer@hotmail.com</a>
<b>St Lucia</b>		
Una May Gordon	IICA	<a href="mailto:una.may.gordon@iica.int">una.may.gordon@iica.int</a>
Anita James	Ministry of Agriculture, Fisheries and Forestry	<a href="mailto:anitavja@yahoo.com">anitavja@yahoo.com</a>
Vaughn Charles	Ministry of Agriculture, Fisheries and Forestry	<a href="mailto:chieffish@slumaffe.org">chieffish@slumaffe.org</a>
Rufus George	Ministry of Agriculture, Fisheries and Forestry	
Alicia George	Ministry of Agriculture, Fisheries and Forestry	<a href="mailto:aliciageorge@yahoo.com">aliciageorge@yahoo.com</a>
Terrence Gillard	Ministry of Agriculture, Fisheries and Forestry	
Michael Bobb	Ministry of Agriculture, Fisheries and Forestry	
Keith Nichols	ESDU, OECS Secretariat	<a href="mailto:kenichols@oecs.org">kenichols@oecs.org</a>
Peter Murray	ESDU, OECS Secretariat	<a href="mailto:pamurray@oecs.org">pamurray@oecs.org</a>
Sarah George	ESDU, OECS Secretariat	<a href="mailto:sgeorge@oecs.org">sgeorge@oecs.org</a>
Kai Wulf	Soufrière Marine Management Association	<a href="mailto:kai_wulf@mac.com">kai_wulf@mac.com</a>
<b>St Vincent</b>		
Osa Samuel	Forestry Department	
Andrew Simmonds		
Edmund Jackson	Environmental Services Unit	(784) 485-6992

PERSON CONTACTED	INSTITUTIONAL AFFILIATION	CONTACT INFORMATION
Howard Prince	National Emergency Management Office (NEMO)	(784) 456-2975
Cornelius Richards	Forestry Department	(784) 457-8594
Fitzgerald Providence	Forestry Department	(784) 453-3340
Shandel Victory	North Leeward Tourism Association	(784) 485-7870
Vanetta LaBorde	North Leeward Tourism Association	(784) 458-2051
Nikkie Sampson	North Leeward Tourism Association	(784) 458-2051
Doreth Ashton	North Leeward Tourism Association	(784) 458-2051
Amos Glasgow	North Leeward Tourism Association	(784) 458-2051
Clem Derrick	North Leeward Tourism Association	(784) 458-2051
Absolom Hooper	North Leeward Tourism Association	(784) 458-2051
Giselle Charles	North Leeward Tourism Association	(784) 458-2051
Berisford George	Central Planning Division	(784) 450 0342
Roxanne John	Central Planning Division	(784) 450-0349
Jerrold Thompson (Hon)	Ministry of Telecommunications, Science, Technology & Industry	
Arlene Lewis	Ministry of Tourism	(784) 457-1502
Ezekiel Barrow	National Parks, Rivers & Beaches Authority	
Racquel Hamlett	Ministry of Tourism	(784) 457-1502
David Robin (Cmdr)	National Maritime Association	(784) 456- 1378
Kathy Martin	St Vincent & the Grenadines National Trust	(784) 451-2921

PERSON CONTACTED	INSTITUTIONAL AFFILIATION	CONTACT INFORMATION
Lystra Culzac-Wilson	National Biosafety Framework Project	
Godfrey Pompey	Office of the Prime Minister	(784) 457-1426
Lucine Edwards	Fisheries Division	(784) 456-1178
<b>St Kitts &amp; Nevis</b>		
Kate Orchard	Brimstone Hill National Park	<a href="mailto:brimstonehill@caribsurf.com">brimstonehill@caribsurf.com</a>
Karen Hughes	Legal Department, Government Headquarters, St Kitts	<a href="mailto:blestkay@yahoo.com">blestkay@yahoo.com</a>
Elton Morton	Environmental Health Unit, St Kitts	
Joseph Simmonds	Fisheries Department, St Kitts	<a href="mailto:fmusk@caribsurf.com">fmusk@caribsurf.com</a>
Lemuel Pemberton	Fisheries Department, Nevis	
Angela Walters	Nevis Island Administration	<a href="mailto:nevplan@caribsurf.com">nevplan@caribsurf.com</a>
Kelvin Daly	Department of Agriculture, St Kitts	
Ashton Stanley	Department of Agriculture, Nevis	<a href="mailto:doastk@sisterisles.kn">doastk@sisterisles.kn</a>
Randolph Edmead		
Halla Sahely	Water Services Department	<a href="mailto:halla@sahely.com">halla@sahely.com</a>
Rene Walters	Nevis Island Administration	
June Hughes	Environment Department	(869) 467 -1055
<b>Grenada</b>		
Allan Joseph	Ministry of Agriculture, Lands, Forestry & Fisheries (Forestry)	
Hayden Forteau	Ministry of Agriculture, Lands, Forestry & Fisheries (Forestry)	
Aaron Francis	Ministry of Agriculture, Lands, Forestry & Fisheries (Planning)	
Justin Rennie	Ministry of Agriculture, Lands, Forestry & Fisheries (Fisheries)	<a href="mailto:jarennie@hotmail.com">jarennie@hotmail.com</a>
Christopher Joseph	Environmental Affairs Department	
Andrew Jacque	Project of Technical Assistance to	<a href="mailto:ajacque@hotmail.com">ajacque@hotmail.com</a>

PERSON CONTACTED	INSTITUTIONAL AFFILIATION	CONTACT INFORMATION
	the Ministry of Agriculture	
Dunbar Steele	T A Marryshow Community College	(473) 440-2841
<b>Antigua &amp; Barbuda</b>		
Adriel Thibou	Forestry Department	<a href="mailto:athibou@gmail.com">athibou@gmail.com</a>
Frances Fuller	Environment Division	(268) 462-4625
Godfrey Pointer	Planning Division, Barbuda	(268)773-0416 / (268) 772-1205
Chad Knight – Alexander	Barbuda	
John Mussington	Barbuda	(268)724-7084 <a href="mailto:jrmuss@apuainet.ag">jrmuss@apuainet.ag</a>
<b>Dominica</b>		
John Robin	National Agribusiness Association	
Al Casimir	Ministry of Agriculture	<a href="mailto:suburban_da@yahoo.com">suburban_da@yahoo.com</a>
Amos Wiltshire	Fair Trade Organisatio	(767)446-0736
Andrew Magloire	Fisheries Division	fisheries @cworldom.dm
David Williams	National Parks	
Kongit Haile Gabriel	Environmental Coordinating Unit	
Marvlyn Alexander James	Discover Dominica Authority	<a href="mailto:malexander@dominica.dm">malexander@dominica.dm</a>
Secretary,	Disaster Management Office.	(767)266-5211

## APPENDIX 4. SITES VISITED

SITE	NOTE
<b>St Lucia</b>	
Soufrière Marine Management Area	Boat Tour
<b>St. Vincent</b>	
Camden Park	Forest Reserve
Government House Forest Reserve	
Airy Hill	Forest Reserve

SITE	NOTE
Kings Hill	Forest Reserve
Fenton	Forest Reserve
Glen Fairhall	Forest Reserve
Peter's Hope	
Richmond	Sand mining on beach, North Leeward Tourism Association Project site
Mt St Andrew	
Botanical Garden	Captive Breeding St Vincent Parrot
<b>St Kitts -</b>	
Brimstone Hill	World Heritage Site
South East Peninsula	
North Frigate Bay	Resort Area
Turtle Bay	Turtle Nesting
Half Moon Bay	
Black Rock	
Monkey Hill	
<b>Nevis</b>	
Pinney's Beach	
Newcastle	
Bath Hotel	
Fort Charles	
Indian Castle	
Jessups	
Nelson's Spring	
<b>Grenada</b>	
Grand Anse	
Prickly Bay	

SITE	NOTE
Lance aux epines	
Annandale	
Grand Etang Forest Reserve & Lake	
Grenville	Second largest urban centre
Mt Carmel Waterfall	
La Sagesse	
Lake Antoine	
Levera Pond	Major private development
Sauteurs	
Beausejour	

## APPENDIX 5. COUNTRY IUCN RED LISTS

### KEY TO STATUS CATEGORIES

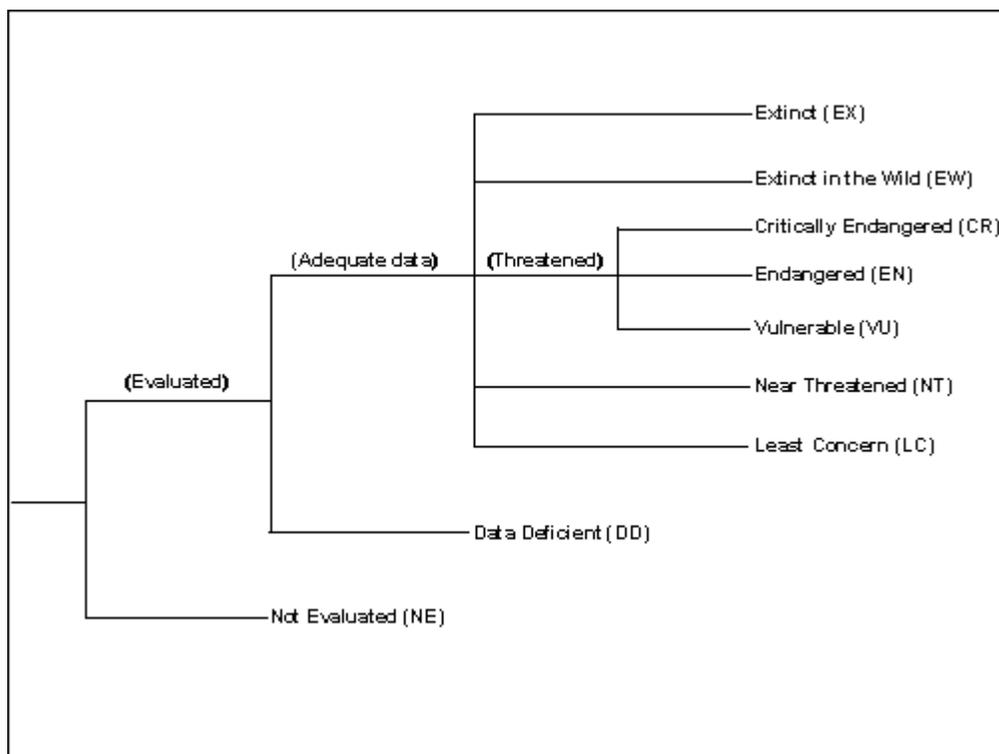


Figure 23. IUCN Red List Structure of Categories

CR= Critically Endangered

DD= Data Deficient

EN= Endangered

EW= Extinct in the Wild

EX= Extinct

LC= Least Concern

NT= Near Threatened

VU= Vulnerable

When discussing the IUCN Red List, the official term "threatened" is a grouping of three categories: Critically Endangered, Endangered, and Vulnerable.



Figure 24. Graphic of 2001 IUCN Red List Categories

There are three other Status designations which appear in the lists below that are hold overs from the 1994 system. These designations are sub-categories of the category Lower Risk. In the 2001 system, Near Threatened and Least Concern have now become their own categories, while Conservation Dependent is no longer used and has been merged into Near Threatened.

LR/cd=Lower Risk-conservation dependent

LR/nt= Lower Risk – near threatened

LR/lc= Lower Risk – least concern

The category PE = Potentially Extinct is used by Birdlife International, the Red List authority for Birds on the Red List.

A fuller understanding of the categories and quantitative criteria for used for evaluation of listed species and the processes used can be found at [http://www.iucnredlist.org/static/categories\\_criteria\\_3\\_1](http://www.iucnredlist.org/static/categories_criteria_3_1).

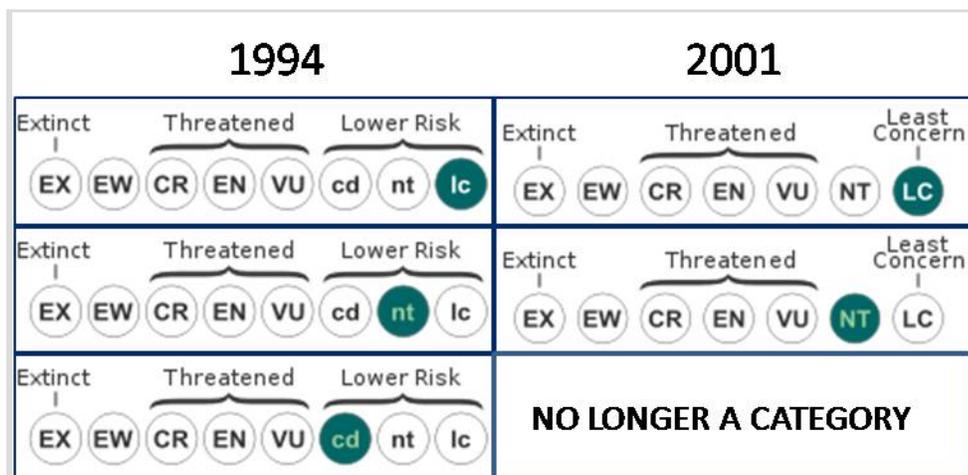


Figure 25. Comparison of Lower Risk Category and Sub-Categories and in the IUCN 1994 System and the current 2001 System

## ANTIGUA & BARBUDA

GENUS	SPECIES	COMMON NAME	STATUS
<i>Balistes</i>	<i>vetula</i>	QUEEN TRIGGERFISH	VU
<i>Dermatolepis</i>	<i>inermis</i>	MARBLED GROUPER	VU
<i>Epinephelus</i>	<i>flavolimbatus</i>	GROUPER, POEY'S GROUPER, WHITE GROUPER,	VU

GENUS	SPECIES	COMMON NAME	STATUS
		YELLOWEDGE GROUPER, YELLOWFINNED GROUPER	
<i>Epinephelus</i>	<i>itajara</i>	GOLIATH GROUPER, JEWFISH	CR
<i>Epinephelus</i>	<i>morio</i>	RED GROUPER	NT
<i>Epinephelus</i>	<i>striatus</i>	NASSAU GROUPER	EN
<i>Lachnolaimus</i>	<i>maximus</i>	HOGFISH	VU
<i>Lutjanus</i>	<i>analis</i>	MUTTON SNAPPER	VU
<i>Lutjanus</i>	<i>cyanopterus</i>	CUBERA SNAPPER	VU
<i>Mycteroperca</i>	<i>interstitialis</i>	BLAKE, CROSSBAND ROCKFISH, GREY MANNOCK, HAMLET, HARLEQUIN ROCKFISH, PRINCESS ROCKFISH, ROCKFISH, SALMON GROUPER, SALMON ROCK FISH, SCAMP, YELLOWMOUTH GROUPER	VU
<i>Mycteroperca</i>	<i>Tigris</i>	TIGER GROUPER	LC
<i>Mycteroperca</i>	<i>venenosa</i>	YELLOWFIN GROUPER	NT
<i>Scarus</i>	<i>guacamaia</i>	RAINBOW PARROTFISH	VU
<i>Thunnus</i>	<i>albacares</i>	YELLOWFIN TUNA	LR/lc
<i>Thunnus</i>	<i>obesus</i>	BIGEYE TUNA	VU
<i>Thunnus</i>	<i>thynnus</i>	NORTHERN BLUEFIN TUNA	DD
<i>Eleutherodactylus</i>	<i>johnstonei</i>		LC
<i>Eleutherodactylus</i>	<i>martinicensis</i>		NT
<i>Actitis</i>	<i>macularius</i>	SPOTTED SANDPIPER	LC
<i>Aix</i>	<i>sponsa</i>	WOOD DUCK	LC
<i>Anas</i>	<i>acuta</i>	NORTHERN PINTAIL	LC
<i>Anas</i>	<i>americana</i>	AMERICAN WIGEON	LC
<i>Anas</i>	<i>bahamensis</i>	WHITE-CHEEKED PINTAIL	LC
<i>Anas</i>	<i>clypeata</i>	NORTHERN SHOVELER	LC
<i>Anas</i>	<i>crecca</i>	COMMON TEAL	LC
<i>Anas</i>	<i>discors</i>	BLUE-WINGED TEAL	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Anas</i>	<i>penelope</i>	EURASIAN WIGEON	LC
<i>Anhinga</i>	<i>anhinga</i>	ANHINGA	LC
<i>Anous</i>	<i>minutus</i>	BLACK NODDY	LC
<i>Anous</i>	<i>stolidus</i>	BROWN NODDY	LC
<i>Anthracothorax</i>	<i>viridigula</i>	GREEN-THROATED MANGO	LC
<i>Ardea</i>	<i>cinerea</i>	GREY HERON	LC
<i>Ardea</i>	<i>herodias</i>	GREAT BLUE HERON	LC
<i>Arenaria</i>	<i>interpres</i>	RUDDY TURNSTONE	LC
<i>Asio</i>	<i>flammeus</i>	SHORT-EARED OWL	LC
<i>Athene</i>	<i>cunicularia</i>	BURROWING OWL	LC
<i>Aythya</i>	<i>affinis</i>	LESSER SCAUP	LC
<i>Aythya</i>	<i>collaris</i>	RING-NECKED DUCK	LC
<i>Bartramia</i>	<i>longicauda</i>	UPLAND SANDPIPER	LC
<i>Bombycilla</i>	<i>cedrorum</i>	CEDAR WAXWING	LC
<i>Botaurus</i>	<i>lentiginosus</i>	AMERICAN BITTERN	LC
<i>Bubulcus</i>	<i>ibis</i>	CATTLE EGRET	LC
<i>Buteo</i>	<i>albicaudatus</i>	WHITE-TAILED HAWK	LC
<i>Buteo</i>	<i>jamaicensis</i>	RED-TAILED HAWK	LC
<i>Buteo</i>	<i>platypterus</i>	BROAD-WINGED HAWK	LC
<i>Buteogallus</i>	<i>anthracinus</i>	COMMON BLACK-HAWK	LC
<i>Butorides</i>	<i>striata</i>	STRIATED HERON	LC
<i>Butorides</i>	<i>virescens</i>	GREEN HERON	LC
<i>Calidris</i>	<i>alba</i>	SANDERLING	LC
<i>Calidris</i>	<i>alpina</i>	DUNLIN	LC
<i>Calidris</i>	<i>bairdii</i>	BAIRD'S SANDPIPER	LC
<i>Calidris</i>	<i>canutus</i>	RED KNOT	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Calidris</i>	<i>ferruginea</i>	CURLEW SANDPIPER	LC
<i>Calidris</i>	<i>fuscicollis</i>	WHITE-RUMPED SANDPIPER	LC
<i>Calidris</i>	<i>mauri</i>	WESTERN SANDPIPER	LC
<i>Calidris</i>	<i>melanotos</i>	PECTORAL SANDPIPER	LC
<i>Calidris</i>	<i>minutilla</i>	LEAST SANDPIPER	LC
<i>Calidris</i>	<i>pusilla</i>	SEMIPALMATED SANDPIPER	LC
<i>Calonectris</i>	<i>diomedea</i>	CORY'S SHEARWATER	LC
<i>Caprimulgus</i>	<i>carolinensis</i>	CHUCK-WILL'S-WIDOW	LC
<i>Caprimulgus</i>	<i>cayennensis</i>	WHITE-TAILED NIGHTJAR	LC
<i>Casmerodius</i>	<i>albus</i>	GREAT EGRET	LC
<i>Catharacta</i>	<i>maccormicki</i>	SOUTH POLAR SKUA	LC
<i>Catharacta</i>	<i>skua</i>	GREAT SKUA	LC
<i>Catharus</i>	<i>minimus</i>	GREY-CHEEKED THRUSH	LC
<i>Catoptrophorus</i>	<i>semipalmatus</i>	WILLET	LC
<i>Ceryle</i>	<i>alcyon</i>	BELTED KINGFISHER	LC
<i>Ceryle</i>	<i>torquatus</i>	RINGED KINGFISHER	LC
<i>Chaetura</i>	<i>brachyura</i>	SHORT-TAILED SWIFT	LC
<i>Chaetura</i>	<i>cinereiventris</i>	GREY-RUMPED SWIFT	LC
<i>Chaetura</i>	<i>martinica</i>	LESSER ANTILLEAN SWIFT	LC
<i>Charadrius</i>	<i>alexandrinus</i>	KENTISH PLOVER	LC
<i>Charadrius</i>	<i>collaris</i>	COLLARED PLOVER	LC
<i>Charadrius</i>	<i>hiaticula</i>	COMMON RINGED PLOVER	LC
<i>Charadrius</i>	<i>semipalmatus</i>	SEMIPALMATED PLOVER	LC
<i>Charadrius</i>	<i>vociferus</i>	KILLDEER	LC
<i>Charadrius</i>	<i>wilsonia</i>	WILSON'S PLOVER	LC
<i>Chlidonias</i>	<i>leucopterus</i>	WHITE-WINGED TERN	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Chlidonias</i>	<i>niger</i>	BLACK TERN	LC
<i>Chondrohierax</i>	<i>uncinatus</i>	HOOK-BILLED KITE	LC
<i>Chordeiles</i>	<i>minor</i>	COMMON NIGHTHAWK	LC
<i>Chrysolampis</i>	<i>mosquitus</i>	RUBY-TOPAZ HUMMINGBIRD	LC
<i>Cinlocerthia</i>	<i>gutturalis</i>	GREY TREMBLER	LC
<i>Cinlocerthia</i>	<i>ruficauda</i>	BROWN TREMBLER	LC
<i>Circus</i>	<i>cyaneus</i>	NORTHERN HARRIER	LC
<i>Coccyzus</i>	<i>americanus</i>	YELLOW-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>erythrophthalmus</i>	BLACK-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>melacoryphus</i>	DARK-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>minor</i>	MANGROVE CUCKOO	LC
<i>Coereba</i>	<i>flaveola</i>	BANANAQUIT	LC
<i>Columba</i>	<i>livia</i>	ROCK PIGEON	LC
<i>Columbina</i>	<i>passerina</i>	COMMON GROUND-DOVE	LC
<i>Contopus</i>	<i>latirostris</i>	LESSER ANTILLEAN PEWEE	LC
<i>Coragyps</i>	<i>atratus</i>	BLACK VULTURE	LC
<i>Crotophaga</i>	<i>ani</i>	SMOOTH-BILLED ANI	LC
<i>Cuculus</i>	<i>canorus</i>	COMMON CUCKOO	LC
<i>Cyanophaia</i>	<i>bicolor</i>	BLUE-HEADED HUMMINGBIRD	LC
<i>Cypseloides</i>	<i>niger</i>	BLACK SWIFT	LC
<i>Dendrocygna</i>	<i>arborea</i>	WEST INDIAN WHISTLING-DUCK	VU
<i>Dendrocygna</i>	<i>autumnalis</i>	BLACK-BELLIED WHISTLING-DUCK	LC
<i>Dendrocygna</i>	<i>bicolor</i>	FULVOUS WHISTLING-DUCK	LC
<i>Dendrocygna</i>	<i>viduata</i>	WHITE-FACED WHISTLING-DUCK	LC
<i>Dendroica</i>	<i>adelaidae</i>	ADELAIDE'S WARBLER	LC
<i>Dendroica</i>	<i>caerulescens</i>	BLACK-THROATED BLUE WARBLER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Dendroica</i>	<i>castanea</i>	BAY-BREASTED WARBLER	LC
<i>Dendroica</i>	<i>coronata</i>	YELLOW-RUMPED WARBLER	LC
<i>Dendroica</i>	<i>discolor</i>	PRAIRIE WARBLER	LC
<i>Dendroica</i>	<i>dominica</i>	YELLOW-THROATED WARBLER	LC
<i>Dendroica</i>	<i>fusca</i>	BLACKBURNIAN WARBLER	LC
<i>Dendroica</i>	<i>magnolia</i>	MAGNOLIA WARBLER	LC
<i>Dendroica</i>	<i>pensylvanica</i>	CHESTNUT-SIDED WARBLER	LC
<i>Dendroica</i>	<i>petechia</i>	YELLOW WARBLER	LC
<i>Dendroica</i>	<i>plumbea</i>	PLUMBEOUS WARBLER	LC
<i>Dendroica</i>	<i>striata</i>	BLACKPOLL WARBLER	LC
<i>Dendroica</i>	<i>subita</i>	BARBUDA WARBLER	NT
<i>Dendroica</i>	<i>tigrina</i>	CAPE MAY WARBLER	LC
<i>Dendroica</i>	<i>virens</i>	BLACK-THROATED GREEN WARBLER	LC
<i>Dolichonyx</i>	<i>oryzivorus</i>	BOBOLINK	LC
<i>Dumetella</i>	<i>carolinensis</i>	GREY CATBIRD	LC
<i>Egretta</i>	<i>caerulea</i>	LITTLE BLUE HERON	LC
<i>Egretta</i>	<i>garzetta</i>	LITTLE EGRET	LC
<i>Egretta</i>	<i>gularis</i>	WESTERN REEF-EGRET	LC
<i>Egretta</i>	<i>rufescens</i>	REDDISH EGRET	LC
<i>Egretta</i>	<i>thula</i>	SNOWY EGRET	LC
<i>Egretta</i>	<i>tricolor</i>	TRICOLOURED HERON	LC
<i>Elaenia</i>	<i>flavogaster</i>	YELLOW-BELLIED ELAENIA	LC
<i>Elaenia</i>	<i>martinica</i>	CARIBBEAN ELAENIA	LC
<i>Eulampis</i>	<i>holosericeus</i>	GREEN-THROATED CARIB	LC
<i>Eulampis</i>	<i>jugularis</i>	PURPLE-THROATED CARIB	LC
<i>Euphonia</i>	<i>musica</i>	ANTILLEAN EUPHONIA	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Falco</i>	<i>columbarius</i>	MERLIN	LC
<i>Falco</i>	<i>peregrinus</i>	PEREGRINE FALCON	LC
<i>Falco</i>	<i>sparverius</i>	AMERICAN KESTREL	LC
<i>Falco</i>	<i>tinnunculus</i>	COMMON KESTREL	LC
<i>Florisuga</i>	<i>mellivora</i>	WHITE-NECKED JACOBIN	LC
<i>Fregata</i>	<i>magnificens</i>	MAGNIFICENT FRIGATEBIRD	LC
<i>Fulica</i>	<i>americana</i>	AMERICAN COOT	LC
<i>Fulica</i>	<i>caribaea</i>	CARIBBEAN COOT	NT
<i>Gallinago</i>	<i>gallinago</i>	COMMON SNIPE	LC
<i>Gallinula</i>	<i>chloropus</i>	COMMON MOORHEN	LC
<i>Geothlypis</i>	<i>trichas</i>	COMMON YELLOWTHROAT	LC
<i>Geotrygon</i>	<i>montana</i>	RUDDY QUAIL-DOVE	LC
<i>Geotrygon</i>	<i>mystacea</i>	BRIDLED QUAIL-DOVE	LC
<i>Glaucis</i>	<i>hirsutus</i>	RUFOUS-BREASTED HERMIT	LC
<i>Haematopus</i>	<i>palliatu</i>	AMERICAN OYSTERCATCHER	LC
<i>Himantopus</i>	<i>mexicanus</i>	BLACK-NECKED STILT	LC
<i>Hirundo</i>	<i>rustica</i>	BARN SWALLOW	LC
<i>Icteria</i>	<i>virens</i>	YELLOW-BREASTED CHAT	LC
<i>Icterus</i>	<i>galbula</i>	BALTIMORE ORIOLE	LC
<i>Ixobrychus</i>	<i>exilis</i>	LEAST BITTERN	LC
<i>Larus</i>	<i>argentatus</i>	HERRING GULL	LC
<i>Larus</i>	<i>atricilla</i>	LAUGHING GULL	LC
<i>Larus</i>	<i>delawarensis</i>	RING-BILLED GULL	LC
<i>Larus</i>	<i>fuscus</i>	LESSER BLACK-BACKED GULL	LC
<i>Larus</i>	<i>marinus</i>	GREAT BLACK-BACKED GULL	LC
<i>Larus</i>	<i>philadelphia</i>	BONAPARTE'S GULL	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Larus</i>	<i>ridibundus</i>	COMMON BLACK-HEADED GULL	LC
<i>Lathrotriccus</i>	<i>euleri</i>	EULER'S FLYCATCHER	LC
<i>Limnodromus</i>	<i>griseus</i>	SHORT-BILLED DOWITCHER	LC
<i>Limosa</i>	<i>fedoa</i>	MARbled GODWIT	LC
<i>Lophodytes</i>	<i>cucullatus</i>	HOODED MERGANSER	LC
<i>Loxigilla</i>	<i>noctis</i>	LESSER ANTILLEAN BULLFINCH	LC
<i>Lymnocyptes</i>	<i>minimus</i>	JACK SNIPE	LC
<i>Margarops</i>	<i>fuscatuS</i>	PEARLY-EYED THRASHER	LC
<i>Margarops</i>	<i>fuscus</i>	SCALY-BREASTED THRASHER	LC
<i>Micropalama</i>	<i>himantopus</i>	STILT SANDPIPER	LC
<i>Mimus</i>	<i>gilvus</i>	TROPICAL MOCKINGBIRD	LC
<i>Mniotilta</i>	<i>varia</i>	BLACK-AND-WHITE WARBLER	LC
<i>Molothrus</i>	<i>bonariensis</i>	SHINY COWBIRD	LC
<i>Motacilla</i>	<i>alba</i>	WHITE WAGTAIL	LC
<i>Myadestes</i>	<i>genibarbis</i>	RUFous-THROATED SOLITAIRE	LC
<i>Myiarchus</i>	<i>nugator</i>	GRENADA FLYCATCHER	LC
<i>Myiarchus</i>	<i>oberi</i>	LESSER ANTILLEAN FLYCATCHER	LC
<i>Myiarchus</i>	<i>tyrannulus</i>	BROWN-CRESTED FLYCATCHER	LC
<i>Nomonyx</i>	<i>dominicus</i>	MASKED DUCK	LC
<i>Numenius</i>	<i>phaeopus</i>	WHIMBREL	LC
<i>Nyctanassa</i>	<i>violacea</i>	YELLOW-CROWNED NIGHT-HERON	LC
<i>Nycticorax</i>	<i>nycticorax</i>	BLACK-CROWNED NIGHT-HERON	LC
<i>Oceanodroma</i>	<i>leucorhoa</i>	LEACH'S STORM-PETREL	LC
<i>Oenanthe</i>	<i>oenanthe</i>	NORTHERN WHEATEAR	LC
<i>Oporornis</i>	<i>agilis</i>	CONNECTICUT WARBLER	LC
<i>Oporornis</i>	<i>formosus</i>	KENTUCKY WARBLER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Orthorhyncus</i>	<i>cristatus</i>	ANTILLEAN CRESTED HUMMINGBIRD	LC
<i>Oxyura</i>	<i>jamaicensis</i>	RUDDY DUCK	LC
<i>Pandion</i>	<i>haliaetus</i>	OSPREY	LC
<i>Parula</i>	<i>americana</i>	NORTHERN PARULA	LC
<i>Patagioenas</i>	<i>leucocephala</i>	WHITE-CROWNED PIGEON	NT
<i>Patagioenas</i>	<i>squamosa</i>	SCALY-NAPED PIGEON	LC
<i>Pelecanus</i>	<i>occidentalis</i>	BROWN PELICAN	LC
<i>Petrochelidon</i>	<i>pyrrhonota</i>	CLIFF SWALLOW	LC
<i>Phaethon</i>	<i>aethereus</i>	RED-BILLED TROPICBIRD	LC
<i>Phaethon</i>	<i>lepturus</i>	WHITE-TAILED TROPICBIRD	LC
<i>Phalacrocorax</i>	<i>auritus</i>	DOUBLE-CRESTED CORMORANT	LC
<i>Phalacrocorax</i>	<i>brasilianus</i>	NEOTROPIC CORMORANT	LC
<i>Pheucticus</i>	<i>ludovicianus</i>	ROSE-BREASTED GROSBEAK	LC
<i>Philomachus</i>	<i>pugnax</i>	RUFF	LC
<i>Piranga</i>	<i>flava</i>	HEPATIC TANAGER	LC
<i>Piranga</i>	<i>olivacea</i>	SCARLET TANAGER	LC
<i>Piranga</i>	<i>rubra</i>	SUMMER TANAGER	LC
<i>Platalea</i>	<i>ajaja</i>	ROSEATE SPOONBILL	LC
<i>Plegadis</i>	<i>falcinellus</i>	GLOSSY IBIS	LC
<i>Pluvialis</i>	<i>dominica</i>	AMERICAN GOLDEN-PLOVER	LC
<i>Pluvialis</i>	<i>squatarola</i>	GREY PLOVER	LC
<i>Podilymbus</i>	<i>podiceps</i>	PIED-BILLED GREBE	LC
<i>Porphyrio</i>	<i>martinica</i>	PURPLE GALLINULE	LC
<i>Porzana</i>	<i>carolina</i>	SORA	LC
<i>Progne</i>	<i>dominicensis</i>	CARIBBEAN MARTIN	LC
<i>Protonotaria</i>	<i>citrea</i>	PROTHONOTARY WARBLER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Puffinus</i>	<i>lherminieri</i>	AUDUBON'S SHEARWATER	LC
<i>Quiscalus</i>	<i>lugubris</i>	CARIB GRACKLE	LC
<i>Rallus</i>	<i>longirostris</i>	CLAPPER RAIL	LC
<i>Recurvirostra</i>	<i>americana</i>	AMERICAN AVOCET	LC
<i>Riparia</i>	<i>riparia</i>	SAND MARTIN	LC
<i>Rissa</i>	<i>tridactyla</i>	BLACK-LEGGED KITTIWAKE	LC
<i>Rynchops</i>	<i>niger</i>	BLACK SKIMMER	LC
<i>Seiurus</i>	<i>aurocapilla</i>	OVENBIRD	LC
<i>Seiurus</i>	<i>motacilla</i>	LOUISIANA WATERTHRUSH	LC
<i>Seiurus</i>	<i>noveboracensis</i>	NORTHERN WATERTHRUSH	LC
<i>Setophaga</i>	<i>ruticilla</i>	AMERICAN REDSTART	LC
<i>Sicalis</i>	<i>luteola</i>	GRASSLAND YELLOW-FINCH	LC
<i>Sphyrapicus</i>	<i>varius</i>	YELLOW-BELLIED SAPSUCKER	LC
<i>Sporophila</i>	<i>nigricollis</i>	YELLOW-BELLIED SEEDEATER	LC
<i>Steganopus</i>	<i>tricolor</i>	WILSON'S PHALAROPE	LC
<i>Stercorarius</i>	<i>longicaudus</i>	LONG-TAILED JAEGER	LC
<i>Stercorarius</i>	<i>parasiticus</i>	PARASITIC JAEGER	LC
<i>Stercorarius</i>	<i>pomarinus</i>	POMARINE JAEGER	LC
<i>Sterna</i>	<i>anaethetus</i>	BRIDLED TERN	LC
<i>Sterna</i>	<i>antillarum</i>	LEAST TERN	LC
<i>Sterna</i>	<i>fuscata</i>	SOOTY TERN	LC
<i>Sterna</i>	<i>hirundo</i>	COMMON TERN	LC
<i>Sterna</i>	<i>maxima</i>	ROYAL TERN	LC
<i>Sterna</i>	<i>nilotica</i>	GULL-BILLED TERN	LC
<i>Sterna</i>	<i>sandvicensis</i>	SANDWICH TERN	LC
<i>Streptoprocne</i>	<i>zonaris</i>	WHITE-COLLARED SWIFT	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Sula</i>	<i>dactylatra</i>	MASKED BOOBY	LC
<i>Sula</i>	<i>leucogaster</i>	BROWN BOOBY	LC
<i>Sula</i>	<i>sula</i>	RED-FOOTED BOOBY	LC
<i>Tangara</i>	<i>cucullata</i>	LESSER ANTILLEAN TANAGER	LC
<i>Tiaris</i>	<i>bicolor</i>	BLACK-FACED GRASSQUIT	LC
<i>Tringa</i>	<i>erythropus</i>	SPOTTED REDSHANK	LC
<i>Tringa</i>	<i>flavipes</i>	LESSER YELLOWLEGS	LC
<i>Tringa</i>	<i>glareola</i>	WOOD SANDPIPER	LC
<i>Tringa</i>	<i>melanoleuca</i>	GREATER YELLOWLEGS	LC
<i>Tringa</i>	<i>solitaria</i>	SOLITARY SANDPIPER	LC
<i>Troglodytes</i>	<i>aedon</i>	HOUSE WREN	LC
<i>Tryngites</i>	<i>subruficollis</i>	BUFF-BREASTED SANDPIPER	NT
<i>Turdus</i>	<i>fumigatus</i>	COCOA THRUSH	LC
<i>Turdus</i>	<i>plumbeus</i>	RED-LEGGED THRUSH	LC
<i>Tyrannus</i>	<i>dominicensis</i>	GREY KINGBIRD	LC
<i>Tyrannus</i>	<i>melancholicus</i>	TROPICAL KINGBIRD	LC
<i>Tyrannus</i>	<i>savana</i>	FORK-TAILED FLYCATCHER	LC
<i>Tyto</i>	<i>alba</i>	BARN OWL	LC
<i>Vanellus</i>	<i>vanellus</i>	NORTHERN LAPWING	LC
<i>Vireo</i>	<i>altiloquus</i>	BLACK-WHISKERED VIREO	LC
<i>Vireo</i>	<i>flavifrons</i>	YELLOW-THROATED VIREO	LC
<i>Vireo</i>	<i>olivaceus</i>	RED-EYED VIREO	LC
<i>Volatinia</i>	<i>jacarina</i>	BLUE-BLACK GRASSQUIT	LC
<i>Wilsonia</i>	<i>canadensis</i>	CANADA WARBLER	LC
<i>Xanthocephalus</i>	<i>xanthocephalus</i>	YELLOW-HEADED BLACKBIRD	LC
<i>Zenaida</i>	<i>auriculata</i>	EARED DOVE	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Zenaida</i>	<i>aurita</i>	ZENAIDA DOVE	LC
<i>Aetobatus</i>	<i>narinari</i>	BONNETRAY, MAYLAN, SPOTTED EAGLE RAY	NT
<i>Apristurus</i>	<i>canutus</i>	HOARY CATSHARK	DD
<i>Carcharhinus</i>	<i>falciformis</i>	SILKY SHARK	LR/lc
<i>Carcharhinus</i>	<i>leucas</i>	BULL SHARK	LR/nt
<i>Carcharhinus</i>	<i>longimanus</i>	OCEANIC WHITETIP SHARK, WHITE-TIPPED SHARK, WHITETIP OCEANIC SHARK, WHITETIP SHARK	VU
<i>Carcharhinus</i>	<i>perezi</i>	CARIBBEAN REEF SHARK	NT
<i>Carcharodon</i>	<i>carcharias</i>	GREAT WHITE SHARK	VU
<i>Dasyatis</i>	<i>americana</i>	SOUTHERN STINGRAY	DD
<i>Dasyatis</i>	<i>say</i>	BLUNTNOSE STINGRAY	LC
<i>Etmopterus</i>	<i>robinsi</i>	WEST INDIAN LANTERNSHARK	LC
<i>Galeocerdo</i>	<i>cuvier</i>	TIGER SHARK	LR/nt
<i>Ginglymostoma</i>	<i>cirratum</i>	NURSE SHARK	DD
<i>Himantura</i>	<i>schmardae</i>	CHUPARE STINGRAY	DD
<i>Isurus</i>	<i>oxyrinchus</i>	SHORTFIN MAKO	LR/nt
<i>Negaprion</i>	<i>brevirostris</i>	LEMON SHARK	LR/nt
<i>Prionace</i>	<i>glauca</i>	BLUE SHARK	LR/nt
<i>Rhincodon</i>	<i>typus</i>	WHALE SHARK	VU
<i>Sphyrna</i>	<i>lewini</i>	SCALLOPED HAMMERHEAD	LR/nt
<i>Sphyrna</i>	<i>mokarran</i>	GREAT HAMMERHEAD, HAMMERHEAD SHARK, SQUAT-HEADED HAMMERHEAD SHARK	EN
<i>Urobatis</i>	<i>jamaicensis</i>	YELLOW STINGRAY	LC
<i>Brachyphylla</i>	<i>cavernarum</i>	ANTILLEAN FRUIT-EATING BAT	LR/lc
<i>Grampus</i>	<i>griseus</i>	GREY DOLPHIN, RISSO'S DOLPHIN	DD
<i>Lagenodelphis</i>	<i>hosei</i>	FRASER'S DOLPHIN, SARAWAK DOLPHIN	DD
<i>Monophyllus</i>	<i>plethodon</i>	INSULAR SINGLE LEAF BAT	LR/nt

GENUS	SPECIES	COMMON NAME	STATUS
<i>Natalus</i>	<i>stramineus</i>	MEXICAN FUNNEL-EARED BAT	LR/lc
<i>Noctilio</i>	<i>leporinus</i>	GREATER BULLDOG BAT	LR/lc
<i>Stenella</i>	<i>clymene</i>	ATLANTIC SPINNER DOLPHIN, CLYMENE DOLPHIN, HELMET DOLPHIN	DD
<i>Tadarida</i>	<i>brasiliensis</i>	BRAZILIAN FREE-TAILED BAT	LR/nt
<i>Trichechus</i>	<i>manatus</i>	AMERICAN MANATEE, WEST INDIAN MANATEE	VU
<i>Alsophis</i>	<i>antiguae</i>	ANTIGUAN RACER	CR
<i>Chelonia</i>	<i>mydas</i>	GREEN TURTLE	EN
<i>Dermochelys</i>	<i>coriacea</i>	LEATHERBACK, LEATHERY TURTLE, LUTH, TRUNKBACK TURTLE	CR
<i>Eretmochelys</i>	<i>imbricata</i>	HAWKSBILL TURTLE	CR
<i>Iguana</i>	<i>delicatissima</i>	LESSER ANTILLEAN IGUANA, WEST INDIAN IGUANA	VU
<i>Cedrela</i>	<i>odorata</i>	CIGAR-BOX WOOD, RED CEDAR, SPANISH CEDAR	VU
<i>Guaiacum</i>	<i>officinale</i>	COMMONER LIGNUM VITAE, GUAIAAC TREE	EN
<i>Nectandra</i>	<i>krugii</i>		EN
<i>Swietenia</i>	<i>mahagoni</i>	AMERICAN MAHOGANY, CUBAN MAHOGANY, SMALL-LEAVED MAHOGANY, WEST INDIAN MAHOGANY	

## DOMINICA

GENUS	SPECIES	COMMON NAME	STATUS
<i>Balistes</i>	<i>vetula</i>	QUEEN TRIGGERFISH	VU
<i>Dermatolepis</i>	<i>inermis</i>	MARbled GROUPER	VU
<i>Epinephelus</i>	<i>flavolimbatus</i>	GROUPER, POEY'S GROUPER, WHITE GROUPER, YELLOWEDGE GROUPER, YELLOWFINNED GROUPER	VU
<i>Epinephelus</i>	<i>itajara</i>	GOLIATH GROUPER, JEW FISH	CR
<i>Epinephelus</i>	<i>morio</i>	RED GROUPER	NT
<i>Epinephelus</i>	<i>striatus</i>	NASSAU GROUPER	EN

GENUS	SPECIES	COMMON NAME	STATUS
<i>Lachnolaimus</i>	<i>maximus</i>	HOGFISH	VU
<i>Lutjanus</i>	<i>analis</i>	MUTTON SNAPPER	VU
<i>Lutjanus</i>	<i>cyanopterus</i>	CUBERA SNAPPER	VU
<i>Mycteroperca</i>	<i>interstitialis</i>	BLAKE, CROSSBAND ROCKFISH, GREY MANNOCK, HAMLET, HARLEQUIN ROCKFISH, PRINCESS ROCKFISH, ROCKFISH, SALMON GROUPER, SALMON ROCK FISH, SCAMP, YELLOWMOUTH GROUPER	VU
<i>Mycteroperca</i>	<i>tigris</i>	TIGER GROUPER	LC
<i>Mycteroperca</i>	<i>venenosa</i>	YELLOWFIN GROUPER	NT
<i>Scarus</i>	<i>guacamaia</i>	RAINBOW PARROTFISH	VU
<i>Thunnus</i>	<i>obesus</i>	BIGEYE TUNA	VU
<i>Thunnus</i>	<i>thynnus</i>	NORTHERN BLUEFIN TUNA	DD
<i>Eleutherodactylus</i>	<i>amplinympa</i>		EN
<i>Eleutherodactylus</i>	<i>johnstonei</i>		LC
<i>Eleutherodactylus</i>	<i>martinicensis</i>		NT
<i>Leptodactylus</i>	<i>fallax</i>	GIANT DITCH FROG, MOUNTAIN CHICKEN	CR
<i>Actitis</i>	<i>macularius</i>	SPOTTED SANDPIPER	LC
<i>Aix</i>	<i>sponsa</i>	WOOD DUCK	LC
<i>Amazona</i>	<i>arausiaca</i>	RED-NECKED PARROT	VU
<i>Amazona</i>	<i>imperialis</i>	IMPERIAL PARROT	EN
<i>Anas</i>	<i>acuta</i>	NORTHERN PINTAIL	LC
<i>Anas</i>	<i>americana</i>	AMERICAN WIGEON	LC
<i>Anas</i>	<i>bahamensis</i>	WHITE-CHEEKED PINTAIL	LC
<i>Anas</i>	<i>clypeata</i>	NORTHERN SHOVELER	LC
<i>Anas</i>	<i>crecca</i>	COMMON TEAL	LC
<i>Anas</i>	<i>discors</i>	BLUE-WINGED TEAL	LC
<i>Anas</i>	<i>penelope</i>	EURASIAN WIGEON	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Anhinga</i>	<i>anhinga</i>	ANHINGA	LC
<i>Anous</i>	<i>minutus</i>	BLACK NODDY	LC
<i>Anous</i>	<i>stolidus</i>	BROWN NODDY	LC
<i>Anthracothorax</i>	<i>viridigula</i>	GREEN-THROATED MANGO	LC
<i>Ara</i>	<i>atwoodi</i>	DOMINICAN GREEN-AND-YELLOW MACAW	EX
<i>Ardea</i>	<i>cinerea</i>	GREY HERON	LC
<i>Ardea</i>	<i>herodias</i>	GREAT BLUE HERON	LC
<i>Arenaria</i>	<i>interpres</i>	RUDDY TURNSTONE	LC
<i>Asio</i>	<i>flammeus</i>	SHORT-EARED OWL	LC
<i>Athene</i>	<i>cunicularia</i>	BURROWING OWL	LC
<i>Aythya</i>	<i>affinis</i>	LESSER SCAUP	LC
<i>Aythya</i>	<i>collaris</i>	RING-NECKED DUCK	LC
<i>Bartramia</i>	<i>longicauda</i>	UPLAND SANDPIPER	LC
<i>Bombycilla</i>	<i>cedrorum</i>	CEDAR WAXWING	LC
<i>Botaurus</i>	<i>lentiginosus</i>	AMERICAN BITTERN	LC
<i>Bubulcus</i>	<i>ibis</i>	CATTLE EGRET	LC
<i>Buteo</i>	<i>albicaudatus</i>	WHITE-TAILED HAWK	LC
<i>Buteo</i>	<i>jamaicensis</i>	RED-TAILED HAWK	LC
<i>Buteo</i>	<i>platypterus</i>	BROAD-WINGED HAWK	LC
<i>Buteogallus</i>	<i>anthracinus</i>	COMMON BLACK-HAWK	LC
<i>Butorides</i>	<i>striata</i>	STRIATED HERON	LC
<i>Butorides</i>	<i>virescens</i>	GREEN HERON	LC
<i>Calidris</i>	<i>alba</i>	SANDERLING	LC
<i>Calidris</i>	<i>alpina</i>	DUNLIN	LC
<i>Calidris</i>	<i>bairdii</i>	BAIRD'S SANDPIPER	LC
<i>Calidris</i>	<i>canutus</i>	RED KNOT	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Calidris</i>	<i>ferruginea</i>	CURLEW SANDPIPER	LC
<i>Calidris</i>	<i>fuscicollis</i>	WHITE-RUMPED SANDPIPER	LC
<i>Calidris</i>	<i>mauri</i>	WESTERN SANDPIPER	LC
<i>Calidris</i>	<i>melanotos</i>	PECTORAL SANDPIPER	LC
<i>Calidris</i>	<i>minutilla</i>	LEAST SANDPIPER	LC
<i>Calidris</i>	<i>pusilla</i>	SEMIPALMATED SANDPIPER	LC
<i>Calonectris</i>	<i>diomedea</i>	CORY'S SHEARWATER	LC
<i>Caprimulgus</i>	<i>carolinensis</i>	CHUCK-WILL'S-WIDOW	LC
<i>Caprimulgus</i>	<i>cayennensis</i>	WHITE-TAILED NIGHTJAR	LC
<i>Casmerodius</i>	<i>albus</i>	GREAT EGRET	LC
<i>Catharacta</i>	<i>maccormicki</i>	SOUTH POLAR SKUA	LC
<i>Catharacta</i>	<i>skua</i>	GREAT SKUA	LC
<i>Catharus</i>	<i>minimus</i>	GREY-CHEEKED THRUSH	LC
<i>Catoptrophorus</i>	<i>semipalmatus</i>	WILLET	LC
<i>Ceryle</i>	<i>alcyon</i>	BELTED KINGFISHER	LC
<i>Ceryle</i>	<i>torquatus</i>	RINGED KINGFISHER	LC
<i>Chaetura</i>	<i>brachyura</i>	SHORT-TAILED SWIFT	LC
<i>Chaetura</i>	<i>cinereiventris</i>	GREY-RUMPED SWIFT	LC
<i>Chaetura</i>	<i>martinica</i>	LESSER ANTILLEAN SWIFT	LC
<i>Charadrius</i>	<i>alexandrinus</i>	KENTISH PLOVER	LC
<i>Charadrius</i>	<i>collaris</i>	COLLARED PLOVER	LC
<i>Charadrius</i>	<i>hiaticula</i>	COMMON RINGED PLOVER	LC
<i>Charadrius</i>	<i>semipalmatus</i>	SEMIPALMATED PLOVER	LC
<i>Charadrius</i>	<i>vociferus</i>	KILLDEER	LC
<i>Charadrius</i>	<i>wilsonia</i>	WILSON'S PLOVER	LC
<i>Chlidonias</i>	<i>leucopterus</i>	WHITE-WINGED TERN	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Chlidonias</i>	<i>niger</i>	BLACK TERN	LC
<i>Chondrohierax</i>	<i>uncinatus</i>	HOOK-BILLED KITE	LC
<i>Chordeiles</i>	<i>minor</i>	COMMON NIGHTHAWK	LC
<i>Chrysolampis</i>	<i>mosquitus</i>	RUBY-TOPAZ HUMMINGBIRD	LC
<i>Cichlherminia</i>	<i>lherminieri</i>	FOREST THRUSH	VU
<i>Cinlocerthia</i>	<i>gutturalis</i>	GREY TREMBLER	LC
<i>Cinlocerthia</i>	<i>ruficauda</i>	BROWN TREMBLER	LC
<i>Circus</i>	<i>cyaneus</i>	NORTHERN HARRIER	LC
<i>Coccyzus</i>	<i>americanus</i>	YELLOW-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>erythrophthalmus</i>	BLACK-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>melacoryphus</i>	DARK-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>minor</i>	MANGROVE CUCKOO	LC
<i>Coereba</i>	<i>flaveola</i>	BANANAQUIT	LC
<i>Columba</i>	<i>livia</i>	ROCK PIGEON	LC
<i>Columbina</i>	<i>passerina</i>	COMMON GROUND-DOVE	LC
<i>Contopus</i>	<i>latirostris</i>	LESSER ANTILLEAN PEWEE	LC
<i>Coragyps</i>	<i>atratus</i>	BLACK VULTURE	LC
<i>Crotophaga</i>	<i>ani</i>	SMOOTH-BILLED ANI	LC
<i>Cuculus</i>	<i>canorus</i>	COMMON CUCKOO	LC
<i>Cyanophaia</i>	<i>bicolor</i>	BLUE-HEADED HUMMINGBIRD	LC
<i>Cypseloides</i>	<i>niger</i>	BLACK SWIFT	LC
<i>Dendrocygna</i>	<i>autumnalis</i>	BLACK-BELLIED WHISTLING-DUCK	LC
<i>Dendrocygna</i>	<i>bicolor</i>	FULVOUS WHISTLING-DUCK	LC
<i>Dendrocygna</i>	<i>viduata</i>	WHITE-FACED WHISTLING-DUCK	LC
<i>Dendroica</i>	<i>adelaidae</i>	ADELAIDE'S WARBLER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Dendroica</i>	<i>caerulescens</i>	BLACK-THROATED BLUE WARBLER	LC
<i>Dendroica</i>	<i>castanea</i>	BAY-BREASTED WARBLER	LC
<i>Dendroica</i>	<i>coronata</i>	YELLOW-RUMPED WARBLER	LC
<i>Dendroica</i>	<i>discolor</i>	PRAIRIE WARBLER	LC
<i>Dendroica</i>	<i>dominica</i>	YELLOW-THROATED WARBLER	LC
<i>Dendroica</i>	<i>fusca</i>	BLACKBURNIAN WARBLER	LC
<i>Dendroica</i>	<i>magnolia</i>	MAGNOLIA WARBLER	LC
<i>Dendroica</i>	<i>pensylvanica</i>	CHESTNUT-SIDED WARBLER	LC
<i>Dendroica</i>	<i>petechia</i>	YELLOW WARBLER	LC
<i>Dendroica</i>	<i>plumbea</i>	PLUMBEOUS WARBLER	LC
<i>Dendroica</i>	<i>striata</i>	BLACKPOLL WARBLER	LC
<i>Dendroica</i>	<i>tigrina</i>	CAPE MAY WARBLER	LC
<i>Dendroica</i>	<i>virens</i>	BLACK-THROATED GREEN WARBLER	LC
<i>Dolichonyx</i>	<i>oryzivorus</i>	BOBOLINK	LC
<i>Dumetella</i>	<i>carolinensis</i>	GREY CATBIRD	LC
<i>Egretta</i>	<i>caerulea</i>	LITTLE BLUE HERON	LC
<i>Egretta</i>	<i>garzetta</i>	LITTLE EGRET	LC
<i>Egretta</i>	<i>gularis</i>	WESTERN REEF-EGRET	LC
<i>Egretta</i>	<i>rufescens</i>	REDDISH EGRET	LC
<i>Egretta</i>	<i>thula</i>	SNOWY EGRET	LC
<i>Egretta</i>	<i>tricolor</i>	TRICOLOURED HERON	LC
<i>Elaenia</i>	<i>flavogaster</i>	YELLOW-BELLIED ELAENIA	LC
<i>Elaenia</i>	<i>martinica</i>	CARIBBEAN ELAENIA	LC
<i>Eulampis</i>	<i>holosericeus</i>	GREEN-THROATED CARIB	LC
<i>Eulampis</i>	<i>jugularis</i>	PURPLE-THROATED CARIB	LC
<i>Euphonia</i>	<i>musica</i>	ANTILLEAN EUPHONIA	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Falco</i>	<i>columbarius</i>	MERLIN	LC
<i>Falco</i>	<i>peregrinus</i>	PEREGRINE FALCON	LC
<i>Falco</i>	<i>sparverius</i>	AMERICAN KESTREL	LC
<i>Falco</i>	<i>tinnunculus</i>	COMMON KESTREL	LC
<i>Florisuga</i>	<i>mellivora</i>	WHITE-NECKED JACOBIN	LC
<i>Fregata</i>	<i>magnificens</i>	MAGNIFICENT FRIGATEBIRD	LC
<i>Fulica</i>	<i>americana</i>	AMERICAN COOT	LC
<i>Gallinago</i>	<i>gallinago</i>	COMMON SNIPE	LC
<i>Gallinula</i>	<i>chloropus</i>	COMMON MOORHEN	LC
<i>Geothlypis</i>	<i>trichas</i>	COMMON YELLOWTHROAT	LC
<i>Geotrygon</i>	<i>montana</i>	RUDDY QUAIL-DOVE	LC
<i>Geotrygon</i>	<i>mystacea</i>	BRIDLED QUAIL-DOVE	LC
<i>Glaucis</i>	<i>hirsutus</i>	RUFIOUS-BREASTED HERMIT	LC
<i>Haematopus</i>	<i>palliatus</i>	AMERICAN OYSTERCATCHER	LC
<i>Himantopus</i>	<i>mexicanus</i>	BLACK-NECKED STILT	LC
<i>Hirundo</i>	<i>rustica</i>	BARN SWALLOW	LC
<i>Icteria</i>	<i>virens</i>	YELLOW-BREASTED CHAT	LC
<i>Icterus</i>	<i>galbula</i>	BALTIMORE ORIOLE	LC
<i>Ixobrychus</i>	<i>exilis</i>	LEAST BITTERN	LC
<i>Larus</i>	<i>argentatus</i>	HERRING GULL	LC
<i>Larus</i>	<i>atricilla</i>	LAUGHING GULL	LC
<i>Larus</i>	<i>delawarensis</i>	RING-BILLED GULL	LC
<i>Larus</i>	<i>fuscus</i>	LESSER BLACK-BACKED GULL	LC
<i>Larus</i>	<i>marinus</i>	GREAT BLACK-BACKED GULL	LC
<i>Larus</i>	<i>philadelphia</i>	BONAPARTE'S GULL	LC
<i>Larus</i>	<i>ridibundus</i>	COMMON BLACK-HEADED GULL	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Lathrotriccus</i>	<i>euleri</i>	EULER'S FLYCATCHER	LC
<i>Limnodromus</i>	<i>griseus</i>	SHORT-BILLED DOWITCHER	LC
<i>Limosa</i>	<i>fedoa</i>	MARbled GODWIT	LC
<i>Lophodytes</i>	<i>cucullatus</i>	HOODED MERGANSER	LC
<i>Loxigilla</i>	<i>noctis</i>	LESSER ANTILLEAN BULLFINCH	LC
<i>Lymnocyptes</i>	<i>minimus</i>	JACK SNIPE	LC
<i>Margarops</i>	<i>fuscatus</i>	PEARLY-EYED THRASHER	LC
<i>Margarops</i>	<i>fuscus</i>	SCALY-BREASTED THRASHER	LC
<i>Micropalama</i>	<i>himantopus</i>	STILT SANDPIPER	LC
<i>Mimus</i>	<i>gilvus</i>	TROPICAL MOCKINGBIRD	LC
<i>Mniotilta</i>	<i>varia</i>	BLACK-AND-WHITE WARBLER	LC
<i>Molothrus</i>	<i>bonariensis</i>	SHINY COWBIRD	LC
<i>Motacilla</i>	<i>alba</i>	WHITE WAGTAIL	LC
<i>Myadestes</i>	<i>genibarbis</i>	RUFous-THROATED SOLITAIRE	LC
<i>Myiarchus</i>	<i>nugator</i>	GRENADA FLYCATCHER	LC
<i>Myiarchus</i>	<i>oberi</i>	LESSER ANTILLEAN FLYCATCHER	LC
<i>Myiarchus</i>	<i>tyrannulus</i>	BROWN-CRESTED FLYCATCHER	LC
<i>Nomonyx</i>	<i>dominicus</i>	MASKED DUCK	LC
<i>Numenius</i>	<i>phaeopus</i>	WHIMBREL	LC
<i>Nyctanassa</i>	<i>violacea</i>	YELLOW-CROWNED NIGHT-HERON	LC
<i>Nycticorax</i>	<i>nycticorax</i>	BLACK-CROWNED NIGHT-HERON	LC
<i>Oceanodroma</i>	<i>leucorhoa</i>	LEACH'S STORM-PETREL	LC
<i>Oenanthe</i>	<i>oenanthe</i>	NORTHERN WHEATEAR	LC
<i>Oporornis</i>	<i>agilis</i>	CONNECTICUT WARBLER	LC
<i>Oporornis</i>	<i>formosus</i>	KENTUCKY WARBLER	LC
<i>Orthorhyncus</i>	<i>cristatus</i>	ANTILLEAN CRESTED HUMMINGBIRD	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Oxyura</i>	<i>jamaicensis</i>	RUDDY DUCK	LC
<i>Pandion</i>	<i>haliaetus</i>	OSPREY	LC
<i>Parula</i>	<i>americana</i>	NORTHERN PARULA	LC
<i>Patagioenas</i>	<i>squamosa</i>	SCALY-NAPED PIGEON	LC
<i>Pelecanus</i>	<i>occidentalis</i>	BROWN PELICAN	LC
<i>Petrochelidon</i>	<i>pyrrhonota</i>	CLIFF SWALLOW	LC
<i>Phaethon</i>	<i>aethereus</i>	RED-BILLED TROPICBIRD	LC
<i>Phaethon</i>	<i>lepturus</i>	WHITE-TAILED TROPICBIRD	LC
<i>Phalacrocorax</i>	<i>auritus</i>	DOUBLE-CRESTED CORMORANT	LC
<i>Phalacrocorax</i>	<i>brasilianus</i>	NEOTROPIC CORMORANT	LC
<i>Pheucticus</i>	<i>ludovicianus</i>	ROSE-BREASTED GROSBEAK	LC
<i>Philomachus</i>	<i>pugnax</i>	RUFF	LC
<i>Piranga</i>	<i>flava</i>	HEPATIC TANAGER	LC
<i>Piranga</i>	<i>olivacea</i>	SCARLET TANAGER	LC
<i>Piranga</i>	<i>rubra</i>	SUMMER TANAGER	LC
<i>Platalea</i>	<i>ajaja</i>	ROSEATE SPOONBILL	LC
<i>Plegadis</i>	<i>falcinellus</i>	GLOSSY IBIS	LC
<i>Pluvialis</i>	<i>dominica</i>	AMERICAN GOLDEN-PLOVER	LC
<i>Pluvialis</i>	<i>squatarola</i>	GREY PLOVER	LC
<i>Podilymbus</i>	<i>podiceps</i>	PIED-BILLED GREBE	LC
<i>Porphyrio</i>	<i>martinica</i>	PURPLE GALLINULE	LC
<i>Porzana</i>	<i>carolina</i>	SORA	LC
<i>Progne</i>	<i>dominicensis</i>	CARIBBEAN MARTIN	LC
<i>Protonotaria</i>	<i>citrea</i>	PROTHONOTARY WARBLER	LC
<i>Puffinus</i>	<i>lherminieri</i>	AUDUBON'S SHEARWATER	LC
<i>Quiscalus</i>	<i>lugubris</i>	CARIB GRACKLE	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Rallus</i>	<i>longirostris</i>	CLAPPER RAIL	LC
<i>Recurvirostra</i>	<i>americana</i>	AMERICAN AVOCET	LC
<i>Riparia</i>	<i>riparia</i>	SAND MARTIN	LC
<i>Rissa</i>	<i>tridactyla</i>	BLACK-LEGGED KITTIWAKE	LC
<i>Rynchops</i>	<i>niger</i>	BLACK SKIMMER	LC
<i>Saltator</i>	<i>albicollis</i>	LESSER ANTILLEAN SALTATOR	LC
<i>Seiurus</i>	<i>aurocapilla</i>	OVENBIRD	LC
<i>Seiurus</i>	<i>motacilla</i>	LOUISIANA WATERTHRUSH	LC
<i>Seiurus</i>	<i>noveboracensis</i>	NORTHERN WATERTHRUSH	LC
<i>Setophaga</i>	<i>ruticilla</i>	AMERICAN REDSTART	LC
<i>Sicalis</i>	<i>luteola</i>	GRASSLAND YELLOW-FINCH	LC
<i>Sphyrapicus</i>	<i>varius</i>	YELLOW-BELLIED SAPSUCKER	LC
<i>Sporophila</i>	<i>nigricollis</i>	YELLOW-BELLIED SEEDEATER	LC
<i>Steganopus</i>	<i>tricolor</i>	WILSON'S PHALAROPE	LC
<i>Stercorarius</i>	<i>longicaudus</i>	LONG-TAILED JAEGER	LC
<i>Stercorarius</i>	<i>parasiticus</i>	PARASITIC JAEGER	LC
<i>Stercorarius</i>	<i>pomarinus</i>	POMARINE JAEGER	LC
<i>Sterna</i>	<i>anaethetus</i>	BRIDLED TERN	LC
<i>Sterna</i>	<i>antillarum</i>	LEAST TERN	LC
<i>Sterna</i>	<i>fuscata</i>	SOOTY TERN	LC
<i>Sterna</i>	<i>hirundo</i>	COMMON TERN	LC
<i>Sterna</i>	<i>maxima</i>	ROYAL TERN	LC
<i>Sterna</i>	<i>nilotica</i>	GULL-BILLED TERN	LC
<i>Sterna</i>	<i>sandvicensis</i>	SANDWICH TERN	LC
<i>Streptopelia</i>	<i>decaocto</i>	EURASIAN COLLARED-DOVE	LC
<i>Streptoprocne</i>	<i>zonaris</i>	WHITE-COLLARED SWIFT	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Sula</i>	<i>dactylatra</i>	MASKED BOOBY	LC
<i>Sula</i>	<i>leucogaster</i>	BROWN BOOBY	LC
<i>Sula</i>	<i>sula</i>	RED-FOOTED BOOBY	LC
<i>Tangara</i>	<i>cucullata</i>	LESSER ANTILLEAN TANAGER	LC
<i>Tiaris</i>	<i>bicolor</i>	BLACK-FACED GRASSQUIT	LC
<i>Tringa</i>	<i>erythropus</i>	SPOTTED REDSHANK	LC
<i>Tringa</i>	<i>flavipes</i>	LESSER YELLOWLEGS	LC
<i>Tringa</i>	<i>glareola</i>	WOOD SANDPIPER	LC
<i>Tringa</i>	<i>melanoleuca</i>	GREATER YELLOWLEGS	LC
<i>Tringa</i>	<i>solitaria</i>	SOLITARY SANDPIPER	LC
<i>Troglodytes</i>	<i>aedon</i>	HOUSE WREN	LC
<i>Turdus</i>	<i>fumigatus</i>	COCOA THRUSH	LC
<i>Turdus</i>	<i>plumbeus</i>	RED-LEGGED THRUSH	LC
<i>Tyrannus</i>	<i>dominicensis</i>	GREY KINGBIRD	LC
<i>Tyrannus</i>	<i>melancholicus</i>	TROPICAL KINGBIRD	LC
<i>Tyrannus</i>	<i>savana</i>	FORK-TAILED FLYCATCHER	LC
<i>Tyto</i>	<i>alba</i>	BARN OWL	LC
<i>Vanellus</i>	<i>vanellus</i>	NORTHERN LAPWING	LC
<i>Vireo</i>	<i>altiloquus</i>	BLACK-WHISKERED VIREO	LC
<i>Vireo</i>	<i>flavifrons</i>	YELLOW-THROATED VIREO	LC
<i>Vireo</i>	<i>olivaceus</i>	RED-EYED VIREO	LC
<i>Volatinia</i>	<i>jacarina</i>	BLUE-BLACK GRASSQUIT	LC
<i>Wilsonia</i>	<i>canadensis</i>	CANADA WARBLER	LC
<i>Xanthocephalus</i>	<i>xanthocephalus</i>	YELLOW-HEADED BLACKBIRD	LC
<i>Zenaida</i>	<i>auriculata</i>	EARED DOVE	LC
<i>Zenaida</i>	<i>aurita</i>	ZENAIDA DOVE	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Aetobatus</i>	<i>narinari</i>	BONNETRAY, MAYLAN, SPOTTED EAGLE RAY	NT
<i>Carcharhinus</i>	<i>falciformis</i>	SILKY SHARK	LR/lc
<i>Carcharhinus</i>	<i>leucas</i>	BULL SHARK	LR/nt
<i>Carcharhinus</i>	<i>limbatus</i>	BLACKTIP SHARK	LR/nt
<i>Carcharhinus</i>	<i>longimanus</i>	OCEANIC WHITETIP SHARK, WHITE-TIPPED SHARK, WHITETIP OCEANIC SHARK, WHITETIP SHARK	VU
<i>Carcharhinus</i>	<i>perezi</i>	CARIBBEAN REEF SHARK	NT
<i>Carcharodon</i>	<i>carcharias</i>	GREAT WHITE SHARK	VU
<i>Centrophorus</i>	<i>granulosus</i>	GULPER SHARK	VU
<i>Dasyatis</i>	<i>americana</i>	SOUTHERN STINGRAY	DD
<i>Dasyatis</i>	<i>say</i>	BLUNTNOSE STINGRAY	LC
<i>Etmopterus</i>	<i>bullisi</i>	LINED LANTERNSHARK	DD
<i>Galeocerdo</i>	<i>cuvier</i>	TIGER SHARK	LR/nt
<i>Ginglymostoma</i>	<i>cirratum</i>	NURSE SHARK	DD
<i>Himantura</i>	<i>schmardae</i>	CHUPARE STINGRAY	DD
<i>Negaprion</i>	<i>brevirostris</i>	LEMON SHARK	LR/nt
<i>Prionace</i>	<i>glauca</i>	BLUE SHARK	LR/nt
<i>Rhincodon</i>	<i>typus</i>	WHALE SHARK	VU
<i>Sphyrna</i>	<i>lewini</i>	SCALLOPED HAMMERHEAD	LR/nt
<i>Sphyrna</i>	<i>mokarran</i>	GREAT HAMMERHEAD, HAMMERHEAD SHARK, SQUAT-HEADED HAMMERHEAD SHARK	EN
<i>Urobatis</i>	<i>jamaicensis</i>	YELLOW STINGRAY	LC
<i>Ardops</i>	<i>nichollsi</i>	TREE BAT	LR/nt
<i>Artibeus</i>	<i>jamaicensis</i>	JAMAICAN FRUIT-EATING BAT	LR/lc
<i>Brachyphylla</i>	<i>cavernarum</i>	ANTILLEAN FRUIT-EATING BAT	LR/lc
<i>Eptesicus</i>	<i>fuscus</i>	BIG BROWN BAT	LR/lc
<i>Globicephala</i>	<i>macrorhynchus</i>	PACIFIC PILOT WHALE, SHORT-FINNED PILOT WHALE	LR/cd

GENUS	SPECIES	COMMON NAME	STATUS
<i>Grampus</i>	<i>griseus</i>	GREY DOLPHIN, RISSO'S DOLPHIN	DD
<i>Lagenodelphis</i>	<i>hosei</i>	FRASER'S DOLPHIN, SARAWAK DOLPHIN	DD
<i>Monophyllus</i>	<i>plethodon</i>	INSULAR SINGLE LEAF BAT	LR/nt
<i>Myotis</i>	<i>dominicensis</i>	DOMINICAN MYOTIS	VU
<i>Natalus</i>	<i>stramineus</i>	MEXICAN FUNNEL-EARED BAT	LR/lc
<i>Noctilio</i>	<i>leporinus</i>	GREATER BULLDOG BAT	LR/lc
<i>Pteronotus</i>	<i>davyi</i>	DAVY'S NAKED-BACKED BAT	LR/lc
<i>Stenella</i>	<i>clymene</i>	ATLANTIC SPINNER DOLPHIN, CLYMENE DOLPHIN, HELMET DOLPHIN	DD
<i>Steno</i>	<i>bredanensis</i>	ROUGH-TOOTHED DOLPHIN	DD
<i>Sturnira</i>	<i>lilium</i>	LITTLE YELLOW-SHOULDERED BAT	LR/lc
<i>Tadarida</i>	<i>brasiliensis</i>	BRAZILIAN FREE-TAILED BAT	LR/nt
<i>Trichechus</i>	<i>manatus</i>	AMERICAN MANATEE, WEST INDIAN MANATEE	VU
<i>Chelonia</i>	<i>mydas</i>	GREEN TURTLE	EN
<i>Dermochelys</i>	<i>coriacea</i>	LEATHERBACK, LEATHERY TURTLE, LUTH, TRUNKBACK TURTLE	CR
<i>Eretmochelys</i>	<i>imbricata</i>	HAWKSBILL TURTLE	CR
<i>Iguana</i>	<i>delicatissima</i>	LESSER ANTILLEAN IGUANA, WEST INDIAN IGUANA	VU
<i>Cedrela</i>	<i>odorata</i>	CIGAR-BOX WOOD, RED CEDAR, SPANISH CEDAR	VU
<i>Freziera</i>	<i>cordata</i>		VU
<i>Guaiacum</i>	<i>officinale</i>	COMMONER LIGNUM VITAE, GUAJAC TREE	EN
<i>Inga</i>	<i>dominicensis</i>		VU
<i>Nectandra</i>	<i>krugii</i>		EN
<i>Pouteria</i>	<i>pallida</i>		EN
<i>Pouteria</i>	<i>semecarpifolia</i>		VU
<i>Protium</i>	<i>attenuatum</i>		DD
<i>Swietenia</i>	<i>macrophylla</i>	BIG LEAF MAHOGANY, BIG-LEAF MAHOGANY, BIGLEAF	VU

GENUS	SPECIES	COMMON NAME	STATUS
		MAHOGANY, BRAZILIAN MAHOGANY, HONDURAS MAHOGANY, LARGE-LEAVED MAHOGANY	
<i>Swietenia</i>	<i>mahagoni</i>	AMERICAN MAHOGANY, CUBAN MAHOGANY, SMALL-LEAVED MAHOGANY, WEST INDIAN MAHOGANY	EN
<i>Vitex</i>	<i>heptaphylla</i>		DD
<i>Dactylolejeunea</i>	<i>acanthifolia</i>		VU
<i>Phycolepidozia</i>	<i>exigua</i>		CR

### GRENADA

GENUS	SPECIES	COMMON NAME	STATUS
<i>Balistes</i>	<i>vetula</i>	QUEEN TRIGGERFISH	VU
<i>Dermatolepis</i>	<i>inermis</i>	MARbled GROUPER	VU
<i>Epinephelus</i>	<i>flavolimbatus</i>	GROUPER, POEY'S GROUPER, WHITE GROUPER, YELLOWEDGE GROUPER, YELLOWFINNED GROUPER	VU
<i>Epinephelus</i>	<i>itajara</i>	GOLIATH GROUPER, JEW FISH	CR
<i>Epinephelus</i>	<i>morio</i>	RED GROUPER	NT
<i>Epinephelus</i>	<i>niveatus</i>	SEABASS, SNOWY GROUPER, SPOTTED GROUPER	VU
<i>Epinephelus</i>	<i>striatus</i>	NASSAU GROUPER	EN
<i>Hippocampus</i>	<i>reidi</i>	LONGSNOUT SEAHORSE, SLENDER SEAHORSE	DD
<i>Lachnolaimus</i>	<i>maximus</i>	HOGFISH	VU
<i>Lutjanus</i>	<i>analis</i>	MUTTON SNAPPER	VU
<i>Lutjanus</i>	<i>cyanopterus</i>	CUBERA SNAPPER	VU
<i>Mycteroperca</i>	<i>interstitialis</i>	BLAKE, CROSSBAND ROCKFISH, GREY MANNOCK, HAMLET, HARLEQUIN ROCKFISH, PRINCESS ROCKFISH, ROCKFISH, SALMON GROUPER, SALMON ROCK FISH, SCAMP, YELLOWMOUTH GROUPER	VU
<i>Mycteroperca</i>	<i>tigris</i>	TIGER GROUPER	LC
<i>Mycteroperca</i>	<i>venenosa</i>	YELLOWFIN GROUPER	NT

GENUS	SPECIES	COMMON NAME	STATUS
<i>Scarus</i>	<i>guacamaia</i>	RAINBOW PARROTFISH	VU
<i>Thunnus</i>	<i>albacares</i>	YELLOWFIN TUNA	LR/lc
<i>Thunnus</i>	<i>obesus</i>	BIGEYE TUNA	VU
<i>Thunnus</i>	<i>thynnus</i>	NORTHERN BLUEFIN TUNA	DD
<i>Xiphias</i>	<i>gladius</i>	SWORDFISH	DD
<i>Eleutherodactylus</i>	<i>euphronides</i>		EN
<i>Eleutherodactylus</i>	<i>johnstonei</i>		LC
<i>Leptodactylus</i>	<i>validus</i>	WINDWARD DITCH FROG	LC
<i>Actitis</i>	<i>macularius</i>	SPOTTED SANDPIPER	LC
<i>Amazilia</i>	<i>brevirostris</i>	WHITE-CHESTED EMERALD	LC
<i>Amazilia</i>	<i>tobaci</i>	COPPER-RUMPED HUMMINGBIRD	LC
<i>Anas</i>	<i>discors</i>	BLUE-WINGED TEAL	LC
<i>Anous</i>	<i>stolidus</i>	BROWN NODDY	LC
<i>Anthracothorax</i>	<i>viridigula</i>	GREEN-THROATED MANGO	LC
<i>Ardea</i>	<i>herodias</i>	GREAT BLUE HERON	LC
<i>Arenaria</i>	<i>interpres</i>	RUDDY TURNSTONE	LC
<i>Aythya</i>	<i>collaris</i>	RING-NECKED DUCK	LC
<i>Bubulcus</i>	<i>ibis</i>	CATTLE EGRET	LC
<i>Buteo</i>	<i>platypterus</i>	BROAD-WINGED HAWK	LC
<i>Butorides</i>	<i>virescens</i>	GREEN HERON	LC
<i>Calidris</i>	<i>alba</i>	SANDERLING	LC
<i>Calidris</i>	<i>canutus</i>	RED KNOT	LC
<i>Calidris</i>	<i>mauri</i>	WESTERN SANDPIPER	LC
<i>Calidris</i>	<i>melanotos</i>	PECTORAL SANDPIPER	LC
<i>Calidris</i>	<i>minutilla</i>	LEAST SANDPIPER	LC
<i>Calidris</i>	<i>pusilla</i>	SEMI-PALMATED SANDPIPER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Casmerodius</i>	<i>albus</i>	GREAT EGRET	LC
<i>Catoptrophorus</i>	<i>semipalmatus</i>	WILLET	LC
<i>Chaetura</i>	<i>brachyura</i>	SHORT-TAILED SWIFT	LC
<i>Chaetura</i>	<i>cinereiventris</i>	GREY-RUMPED SWIFT	LC
<i>Charadrius</i>	<i>collaris</i>	COLLARED PLOVER	LC
<i>Charadrius</i>	<i>semipalmatus</i>	SEMIPALMATED PLOVER	LC
<i>Charadrius</i>	<i>vociferus</i>	KILLDEER	LC
<i>Charadrius</i>	<i>wilsonia</i>	WILSON'S PLOVER	LC
<i>Chondrohierax</i>	<i>uncinatus</i>	HOOK-BILLED KITE	LC
<i>Cinlocerthia</i>	<i>ruficauda</i>	BROWN TREMBLER	LC
<i>Circus</i>	<i>cyaneus</i>	NORTHERN HARRIER	LC
<i>Coccyzus</i>	<i>minor</i>	MANGROVE CUCKOO	LC
<i>Coereba</i>	<i>flaveola</i>	BANANAQUIT	LC
<i>Crotophaga</i>	<i>ani</i>	SMOOTH-BILLED ANI	LC
<i>Cypseloides</i>	<i>niger</i>	BLACK SWIFT	LC
<i>Dendroica</i>	<i>petechia</i>	YELLOW WARBLER	LC
<i>Dendroica</i>	<i>striata</i>	BLACKPOLL WARBLER	LC
<i>Egretta</i>	<i>caerulea</i>	LITTLE BLUE HERON	LC
<i>Egretta</i>	<i>thula</i>	SNOWY EGRET	LC
<i>Elaenia</i>	<i>flavogaster</i>	YELLOW-BELLIED ELAENIA	LC
<i>Elaenia</i>	<i>martinica</i>	CARIBBEAN ELAENIA	LC
<i>Eulampis</i>	<i>holosericeus</i>	GREEN-THROATED CARIB	LC
<i>Euphonia</i>	<i>musica</i>	ANTILLEAN EUPHONIA	LC
<i>Falco</i>	<i>columbarius</i>	MERLIN	LC
<i>Falco</i>	<i>peregrinus</i>	PEREGRINE FALCON	LC
<i>Falco</i>	<i>sparverius</i>	AMERICAN KESTREL	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Fregata</i>	<i>magnificens</i>	MAGNIFICENT FRIGATEBIRD	LC
<i>Gallinago</i>	<i>gallinago</i>	COMMON SNIPE	LC
<i>Gallinula</i>	<i>chloropus</i>	COMMON MOORHEN	LC
<i>Geotrygon</i>	<i>montana</i>	RUDDY QUAIL-DOVE	LC
<i>Glaucis</i>	<i>hirsutus</i>	RUFOUS-BREASTED HERMIT	LC
<i>Himantopus</i>	<i>mexicanus</i>	BLACK-NECKED STILT	LC
<i>Hirundo</i>	<i>rustica</i>	BARN SWALLOW	LC
<i>Larus</i>	<i>atricilla</i>	LAUGHING GULL	LC
<i>Lathrotriccus</i>	<i>euleri</i>	EULER'S FLYCATCHER	LC
<i>Leptotila</i>	<i>wellsi</i>	GRENADA DOVE	CR
<i>Limnodromus</i>	<i>griseus</i>	SHORT-BILLED DOWITCHER	LC
<i>Loxigilla</i>	<i>noctis</i>	LESSER ANTILLEAN BULLFINCH	LC
<i>Margarops</i>	<i>fuscus</i>	SCALY-BREASTED THRASHER	LC
<i>Micropalama</i>	<i>himantopus</i>	STILT SANDPIPER	LC
<i>Mimus</i>	<i>gilvus</i>	TROPICAL MOCKINGBIRD	LC
<i>Molothrus</i>	<i>bonariensis</i>	SHINY COWBIRD	LC
<i>Myiarchus</i>	<i>nugator</i>	GRENADA FLYCATCHER	LC
<i>Nyctanassa</i>	<i>violacea</i>	YELLOW-CROWNED NIGHT-HERON	LC
<i>Nycticorax</i>	<i>nycticorax</i>	BLACK-CROWNED NIGHT-HERON	LC
<i>Oceanites</i>	<i>oceanicus</i>	WILSON'S STORM-PETREL	LC
<i>Ortalis</i>	<i>ruficauda</i>	RUFOUS-VENTED CHACHALACA	LC
<i>Orthorhyncus</i>	<i>cristatus</i>	ANTILLEAN CRESTED HUMMINGBIRD	LC
<i>Pandion</i>	<i>haliaetus</i>	OSPREY	LC
<i>Parula</i>	<i>americana</i>	NORTHERN PARULA	LC
<i>Patagioenas</i>	<i>squamosa</i>	SCALY-NAPED PIGEON	LC
<i>Pelecanus</i>	<i>occidentalis</i>	BROWN PELICAN	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Phaethon</i>	<i>aethereus</i>	RED-BILLED TROPICBIRD	LC
<i>Phaethon</i>	<i>lepturus</i>	WHITE-TAILED TROPICBIRD	LC
<i>Pheucticus</i>	<i>ludovicianus</i>	ROSE-BREASTED GROSBEAK	LC
<i>Philomachus</i>	<i>pugnax</i>	RUFF	LC
<i>Pluvialis</i>	<i>dominica</i>	AMERICAN GOLDEN-PLOVER	LC
<i>Pluvialis</i>	<i>squatarola</i>	GREY PLOVER	LC
<i>Porzana</i>	<i>carolina</i>	SORA	LC
<i>Progne</i>	<i>dominicensis</i>	CARIBBEAN MARTIN	LC
<i>Protonotaria</i>	<i>citrea</i>	PROTHONOTARY WARBLER	LC
<i>Puffinus</i>	<i>lherminieri</i>	AUDUBON'S SHEARWATER	LC
<i>Quiscalus</i>	<i>lugubris</i>	CARIB GRACKLE	LC
<i>Seiurus</i>	<i>noveboracensis</i>	NORTHERN WATERTHRUSH	LC
<i>Setophaga</i>	<i>ruticilla</i>	AMERICAN REDSTART	LC
<i>Sporophila</i>	<i>nigricollis</i>	YELLOW-BELLIED SEEDEATER	LC
<i>Steganopus</i>	<i>tricolor</i>	WILSON'S PHALAROPE	LC
<i>Sterna</i>	<i>anaethetus</i>	BRIDLED TERN	LC
<i>Sterna</i>	<i>fuscata</i>	SOOTY TERN	LC
<i>Sterna</i>	<i>hirundo</i>	COMMON TERN	LC
<i>Sterna</i>	<i>maxima</i>	ROYAL TERN	LC
<i>Sterna</i>	<i>sandvicensis</i>	SANDWICH TERN	LC
<i>Streptoprocne</i>	<i>zonaris</i>	WHITE-COLLARED SWIFT	LC
<i>Sula</i>	<i>leucogaster</i>	BROWN BOOBY	LC
<i>Sula</i>	<i>sula</i>	RED-FOOTED BOOBY	LC
<i>Tangara</i>	<i>cucullata</i>	LESSER ANTILLEAN TANAGER	LC
<i>Tiaris</i>	<i>bicolor</i>	BLACK-FACED GRASSQUIT	LC
<i>Tringa</i>	<i>flavipes</i>	LESSER YELLOWLEGS	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Tringa</i>	<i>melanoleuca</i>	GREATER YELLOWLEGS	LC
<i>Tringa</i>	<i>solitaria</i>	SOLITARY SANDPIPER	LC
<i>Troglodytes</i>	<i>aedon</i>	HOUSE WREN	LC
<i>Tryngites</i>	<i>subruficollis</i>	BUFF-BREASTED SANDPIPER	NT
<i>Turdus</i>	<i>fumigatus</i>	COCOA THRUSH	LC
<i>Turdus</i>	<i>nudigenis</i>	BARE-EYED ROBIN	LC
<i>Tyrannus</i>	<i>dominicensis</i>	GREY KINGBIRD	LC
<i>Tyrannus</i>	<i>melancholicus</i>	TROPICAL KINGBIRD	LC
<i>Tyto</i>	<i>alba</i>	BARN OWL	LC
<i>Vireo</i>	<i>altiloquus</i>	BLACK-WHISKERED VIREO	LC
<i>Volatinia</i>	<i>jacarina</i>	BLUE-BLACK GRASSQUIT	LC
<i>Zenaida</i>	<i>auriculata</i>	EARED DOVE	LC
<i>Zenaida</i>	<i>aurita</i>	ZENAIDA DOVE	LC
<i>Aetobatus</i>	<i>narinari</i>	BONNETRAY, MAYLAN, SPOTTED EAGLE RAY	NT
<i>Carcharhinus</i>	<i>falciformis</i>	SILKY SHARK	LR/lc
<i>Carcharhinus</i>	<i>leucas</i>	BULL SHARK	LR/nt
<i>Carcharhinus</i>	<i>limbatus</i>	BLACKTIP SHARK	LR/nt
<i>Carcharhinus</i>	<i>longimanus</i>	OCEANIC WHITETIP SHARK, WHITE-TIPPED SHARK, WHITETIP OCEANIC SHARK, WHITETIP SHARK	VU
<i>Carcharhinus</i>	<i>perezi</i>	CARIBBEAN REEF SHARK	NT
<i>Carcharodon</i>	<i>carcharias</i>	GREAT WHITE SHARK	VU
<i>Dasyatis</i>	<i>americana</i>	SOUTHERN STINGRAY	DD
<i>Dasyatis</i>	<i>say</i>	BLUNTNOSE STINGRAY	LC
<i>Etmopterus</i>	<i>bullisi</i>	LINED LANTERNSHARK	DD
<i>Etmopterus</i>	<i>perryi</i>	DWARF LANTERNSHARK	DD
<i>Galeocerdo</i>	<i>cuvier</i>	TIGER SHARK	LR/nt

GENUS	SPECIES	COMMON NAME	STATUS
<i>Ginglymostoma</i>	<i>cirratum</i>	NURSE SHARK	DD
<i>Himantura</i>	<i>schmardae</i>	CHUPARE STINGRAY	DD
<i>Negaprion</i>	<i>brevirostris</i>	LEMON SHARK	LR/nt
<i>Prionace</i>	<i>glauca</i>	BLUE SHARK	LR/nt
<i>Rhincodon</i>	<i>typus</i>	WHALE SHARK	VU
<i>Sphyrna</i>	<i>lewini</i>	SCALLOPED HAMMERHEAD	LR/nt
<i>Sphyrna</i>	<i>mokarran</i>	GREAT HAMMERHEAD, HAMMERHEAD SHARK, SQUAT-HEADED HAMMERHEAD SHARK	EN
<i>Urobatis</i>	<i>jamaicensis</i>	YELLOW STINGRAY	LC
<i>Anoura</i>	<i>geoffroyi</i>	GEOFFROY'S TAILLESS BAT	LR/lc
<i>Artibeus</i>	<i>jamaicensis</i>	JAMAICAN FRUIT-EATING BAT	LR/lc
<i>Balaenoptera</i>	<i>edeni</i>	BRYDE'S WHALE, COMMON BRYDE'S WHALE, PYGMY BRYDE'S WHALE, TROPICAL WHALE	DD
<i>Brachyphylla</i>	<i>cavernarum</i>	ANTILLEAN FRUIT-EATING BAT	LR/lc
<i>Carollia</i>	<i>perspicillata</i>	SEBA'S SHORT-TAILED BAT	LR/lc
<i>Dasypus</i>	<i>novemcinctus</i>	COMMON LONG-NOSED ARMADILLO, NINE-BANDED ARMADILLO	LC
<i>Glossophaga</i>	<i>longirostris</i>	MILLER'S LONG-TONGUED BAT	LR/lc
<i>Grampus</i>	<i>griseus</i>	GREY DOLPHIN, RISSO'S DOLPHIN	DD
<i>Lagenodelphis</i>	<i>hosei</i>	FRASER'S DOLPHIN, SARAWAK DOLPHIN	DD
<i>Marmosa</i>	<i>robinsoni</i>	ROBINSON'S MOUSE OPOSSUM	LR/lc
<i>Micronycteris</i>	<i>megalotis</i>	LITTLE BIG-EARED BAT	LR/lc
<i>Myotis</i>	<i>nigricans</i>	BLACK MYOTIS	LR/lc
<i>Noctilio</i>	<i>leporinus</i>	GREATER BULLDOG BAT	LR/lc
<i>Peropteryx</i>	<i>macrotis</i>	LESSER DOG-LIKE BAT	LR/lc
<i>Pteronotus</i>	<i>davyi</i>	DAVY'S NAKED-BACKED BAT	LR/lc
<i>Stenella</i>	<i>clymene</i>	ATLANTIC SPINNER DOLPHIN, CLYMENE DOLPHIN,	DD

GENUS	SPECIES	COMMON NAME	STATUS
		HELMET DOLPHIN	
<i>Trichechus</i>	<i>manatus</i>	AMERICAN MANATEE, WEST INDIAN MANATEE	VU
<i>Caretta</i>	<i>caretta</i>	LOGGERHEAD	EN
<i>Chelonia</i>	<i>mydas</i>	GREEN TURTLE	EN
<i>Dermochelys</i>	<i>coriacea</i>	LEATHERBACK, LEATHERY TURTLE, LUTH, TRUNKBACK TURTLE	CR
<i>Eretmochelys</i>	<i>imbricata</i>	HAWKSBILL TURTLE	CR
<i>Cedrela</i>	<i>odorata</i>	CIGAR-BOX WOOD, RED CEDAR, SPANISH CEDAR	VU
<i>Guaiacum</i>	<i>officinale</i>	COMMONER LIGNUM VITAE, GUAIAAC TREE	EN
<i>Swietenia</i>	<i>mahagoni</i>	AMERICAN MAHOGANY, CUBAN MAHOGANY, SMALL-LEAVED MAHOGANY, WEST INDIAN MAHOGANY	EN

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GENUS	SPECIES	COMMON NAME	STATUS
<i>Balistes</i>	<i>vetula</i>	QUEEN TRIGGERFISH	VU
<i>Dermatolepis</i>	<i>inermis</i>	MARbled GROUPER	VU
<i>Epinephelus</i>	<i>flavolimbatus</i>	GROUPER, POEY'S GROUPER, WHITE GROUPER, YELLOWEDGE GROUPER, YELLOWFINNED GROUPER	VU
<i>Epinephelus</i>	<i>itajara</i>	GOLIATH GROUPER, JEW FISH	CR
<i>Epinephelus</i>	<i>morio</i>	RED GROUPER	NT
<i>Epinephelus</i>	<i>striatus</i>	NASSAU GROUPER	EN
<i>Hippocampus</i>	<i>erectus</i>	LINED SEAHORSE, NORTHERN SEAHORSE	VU
<i>Lachnolaimus</i>	<i>maximus</i>	HOGFISH	VU
<i>Lutjanus</i>	<i>analis</i>	MUTTON SNAPPER	VU
<i>Lutjanus</i>	<i>cyanopterus</i>	CUBERA SNAPPER	VU
<i>Mycteroperca</i>	<i>interstitialis</i>	BLAKE, CROSSBAND ROCKFISH, GREY MANNOCK, HAMLET, HARLEQUIN ROCKFISH, PRINCESS ROCKFISH, ROCKFISH, SALMON GROUPER, SALMON ROCK FISH,	VU

GENUS	SPECIES	COMMON NAME	STATUS
		SCAMP, YELLOWMOUTH GROUPER	
<i>Mycteroperca</i>	<i>tigris</i>	TIGER GROUPER	LC
<i>Mycteroperca</i>	<i>venenosa</i>	YELLOWFIN GROUPER	NT
<i>Scarus</i>	<i>guacamaia</i>	RAINBOW PARROTFISH	VU
<i>Thunnus</i>	<i>albacares</i>	YELLOWFIN TUNA	LR/lc
<i>Thunnus</i>	<i>obesus</i>	BIGEYE TUNA	VU
<i>Thunnus</i>	<i>thynnus</i>	NORTHERN BLUEFIN TUNA	DD
<i>Eleutherodactylus</i>	<i>johnstonei</i>		LC
<i>Leptodactylus</i>	<i>fallax</i>	GIANT DITCH FROG, MOUNTAIN CHICKEN	CR
<i>Actitis</i>	<i>macularius</i>	SPOTTED SANDPIPER	LC
<i>Aix</i>	<i>sponsa</i>	WOOD DUCK	LC
<i>Anas</i>	<i>acuta</i>	NORTHERN PINTAIL	LC
<i>Anas</i>	<i>americana</i>	AMERICAN WIGEON	LC
<i>Anas</i>	<i>bahamensis</i>	WHITE-CHEEKED PINTAIL	LC
<i>Anas</i>	<i>clypeata</i>	NORTHERN SHOVELER	LC
<i>Anas</i>	<i>crecca</i>	COMMON TEAL	LC
<i>Anas</i>	<i>discors</i>	BLUE-WINGED TEAL	LC
<i>Anas</i>	<i>penelope</i>	EURASIAN WIGEON	LC
<i>Anhinga</i>	<i>anhinga</i>	ANHINGA	LC
<i>Anous</i>	<i>minutus</i>	BLACK NODDY	LC
<i>Anous</i>	<i>stolidus</i>	BROWN NODDY	LC
<i>Anthracothorax</i>	<i>viridigula</i>	GREEN-THROATED MANGO	LC
<i>Ardea</i>	<i>cinerea</i>	GREY HERON	LC
<i>Ardea</i>	<i>herodias</i>	GREAT BLUE HERON	LC
<i>Arenaria</i>	<i>interpres</i>	RUDDY TURNSTONE	LC
<i>Asio</i>	<i>flammeus</i>	SHORT-EARED OWL	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Athene</i>	<i>cunicularia</i>	BURROWING OWL	LC
<i>Aythya</i>	<i>affinis</i>	LESSER SCAUP	LC
<i>Aythya</i>	<i>collaris</i>	RING-NECKED DUCK	LC
<i>Bartramia</i>	<i>longicauda</i>	UPLAND SANDPIPER	LC
<i>Bombycilla</i>	<i>cedrorum</i>	CEDAR WAXWING	LC
<i>Botaurus</i>	<i>lentiginosus</i>	AMERICAN BITTERN	LC
<i>Bubulcus</i>	<i>ibis</i>	CATTLE EGRET	LC
<i>Buteo</i>	<i>albicaudatus</i>	WHITE-TAILED HAWK	LC
<i>Buteo</i>	<i>jamaicensis</i>	RED-TAILED HAWK	LC
<i>Buteo</i>	<i>platypterus</i>	BROAD-WINGED HAWK	LC
<i>Buteogallus</i>	<i>anthracinus</i>	COMMON BLACK-HAWK	LC
<i>Butorides</i>	<i>striata</i>	STRIATED HERON	LC
<i>Butorides</i>	<i>virescens</i>	GREEN HERON	LC
<i>Calidris</i>	<i>alba</i>	SANDERLING	LC
<i>Calidris</i>	<i>alpina</i>	DUNLIN	LC
<i>Calidris</i>	<i>bairdii</i>	BAIRD'S SANDPIPER	LC
<i>Calidris</i>	<i>canutus</i>	RED KNOT	LC
<i>Calidris</i>	<i>ferruginea</i>	CURLEW SANDPIPER	LC
<i>Calidris</i>	<i>fuscicollis</i>	WHITE-RUMPED SANDPIPER	LC
<i>Calidris</i>	<i>mauri</i>	WESTERN SANDPIPER	LC
<i>Calidris</i>	<i>melanotos</i>	PECTORAL SANDPIPER	LC
<i>Calidris</i>	<i>minutilla</i>	LEAST SANDPIPER	LC
<i>Calidris</i>	<i>pusilla</i>	SEMIPALMATED SANDPIPER	LC
<i>Calonectris</i>	<i>diomedea</i>	CORY'S SHEARWATER	LC
<i>Caprimulgus</i>	<i>carolinensis</i>	CHUCK-WILL'S-WIDOW	LC
<i>Caprimulgus</i>	<i>cayennensis</i>	WHITE-TAILED NIGHTJAR	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Casmerodius</i>	<i>albus</i>	GREAT EGRET	LC
<i>Catharacta</i>	<i>maccormicki</i>	SOUTH POLAR SKUA	LC
<i>Catharacta</i>	<i>skua</i>	GREAT SKUA	LC
<i>Catharus</i>	<i>minimus</i>	GREY-CHEEKED THRUSH	LC
<i>Catoptrophorus</i>	<i>semipalmatus</i>	WILLET	LC
<i>Ceryle</i>	<i>alcyon</i>	BELTED KINGFISHER	LC
<i>Ceryle</i>	<i>torquatus</i>	RINGED KINGFISHER	LC
<i>Chaetura</i>	<i>brachyura</i>	SHORT-TAILED SWIFT	LC
<i>Chaetura</i>	<i>cinereiventris</i>	GREY-RUMPED SWIFT	LC
<i>Chaetura</i>	<i>martinica</i>	LESSER ANTILLEAN SWIFT	LC
<i>Charadrius</i>	<i>alexandrinus</i>	KENTISH PLOVER	LC
<i>Charadrius</i>	<i>collaris</i>	COLLARED PLOVER	LC
<i>Charadrius</i>	<i>hiaticula</i>	COMMON RINGED PLOVER	LC
<i>Charadrius</i>	<i>semipalmatus</i>	SEMIPALMATED PLOVER	LC
<i>Charadrius</i>	<i>wilsonia</i>	WILSON'S PLOVER	LC
<i>Chlidonias</i>	<i>leucopterus</i>	WHITE-WINGED TERN	LC
<i>Chlidonias</i>	<i>niger</i>	BLACK TERN	LC
<i>Chondrohierax</i>	<i>uncinatus</i>	HOOK-BILLED KITE	LC
<i>Chordeiles</i>	<i>minor</i>	COMMON NIGHTHAWK	LC
<i>Chrysolampis</i>	<i>mosquitos</i>	RUBY-TOPAZ HUMMINGBIRD	LC
<i>Cinclocerthia</i>	<i>gutturialis</i>	GREY TREMBLER	LC
<i>Cinclocerthia</i>	<i>ruficauda</i>	BROWN TREMBLER	LC
<i>Circus</i>	<i>cyaneus</i>	NORTHERN HARRIER	LC
<i>Coccyzus</i>	<i>americanus</i>	YELLOW-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>erythrophthalmus</i>	BLACK-BILLED CUCKOO	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Coccyzus</i>	<i>melacoryphus</i>	DARK-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>minor</i>	MANGROVE CUCKOO	LC
<i>Coereba</i>	<i>flaveola</i>	BANANAQUIT	LC
<i>Columba</i>	<i>livia</i>	ROCK PIGEON	LC
<i>Columbina</i>	<i>passerina</i>	COMMON GROUND-DOVE	LC
<i>Contopus</i>	<i>latirostris</i>	LESSER ANTILLEAN PEWEE	LC
<i>Coragyps</i>	<i>atratus</i>	BLACK VULTURE	LC
<i>Crotophaga</i>	<i>ani</i>	SMOOTH-BILLED ANI	LC
<i>Cuculus</i>	<i>canorus</i>	COMMON CUCKOO	LC
<i>Cyanophaia</i>	<i>bicolor</i>	BLUE-HEADED HUMMINGBIRD	LC
<i>Cypseloides</i>	<i>niger</i>	BLACK SWIFT	LC
<i>Dendrocygna</i>	<i>arborea</i>	WEST INDIAN WHISTLING-DUCK	VU
<i>Dendrocygna</i>	<i>autumnalis</i>	BLACK-BELLIED WHISTLING-DUCK	LC
<i>Dendrocygna</i>	<i>bicolor</i>	FULVOUS WHISTLING-DUCK	LC
<i>Dendrocygna</i>	<i>viduata</i>	WHITE-FACED WHISTLING-DUCK	LC
<i>Dendroica</i>	<i>adelaidae</i>	ADELAIDE'S WARBLER	LC
<i>Dendroica</i>	<i>caerulescens</i>	BLACK-THROATED BLUE WARBLER	LC
<i>Dendroica</i>	<i>castanea</i>	BAY-BREASTED WARBLER	LC
<i>Dendroica</i>	<i>coronata</i>	YELLOW-RUMPED WARBLER	LC
<i>Dendroica</i>	<i>discolor</i>	PRAIRIE WARBLER	LC
<i>Dendroica</i>	<i>dominica</i>	YELLOW-THROATED WARBLER	LC
<i>Dendroica</i>	<i>fusca</i>	BLACKBURNIAN WARBLER	LC
<i>Dendroica</i>	<i>magnolia</i>	MAGNOLIA WARBLER	LC
<i>Dendroica</i>	<i>pensylvanica</i>	CHESTNUT-SIDED WARBLER	LC
<i>Dendroica</i>	<i>petechia</i>	YELLOW WARBLER	LC
<i>Dendroica</i>	<i>plumbea</i>	PLUMBEOUS WARBLER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Dendroica</i>	<i>striata</i>	BLACKPOLL WARBLER	LC
<i>Dendroica</i>	<i>tigrina</i>	CAPE MAY WARBLER	LC
<i>Dendroica</i>	<i>virens</i>	BLACK-THROATED GREEN WARBLER	LC
<i>Dolichonyx</i>	<i>oryzivorus</i>	BOBOLINK	LC
<i>Dumetella</i>	<i>carolinensis</i>	GREY CATBIRD	LC
<i>Egretta</i>	<i>caerulea</i>	LITTLE BLUE HERON	LC
<i>Egretta</i>	<i>garzetta</i>	LITTLE EGRET	LC
<i>Egretta</i>	<i>gularis</i>	WESTERN REEF-EGRET	LC
<i>Egretta</i>	<i>rufescens</i>	REDDISH EGRET	LC
<i>Egretta</i>	<i>thula</i>	SNOWY EGRET	LC
<i>Egretta</i>	<i>tricolor</i>	TRICOLOURED HERON	LC
<i>Elaenia</i>	<i>flavogaster</i>	YELLOW-BELLIED ELAENIA	LC
<i>Elaenia</i>	<i>martinica</i>	CARIBBEAN ELAENIA	LC
<i>Eulampis</i>	<i>holosericeus</i>	GREEN-THROATED CARIB	LC
<i>Eulampis</i>	<i>jugularis</i>	PURPLE-THROATED CARIB	LC
<i>Euphonia</i>	<i>musica</i>	ANTILLEAN EUPHONIA	LC
<i>Falco</i>	<i>columbarius</i>	MERLIN	LC
<i>Falco</i>	<i>peregrinus</i>	PEREGRINE FALCON	LC
<i>Falco</i>	<i>sparverius</i>	AMERICAN KESTREL	LC
<i>Falco</i>	<i>tinnunculus</i>	COMMON KESTREL	LC
<i>Florisuga</i>	<i>mellivora</i>	WHITE-NECKED JACOBIN	LC
<i>Fregata</i>	<i>magnificens</i>	MAGNIFICENT FRIGATEBIRD	LC
<i>Fulica</i>	<i>americana</i>	AMERICAN COOT	LC
<i>Fulica</i>	<i>caribaea</i>	CARIBBEAN COOT	NT
<i>Gallinago</i>	<i>gallinago</i>	COMMON SNIPE	LC
<i>Gallinula</i>	<i>chloropus</i>	COMMON MOORHEN	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Geothlypis</i>	<i>trichas</i>	COMMON YELLOWTHROAT	LC
<i>Geotrygon</i>	<i>montana</i>	RUDDY QUAIL-DOVE	LC
<i>Glaucis</i>	<i>hirsutus</i>	RUFOUS-BREASTED HERMIT	LC
<i>Haematopus</i>	<i>palliatu</i>	AMERICAN OYSTERCATCHER	LC
<i>Himantopus</i>	<i>mexicanus</i>	BLACK-NECKED STILT	LC
<i>Hirundo</i>	<i>rustica</i>	BARN SWALLOW	LC
<i>Icteria</i>	<i>virens</i>	YELLOW-BREASTED CHAT	LC
<i>Icterus</i>	<i>galbula</i>	BALTIMORE ORIOLE	LC
<i>Ixobrychus</i>	<i>exilis</i>	LEAST BITTERN	LC
<i>Larus</i>	<i>argentatus</i>	HERRING GULL	LC
<i>Larus</i>	<i>atricilla</i>	LAUGHING GULL	LC
<i>Larus</i>	<i>delawarensis</i>	RING-BILLED GULL	LC
<i>Larus</i>	<i>fuscus</i>	LESSER BLACK-BACKED GULL	LC
<i>Larus</i>	<i>marinus</i>	GREAT BLACK-BACKED GULL	LC
<i>Larus</i>	<i>philadelphia</i>	BONAPARTE'S GULL	LC
<i>Larus</i>	<i>ridibundus</i>	COMMON BLACK-HEADED GULL	LC
<i>Lathrotriccus</i>	<i>euleri</i>	EULER'S FLYCATCHER	LC
<i>Limnodromus</i>	<i>griseus</i>	SHORT-BILLED DOWITCHER	LC
<i>Limosa</i>	<i>fedoa</i>	MARbled GODWIT	LC
<i>Lophodytes</i>	<i>cucullatus</i>	HOODED MERGANSER	LC
<i>Loxigilla</i>	<i>noctis</i>	LESSER ANTILLEAN BULLFINCH	LC
<i>Loxigilla</i>	<i>portoricensis</i>	PUERTO RICAN BULLFINCH	LC
<i>Lymnocyptes</i>	<i>minimus</i>	JACK SNIPE	LC
<i>Margarops</i>	<i>fuscatus</i>	PEARLY-EYED THRASHER	LC
<i>Margarops</i>	<i>fuscus</i>	SCALY-BREASTED THRASHER	LC
<i>Micropalama</i>	<i>himantopus</i>	STILT SANDPIPER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Mimus</i>	<i>gilvus</i>	TROPICAL MOCKINGBIRD	LC
<i>Mniotilta</i>	<i>varia</i>	BLACK-AND-WHITE WARBLER	LC
<i>Molothrus</i>	<i>bonariensis</i>	SHINY COWBIRD	LC
<i>Motacilla</i>	<i>alba</i>	WHITE WAGTAIL	LC
<i>Myadestes</i>	<i>genibarbis</i>	RUFOUS-THROATED SOLITAIRE	LC
<i>Myiarchus</i>	<i>nugator</i>	GRENADA FLYCATCHER	LC
<i>Myiarchus</i>	<i>oberi</i>	LESSER ANTILLEAN FLYCATCHER	LC
<i>Myiarchus</i>	<i>tyrannulus</i>	BROWN-CRESTED FLYCATCHER	LC
<i>Nomonyx</i>	<i>dominicus</i>	MASKED DUCK	LC
<i>Numenius</i>	<i>phaeopus</i>	WHIMBREL	LC
<i>Nyctanassa</i>	<i>violacea</i>	YELLOW-CROWNED NIGHT-HERON	LC
<i>Nycticorax</i>	<i>nycticorax</i>	BLACK-CROWNED NIGHT-HERON	LC
<i>Oceanodroma</i>	<i>leucorhoa</i>	LEACH'S STORM-PETREL	LC
<i>Oenanthe</i>	<i>oenanthe</i>	NORTHERN WHEATEAR	LC
<i>Oporornis</i>	<i>agilis</i>	CONNECTICUT WARBLER	LC
<i>Oporornis</i>	<i>formosus</i>	KENTUCKY WARBLER	LC
<i>Orthorhyncus</i>	<i>cristatus</i>	ANTILLEAN CRESTED HUMMINGBIRD	LC
<i>Oxyura</i>	<i>jamaicensis</i>	RUDDY DUCK	LC
<i>Pandion</i>	<i>haliaetus</i>	OSPREY	LC
<i>Parula</i>	<i>americana</i>	NORTHERN PARULA	LC
<i>Patagioenas</i>	<i>squamosa</i>	SCALY-NAPED PIGEON	LC
<i>Pelecanus</i>	<i>occidentalis</i>	BROWN PELICAN	LC
<i>Petrochelidon</i>	<i>pyrrhonota</i>	CLIFF SWALLOW	LC
<i>Phaethon</i>	<i>aethereus</i>	RED-BILLED TROPICBIRD	LC
<i>Phaethon</i>	<i>lepturus</i>	WHITE-TAILED TROPICBIRD	LC
<i>Phalacrocorax</i>	<i>auritus</i>	DOUBLE-CRESTED CORMORANT	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Phalacrocorax</i>	<i>brasilianus</i>	NEOTROPIC CORMORANT	LC
<i>Pheucticus</i>	<i>ludovicianus</i>	ROSE-BREASTED GROSBEAK	LC
<i>Philomachus</i>	<i>pugnax</i>	RUFF	LC
<i>Piranga</i>	<i>flava</i>	HEPATIC Tanager	LC
<i>Piranga</i>	<i>olivacea</i>	SCARLET Tanager	LC
<i>Piranga</i>	<i>rubra</i>	SUMMER Tanager	LC
<i>Platalea</i>	<i>ajaja</i>	ROSEATE SPOONBILL	LC
<i>Plegadis</i>	<i>falcinellus</i>	GLOSSY IBIS	LC
<i>Pluvialis</i>	<i>squatarola</i>	GREY PLOVER	LC
<i>Podilymbus</i>	<i>podiceps</i>	PIED-BILLED GREBE	LC
<i>Porphyrio</i>	<i>martinica</i>	PURPLE GALLINULE	LC
<i>Porzana</i>	<i>carolina</i>	SORA	LC
<i>Progne</i>	<i>dominicensis</i>	CARIBBEAN MARTIN	LC
<i>Protonotaria</i>	<i>citrea</i>	PROTHONOTARY WARBLER	LC
<i>Puffinus</i>	<i>lherminieri</i>	AUDUBON'S SHEARWATER	LC
<i>Quiscalus</i>	<i>lugubris</i>	CARIB GRACKLE	LC
<i>Rallus</i>	<i>longirostris</i>	CLAPPER RAIL	LC
<i>Recurvirostra</i>	<i>americana</i>	AMERICAN AVOCET	LC
<i>Riparia</i>	<i>riparia</i>	SAND MARTIN	LC
<i>Rissa</i>	<i>tridactyla</i>	BLACK-LEGGED KITTIWAKE	LC
<i>Rynchops</i>	<i>niger</i>	BLACK SKIMMER	LC
<i>Seiurus</i>	<i>aurocapilla</i>	OVENBIRD	LC
<i>Seiurus</i>	<i>motacilla</i>	LOUISIANA WATERTHRUSH	LC
<i>Seiurus</i>	<i>noveboracensis</i>	NORTHERN WATERTHRUSH	LC
<i>Setophaga</i>	<i>ruticilla</i>	AMERICAN REDSTART	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Sicalis</i>	<i>luteola</i>	GRASSLAND YELLOW-FINCH	LC
<i>Sphyrapicus</i>	<i>varius</i>	YELLOW-BELLIED SAPSUCKER	LC
<i>Sporophila</i>	<i>nigricollis</i>	YELLOW-BELLIED SEEDEATER	LC
<i>Steganopus</i>	<i>tricolor</i>	WILSON'S PHALAROPE	LC
<i>Stercorarius</i>	<i>longicaudus</i>	LONG-TAILED JAEGER	LC
<i>Stercorarius</i>	<i>parasiticus</i>	PARASITIC JAEGER	LC
<i>Stercorarius</i>	<i>pomarinus</i>	POMARINE JAEGER	LC
<i>Sterna</i>	<i>anaethetus</i>	BRIDLED TERN	LC
<i>Sterna</i>	<i>antillarum</i>	LEAST TERN	LC
<i>Sterna</i>	<i>fuscata</i>	SOOTY TERN	LC
<i>Sterna</i>	<i>hirundo</i>	COMMON TERN	LC
<i>Sterna</i>	<i>maxima</i>	ROYAL TERN	LC
<i>Sterna</i>	<i>nilotica</i>	GULL-BILLED TERN	LC
<i>Sterna</i>	<i>sandvicensis</i>	SANDWICH TERN	LC
<i>Streptopelia</i>	<i>decaocto</i>	EURASIAN COLLARED-DOVE	LC
<i>Streptoprocne</i>	<i>zonaris</i>	WHITE-COLLARED SWIFT	LC
<i>Sula</i>	<i>dactylatra</i>	MASKED BOOBY	LC
<i>Sula</i>	<i>leucogaster</i>	BROWN BOOBY	LC
<i>Sula</i>	<i>sula</i>	RED-FOOTED BOOBY	LC
<i>Tangara</i>	<i>cucullata</i>	LESSER ANTILLEAN TANAGER	LC
<i>Tiaris</i>	<i>bicolor</i>	BLACK-FACED GRASSQUIT	LC
<i>Tringa</i>	<i>erythropus</i>	SPOTTED REDSHANK	LC
<i>Tringa</i>	<i>flavipes</i>	LESSER YELLOWLEGS	LC
<i>Tringa</i>	<i>glareola</i>	WOOD SANDPIPER	LC
<i>Tringa</i>	<i>melanoleuca</i>	GREATER YELLOWLEGS	LC
<i>Tringa</i>	<i>solitaria</i>	SOLITARY SANDPIPER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Troglodytes</i>	<i>aedon</i>	HOUSE WREN	LC
<i>Turdus</i>	<i>fumigatus</i>	COCOA THRUSH	LC
<i>Turdus</i>	<i>plumbeus</i>	RED-LEGGED THRUSH	LC
<i>Tyrannus</i>	<i>dominicensis</i>	GREY KINGBIRD	LC
<i>Tyrannus</i>	<i>melancholicus</i>	TROPICAL KINGBIRD	LC
<i>Tyrannus</i>	<i>savana</i>	FORK-TAILED FLYCATCHER	LC
<i>Tyto</i>	<i>alba</i>	BARN OWL	LC
<i>Vanellus</i>	<i>vanellus</i>	NORTHERN LAPWING	LC
<i>Vireo</i>	<i>altiloquus</i>	BLACK-WHISKERED VIREO	LC
<i>Vireo</i>	<i>flavifrons</i>	YELLOW-THROATED VIREO	LC
<i>Vireo</i>	<i>olivaceus</i>	RED-EYED VIREO	LC
<i>Volatinia</i>	<i>jacarina</i>	BLUE-BLACK GRASSQUIT	LC
<i>Wilsonia</i>	<i>canadensis</i>	CANADA WARBLER	LC
<i>Xanthocephalus</i>	<i>xanthocephalus</i>	YELLOW-HEADED BLACKBIRD	LC
<i>Zenaida</i>	<i>auriculata</i>	EARED DOVE	LC
<i>Zenaida</i>	<i>aurita</i>	ZENAIDA DOVE	LC
<i>Aetobatus</i>	<i>narinari</i>	BONNETRAY, MAYLAN, SPOTTED EAGLE RAY	NT
<i>Carcharhinus</i>	<i>falciiformis</i>	SILKY SHARK	LR/lc
<i>Carcharhinus</i>	<i>leucas</i>	BULL SHARK	LR/nt
<i>Carcharhinus</i>	<i>limbatus</i>	BLACKTIP SHARK	LR/nt
<i>Carcharhinus</i>	<i>longimanus</i>	OCEANIC WHITETIP SHARK, WHITE-TIPPED SHARK, WHITETIP OCEANIC SHARK, WHITETIP SHARK	VU
<i>Carcharhinus</i>	<i>perezi</i>	CARIBBEAN REEF SHARK	NT
<i>Carcharodon</i>	<i>carcharias</i>	GREAT WHITE SHARK	VU
<i>Dasyatis</i>	<i>americana</i>	SOUTHERN STINGRAY	DD
<i>Dasyatis</i>	<i>say</i>	BLUNTNOSE STINGRAY	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Etmopterus</i>	<i>bullisi</i>	LINED LANTERNSHARK	DD
<i>Etmopterus</i>	<i>hillianus</i>	CARIBBEAN LANTERNSHARK	LC
<i>Galeocerdo</i>	<i>cuvier</i>	TIGER SHARK	LR/nt
<i>Ginglymostoma</i>	<i>cirratum</i>	NURSE SHARK	DD
<i>Himantura</i>	<i>schmardae</i>	CHUPARE STINGRAY	DD
<i>Isurus</i>	<i>oxyrinchus</i>	SHORTFIN MAKO	LR/nt
<i>Negaprion</i>	<i>brevirostris</i>	LEMON SHARK	LR/nt
<i>Prionace</i>	<i>glauca</i>	BLUE SHARK	LR/nt
<i>Sphyrna</i>	<i>lewini</i>	SCALLOPED HAMMERHEAD	LR/nt
<i>Sphyrna</i>	<i>mokarran</i>	GREAT HAMMERHEAD, HAMMERHEAD SHARK, SQUAT-HEADED HAMMERHEAD SHARK	EN
<i>Squalus</i>	<i>mitsukurii</i>	GREEN-EYE SPURDOG, SHORTSPINE SPURDOG	DD
<i>Urobatis</i>	<i>jamaicensis</i>	YELLOW STINGRAY	LC
<i>Artibeus</i>	<i>jamaicensis</i>	JAMAICAN FRUIT-EATING BAT	LR/lc
<i>Brachyphylla</i>	<i>cavernarum</i>	ANTILLEAN FRUIT-EATING BAT	LR/lc
<i>Carollia</i>	<i>perspicillata</i>	SEBA'S SHORT-TAILED BAT	LR/lc
<i>Grampus</i>	<i>griseus</i>	GREY DOLPHIN, RISSO'S DOLPHIN	DD
<i>Lagenodelphis</i>	<i>hosei</i>	FRASER'S DOLPHIN, SARAWAK DOLPHIN	DD
<i>Noctilio</i>	<i>leporinus</i>	GREATER BULLDOG BAT	LR/lc
<i>Sciurus</i>	<i>vulgaris</i>	EURASIAN RED SQUIRREL, RED SQUIRREL	NT
<i>Tadarida</i>	<i>brasiliensis</i>	BRAZILIAN FREE-TAILED BAT	LR/nt
<i>Trichechus</i>	<i>manatus</i>	AMERICAN MANATEE, WEST INDIAN MANATEE	VU
<i>Alsophis</i>	<i>rufiventris</i>	RED-BELLIED RACER	EN
<i>Chelonia</i>	<i>mydas</i>	GREEN TURTLE	EN
<i>Dermochelys</i>	<i>coriacea</i>	LEATHERBACK, LEATHERY TURTLE, LUTH, TRUNKBACK TURTLE	CR
<i>Eretmochelys</i>	<i>imbricata</i>	HAWKSBILL TURTLE	CR

GENUS	SPECIES	COMMON NAME	STATUS
<i>Iguana</i>	<i>delicatissima</i>	LESSER ANTILLEAN IGUANA, WEST INDIAN IGUANA	VU
<i>Podocarpus</i>	<i>coriaceus</i>		LR/lc
<i>Cedrela</i>	<i>odorata</i>	CIGAR-BOX WOOD, RED CEDAR, SPANISH CEDAR	VU
<i>Protium</i>	<i>attenuatum</i>		DD
<i>Swietenia</i>	<i>mahagoni</i>	AMERICAN MAHOGANY, CUBAN MAHOGANY, SMALL-LEAVED MAHOGANY, WEST INDIAN MAHOGANY	EN

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GENUS	SPECIES	COMMON NAME	STATUS
<i>Balistes</i>	<i>vetula</i>	QUEEN TRIGGERFISH	VU
<i>Dermatolepis</i>	<i>inermis</i>	MARbled GROUPER	VU
<i>Epinephelus</i>	<i>flavolimbatus</i>	GROUPER, POEY'S GROUPER, WHITE GROUPER, YELLOWEDGE GROUPER, YELLOWFINNED GROUPER	VU
<i>Epinephelus</i>	<i>itajara</i>	GOLIATH GROUPER, JEW FISH	CR
<i>Epinephelus</i>	<i>morio</i>	RED GROUPER	NT
<i>Epinephelus</i>	<i>striatus</i>	NASSAU GROUPER	EN
<i>Lachnolaimus</i>	<i>maximus</i>	HOGFISH	VU
<i>Lutjanus</i>	<i>analis</i>	MUTTON SNAPPER	VU
<i>Lutjanus</i>	<i>cyanopterus</i>	CUBERA SNAPPER	VU
<i>Mycteroperca</i>	<i>interstitialis</i>	BLAKE, CROSSBAND ROCKFISH, GREY MANNOCK, HAMLET, HARLEQUIN ROCKFISH, PRINCESS ROCKFISH, ROCKFISH, SALMON GROUPER, SALMON ROCK FISH, SCAMP, YELLOWMOUTH GROUPER	VU
<i>Mycteroperca</i>	<i>tigris</i>	TIGER GROUPER	LC
<i>Mycteroperca</i>	<i>venenosa</i>	YELLOWFIN GROUPER	NT
<i>Scarus</i>	<i>guacamaia</i>	RAINBOW PARROTFISH	VU
<i>Thunnus</i>	<i>albacares</i>	YELLOWFIN TUNA	LR/lc

GENUS	SPECIES	COMMON NAME	STATUS
<i>Thunnus</i>	<i>obesus</i>	BIGEYE TUNA	VU
<i>Thunnus</i>	<i>thynnus</i>	NORTHERN BLUEFIN TUNA	DD
<i>Eleutherodactylus</i>	<i>johnstonei</i>		LC
<i>Eleutherodactylus</i>	<i>martinicensis</i>		NT
<i>Actitis</i>	<i>macularius</i>	SPOTTED SANDPIPER	LC
<i>Aix</i>	<i>sponsa</i>	WOOD DUCK	LC
<i>Amazona</i>	<i>versicolor</i>	ST LUCIA PARROT	VU
<i>Anas</i>	<i>acuta</i>	NORTHERN PINTAIL	LC
<i>Anas</i>	<i>americana</i>	AMERICAN WIGEON	LC
<i>Anas</i>	<i>bahamensis</i>	WHITE-CHEEKED PINTAIL	LC
<i>Anas</i>	<i>clypeata</i>	NORTHERN SHOVELER	LC
<i>Anas</i>	<i>crecca</i>	COMMON TEAL	LC
<i>Anas</i>	<i>discors</i>	BLUE-WINGED TEAL	LC
<i>Anas</i>	<i>penelope</i>	EURASIAN WIGEON	LC
<i>Anhinga</i>	<i>anhinga</i>	ANHINGA	LC
<i>Anous</i>	<i>minutus</i>	BLACK NODDY	LC
<i>Anous</i>	<i>stolidus</i>	BROWN NODDY	LC
<i>Anthracothorax</i>	<i>viridigula</i>	GREEN-THROATED MANGO	LC
<i>Ardea</i>	<i>cinerea</i>	GREY HERON	LC
<i>Ardea</i>	<i>herodias</i>	GREAT BLUE HERON	LC
<i>Arenaria</i>	<i>interpres</i>	RUDDY TURNSTONE	LC
<i>Asio</i>	<i>flammeus</i>	SHORT-EARED OWL	LC
<i>Athene</i>	<i>cunicularia</i>	BURROWING OWL	LC
<i>Aythya</i>	<i>affinis</i>	LESSER SCAUP	LC
<i>Aythya</i>	<i>collaris</i>	RING-NECKED DUCK	LC
<i>Bartramia</i>	<i>longicauda</i>	UPLAND SANDPIPER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Bombycilla</i>	<i>cedrorum</i>	CEDAR WAXWING	LC
<i>Botaurus</i>	<i>lentiginosus</i>	AMERICAN BITTERN	LC
<i>Bubulcus</i>	<i>ibis</i>	CATTLE EGRET	LC
<i>Buteo</i>	<i>albicaudatus</i>	WHITE-TAILED HAWK	LC
<i>Buteo</i>	<i>jamaicensis</i>	RED-TAILED HAWK	LC
<i>Buteo</i>	<i>platypterus</i>	BROAD-WINGED HAWK	LC
<i>Buteogallus</i>	<i>anthracinus</i>	COMMON BLACK-HAWK	LC
<i>Butorides</i>	<i>striata</i>	STRIATED HERON	LC
<i>Butorides</i>	<i>virescens</i>	GREEN HERON	LC
<i>Calidris</i>	<i>alba</i>	SANDERLING	LC
<i>Calidris</i>	<i>alpina</i>	DUNLIN	LC
<i>Calidris</i>	<i>bairdii</i>	BAIRD'S SANDPIPER	LC
<i>Calidris</i>	<i>canutus</i>	RED KNOT	LC
<i>Calidris</i>	<i>ferruginea</i>	CURLEW SANDPIPER	LC
<i>Calidris</i>	<i>fuscicollis</i>	WHITE-RUMPED SANDPIPER	LC
<i>Calidris</i>	<i>mauri</i>	WESTERN SANDPIPER	LC
<i>Calidris</i>	<i>melanotos</i>	PECTORAL SANDPIPER	LC
<i>Calidris</i>	<i>minutilla</i>	LEAST SANDPIPER	LC
<i>Calidris</i>	<i>pusilla</i>	SEMIPALMATED SANDPIPER	LC
<i>Calonectris</i>	<i>diomedea</i>	CORY'S SHEARWATER	LC
<i>Caprimulgus</i>	<i>carolinensis</i>	CHUCK-WILL'S-WIDOW	LC
<i>Caprimulgus</i>	<i>cayennensis</i>	WHITE-TAILED NIGHTJAR	LC
<i>Caprimulgus</i>	<i>rufus</i>	RUFIOUS NIGHTJAR	LC
<i>Casmerodius</i>	<i>albus</i>	GREAT EGRET	LC
<i>Catharacta</i>	<i>maccormicki</i>	SOUTH POLAR SKUA	LC
<i>Catharacta</i>	<i>skua</i>	GREAT SKUA	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Catharus</i>	<i>minimus</i>	GREY-CHEEKED THRUSH	LC
<i>Catoptrophorus</i>	<i>semipalmatus</i>	WILLET	LC
<i>Ceryle</i>	<i>alcyon</i>	BELTED KINGFISHER	LC
<i>Ceryle</i>	<i>torquatus</i>	RINGED KINGFISHER	LC
<i>Chaetura</i>	<i>brachyura</i>	SHORT-TAILED SWIFT	LC
<i>Chaetura</i>	<i>cinereiventris</i>	GREY-RUMPED SWIFT	LC
<i>Chaetura</i>	<i>martinica</i>	LESSER ANTILLEAN SWIFT	LC
<i>Charadrius</i>	<i>alexandrinus</i>	KENTISH PLOVER	LC
<i>Charadrius</i>	<i>collaris</i>	COLLARED PLOVER	LC
<i>Charadrius</i>	<i>hiaticula</i>	COMMON RINGED PLOVER	LC
<i>Charadrius</i>	<i>semipalmatus</i>	SEMIPALMATED PLOVER	LC
<i>Charadrius</i>	<i>wilsonia</i>	WILSON'S PLOVER	LC
<i>Chlidonias</i>	<i>leucopterus</i>	WHITE-WINGED TERN	LC
<i>Chlidonias</i>	<i>niger</i>	BLACK TERN	LC
<i>Chondrohierax</i>	<i>uncinatus</i>	HOOK-BILLED KITE	LC
<i>Chordeiles</i>	<i>minor</i>	COMMON NIGHTHAWK	LC
<i>Chrysolampis</i>	<i>mosquitos</i>	RUBY-TOPAZ HUMMINGBIRD	LC
<i>Cichlherminia</i>	<i>lherminieri</i>	FOREST THRUSH	VU
<i>Cinlocerthia</i>	<i>gutturalis</i>	GREY TREMBLER	LC
<i>Cinlocerthia</i>	<i>ruficauda</i>	BROWN TREMBLER	LC
<i>Circus</i>	<i>cyaneus</i>	NORTHERN HARRIER	LC
<i>Coccyzus</i>	<i>americanus</i>	YELLOW-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>erythrophthalmus</i>	BLACK-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>melacoryphus</i>	DARK-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>minor</i>	MANGROVE CUCKOO	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Coereba</i>	<i>flaveola</i>	BANANAQUIT	LC
<i>Columba</i>	<i>livia</i>	ROCK PIGEON	LC
<i>Columbina</i>	<i>passerina</i>	COMMON GROUND-DOVE	LC
<i>Contopus</i>	<i>latirostris</i>	LESSER ANTILLEAN PEWEE	LC
<i>Coragyps</i>	<i>atratus</i>	BLACK VULTURE	LC
<i>Crotophaga</i>	<i>ani</i>	SMOOTH-BILLED ANI	LC
<i>Cuculus</i>	<i>canorus</i>	COMMON CUCKOO	LC
<i>Cyanophaia</i>	<i>bicolor</i>	BLUE-HEADED HUMMINGBIRD	LC
<i>Cypseloides</i>	<i>niger</i>	BLACK SWIFT	LC
<i>Dendrocygna</i>	<i>autumnalis</i>	BLACK-BELLIED WHISTLING-DUCK	LC
<i>Dendrocygna</i>	<i>bicolor</i>	FULVOUS WHISTLING-DUCK	LC
<i>Dendrocygna</i>	<i>viduata</i>	WHITE-FACED WHISTLING-DUCK	LC
<i>Dendroica</i>	<i>adelaidae</i>	ADELAIDE'S WARBLER	LC
<i>Dendroica</i>	<i>caerulescens</i>	BLACK-THROATED BLUE WARBLER	LC
<i>Dendroica</i>	<i>castanea</i>	BAY-BREASTED WARBLER	LC
<i>Dendroica</i>	<i>coronata</i>	YELLOW-RUMPED WARBLER	LC
<i>Dendroica</i>	<i>delicata</i>	ST LUCIA WARBLER	LC
<i>Dendroica</i>	<i>discolor</i>	PRAIRIE WARBLER	LC
<i>Dendroica</i>	<i>dominica</i>	YELLOW-THROATED WARBLER	LC
<i>Dendroica</i>	<i>fusca</i>	BLACKBURNIAN WARBLER	LC
<i>Dendroica</i>	<i>magnolia</i>	MAGNOLIA WARBLER	LC
<i>Dendroica</i>	<i>pensylvanica</i>	CHESTNUT-SIDED WARBLER	LC
<i>Dendroica</i>	<i>petechia</i>	YELLOW WARBLER	LC
<i>Dendroica</i>	<i>plumbea</i>	PLUMBEOUS WARBLER	LC
<i>Dendroica</i>	<i>striata</i>	BLACKPOLL WARBLER	LC
<i>Dendroica</i>	<i>tigrina</i>	CAPE MAY WARBLER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Dendroica</i>	<i>virens</i>	BLACK-THROATED GREEN WARBLER	LC
<i>Dolichonyx</i>	<i>oryzivorus</i>	BOBOLINK	LC
<i>Dumetella</i>	<i>carolinensis</i>	GREY CATBIRD	LC
<i>Egretta</i>	<i>caerulea</i>	LITTLE BLUE HERON	LC
<i>Egretta</i>	<i>garzetta</i>	LITTLE EGRET	LC
<i>Egretta</i>	<i>gularis</i>	WESTERN REEF-EGRET	LC
<i>Egretta</i>	<i>rufescens</i>	REDDISH EGRET	LC
<i>Egretta</i>	<i>thula</i>	SNOWY EGRET	LC
<i>Egretta</i>	<i>tricolor</i>	TRICOLOURED HERON	LC
<i>Elaenia</i>	<i>flavogaster</i>	YELLOW-BELLIED ELAENIA	LC
<i>Elaenia</i>	<i>martinica</i>	CARIBBEAN ELAENIA	LC
<i>Eulampis</i>	<i>holosericeus</i>	GREEN-THROATED CARIB	LC
<i>Eulampis</i>	<i>jugularis</i>	PURPLE-THROATED CARIB	LC
<i>Euphonia</i>	<i>musica</i>	ANTILLEAN EUPHONIA	LC
<i>Falco</i>	<i>columbarius</i>	MERLIN	LC
<i>Falco</i>	<i>peregrinus</i>	PEREGRINE FALCON	LC
<i>Falco</i>	<i>sparverius</i>	AMERICAN KESTREL	LC
<i>Falco</i>	<i>tinnunculus</i>	COMMON KESTREL	LC
<i>Florisuga</i>	<i>mellivora</i>	WHITE-NECKED JACOBIN	LC
<i>Fregata</i>	<i>magnificens</i>	MAGNIFICENT FRIGATEBIRD	LC
<i>Fulica</i>	<i>americana</i>	AMERICAN COOT	LC
<i>Gallinago</i>	<i>gallinago</i>	COMMON SNIPE	LC
<i>Gallinula</i>	<i>chloropus</i>	COMMON MOORHEN	LC
<i>Geothlypis</i>	<i>trichas</i>	COMMON YELLOWTHROAT	LC
<i>Geotrygon</i>	<i>montana</i>	RUDDY QUAIL-DOVE	LC
<i>Geotrygon</i>	<i>mystacea</i>	BRIDLED QUAIL-DOVE	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Glaucis</i>	<i>hirsutus</i>	RUFOUS-BREASTED HERMIT	LC
<i>Haematopus</i>	<i>palliatu</i>	AMERICAN OYSTERCATCHER	LC
<i>Himantopus</i>	<i>mexicanus</i>	BLACK-NECKED STILT	LC
<i>Hirundo</i>	<i>rustica</i>	BARN SWALLOW	LC
<i>Icteria</i>	<i>virens</i>	YELLOW-BREASTED CHAT	LC
<i>Icterus</i>	<i>galbula</i>	BALTIMORE ORIOLE	LC
<i>Icterus</i>	<i>laudabilis</i>	ST LUCIA ORIOLE	NT
<i>Ixobrychus</i>	<i>exilis</i>	LEAST BITTERN	LC
<i>Larus</i>	<i>argentatus</i>	HERRING GULL	LC
<i>Larus</i>	<i>atricilla</i>	LAUGHING GULL	LC
<i>Larus</i>	<i>delawarensis</i>	RING-BILLED GULL	LC
<i>Larus</i>	<i>fuscus</i>	LESSER BLACK-BACKED GULL	LC
<i>Larus</i>	<i>marinus</i>	GREAT BLACK-BACKED GULL	LC
<i>Larus</i>	<i>philadelphia</i>	BONAPARTE'S GULL	LC
<i>Larus</i>	<i>ridibundus</i>	COMMON BLACK-HEADED GULL	LC
<i>Lathrotriccus</i>	<i>euleri</i>	EULER'S FLYCATCHER	LC
<i>Leucopez</i>	<i>semperi</i>	SEMPER'S WARBLER	CR
<i>Limnodromus</i>	<i>griseus</i>	SHORT-BILLED DOWITCHER	LC
<i>Limosa</i>	<i>fedoa</i>	MARbled GODWIT	LC
<i>Lophodytes</i>	<i>cucullatus</i>	HOODED MERGANSER	LC
<i>Loxigilla</i>	<i>noctis</i>	LESSER ANTILLEAN BULLFINCH	LC
<i>Lymnocyptes</i>	<i>minimus</i>	JACK SNIPE	LC
<i>Margarops</i>	<i>fuscatus</i>	PEARLY-EYED THRASHER	LC
<i>Margarops</i>	<i>fuscus</i>	SCALY-BREASTED THRASHER	LC
<i>Melanospiza</i>	<i>richardsoni</i>	ST LUCIA BLACK FINCH	EN
<i>Micropalama</i>	<i>himantopus</i>	STILT SANDPIPER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Mimus</i>	<i>gilvus</i>	TROPICAL MOCKINGBIRD	LC
<i>Mniotilta</i>	<i>varia</i>	BLACK-AND-WHITE WARBLER	LC
<i>Molothrus</i>	<i>bonariensis</i>	SHINY COWBIRD	LC
<i>Motacilla</i>	<i>alba</i>	WHITE WAGTAIL	LC
<i>Myadestes</i>	<i>genibarbis</i>	RUFOUS-THROATED SOLITAIRE	LC
<i>Myiarchus</i>	<i>nugator</i>	GRENADA FLYCATCHER	LC
<i>Myiarchus</i>	<i>oberi</i>	LESSER ANTILLEAN FLYCATCHER	LC
<i>Myiarchus</i>	<i>tyrannulus</i>	BROWN-CRESTED FLYCATCHER	LC
<i>Nomonyx</i>	<i>dominicus</i>	MASKED DUCK	LC
<i>Numenius</i>	<i>phaeopus</i>	WHIMBREL	LC
<i>Nyctanassa</i>	<i>violacea</i>	YELLOW-CROWNED NIGHT-HERON	LC
<i>Nycticorax</i>	<i>nycticorax</i>	BLACK-CROWNED NIGHT-HERON	LC
<i>Oceanodroma</i>	<i>leucorhoa</i>	LEACH'S STORM-PETREL	LC
<i>Oenanthe</i>	<i>oenanthe</i>	NORTHERN WHEATEAR	LC
<i>Oporornis</i>	<i>agilis</i>	CONNECTICUT WARBLER	LC
<i>Oporornis</i>	<i>formosus</i>	KENTUCKY WARBLER	LC
<i>Orthorhyncus</i>	<i>cristatus</i>	ANTILLEAN CRESTED HUMMINGBIRD	LC
<i>Oxyura</i>	<i>jamaicensis</i>	RUDDY DUCK	LC
<i>Pandion</i>	<i>haliaetus</i>	OSPREY	LC
<i>Parula</i>	<i>americana</i>	NORTHERN PARULA	LC
<i>Patagioenas</i>	<i>squamosa</i>	SCALY-NAPED PIGEON	LC
<i>Pelecanus</i>	<i>occidentalis</i>	BROWN PELICAN	LC
<i>Petrochelidon</i>	<i>pyrrhonota</i>	CLIFF SWALLOW	LC
<i>Phaethon</i>	<i>aethereus</i>	RED-BILLED TROPICBIRD	LC
<i>Phaethon</i>	<i>lepturus</i>	WHITE-TAILED TROPICBIRD	LC
<i>Phalacrocorax</i>	<i>auritus</i>	DOUBLE-CRESTED CORMORANT	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Phalacrocorax</i>	<i>brasilianus</i>	NEOTROPIC CORMORANT	LC
<i>Pheucticus</i>	<i>ludovicianus</i>	ROSE-BREASTED GROSBEAK	LC
<i>Philomachus</i>	<i>pugnax</i>	RUFF	LC
<i>Piranga</i>	<i>flava</i>	HEPATIC TANAGER	LC
<i>Piranga</i>	<i>olivacea</i>	SCARLET TANAGER	LC
<i>Piranga</i>	<i>rubra</i>	SUMMER TANAGER	LC
<i>Platalea</i>	<i>ajaja</i>	ROSEATE SPOONBILL	LC
<i>Plegadis</i>	<i>falcinellus</i>	GLOSSY IBIS	LC
<i>Pluvialis</i>	<i>dominica</i>	AMERICAN GOLDEN-PLOVER	LC
<i>Pluvialis</i>	<i>squatarola</i>	GREY PLOVER	LC
<i>Podilymbus</i>	<i>podiceps</i>	PIED-BILLED GREBE	LC
<i>Porphyrio</i>	<i>martinica</i>	PURPLE GALLINULE	LC
<i>Porzana</i>	<i>carolina</i>	SORA	LC
<i>Progne</i>	<i>dominicensis</i>	CARIBBEAN MARTIN	LC
<i>Protonotaria</i>	<i>citrea</i>	PROTHONOTARY WARBLER	LC
<i>Puffinus</i>	<i>lherminieri</i>	AUDUBON'S SHEARWATER	LC
<i>Quiscalus</i>	<i>lugubris</i>	CARIB GRACKLE	LC
<i>Rallus</i>	<i>longirostris</i>	CLAPPER RAIL	LC
<i>Ramphocinclus</i>	<i>brachyurus</i>	WHITE-BREASTED THRASHER	EN
<i>Recurvirostra</i>	<i>americana</i>	AMERICAN AVOCET	LC
<i>Riparia</i>	<i>riparia</i>	SAND MARTIN	LC
<i>Rissa</i>	<i>tridactyla</i>	BLACK-LEGGED KITTIWAKE	LC
<i>Rynchops</i>	<i>niger</i>	BLACK SKIMMER	LC
<i>Saltator</i>	<i>albicollis</i>	LESSER ANTILLEAN SALTATOR	LC
<i>Seiurus</i>	<i>aurocapilla</i>	OVENBIRD	LC
<i>Seiurus</i>	<i>motacilla</i>	LOUISIANA WATERTHRUSH	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Seiurus</i>	<i>noveboracensis</i>	NORTHERN WATERTHRUSH	LC
<i>Setophaga</i>	<i>ruticilla</i>	AMERICAN REDSTART	LC
<i>Sicalis</i>	<i>luteola</i>	GRASSLAND YELLOW-FINCH	LC
<i>Sphyrapicus</i>	<i>varius</i>	YELLOW-BELLIED SAPSUCKER	LC
<i>Sporophila</i>	<i>nigricollis</i>	YELLOW-BELLIED SEEDEATER	LC
<i>Steganopus</i>	<i>tricolor</i>	WILSON'S PHALAROPE	LC
<i>Stercorarius</i>	<i>longicaudus</i>	LONG-TAILED JAEGER	LC
<i>Stercorarius</i>	<i>parasiticus</i>	PARASITIC JAEGER	LC
<i>Stercorarius</i>	<i>pomarinus</i>	POMARINE JAEGER	LC
<i>Sterna</i>	<i>anaethetus</i>	BRIDLED TERN	LC
<i>Sterna</i>	<i>antillarum</i>	LEAST TERN	LC
<i>Sterna</i>	<i>fuscata</i>	SOOTY TERN	LC
<i>Sterna</i>	<i>hirundo</i>	COMMON TERN	LC
<i>Sterna</i>	<i>maxima</i>	ROYAL TERN	LC
<i>Sterna</i>	<i>nilotica</i>	GULL-BILLED TERN	LC
<i>Sterna</i>	<i>sandvicensis</i>	SANDWICH TERN	LC
<i>Streptoprocne</i>	<i>zonaris</i>	WHITE-COLLARED SWIFT	LC
<i>Sula</i>	<i>dactylatra</i>	MASKED BOOBY	LC
<i>Sula</i>	<i>leucogaster</i>	BROWN BOOBY	LC
<i>Sula</i>	<i>sula</i>	RED-FOOTED BOOBY	LC
<i>Tangara</i>	<i>cucullata</i>	LESSER ANTILLEAN TANAGER	LC
<i>Tiaris</i>	<i>bicolor</i>	BLACK-FACED GRASSQUIT	LC
<i>Tringa</i>	<i>erythropus</i>	SPOTTED REDSHANK	LC
<i>Tringa</i>	<i>flavipes</i>	LESSER YELLOWLEGS	LC
<i>Tringa</i>	<i>glareola</i>	WOOD SANDPIPER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Tringa</i>	<i>melanoleuca</i>	GREATER YELLOWLEGS	LC
<i>Tringa</i>	<i>solitaria</i>	SOLITARY SANDPIPER	LC
<i>Troglodytes</i>	<i>aedon</i>	HOUSE WREN	LC
<i>Tryngites</i>	<i>subruficollis</i>	BUFF-BREASTED SANDPIPER	NT
<i>Turdus</i>	<i>fumigatus</i>	COCOA THRUSH	LC
<i>Turdus</i>	<i>nudigenis</i>	BARE-EYED ROBIN	LC
<i>Turdus</i>	<i>plumbeus</i>	RED-LEGGED THRUSH	LC
<i>Tyrannus</i>	<i>dominicensis</i>	GREY KINGBIRD	LC
<i>Tyrannus</i>	<i>melancholicus</i>	TROPICAL KINGBIRD	LC
<i>Tyrannus</i>	<i>savana</i>	FORK-TAILED FLYCATCHER	LC
<i>Tyto</i>	<i>alba</i>	BARN OWL	LC
<i>Vanellus</i>	<i>vanellus</i>	NORTHERN LAPWING	LC
<i>Vireo</i>	<i>altiloquus</i>	BLACK-WHISKERED VIREO	LC
<i>Vireo</i>	<i>flavifrons</i>	YELLOW-THROATED VIREO	LC
<i>Vireo</i>	<i>olivaceus</i>	RED-EYED VIREO	LC
<i>Volatinia</i>	<i>jacarina</i>	BLUE-BLACK GRASSQUIT	LC
<i>Wilsonia</i>	<i>canadensis</i>	CANADA WARBLER	LC
<i>Xanthocephalus</i>	<i>xanthocephalus</i>	YELLOW-HEADED BLACKBIRD	LC
<i>Zenaida</i>	<i>auriculata</i>	EARED DOVE	LC
<i>Zenaida</i>	<i>aurita</i>	ZENAIDA DOVE	LC
<i>Aetobatus</i>	<i>narinari</i>	BONNETRAY, MAYLAN, SPOTTED EAGLE RAY	NT
<i>Carcharhinus</i>	<i>falciformis</i>	SILKY SHARK	LR/lc
<i>Carcharhinus</i>	<i>leucas</i>	BULL SHARK	LR/nt
<i>Carcharhinus</i>	<i>limbatus</i>	BLACKTIP SHARK	LR/nt
<i>Carcharhinus</i>	<i>longimanus</i>	OCEANIC WHITETIP SHARK, WHITE-TIPPED SHARK, WHITETIP OCEANIC SHARK, WHITETIP SHARK	VU

GENUS	SPECIES	COMMON NAME	STATUS
<i>Carcharhinus</i>	<i>perezi</i>	CARIBBEAN REEF SHARK	NT
<i>Carcharodon</i>	<i>carcharias</i>	GREAT WHITE SHARK	VU
<i>Dasyatis</i>	<i>americana</i>	SOUTHERN STINGRAY	DD
<i>Dasyatis</i>	<i>say</i>	BLUNTNOSE STINGRAY	LC
<i>Etmopterus</i>	<i>bullisi</i>	LINED LANTERNSHARK	DD
<i>Galeocerdo</i>	<i>cuvier</i>	TIGER SHARK	LR/nt
<i>Ginglymostoma</i>	<i>cirratum</i>	NURSE SHARK	DD
<i>Himantura</i>	<i>schmardae</i>	CHUPARE STINGRAY	DD
<i>Isurus</i>	<i>oxyrinchus</i>	SHORTFIN MAKO	LR/nt
<i>Negaprion</i>	<i>brevirostris</i>	LEMON SHARK	LR/nt
<i>Prionace</i>	<i>glauca</i>	BLUE SHARK	LR/nt
<i>Sphyrna</i>	<i>lewini</i>	SCALLOPED HAMMERHEAD	LR/nt
<i>Sphyrna</i>	<i>mokarran</i>	GREAT HAMMERHEAD, HAMMERHEAD SHARK, SQUAT-HEADED HAMMERHEAD SHARK	EN
<i>Ardops</i>	<i>nichollsi</i>	TREE BAT	LR/nt
<i>Artibeus</i>	<i>jamaicensis</i>	JAMAICAN FRUIT-EATING BAT	LR/lc
<i>Globicephala</i>	<i>macrorhynchus</i>	PACIFIC PILOT WHALE, SHORT-FINNED PILOT WHALE	LR/cd
<i>Grampus</i>	<i>griseus</i>	GREY DOLPHIN, RISSO'S DOLPHIN	DD
<i>Lagenodelphis</i>	<i>hosei</i>	FRASER'S DOLPHIN, SARAWAK DOLPHIN	DD
<i>Megalomys</i>	<i>luciae</i>	SANTA LUCIA GIANT RICE RAT	EX
<i>Megaptera</i>	<i>novaeangliae</i>	BUNCH, HUMP WHALE, HUMPBACK WHALE, HUNCHBACKED WHALE	VU
<i>Monophyllus</i>	<i>plethodon</i>	INSULAR SINGLE LEAF BAT	LR/nt
<i>Noctilio</i>	<i>leporinus</i>	GREATER BULLDOG BAT	LR/lc
<i>Sturnira</i>	<i>lilium</i>	LITTLE YELLOW-SHOULDERED BAT	LR/lc
<i>Tadarida</i>	<i>brasiliensis</i>	BRAZILIAN FREE-TAILED BAT	LR/nt

GENUS	SPECIES	COMMON NAME	STATUS
<i>Trichechus</i>	<i>manatus</i>	AMERICAN MANATEE, WEST INDIAN MANATEE	VU
<i>Caretta</i>	<i>caretta</i>	LOGGERHEAD	EN
<i>Chelonia</i>	<i>mydas</i>	GREEN TURTLE	EN
<i>Cnemidophorus</i>	<i>vanzoi</i>	ST LUCIA WHIPTAIL	VU
<i>Dermochelys</i>	<i>coriacea</i>	LEATHERBACK, LEATHERY TURTLE, LUTH, TRUNKBACK TURTLE	CR
<i>Eretmochelys</i>	<i>imbricata</i>	HAWKSBILL TURTLE	CR
<i>Liophis</i>	<i>ornatus</i>	ST LUCIA RACER	EN
<i>Juniperus</i>	<i>barbadensis</i>		VU
<i>Cedrela</i>	<i>odorata</i>	CIGAR-BOX WOOD, RED CEDAR, SPANISH CEDAR	VU
<i>Ocotea</i>	<i>aciphylla</i>		LR/lc
<i>Pouteria</i>	<i>pallida</i>		EN
<i>Pouteria</i>	<i>semecarpifolia</i>		VU
<i>Protium</i>	<i>attenuatum</i>		DD
<i>Swietenia</i>	<i>mahagoni</i>	AMERICAN MAHOGANY, CUBAN MAHOGANY, SMALL-LEAVED MAHOGANY, WEST INDIAN MAHOGANY	EN
<i>Zanthoxylum</i>	<i>flavum</i>	WEST INDIAN SATINWOOD, YELLOW SANDERS, YELLOW-HEAD, YELLOWHEART	VU

## ST VINCENT

GENUS	SPECIES	COMMON NAME	STATUS
<i>Balistes</i>	<i>Vetula</i>	QUEEN TRIGGERFISH	VU
<i>Dermatolepis</i>	<i>Inermis</i>	MARbled GROUper	VU
<i>Epinephelus</i>	<i>Flavolimbatus</i>	GROUper, POEY'S GROUper, WHITE GROUper, YELLOWEDGE GROUper, YELLOWFINNED GROUper	VU

GENUS	SPECIES	COMMON NAME	STATUS
<i>Epinephelus</i>	<i>Itajara</i>	GOLIATH GROUPER, JEWFISH	CR
<i>Epinephelus</i>	<i>Morio</i>	RED GROUPER	NT
<i>Epinephelus</i>	<i>Striatus</i>	NASSAU GROUPER	EN
<i>Lachnolaimus</i>	<i>maximus</i>	HOGFISH	VU
<i>Lutjanus</i>	<i>analis</i>	MUTTON SNAPPER	VU
<i>Lutjanus</i>	<i>cyanopterus</i>	CUBERA SNAPPER	VU
<i>Mycteroperca</i>	<i>interstitialis</i>	BLAKE, CROSSBAND ROCKFISH, GREY MANNOCK, HAMLET, HARLEQUIN ROCKFISH, PRINCESS ROCKFISH, ROCKFISH, SALMON GROUPER, SALMON ROCK FISH, SCAMP, YELLOWMOUTH GROUPER	VU
<i>Mycteroperca</i>	<i>tigris</i>	TIGER GROUPER	LC
<i>Mycteroperca</i>	<i>venenosa</i>	YELLOWFIN GROUPER	NT
<i>Scarus</i>	<i>guacamaia</i>	RAINBOW PARROTFISH	VU
<i>Thunnus</i>	<i>albacares</i>	YELLOWFIN TUNA	LR/lc
<i>Thunnus</i>	<i>obesus</i>	BIGEYE TUNA	VU
<i>Thunnus</i>	<i>thynnus</i>	NORTHERN BLUEFIN TUNA	DD
<i>Eleutherodactylus</i>	<i>johnstonei</i>		LC
<i>Eleutherodactylus</i>	<i>shrevei</i>		EN
<i>Leptodactylus</i>	<i>validus</i>	WINDWARD DITCH FROG	LC
<i>Actitis</i>	<i>macularius</i>	SPOTTED SANDPIPER	LC
<i>Aix</i>	<i>sponsa</i>	WOOD DUCK	LC
<i>Amazona</i>	<i>gouldingii</i>	ST VINCENT PARROT	VU
<i>Anas</i>	<i>acuta</i>	NORTHERN PINTAIL	LC
<i>Anas</i>	<i>americana</i>	AMERICAN WIGEON	LC
<i>Anas</i>	<i>bahamensis</i>	WHITE-CHEEKED PINTAIL	LC
<i>Anas</i>	<i>clypeata</i>	NORTHERN SHOVELER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Anas</i>	<i>discors</i>	BLUE-WINGED TEAL	LC
<i>Anas</i>	<i>penelope</i>	EURASIAN WIGEON	LC
<i>Anhinga</i>	<i>anhinga</i>	ANHINGA	LC
<i>Anous</i>	<i>minutus</i>	BLACK NODDY	LC
<i>Anous</i>	<i>stolidus</i>	BROWN NODDY	LC
<i>Anthracothorax</i>	<i>viridigula</i>	GREEN-THROATED MANGO	LC
<i>Ardea</i>	<i>cinerea</i>	GREY HERON	LC
<i>Ardea</i>	<i>herodias</i>	GREAT BLUE HERON	LC
<i>Arenaria</i>	<i>interpres</i>	RUDDY TURNSTONE	LC
<i>Asio</i>	<i>flammeus</i>	SHORT-EARED OWL	LC
<i>Athene</i>	<i>cunicularia</i>	BURROWING OWL	LC
<i>Aythya</i>	<i>affinis</i>	LESSER SCAUP	LC
<i>Aythya</i>	<i>collaris</i>	RING-NECKED DUCK	LC
<i>Bartramia</i>	<i>longicauda</i>	UPLAND SANDPIPER	LC
<i>Bombycilla</i>	<i>cedrorum</i>	CEDAR WAXWING	LC
<i>Botaurus</i>	<i>lentiginosus</i>	AMERICAN BITTERN	LC
<i>Bubulcus</i>	<i>ibis</i>	CATTLE EGRET	LC
<i>Buteo</i>	<i>albicaudatus</i>	WHITE-TAILED HAWK	LC
<i>Buteo</i>	<i>jamaicensis</i>	RED-TAILED HAWK	LC
<i>Buteo</i>	<i>platypterus</i>	BROAD-WINGED HAWK	LC
<i>Buteogallus</i>	<i>anthracinus</i>	COMMON BLACK-HAWK	LC
<i>Butorides</i>	<i>striata</i>	STRIATED HERON	LC
<i>Butorides</i>	<i>virescens</i>	GREEN HERON	LC
<i>Calidris</i>	<i>alba</i>	SANDERLING	LC
<i>Calidris</i>	<i>alpina</i>	DUNLIN	LC
<i>Calidris</i>	<i>bairdii</i>	BAIRD'S SANDPIPER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Calidris</i>	<i>canutus</i>	RED KNOT	LC
<i>Calidris</i>	<i>ferruginea</i>	CURLEW SANDPIPER	LC
<i>Calidris</i>	<i>fuscicollis</i>	WHITE-RUMPED SANDPIPER	LC
<i>Calidris</i>	<i>mauri</i>	WESTERN SANDPIPER	LC
<i>Calidris</i>	<i>melanotos</i>	PECTORAL SANDPIPER	LC
<i>Calidris</i>	<i>minutilla</i>	LEAST SANDPIPER	LC
<i>Calidris</i>	<i>pusilla</i>	SEMIPALMATED SANDPIPER	LC
<i>Calonectris</i>	<i>diomedea</i>	CORY'S SHEARWATER	LC
<i>Caprimulgus</i>	<i>carolinensis</i>	CHUCK-WILL'S-WIDOW	LC
<i>Caprimulgus</i>	<i>cayennensis</i>	WHITE-TAILED NIGHTJAR	LC
<i>Casmerodius</i>	<i>albus</i>	GREAT EGRET	LC
<i>Catharacta</i>	<i>maccormicki</i>	SOUTH POLAR SKUA	LC
<i>Catharacta</i>	<i>skua</i>	GREAT SKUA	LC
<i>Catharopeza</i>	<i>bishopi</i>	WHISTLING WARBLER	EN
<i>Catharus</i>	<i>minimus</i>	GREY-CHEEKED THRUSH	LC
<i>Catoptrophorus</i>	<i>semipalmatus</i>	WILLET	LC
<i>Ceryle</i>	<i>alcyon</i>	BELTED KINGFISHER	LC
<i>Ceryle</i>	<i>torquatus</i>	RINGED KINGFISHER	LC
<i>Chaetura</i>	<i>brachyura</i>	SHORT-TAILED SWIFT	LC
<i>Chaetura</i>	<i>cinereiventris</i>	GREY-RUMPED SWIFT	LC
<i>Chaetura</i>	<i>martinica</i>	LESSER ANTILLEAN SWIFT	LC
<i>Charadrius</i>	<i>alexandrinus</i>	KENTISH PLOVER	LC
<i>Charadrius</i>	<i>collaris</i>	COLLARED PLOVER	LC
<i>Charadrius</i>	<i>hiaticula</i>	COMMON RINGED PLOVER	LC
<i>Charadrius</i>	<i>semipalmatus</i>	SEMIPALMATED PLOVER	LC
<i>Charadrius</i>	<i>wilsonia</i>	WILSON'S PLOVER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Chlidonias</i>	<i>leucopterus</i>	WHITE-WINGED TERN	LC
<i>Chlidonias</i>	<i>niger</i>	BLACK TERN	LC
<i>Chondrohierax</i>	<i>uncinatus</i>	HOOK-BILLED KITE	LC
<i>Chordeiles</i>	<i>minor</i>	COMMON NIGHTHAWK	LC
<i>Chrysolampis</i>	<i>mosquitos</i>	RUBY-TOPAZ HUMMINGBIRD	LC
<i>Cinlocerthia</i>	<i>gutturalis</i>	GREY TREMBLER	LC
<i>Cinlocerthia</i>	<i>ruficauda</i>	BROWN TREMBLER	LC
<i>Circus</i>	<i>cyaneus</i>	NORTHERN HARRIER	LC
<i>Coccyzus</i>	<i>americanus</i>	YELLOW-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>erythrophthalmus</i>	BLACK-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>melacoryphus</i>	DARK-BILLED CUCKOO	LC
<i>Coccyzus</i>	<i>minor</i>	MANGROVE CUCKOO	LC
<i>Coereba</i>	<i>flaveola</i>	BANANAQUIT	LC
<i>Columba</i>	<i>livia</i>	ROCK PIGEON	LC
<i>Columbina</i>	<i>passerina</i>	COMMON GROUND-DOVE	LC
<i>Contopus</i>	<i>latirostris</i>	LESSER ANTILLEAN PEWEE	LC
<i>Coragyps</i>	<i>atratus</i>	BLACK VULTURE	LC
<i>Crotophaga</i>	<i>ani</i>	SMOOTH-BILLED ANI	LC
<i>Cuculus</i>	<i>canorus</i>	COMMON CUCKOO	LC
<i>Cyanophaia</i>	<i>bicolor</i>	BLUE-HEADED HUMMINGBIRD	LC
<i>Cypseloides</i>	<i>niger</i>	BLACK SWIFT	LC
<i>Dendrocygna</i>	<i>autumnalis</i>	BLACK-BELLIED WHISTLING-DUCK	LC
<i>Dendrocygna</i>	<i>bicolor</i>	FULVOUS WHISTLING-DUCK	LC
<i>Dendrocygna</i>	<i>viduata</i>	WHITE-FACED WHISTLING-DUCK	LC
<i>Dendroica</i>	<i>adelaidae</i>	ADELAIDE'S WARBLER	LC
<i>Dendroica</i>	<i>caerulescens</i>	BLACK-THROATED BLUE WARBLER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Dendroica</i>	<i>castanea</i>	BAY-BREASTED WARBLER	LC
<i>Dendroica</i>	<i>coronata</i>	YELLOW-RUMPED WARBLER	LC
<i>Dendroica</i>	<i>discolor</i>	PRAIRIE WARBLER	LC
<i>Dendroica</i>	<i>dominica</i>	YELLOW-THROATED WARBLER	LC
<i>Dendroica</i>	<i>fusca</i>	BLACKBURNIAN WARBLER	LC
<i>Dendroica</i>	<i>magnolia</i>	MAGNOLIA WARBLER	LC
<i>Dendroica</i>	<i>pensylvanica</i>	CHESTNUT-SIDED WARBLER	LC
<i>Dendroica</i>	<i>petechia</i>	YELLOW WARBLER	LC
<i>Dendroica</i>	<i>plumbea</i>	PLUMBEOUS WARBLER	LC
<i>Dendroica</i>	<i>striata</i>	BLACKPOLL WARBLER	LC
<i>Dendroica</i>	<i>tigrina</i>	CAPE MAY WARBLER	LC
<i>Dendroica</i>	<i>virens</i>	BLACK-THROATED GREEN WARBLER	LC
<i>Dolichonyx</i>	<i>oryzivorus</i>	BOBOLINK	LC
<i>Dumetella</i>	<i>carolinensis</i>	GREY CATBIRD	LC
<i>Egretta</i>	<i>caerulea</i>	LITTLE BLUE HERON	LC
<i>Egretta</i>	<i>garzetta</i>	LITTLE EGRET	LC
<i>Egretta</i>	<i>gularis</i>	WESTERN REEF-EGRET	LC
<i>Egretta</i>	<i>rufescens</i>	REDDISH EGRET	LC
<i>Egretta</i>	<i>thula</i>	SNOWY EGRET	LC
<i>Egretta</i>	<i>tricolor</i>	TRICOLOURED HERON	LC
<i>Elaenia</i>	<i>flavogaster</i>	YELLOW-BELLIED ELAENIA	LC
<i>Elaenia</i>	<i>martinica</i>	CARIBBEAN ELAENIA	LC
<i>Eulampis</i>	<i>holosericeus</i>	GREEN-THROATED CARIB	LC
<i>Eulampis</i>	<i>jugularis</i>	PURPLE-THROATED CARIB	LC
<i>Euphonia</i>	<i>musica</i>	ANTILLEAN EUPHONIA	LC
<i>Falco</i>	<i>columbarius</i>	MERLIN	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Falco</i>	<i>peregrinus</i>	PEREGRINE FALCON	LC
<i>Falco</i>	<i>sparverius</i>	AMERICAN KESTREL	LC
<i>Falco</i>	<i>tinnunculus</i>	COMMON KESTREL	LC
<i>Florisuga</i>	<i>mellivora</i>	WHITE-NECKED JACOBIN	LC
<i>Fregata</i>	<i>magnificens</i>	MAGNIFICENT FRIGATEBIRD	LC
<i>Fulica</i>	<i>americana</i>	AMERICAN COOT	LC
<i>Gallinago</i>	<i>gallinago</i>	COMMON SNIPE	LC
<i>Gallinula</i>	<i>chloropus</i>	COMMON MOORHEN	LC
<i>Geothlypis</i>	<i>trichas</i>	COMMON YELLOWTHROAT	LC
<i>Geotrygon</i>	<i>montana</i>	RUDDY QUAIL-DOVE	LC
<i>Glaucis</i>	<i>hirsutus</i>	RUFIOUS-BREASTED HERMIT	LC
<i>Haematopus</i>	<i>palliatus</i>	AMERICAN OYSTERCATCHER	LC
<i>Himantopus</i>	<i>mexicanus</i>	BLACK-NECKED STILT	LC
<i>Hirundo</i>	<i>rustica</i>	BARN SWALLOW	LC
<i>Icteria</i>	<i>virens</i>	YELLOW-BREASTED CHAT	LC
<i>Icterus</i>	<i>galbula</i>	BALTIMORE ORIOLE	LC
<i>Ixobrychus</i>	<i>exilis</i>	LEAST BITTERN	LC
<i>Larus</i>	<i>argentatus</i>	HERRING GULL	LC
<i>Larus</i>	<i>atricilla</i>	LAUGHING GULL	LC
<i>Larus</i>	<i>delawarensis</i>	RING-BILLED GULL	LC
<i>Larus</i>	<i>fuscus</i>	LESSER BLACK-BACKED GULL	LC
<i>Larus</i>	<i>marinus</i>	GREAT BLACK-BACKED GULL	LC
<i>Larus</i>	<i>philadelphia</i>	BONAPARTE'S GULL	LC
<i>Larus</i>	<i>ridibundus</i>	COMMON BLACK-HEADED GULL	LC
<i>Lathrotriccus</i>	<i>euleri</i>	EULER'S FLYCATCHER	LC
<i>Limnodromus</i>	<i>griseus</i>	SHORT-BILLED DOWITCHER	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Limosa</i>	<i>fedoa</i>	MARbled GODWIT	LC
<i>Lophodytes</i>	<i>cucullatus</i>	HOODED MERGANSER	LC
<i>Loxigilla</i>	<i>noctis</i>	LESSER ANTILLEAN BULLFINCH	LC
<i>Lymnocyptes</i>	<i>minimus</i>	JACK SNIPE	LC
<i>Margarops</i>	<i>fuscatus</i>	PEARLY-EYED THRASHER	LC
<i>Margarops</i>	<i>fuscus</i>	SCALY-BREASTED THRASHER	LC
<i>Micropalama</i>	<i>himantopus</i>	STILT SANDPIPER	LC
<i>Mimus</i>	<i>gilvus</i>	TROPICAL MOCKINGBIRD	LC
<i>Mniotilta</i>	<i>varia</i>	BLACK-AND-WHITE WARBLER	LC
<i>Molothrus</i>	<i>bonariensis</i>	SHINY COWBIRD	LC
<i>Motacilla</i>	<i>alba</i>	WHITE WAGTAIL	LC
<i>Myadestes</i>	<i>genibarbis</i>	RUFOUS-THROATED SOLITAIRE	LC
<i>Myiarchus</i>	<i>nugator</i>	GRENADA FLYCATCHER	LC
<i>Myiarchus</i>	<i>oberi</i>	LESSER ANTILLEAN FLYCATCHER	LC
<i>Myiarchus</i>	<i>tyrannulus</i>	BROWN-CRESTED FLYCATCHER	LC
<i>Nomonyx</i>	<i>dominicus</i>	MASKED DUCK	LC
<i>Numenius</i>	<i>phaeopus</i>	WHIMBREL	LC
<i>Nyctanassa</i>	<i>violacea</i>	YELLOW-CROWNED NIGHT-HERON	LC
<i>Nycticorax</i>	<i>nycticorax</i>	BLACK-CROWNED NIGHT-HERON	LC
<i>Oceanites</i>	<i>oceanicus</i>	WILSON'S STORM-PETREL	LC
<i>Oceanodroma</i>	<i>leucorhoa</i>	LEACH'S STORM-PETREL	LC
<i>Oenanthe</i>	<i>oenanthe</i>	NORTHERN WHEATEAR	LC
<i>Oporornis</i>	<i>agilis</i>	CONNECTICUT WARBLER	LC
<i>Oporornis</i>	<i>formosus</i>	KENTUCKY WARBLER	LC
<i>Ortalis</i>	<i>ruficauda</i>	RUFOUS-VENTED CHACHALACA	LC
<i>Orthorhyncus</i>	<i>cristatus</i>	ANTILLEAN CRESTED HUMMINGBIRD	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Oxyura</i>	<i>jamaicensis</i>	RUDDY DUCK	LC
<i>Pandion</i>	<i>haliaetus</i>	OSPREY	LC
<i>Parula</i>	<i>americana</i>	NORTHERN PARULA	LC
<i>Patagioenas</i>	<i>squamosa</i>	SCALY-NAPED PIGEON	LC
<i>Pelecanus</i>	<i>occidentalis</i>	BROWN PELICAN	LC
<i>Petrochelidon</i>	<i>pyrrhonota</i>	CLIFF SWALLOW	LC
<i>Phaethon</i>	<i>aethereus</i>	RED-BILLED TROPICBIRD	LC
<i>Phaethon</i>	<i>lepturus</i>	WHITE-TAILED TROPICBIRD	LC
<i>Phalacrocorax</i>	<i>auritus</i>	DOUBLE-CRESTED CORMORANT	LC
<i>Phalacrocorax</i>	<i>brasilianus</i>	NEOTROPIC CORMORANT	LC
<i>Pheucticus</i>	<i>ludovicianus</i>	ROSE-BREASTED GROSBEAK	LC
<i>Philomachus</i>	<i>pugnax</i>	RUFF	LC
<i>Piranga</i>	<i>flava</i>	HEPATIC TANAGER	LC
<i>Piranga</i>	<i>olivacea</i>	SCARLET TANAGER	LC
<i>Piranga</i>	<i>rubra</i>	SUMMER TANAGER	LC
<i>Platalea</i>	<i>ajaja</i>	ROSEATE SPOONBILL	LC
<i>Plegadis</i>	<i>falcinellus</i>	GLOSSY IBIS	LC
<i>Pluvialis</i>	<i>dominica</i>	AMERICAN GOLDEN-PLOVER	LC
<i>Pluvialis</i>	<i>squatarola</i>	GREY PLOVER	LC
<i>Podilymbus</i>	<i>podiceps</i>	PIED-BILLED GREBE	LC
<i>Porphyrio</i>	<i>martinica</i>	PURPLE GALLINULE	LC
<i>Porzana</i>	<i>carolina</i>	SORA	LC
<i>Progne</i>	<i>dominicensis</i>	CARIBBEAN MARTIN	LC
<i>Protonotaria</i>	<i>citrea</i>	PROTHONOTARY WARBLER	LC
<i>Puffinus</i>	<i>lherminieri</i>	AUDUBON'S SHEARWATER	LC
<i>Quiscalus</i>	<i>lugubris</i>	CARIB GRACKLE	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Rallus</i>	<i>longirostris</i>	CLAPPER RAIL	LC
<i>Recurvirostra</i>	<i>americana</i>	AMERICAN AVOCET	LC
<i>Riparia</i>	<i>riparia</i>	SAND MARTIN	LC
<i>Rissa</i>	<i>tridactyla</i>	BLACK-LEGGED KITTIWAKE	LC
<i>Rynchops</i>	<i>niger</i>	BLACK SKIMMER	LC
<i>Seiurus</i>	<i>aurocapilla</i>	OVENBIRD	LC
<i>Seiurus</i>	<i>motacilla</i>	LOUISIANA WATERTHRUSH	LC
<i>Seiurus</i>	<i>noveboracensis</i>	NORTHERN WATERTHRUSH	LC
<i>Setophaga</i>	<i>ruticilla</i>	AMERICAN REDSTART	LC
<i>Sicalis</i>	<i>luteola</i>	GRASSLAND YELLOW-FINCH	LC
<i>Sphyrapicus</i>	<i>varius</i>	YELLOW-BELLIED SAPSUCKER	LC
<i>Sporophila</i>	<i>nigricollis</i>	YELLOW-BELLIED SEEDEATER	LC
<i>Steganopus</i>	<i>tricolor</i>	WILSON'S PHALAROPE	LC
<i>Stercorarius</i>	<i>longicaudus</i>	LONG-TAILED JAEGER	LC
<i>Stercorarius</i>	<i>parasiticus</i>	PARASITIC JAEGER	LC
<i>Stercorarius</i>	<i>pomarinus</i>	POMARINE JAEGER	LC
<i>Sterna</i>	<i>anaethetus</i>	BRIDLED TERN	LC
<i>Sterna</i>	<i>antillarum</i>	LEAST TERN	LC
<i>Sterna</i>	<i>fuscata</i>	SOOTY TERN	LC
<i>Sterna</i>	<i>hirundo</i>	COMMON TERN	LC
<i>Sterna</i>	<i>maxima</i>	ROYAL TERN	LC
<i>Sterna</i>	<i>nilotica</i>	GULL-BILLED TERN	LC
<i>Sterna</i>	<i>sandvicensis</i>	SANDWICH TERN	LC
<i>Streptoprocne</i>	<i>zonaris</i>	WHITE-COLLARED SWIFT	LC
<i>Sula</i>	<i>dactylatra</i>	MASKED BOOBY	LC
<i>Sula</i>	<i>leucogaster</i>	BROWN BOOBY	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Sula</i>	<i>sula</i>	RED-FOOTED BOOBY	LC
<i>Tangara</i>	<i>cucullata</i>	LESSER ANTILLEAN TANAGER	LC
<i>Tiaris</i>	<i>bicolor</i>	BLACK-FACED GRASSQUIT	LC
<i>Tringa</i>	<i>erythropus</i>	SPOTTED REDSHANK	LC
<i>Tringa</i>	<i>flavipes</i>	LESSER YELLOWLEGS	LC
<i>Tringa</i>	<i>glareola</i>	WOOD SANDPIPER	LC
<i>Tringa</i>	<i>melanoleuca</i>	GREATER YELLOWLEGS	LC
<i>Tringa</i>	<i>solitaria</i>	SOLITARY SANDPIPER	LC
<i>Troglodytes</i>	<i>aedon</i>	HOUSE WREN	LC
<i>Tryngites</i>	<i>subruficollis</i>	BUFF-BREASTED SANDPIPER	NT
<i>Turdus</i>	<i>fumigatus</i>	COCOA THRUSH	LC
<i>Turdus</i>	<i>nudigenis</i>	BARE-EYED ROBIN	LC
<i>Turdus</i>	<i>plumbeus</i>	RED-LEGGED THRUSH	LC
<i>Tyrannus</i>	<i>dominicensis</i>	GREY KINGBIRD	LC
<i>Tyrannus</i>	<i>melancholicus</i>	TROPICAL KINGBIRD	LC
<i>Tyrannus</i>	<i>savana</i>	FORK-TAILED FLYCATCHER	LC
<i>Tyto</i>	<i>alba</i>	BARN OWL	LC
<i>Vanellus</i>	<i>vanellus</i>	NORTHERN LAPWING	LC
<i>Vireo</i>	<i>altiloquus</i>	BLACK-WHISKERED VIREO	LC
<i>Vireo</i>	<i>flavifrons</i>	YELLOW-THROATED VIREO	LC
<i>Vireo</i>	<i>olivaceus</i>	RED-EYED VIREO	LC
<i>Volatinia</i>	<i>jacarina</i>	BLUE-BLACK GRASSQUIT	LC
<i>Wilsonia</i>	<i>canadensis</i>	CANADA WARBLER	LC
<i>Xanthocephalus</i>	<i>xanthocephalus</i>	YELLOW-HEADED BLACKBIRD	LC
<i>Zenaida</i>	<i>auriculata</i>	EARED DOVE	LC
<i>Zenaida</i>	<i>aurita</i>	ZENAIDA DOVE	LC

GENUS	SPECIES	COMMON NAME	STATUS
<i>Aetobatus</i>	<i>narinari</i>	BONNETRAY, MAYLAN, SPOTTED EAGLE RAY	NT
<i>Carcharhinus</i>	<i>falciformis</i>	SILKY SHARK	LR/lc
<i>Carcharhinus</i>	<i>leucas</i>	BULL SHARK	LR/nt
<i>Carcharhinus</i>	<i>limbatus</i>	BLACKTIP SHARK	LR/nt
<i>Carcharhinus</i>	<i>longimanus</i>	OCEANIC WHITETIP SHARK, WHITE-TIPPED SHARK, WHITETIP OCEANIC SHARK, WHITETIP SHARK	VU
<i>Carcharhinus</i>	<i>perezi</i>	CARIBBEAN REEF SHARK	NT
<i>Carcharodon</i>	<i>carcharias</i>	GREAT WHITE SHARK	VU
<i>Dasyatis</i>	<i>americana</i>	SOUTHERN STINGRAY	DD
<i>Dasyatis</i>	<i>say</i>	BLUNTNOSE STINGRAY	LC
<i>Etmopterus</i>	<i>bullisi</i>	LINED LANTERNSHARK	DD
<i>Galeocerdo</i>	<i>cuvier</i>	TIGER SHARK	LR/nt
<i>Ginglymostoma</i>	<i>cirratum</i>	NURSE SHARK	DD
<i>Himantura</i>	<i>schmardae</i>	CHUPARE STINGRAY	DD
<i>Isurus</i>	<i>oxyrinchus</i>	SHORTFIN MAKO	LR/nt
<i>Negaprion</i>	<i>brevirostris</i>	LEMON SHARK	LR/nt
<i>Prionace</i>	<i>glauca</i>	BLUE SHARK	LR/nt
<i>Rhincodon</i>	<i>typus</i>	WHALE SHARK	VU
<i>Sphyrna</i>	<i>lewini</i>	SCALLOPED HAMMERHEAD	LR/nt
<i>Sphyrna</i>	<i>mokarran</i>	GREAT HAMMERHEAD, HAMMERHEAD SHARK, SQUAT-HEADED HAMMERHEAD SHARK	EN
<i>Urobatis</i>	<i>jamaicensis</i>	YELLOW STINGRAY	LC
<i>Ardops</i>	<i>nicholli</i>	TREE BAT	LR/nt
<i>Feresa</i>	<i>attenuata</i>	PYGMY KILLER WHALE, SLENDER BLACKFISH	DD
<i>Globicephala</i>	<i>macrorhynchus</i>	PACIFIC PILOT WHALE, SHORT-FINNED PILOT WHALE	LR/cd
<i>Grampus</i>	<i>griseus</i>	GREY DOLPHIN, RISSO'S DOLPHIN	DD
<i>Kogia</i>	<i>sima</i>	DWARF SPERM WHALE	LR/lc

GENUS	SPECIES	COMMON NAME	STATUS
<i>Lagenodelphis</i>	<i>hosei</i>	FRASER'S DOLPHIN, SARAWAK DOLPHIN	DD
<i>Megaptera</i>	<i>novaeangliae</i>	BUNCH, HUMP WHALE, HUMPBACK WHALE, HUNCHBACKED WHALE	VU
<i>Monophyllus</i>	<i>plethodon</i>	INSULAR SINGLE LEAF BAT	LR/nt
<i>Noctilio</i>	<i>leporinus</i>	GREATER BULLDOG BAT	LR/lc
<i>Oligoryzomys</i>	<i>victus</i>	ST. VINCENT PYGMY RICE RAT	EN
<i>Orcinus</i>	<i>orca</i>	KILLER WHALE, ORCA	LR/cd
<i>Peponocephala</i>	<i>electra</i>	MELON-HEADED WHALE	LR/lc
<i>Pseudorca</i>	<i>crassidens</i>	FALSE KILLER WHALE	LR/lc
<i>Pteronotus</i>	<i>parnellii</i>	PARNELL'S MUSTACHED BAT	LR/lc
<i>Stenella</i>	<i>attenuata</i>	BRIDLED DOLPHIN, NARROW-SNOURED DOLPHIN, PANTROPICAL SPOTTED DOLPHIN	LR/cd
<i>Stenella</i>	<i>clymene</i>	ATLANTIC SPINNER DOLPHIN, CLYMENE DOLPHIN, HELMET DOLPHIN	DD
<i>Stenella</i>	<i>coeruleoalba</i>	EUPHROSYNE DOLPHIN, STRIPED DOLPHIN	LR/cd
<i>Stenella</i>	<i>frontalis</i>	ATLANTIC SPOTTED DOLPHIN, BRIDLED DOLPHIN	DD
<i>Stenella</i>	<i>longirostris</i>	LONG-BEAKED DOLPHIN, LONG-SNOURED DOLPHIN, SPINNER DOLPHIN	LR/cd
<i>Steno</i>	<i>bredanensis</i>	ROUGH-TOOTHED DOLPHIN	DD
<i>Trichechus</i>	<i>manatus</i>	AMERICAN MANATEE, WEST INDIAN MANATEE	VU
<i>Tursiops</i>	<i>truncatus</i>	BOTTLE-NOSED DOLPHIN, BOTTLENOSE DOLPHIN, BOTTLENOSED DOLPHIN	DD
<i>Ziphius</i>	<i>cavirostris</i>	CUVIER'S BEAKED WHALE, GOOSE-BEAKED WHALE, GOOSEBEAK WHALE	DD
<i>Chelonia</i>	<i>mydas</i>	GREEN TURTLE	EN
<i>Chironius</i>	<i>vincenti</i>	ST VINCENT BLACKSNAKE	CR
<i>Dermochelys</i>	<i>coriacea</i>	LEATHERBACK, LEATHERY TURTLE, LUTH, TRUNKBACK TURTLE	CR
<i>Eretmochelys</i>	<i>imbricata</i>	HAWKSBILL TURTLE	CR

GENUS	SPECIES	COMMON NAME	STATUS
<i>Guaiacum</i>	<i>officinale</i>	COMMONER LIGNUM VITAE, GUAIAAC TREE	EN
<i>Picrasma</i>	<i>excelsa</i>		VU
<i>Pouteria</i>	<i>semecarpifolia</i>		VU
<i>Protium</i>	<i>attenuatum</i>		DD
<i>Swietenia</i>	<i>macrophylla</i>	BIG LEAF MAHOGANY, BIG-LEAF MAHOGANY, BIGLEAF MAHOGANY, BRAZILIAN MAHOGANY, HONDURAS MAHOGANY, LARGE-LEAVED MAHOGANY	VU
<i>Swietenia</i>	<i>mahagoni</i>	AMERICAN MAHOGANY, CUBAN MAHOGANY, SMALL-LEAVED MAHOGANY, WEST INDIAN MAHOGANY	EN

## APPENDIX 6. FRESHWATER SPECIES LISTS

### ANTIGUA AND BARBUDA

Family	Scientific Name	Common Name	Status
Carcharhinidae	<i>Carcharhinus leucas</i>	Bull shark	native
Centropomidae	<i>Centropomus ensiferus</i>	Swordspine snook	native
Centropomidae	<i>Centropomus parallelus</i>	Fat snook	native
Centropomidae	<i>Centropomus pectinatus</i>	Tarpon snook	native
Mugilidae	<i>Joturus pichardi</i>	Bobo mullet	native
Megalopidae	<i>Megalops atlanticus</i>	Tarpon	native
Mugilidae	<i>Mugil cephalus</i>	Flathead mullet	questionable
Mugilidae	<i>Mugil liza</i>	Liza	native
Cichlidae	<i>Oreochromis aureus</i>	Blue tilapia	introduced
Cichlidae	<i>Oreochromis mossambicus</i>	Mozambique tilapia	introduced
Poeciliidae	<i>Poecilia reticulata</i>	Guppy	native
Cichlidae	<i>Tilapia rendalli</i>	Redbreast tilapia	introduced
Cichlidae	<i>Tilapia zillii</i>	Redbelly tilapia	introduced

### DOMINICA

Family	Scientific Name	Common Name	Local Name	Status
Anguillidae	<i>Anguilla rostrata</i>	American eel		native
Gobiidae	<i>Awaous banana</i>	River goby		native
Carcharhinidae	<i>Carcharhinus leucas</i>	Bull shark		native
Centropomidae	<i>Centropomus ensiferus</i>	Swordspine snook		native
Centropomidae	<i>Centropomus parallelus</i>	Fat snook		native
Centropomidae	<i>Centropomus pectinatus</i>	Tarpon snook		native
Gobiesocidae	<i>Gobiesox nudus</i>	Clingfish		native
Mugilidae	<i>Joturus pichardi</i>	Bobo mullet		native
Megalopidae	<i>Megalops atlanticus</i>	Tarpon		native
Mugilidae	<i>Mugil cephalus</i>	Flathead mullet		questionable

Family	Scientific Name	Common Name	Local Name	Status
Mugilidae	<i>Mugil liza</i>	Liza		native
Cichlidae	<i>Oreochromis aureus</i>	Blue tilapia		introduced
Cichlidae	<i>Oreochromis mossambicus</i>	Mozambique tilapia		introduced
Gobiidae	<i>Sicydium punctatum</i>		Tritri	native

## GRENADA

Family	Scientific Name	Common Name	Local Name	Status
Carcharhinidae	<i>Carcharhinus leucas</i>	Bull shark		native
Centropomidae	<i>Centropomus ensiferus</i>	Swordspine snook		native
Centropomidae	<i>Centropomus parallelus</i>	Fat snook		native
Centropomidae	<i>Centropomus pectinatus</i>	Tarpon snook		native
Sciaenidae	<i>Cynoscion acoupa</i>	Acoupa weakfish		native
Gerreidae	<i>Eucinostomus argenteus</i>	Silver mojarra		native
Gerreidae	<i>Eugerres plumieri</i>	Striped mojarra		native
Gerreidae	<i>Gerres cinereus</i>	Yellow fin mojarra	Hedow	native
Mugilidae	<i>Joturus pichardi</i>	Bobo mullet		native
Megalopidae	<i>Megalops atlanticus</i>	Tarpon		native
Mugilidae	<i>Mugil cephalus</i>	Flathead mullet		questionable
Mugilidae	<i>Mugil liza</i>	Liza		native
Carangidae	<i>Oligoplites palometa</i>	Maracaibo leatherjacket		native
Cichlidae	<i>Oreochromis mossambicus</i>	Mozambique tilapia		introduced
Cichlidae	<i>Oreochromis niloticus niloticus</i>	Nile tilapia		introduced
Haemulidae	<i>Pomadasys croco</i>	Burro grunt		native

## ST KITTS AND NEVIS

Family	Scientific Name	Common Name	Local Name	Status
Carcharhinidae	<i>Carcharhinus leucas</i>	Bull shark		native
Centropomidae	<i>Centropomus ensiferus</i>	Swordspine snook		native
Centropomidae	<i>Centropomus parallelus</i>	Fat snook		native
Centropomidae	<i>Centropomus pectinatus</i>	Tarpon snook		native
Mugilidae	<i>Joturus pichardi</i>	Bobo mullet		native

Family	Scientific Name	Common Name	Local Name	Status
Megalopidae	<i>Megalops atlanticus</i>	Tarpon	Bass	native
Mugilidae	<i>Mugil cephalus</i>	Flathead mullet		questionable
Mugilidae	<i>Mugil liza</i>	Liza		Native

## ST LUCIA

Family	Scientific Name	Common Name	Local Name	Status
Carcharhinidae	<i>Carcharhinus leucas</i>	Bull shark		native
Centropomidae	<i>Centropomus ensiferus</i>	Swordspine snook		native
Centropomidae	<i>Centropomus parallelus</i>	Fat snook		native
Centropomidae	<i>Centropomus pectinatus</i>	Tarpon snook		native
Sciaenidae	<i>Cynoscion acoupa</i>	Acoupa weakfish		native
Gerreidae	<i>Gerres cinereus</i>	Yellow fin mojarra	Hedow	native
Mugilidae	<i>Joturus pichardi</i>	Bobo mullet		native
Megalopidae	<i>Megalops atlanticus</i>	Tarpon		native
Mugilidae	<i>Mugil cephalus</i>	Flathead mullet		questionable
Mugilidae	<i>Mugil liza</i>	Liza		native
Synbranchidae	<i>Ophisternon aenigmaticum</i>	Obscure swamp eel		introduced
Cichlidae	<i>Oreochromis mossambicus</i>	Mozambique tilapia		introduced
Cichlidae	<i>Oreochromis niloticus niloticus</i>	Nile tilapia		introduced
Rivulidae	<i>Rivulus cryptocallus</i>			native

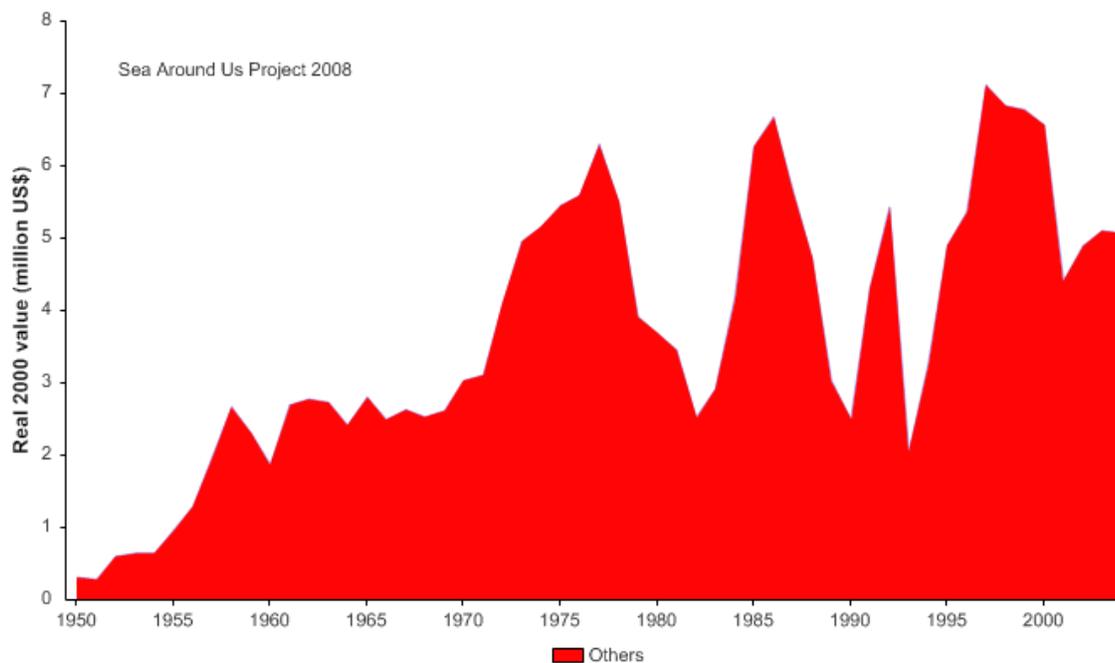
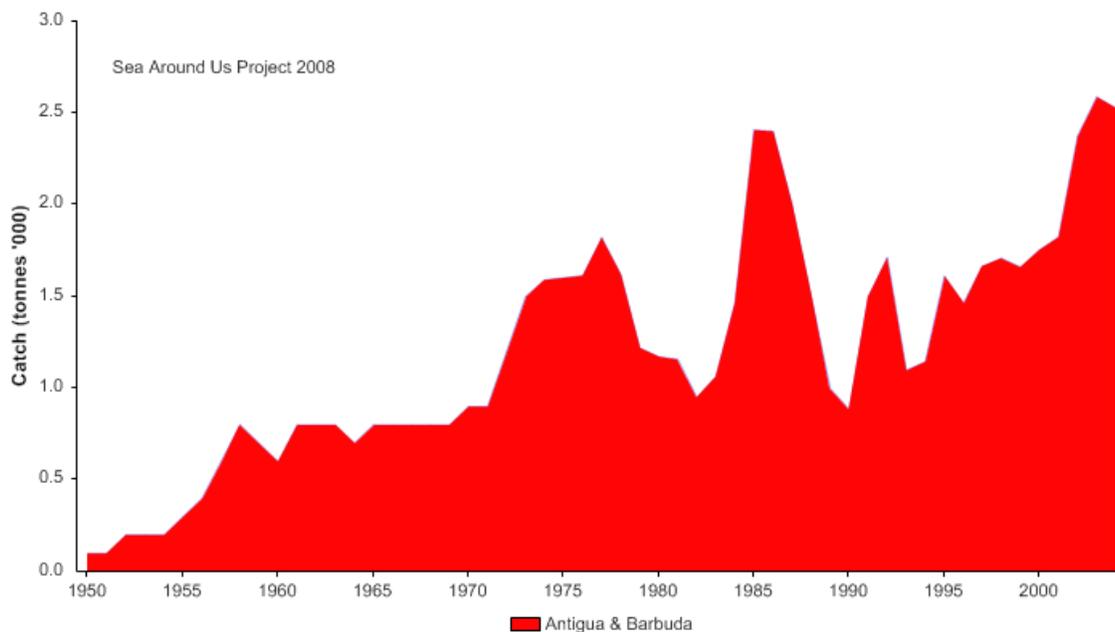
## ST VINCENT

Family	Scientific Name	Common Name	Local Name	Status
Gobiidae	<i>Awaous banana</i>	River goby		native
Carcharhinidae	<i>Carcharhinus leucas</i>	Bull shark		native
Centropomidae	<i>Centropomus ensiferus</i>	Swordspine snook		native
Centropomidae	<i>Centropomus parallelus</i>	Fat snook		native
Centropomidae	<i>Centropomus pectinatus</i>	Tarpon snook		native
Sciaenidae	<i>Cynoscion acoupa</i>	Acoupa weakfish		native
Gerreidae	<i>Gerres cinereus</i>	Yellow fin mojarra	Hedow	native
Mugilidae	<i>Joturus pichardi</i>	Bobo mullet		native

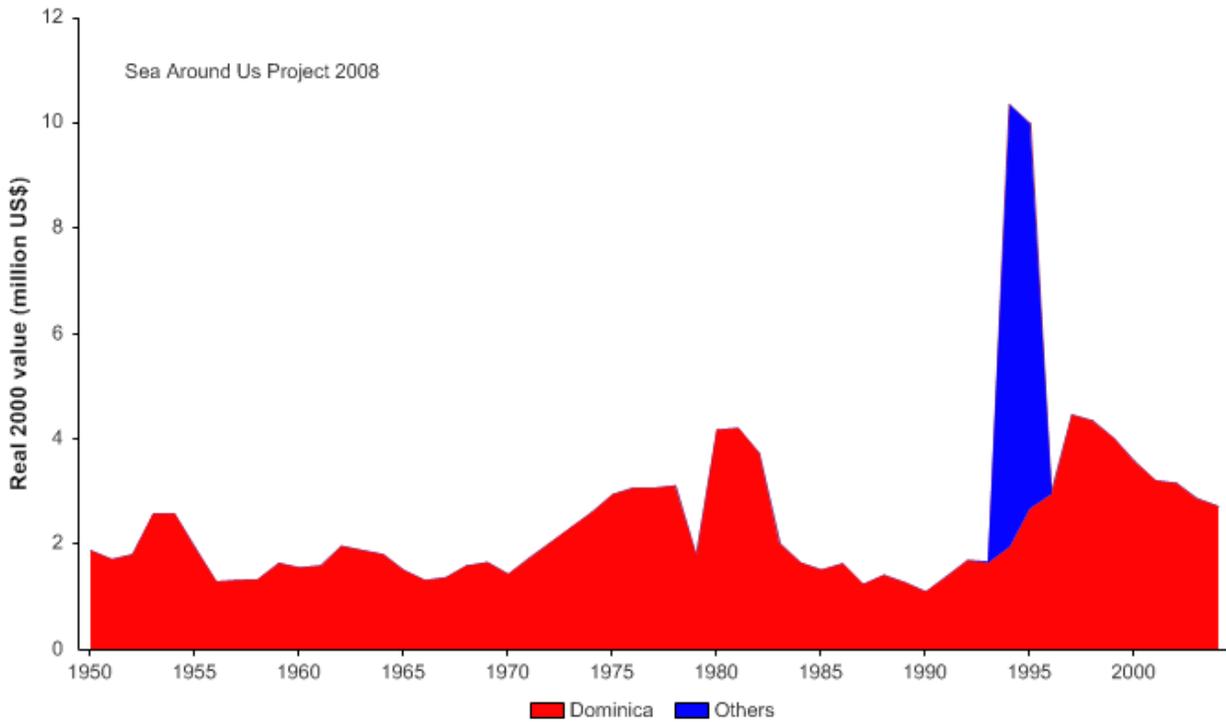
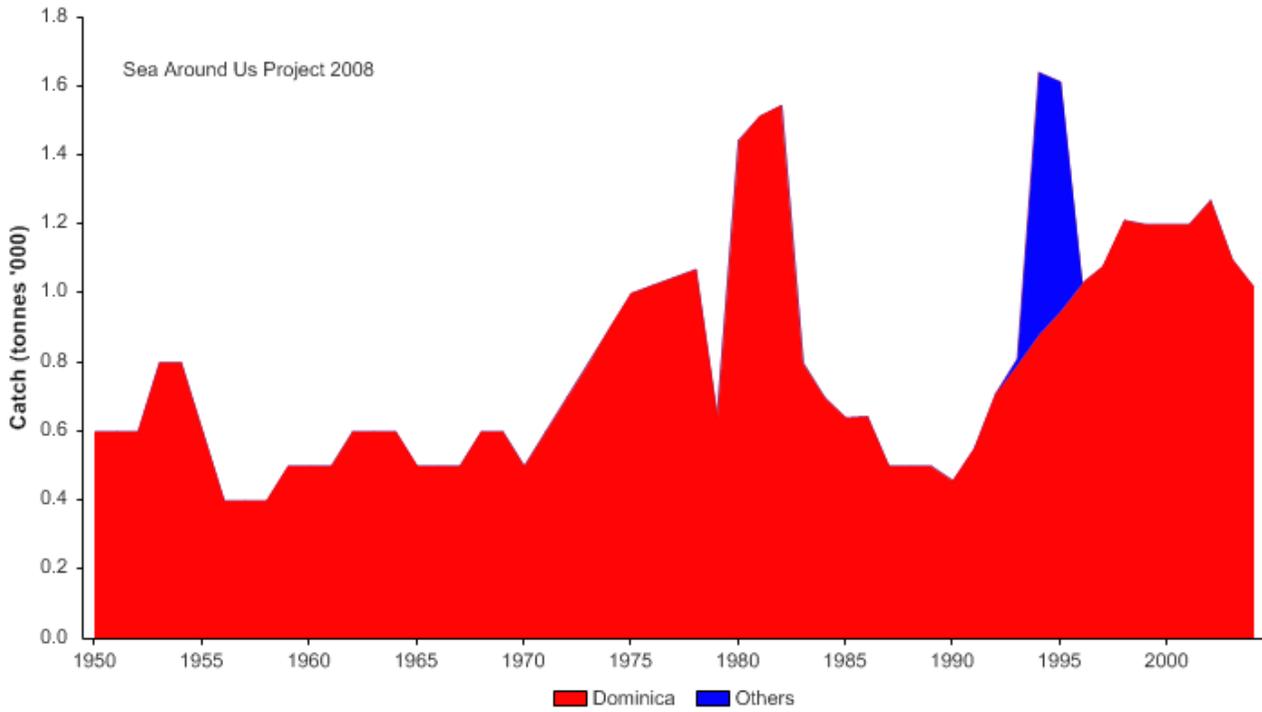
Family	Scientific Name	Common Name	Local Name	Status
Megalopidae	<i>Megalops atlanticus</i>	Tarpon		native
Mugilidae	<i>Mugil cephalus</i>	Flathead mullet		questionable
Mugilidae	<i>Mugil liza</i>	Liza		native
Cichlidae	<i>Oreochromis niloticus niloticus</i>	Nile tilapia		introduced
Gobiidae	<i>Sicydium plumieri</i>	Sirajo	Tri-tri	native

## APPENDIX 7. COUNTRY FISH CATCH AND REAL 2000 VALUE (SEA AROUND US PROJECT 2008)

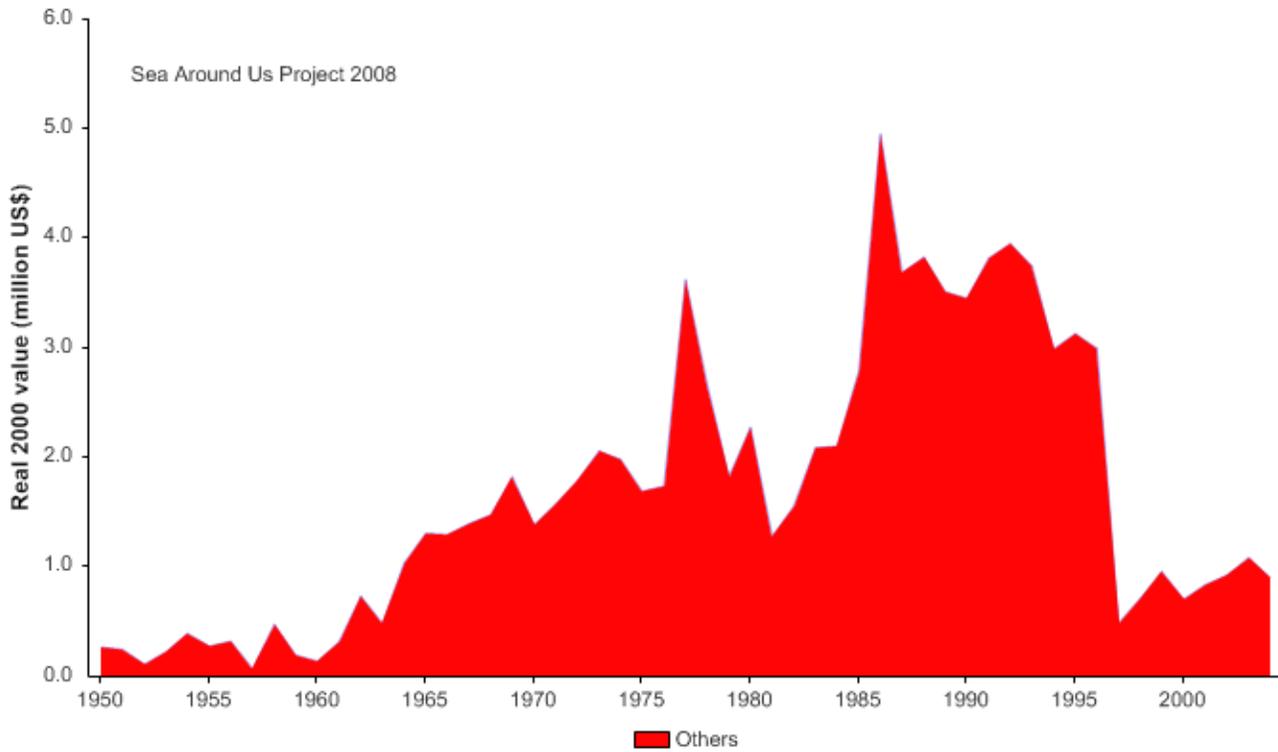
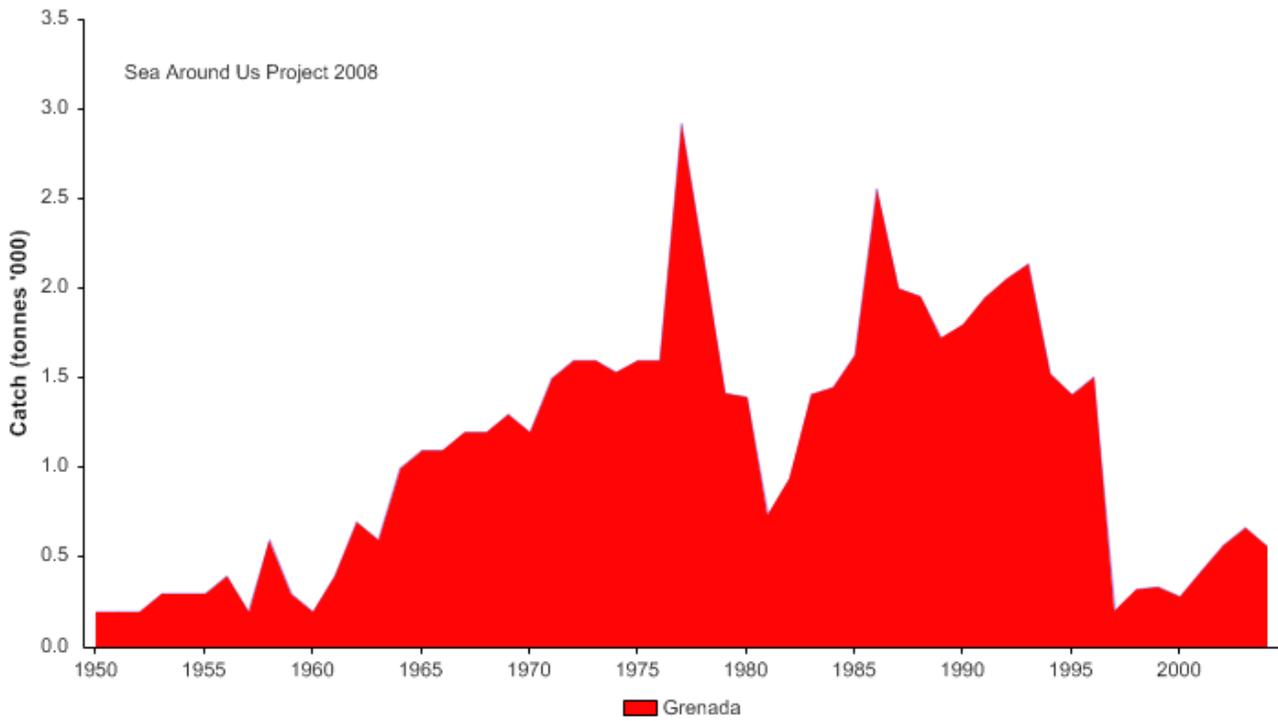
### ANTIGUA AND BARBUDA



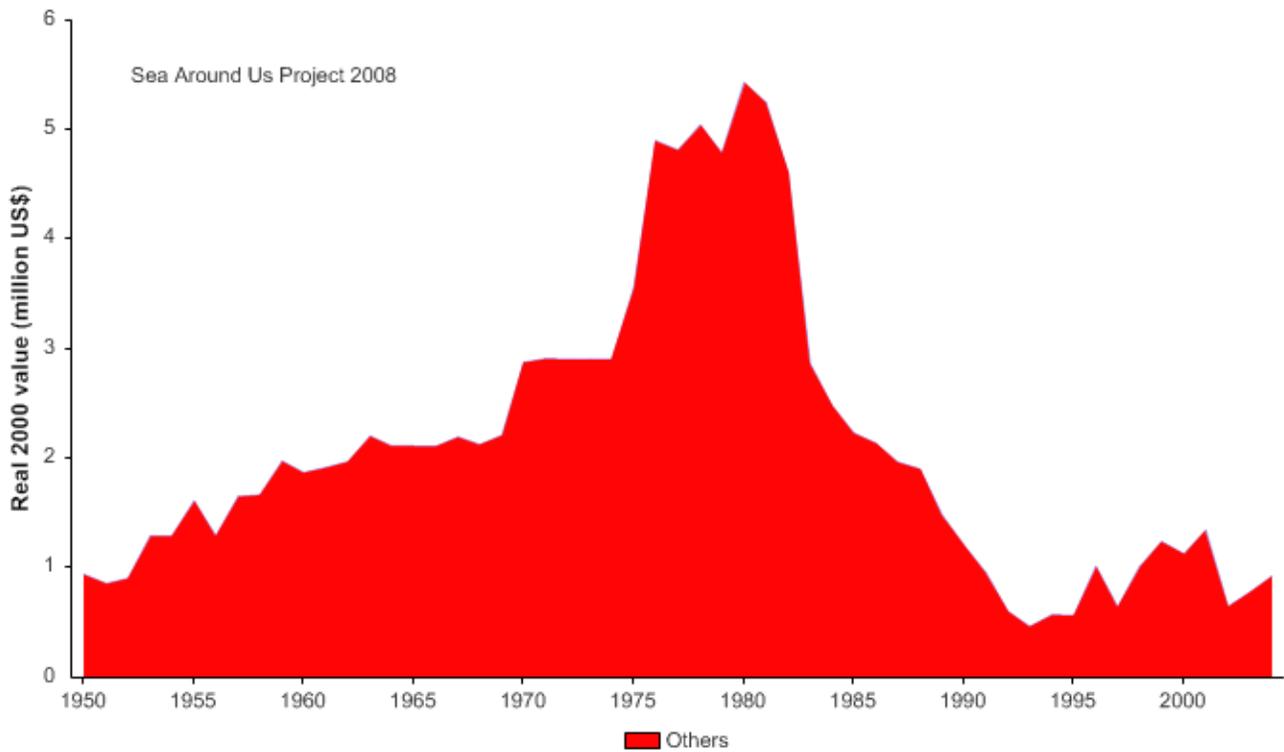
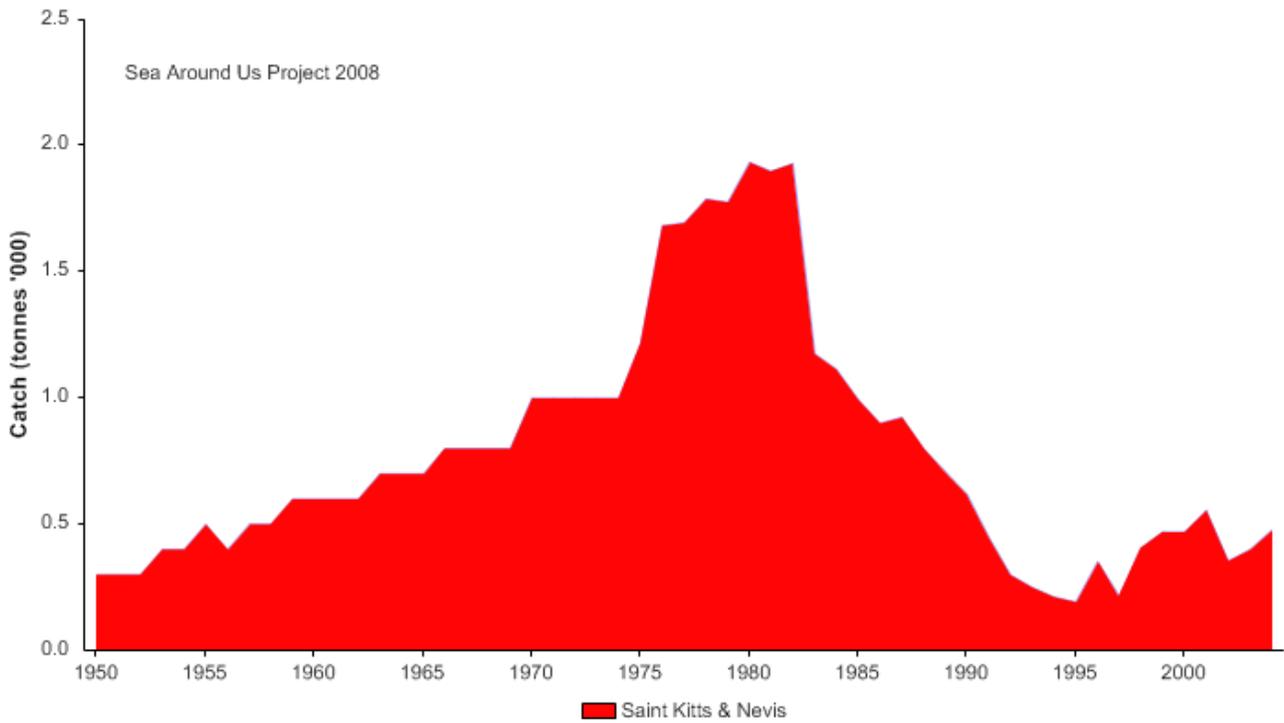
# DOMINICA



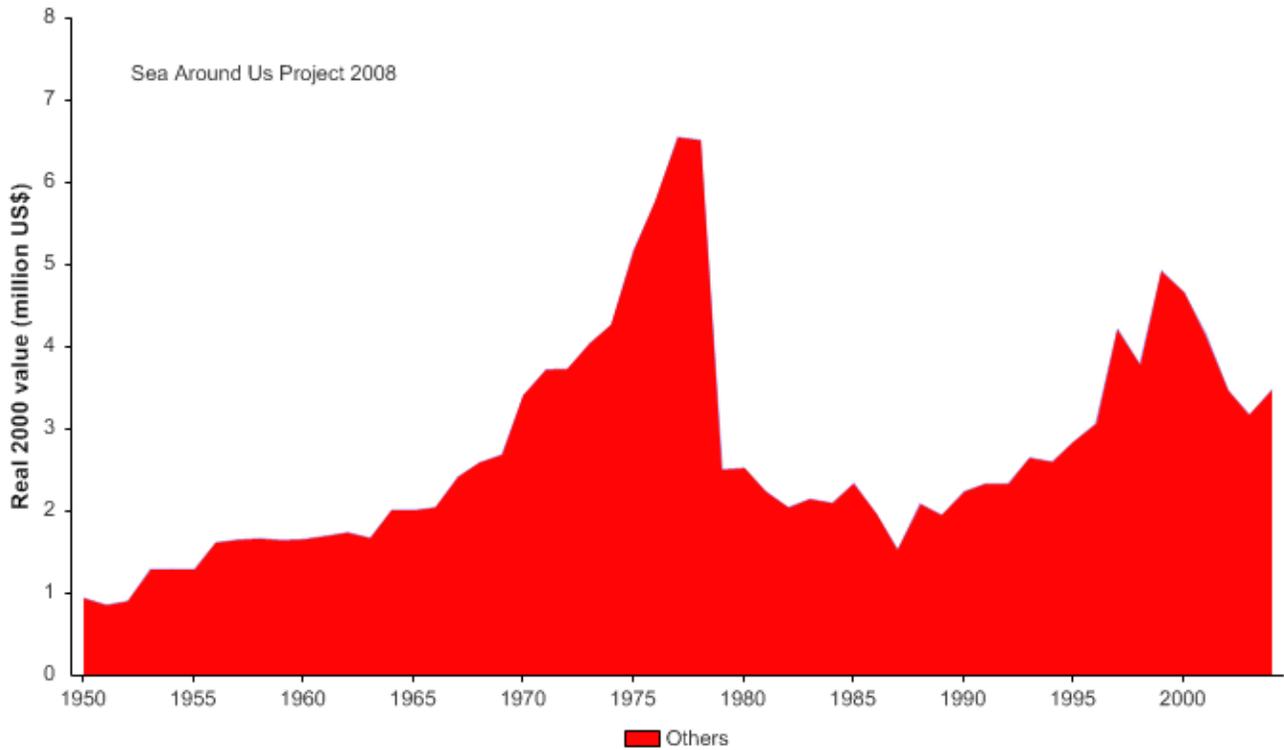
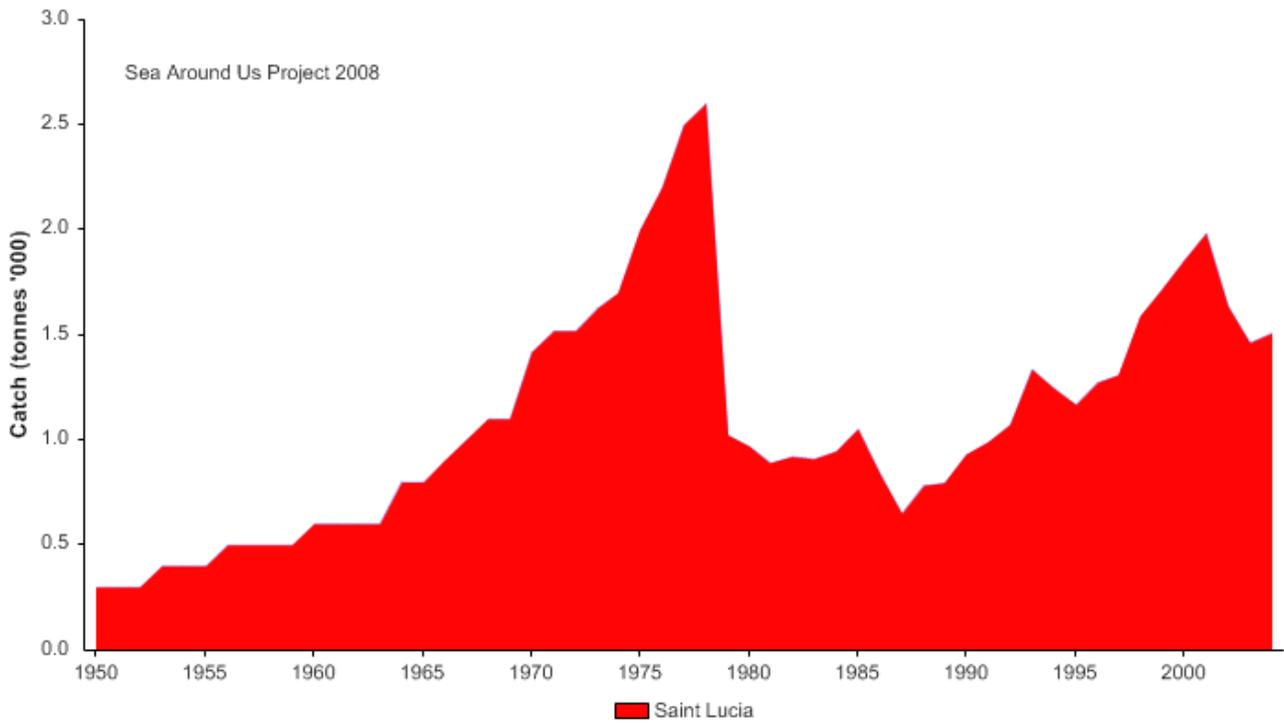
# GRENADA



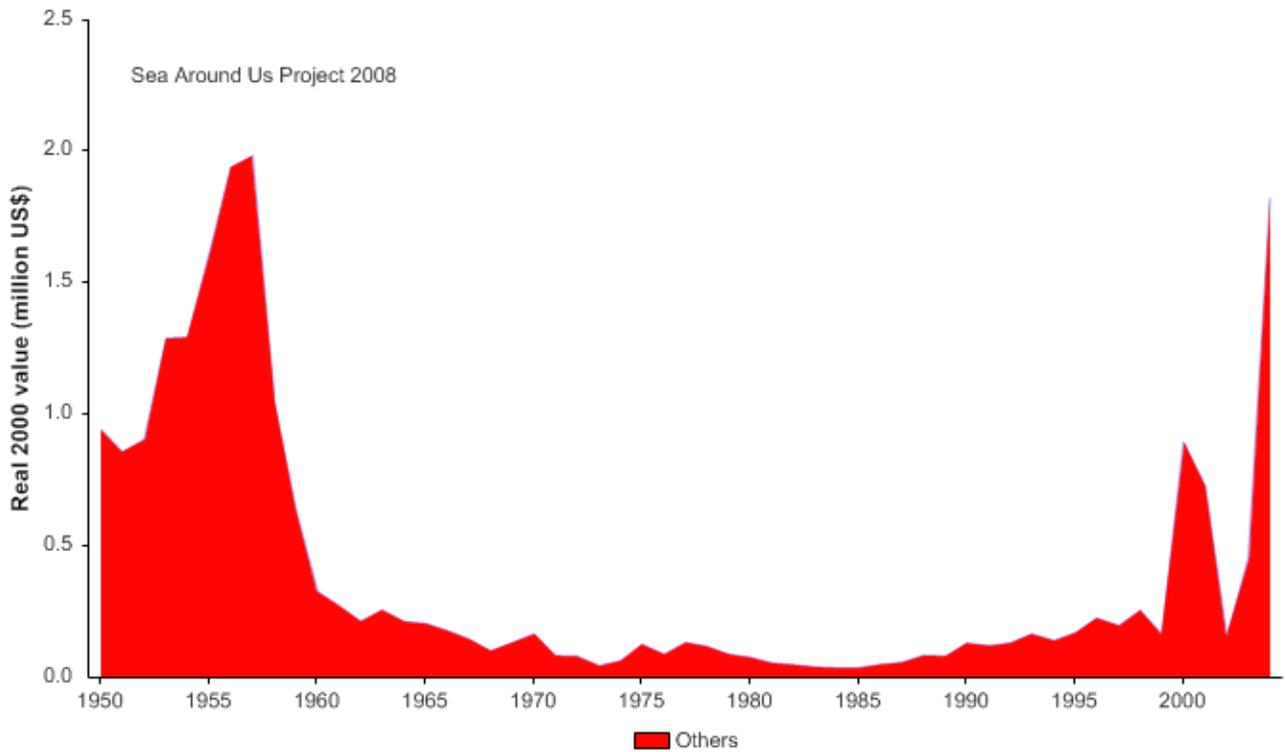
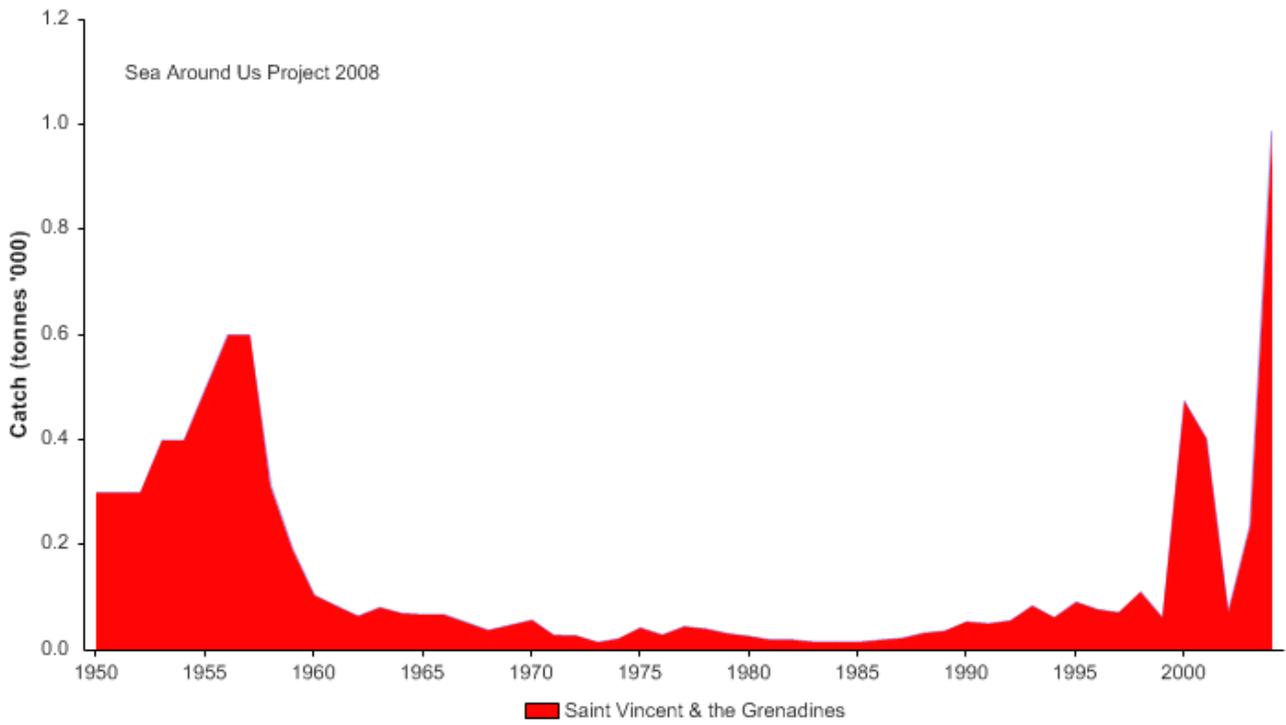
## ST KITTS AND NEVIS



# ST LUCIA



## ST VINCENT



## APPENDIX 8. LISTS OF ENVIRONMENTAL LEGISLATION

### ANTIGUA AND BARBUDA – REVISED 1992

Agriculture Small Holdings Act	Cap 45	1953
Agriculture Small Holdings (Regulations of rentals)	Cap 12	1953
Animals (Diseases and Importation) Act	Cap 18	1953
Animals (International Movement and Diseases) Act	Cap 19	1987
Antigua and Barbuda Merchant Shipping Act	Cap 28	1986
Barbuda Local Government Act	Cap 44	1976
Beach Control Act	Cap 45	1959
Beach Protection Act	Cap 46	1957
Boats Regulation Act	Cap 55	1933
Botanical Gardens Act	Cap 56	1900
Bush Fires Act	Cap 62	1901
Cattle Trespass Act	Cap 77	1982
Cotton Planting (Regulations) Act	Cap 110	1931
Cotton Seed Control Act	Cap 112	1932
Cotton Protection Act	Cap 111	1922
Crown Lands (Regulation) Act	Cap 120	1917
Disaster Management Act		13 of 2002
Dumping at Sea Act	Cap 141	1975
Environmental Protection Levy		22 of 2002
Fisheries Act	Cap 173	1984
Forestry Act	Cap 178	1941
Geographical Indications Act		21 of 2003
Importation of Live Fish Act	Cap 209	1975
Importation Prohibition (Epidemic Diseases) Act	Cap 210	1888
Land Acquisition Act	Cap 233	1958
Litter Act	Cap 250	1983

Litter (Amendment) Act	8 of 2004
Marine Areas (Preservation & Enhancement) Act	Cap 259 1972
Maritime Areas Act	Cap 260 1982
Minerals (Vesting) Act	Cap 282 1949
National Parks Act	Cap 290 1984
National Parks (Amendment) Act	11 of 2004
National Solid Waste Management Authority Act	10 of 1995
National Solid Waste Management Authority (Amendment) Act	6 of 2005
Oil Pollution of Marine Areas	14 of 1995
Pesticides Control Act	Cap 325 1973
Physical Planning Act	6 of 2003
Plant Protection Act	Cap 329 1941
Protection of Animals Act	Cap 349 1935
Public Parks Act	Cap 35 1965
Quarantine Act	Cap 361 1946
Town and Country Planning Act	Cap 432 1948
Turtle Act	Cap 449 1927
Wild Birds Protection Act	Cap 472 1913
<i>PENDING</i>	
Protection of New Plant Varieties Act	2007
The Barbuda Land Act	2007

### **DOMINICA 1ST JANUARY 2001**

Animals Depasturage Ordinance (Cap 89)	1961 rev
Animals Diseases Act (Cap 61:02)	1990 rev
Amendment 1995 (By SRO)	1990 rev
Sec 3 Animal Diseases (infected Area) order 1981	1990 rev
Sec 10 Animal Disease orders	1990 rev
Antrax (1955)	1990 rev

Epizootic Abortion(1955)	1990 rev
Rabies (1955)	1990 rev
Swine Fever(1955)	1990 rev
Newcastle Disease (Fowl Pest) (1972)	1990 rev
Animal Diseases Act	
Sec 10: Animal Diseases (Quarantine areas) Order	1990 rev
12: importation of animals (Prohibition) order	1990 rev
12: importation of frogs (prohibition)reg (2004	6/2004
12: Foot and Mouth Disease reg(1954)	1990 rev
Beach Control Act (Chap0 42:04)	1990 rev
Amendment 1992	18/1992
Sec 12: Beach Control (Prohibition) Order (1993)	19/1993
Biological Weapons Act (Chap 42:621)	1990 rev
Botanical Gardens Ordinance (Cap 166)(o)(o)	1961 rev
Amendment 1967(By implication)	
Sec 3 Botanical Gardens Rules (vol 5/895)	5/1967
Amendment 1967 (by order)(by implication)	1961 rev
Cricket admission charge rules (vol 5/899)	5/1967
Bush Fires Act (Chap 42:61)	1990 rev
Caribbean Community Act 2005	22/2005
Crown Lands Ordinance (Cap 169)	1961 REV
Renamed 1990 (on reason)	
State Lands Act (Chap 53:01	1990 rev
Dogs (confinement) act (Chap 61:04)	1990 rev
Dogs (rabies control) Ordinance (Cap 93)(o)(o)	1961 rev
Amendment 1967 (By implication)	5 /1967
Sec 3: unmuzzled Dogs destruction prog. (vol.5/347)	1961 rev
Amendment 1967(By Order) (By Implication)	5/1967
Sec 3:Rabies (UK) Proclamation 1970	13/1970

Emergency Powers (Disaster) Act Chap. 15:03	1990 rev	
Epidemic Diseases(import of foods prohibition) Act Chap 40:03)	1990 rev.	
Fisheries Act (Chap 61:60)		1990 rev
Fisheries Notices		
Sec 18 Fisheries Mgmt Authority (Soufriere/ Scott's head Marine Reserve) Notice	1998	17/1998
18 Fisheries (Soufriere Scott's head Fisheries Mgmt Areas)		18/1998
20 Fisheries (Soufriere/Scott's head Marine Reserve) Orders	1998	20/1998
38 Fisheries (Marine Reserve) regulation	2001	7/2001
38 Fisheries(Berthing) regulations	2001	23/2001
Amendment	2005	18/2005
Fisheries(authorized Officers) (Souferiere/Scott's head Marine Reserve) Notice	1998	6/1998
40 Presentation of ? under Fishing Ordinance(cap79) (1961) rev		
Manley Fishers Rules	1939 No 5/239	
Forest Industries Corp Act (Chap 85:01)		1990 rev
Forestry and Wildlife Act (Chap 60:02)		1990 rev
Amendment	1988 (not listed but inc 1990 rev)	12/1988
Sec 45 Hunting of frogs(Prohibition) Notice	2004	4/2004
Sec 45 Hunting and fishing Season Notice	2005	20/2005
Forests Act (Chap 60:01)		1990 rev
Sec 3 forest reserve(Nothern Forest) Order		1977
4 Stewart Hall Catchment Area (Protected Forest Order)		(1975)
5 Stewart Hall Water Catchment Rules (1975)		R11/1995
5 Water Catchment Rules	1995	11/1995
13 Forest Rules (1972		1999 rev
Fruit Trade Regulation Act (Chap 53:03)	1990 rev	
Sec 8 Citrus fruit regs	1951	
Fruit trade (over time pay) rules		1988
Geothermal Energy Act (Chap 85:02)		1990 rev
Housing Dev. Corp (repeal & ? of property) Act Chap 31:61	1990 ver	

Land acquisition Act (Chap 53:02)	1990 rev
Land Mgmt Authority Act (Chap 58:02)	1990 rev
Land survey Act (Chap 53:04)	1990 rev
Amendment 2005	12/2005
Sec 30 preservation of ex Rights & etc	1990 ver
Litter Act      1990	
? in 1990 rev as Chap 40:61 1995 by SRO	1/1995
Amendment    1991	6/1995
1997	20/1997
Schedule: form of fixed penalty tickets added 1991	
Merchant Shipping Act 1974 UK	
Sec 10 Oil Pollution (parties to conventions) orders (1975 No 1036)	
Amendment    (1976 No 1039)	
(1977 Nos 4, 5 & 826)	
Merchant Shipping (Oil Pollution) Act 1971 (UK)	
Sec 19 parties to conventions order (1975 No 1036)	
Amendment    1976 No 1039	
1977 Nos. 48 & 826	
Mines and Minerals Act      1996	5/1996
Amendment 2005	17/2005
Mining of Pumice Act (Chap 57:02)	1990 rev
Miscellaneous(Agric enactments)Amendments Act 1973 (o) (o) 35/1973	
Montreal Protocol ( Substances that deplete the ozone layer) Act 2006	14/2006
National Parks & Protected Areas Act (Chap 42:02)	
Amendment 2001 (ref 4.1.2000)	8/2001
Schedule National Parks & Protected Areas	1990 rev
Sec 4 National Parks Protected Areas	1990 rev
(Morne Diablotin National Park) Order	
2001	21/2001

2002	36/2003
Sec 16 (Eco tourist site)(User Fee) Regs 1997	27/1997
16 National Parks Regs 2003	54/2003
19 National Parks and Protected Areas (Morne Diabolotin National Park) Order 2000	3/2000
Pesticides Control Act (Chap40:10)	1990 rev
Sec 7 Pesticides Control (labeling of pesticides) Regs 1987	
7 (registration & Licensing) Regs 1987	
Approved pesticides Notice 1993 (up to 10.12.1995) by GN G6/1993	
Plant Protection & Quarantine Act (Chap 58:40)	1990 rev
Sch	1990
Revoked & Replaced 2003	9/2003
2003	38/2003
Sec 7 Unroasted & Unprocessed Coffee Beans	
Importation and prohibition Order	44/1986
Pink Mealy Bug/Hibiscus Mealy Bug control order 1996	18/1996
Amendment 1996	61/1996
Amendment 1997	51/1997
Sec 29 Preservation of Precious Regulations	
Plant protection(Importation) reg (1942)	
Amendment 2003	8 & 37/2003
Plant Protection (importation prohibition) reg 1956.	

### **GRENADA 1ST JANUARY 2007**

Abatement of litter –(Cap 1)	2/1990
Agricultural Crops (Compensation) Acts (Cap5)	1/1990
Repealed and replaced 1995 (By SRO)	32 /1995
Agricultural Fires Act (Cap6)	2/1990
Airports Authority Act (Cap12)	2/1990

Airport Authority [Cap 12- (Subsidiary Legislation)]	
Animal (Diseases and Importation) Act [Cap 15]	1/1917
amendment 1991 (By Sec 7) (Inc in 1990 rev)	8/1990
Animal (Diseases and Importation) (Rabies) Order [Cap 15] – (Subsidiary Legislation)	
(Poultry) reg. (1953)	
Importation Control order reg 1/1960)	
Rabies, Anthrax, Swine Fever, Epizootic Abortions, Diseases of poultry) Reg.	2/1990
Bathing Places Act [Cap 28]	2/1990
Amendment 1990	2/1990
Sec 2 Bathing Places rules (1903)	
8/1990 Bathing Places [Cap 28] – Subsidiary Legislation	0
Beach Protection Act [CAP 29]	
Sec 2 General prohibition against removal of sand from any Beach with a permit	
Sec 3 Notice of reason f permits to remove sand from?	
Notice 1987	
Notice 1988	
Botanical Gardens – [CAP 35]- (formerly National Botanical and Zoological Gardens Act 1968 25/1968 2/1990	
Botanical Gardens – [CAP 35] – Subsidiary Legislation)	8/1990
Carriacou Land Settlement and Development –[CAP 42]	1/405
Civil Liability of Oil Pollution Damage (International Convention)Act7	7/1998
Commencement	20/1999
Crown Lands –[CAP 73]	3/1990
Crown Lands – [CAP 73] – Subsidiary Legislation)	8/1990
Crown Lands Forest Produce Rules [CAP-116] – Subsidiary Legislation)	
Crown Proceedings – [CAP 74]	3/1990
Amendment 1998 (By Implication)	3/1998
Environmental Levy Act 29	5/1997
Amendment 1998 (12/1998) and 2000 (12/2000) – Grenada Mo'or ? Exemption (57/2001)	
Sec 4 Environ levy exemption order 2001 (58/2001) and 2002 (20/2002)	

Fisheries Act (Cap 108)	3/1990
Formerly entitled	
Grenada Fisheries Act 1986	15/1986
Renamed 1990 on revision	
Amendment 1999	1/1999
Sec 23: Fisheries(M. Prot Areas) Order 2001	77/2001
27: Authorised Fisheries Officers(x officio) Res.? G27/	
40: Fisheries Regs	8/1990
Amendment 1996	24/1996
Amendment 2001	2/2001
27: Fisheries Regs	
Reg 16 (Closed season for lobsters, turtles etc. Notices	
Notice, 1994	G20/1994
Notice 1995	G20/1995
40: Fisheries(Fishing vessels Safety) Regs	8/1990
And see "Regulation of Fish export Notice 1988" E43/1988	
40: Fisheries (Marine Protected Areas)	
Regulations 2001	78/2001
42: Fish & fishery Products Regs 1999	17/1999
Amendment 2004	8/2004
Amendment (No 2) 2004	11/2004
Grand Etang Forest Reserve – [CAP 124]	4/1990
Grenada Solid Waste Management Authority – [Act 11 of 1995]	11/1995
Amendment 1995	30/1995
Sec 9. Grenada Solid Waste Mgmt Authority (Vestry ) Order 2001	32/200
Grenada Solid Waste Management Authority (Amendment) – [ACT 30 of 1995]	
Land Acquisition (Part as Abandonment of Land site) Act 1996	25/1996
Forest Soil and Water Conservation Act (Exp 116)	4/1990
I Sch Table of Forms	4/1990

2Sch Protected Areas	4/1990
Sec 7 Protected Forest Order	8/1990
Sec 8 Protected Forest Rules	8/1990
Sec 33 Crown Land Forest Produce Rule	8/1990
Housing (Hurricane Damage) Loans Act [CAP 142]4/1990 (27) Land 67. Acquisition – [CAP 159] 4/1990	
Amendment 1991 1998	16/1991
Land Development Control Act - [CAP 160]	4/1990
Land Development Control Act - [CAP 160] – (Subsidiary Legislation)	
Land Dev. Control (Fees) Regulations 2002	3/2002
Amendment	32/2002
Land Settlement – [CAP 161	] 4/1990
Land Settlement (Point Saline) Regulation [CAP 161] (Sec 9 Subsidiary Legislation)	9/1990
Sec 9 Land Settlement Regulations , Land Settlement Development Rules.	
National Disaster (Emergency Powers) Act [CAP 203]	5/1990
5/1990 (33) National Heritage Protection Act [ CAP 204]	
5/1990 (34) National Parks and Protected Areas – [CAP 206]	
Amendment 1991	(12/1991)
Amendment 1991 inc in 1990 Revision (52/1991) Sec 13 National Parks etc (Fees) Order 1992	(30/1992).
National Trust – [CAP 207	] 5/1990
Formerly Grenada National Trust Act 1907	20/1967
National Water and Sewerage Authority – [CAP 208]	
Section National Water and Sewerage Authority Regulations 1993	40/1993
National Water and Sewerage Authority (Amendment ) –	41& 52 /1991
National Water and Sewerage Authority (Amendment ) –	30 /1991
National Water and Sewerage Authority (Amendment ) –	15 / 199]
Noxious Weeds – [CAP 213]	5/1990
Noxious Weeds (Love Vine) Order [CAP 213]	9/1990
Oil Pollution Damage Compensation Fund (International Convention)	6 /1998]

Sec 15 commencement 21.5.1999	19/1999
Oyster Fishery Act [CAP 223]	6/1990
Oyster Fishery Rules [CAP 223]- (Subsidiary Legislation)	9/1990
Pesticides Control- [CAP 238]	6/1990
Pesticides Control (Approval of Pesticides) Regulation [CAP 238] (Subsidiary Legislation)	
Sec. 3 Pesticides Control (labeling of pesticides) Regs (1979)	9/1990
Sec. 3 Pesticides Control (approval of pesticides) Regs (1979)	9/1990
Reg 12 Commencement	
Physical Planning and Development Control	25/ 2002
Physical Planning and Development Control (Amendment)	30 of 200
Plant Protection – [CAP 242]	6/1990
Sec 3 Plant Protection (modifiable diseases and pest) orders	
Witches Broom(disease order)	9/1990
Moko (Disease) Order	9/1990
Love Vine (Pest) Order	9/1990
Mango Seed Weevil	28/2001
12 Cotton Seed Protection Order	9/1990
18: Plant Protection (Cotton Seed) Reg	9/1990
18: Cotton (Presevation of disease) Regs	9/1990
18: Plant Protection Regulation	9/1990
Plant Protection Regulation [CAP 242] – (Subsidiary Legislation)	
Plant Protection Amendment –[Act 3 of 2002]	
Ports Authority Act [CAP 247]	6/1990
Ports Regulation [CAP 247] (Subsidiary Legislation)	
Amendments 1991	52/1991
1992	(11/1992
1995	14/1995
Prohibition of Bird Exportation	9/ 1991
Amendment 1995	14/1995

Protection from Disease (Plants) CAP 25	6/1990
Sec 3 Protection from Disease orders	
Banana (Eye Spot), Bananas (Panama Disease), Limes (Wither Tip)	9/1990
Protected Forest Rules [CAP 116] (Subsidiary Legislation)	
Public Health – [CAP 263]	6/1990
Public Health – [CAP 263] – (Subsidiary Legislation)	
Amendment 2006	44/2006
Regulations 1990 Public health (?) Proclamation	9/1990
Quarantine Act [CAP 271]	6/1990
Roads Act [CAP 290]	7/1990
Roads [290] – (Subsidiary Legislation)	
Sec 50 Road Regulation	10/1990
Sec 51 Road Declarations 2000	4 and 7/2000
Slum Clearance and Housing – [CAP 306]	7/1990
Sec2 Local Authorities (Establishment) Order (1958)	6/1105
Repealed 1992 (By Act)	137/1992
Territorial Sea and Maritime Boundaries Act [CAP 318]	25/1989
Sec 4 Archeologic baselines) Order 1992	
Sec 6 Crossing Lines internal waters Order 1992	32/1992.
Tourst Board Act [CAP 321]	7/1990
Tourist Board (Amendment) Act	12/1992
Tourist Board (Amendment Act	20 /1992
Tourist Board (Amendment)	39/1993
Town and Country Planning Act[CAP 322]	7/1990
Repealed 2002 (By 563)	5/2002
Sec 2 . St Georges Corporation Local Authority) Order (1963)	
Sec 4 Town and Country Planning Regulations (1965)	
Trade(Non-refundable Container) Levy Act	
Wild Animals and Birds Sanctuary Act – [CAP 339]	7/1990

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Agricultural Development Act 19723	18/1973
Sec I Commencement ? (24.1.1974)	3/1974
Biological Weapons Act 1976	18/1976
Biological Weapons Act 1991	3/1991
Caribbean Community & Common Market Agreement Act 1982 14/1982	
1st Sch Member Territories of the Caribbean Community	
Amendment 1996	2/1996
Cattle Tressparo (Tresspero to small holdings by cattle)	
Act 1967	29/1967
Development of the States tourist potential	
(Servicing of planned public relations Ltd. ) Loan Act 1971	8/1971
Environmental Levy(used moter vehicles) Act 2001	3/2001
Fisheries Act 1984	4/1984
Amendment 1992	2/1992
Amendment 1997	10/1997
Sec I:Commencement	
Fisheries Act (No 4 of 1984) Appointed Day Order 1992	24/1992
40: Fisheries Regs 1995	11/1995
42: Preservation of existing subsidiary legislationunder	4/1984
(1) Fisheries Act (Cap 91) (supra)	2/799
(2) Turtle Act (Cap 99) (post)	2/831
Forestry Act (Cap 92)	2/803
Amendment 1974	4/1974
1976	7/1976
1986	8/1986

Repealed	1987	5/1987
Sec 17 Forestry (Fuel supply) (St Christopher) Regs	6/266	
17 Forestry (Nevis) Regs	6/267	
17 Forestry (St Christopher) Regs	6/270	
Fruit Trees(Destruction prohibition) Act (Cap93)	2/811	
Amendment 1976 (1.6 1977)	8/1977	7/1977
1986 (Ordinance renamed Act)		8/1986
Fumigation of Plants Act (Cap 94)	2/813	
Amendment 1974 By implication		4/1974
1976 ref 1.61.977)	8/1977	7/1977
1986 Ordinance renamed Act		8/1986
Sec 12 Fumigation of Plants Regs	6/272	
Government trends Regulation Act (Cap 126)		2/1975
Amendment 1974 (By Implication)		4/1974
1976 (? 1.6.1977)	8/1977	7/1976
1986 Ordinance renamed Act)		8/1986
Sec 3 Government Lands Regulations	6/376	
3 Brimstone Hill regulations		
1932 (A 11/1976)(R 52/1978)	6/375	
1978 (R 44/1983)		52/1978
1983 Gueritelands Regs	6/380	44/1983
Simpson Land, Sandy Point (Occupancy) regs	6/381	
Housing Act 1976		37/1976
Island Enhancement Fund Act 2003		3/2003
Land Acquisition Act (Cap 273)		4/2429
Amendment 1967 No 223) By Implication		App /1967
1969		10/1969

1974	4/1974
1975	17/1975
1976	7/1976
Greenhill Est St Peter 1998	47 & 48/1998
Limekiln Development Ltd. Lands(1999)	4, 7/1999
Fort Thomas Dev to ? Land (1999)	5,6/1999
Frigate Bay (2000)	17/2000
Frigate Bay (2000)	19/2000
Sandy Point, St Anne (1991)	1/1991
Land Development Act 1991	1/1991
Litter (Abatement) Act 1989	8/1989
Amendment 2000	20/2000
2001	6/2001
1st Sch Table of Forms	8/1989
Amendment 1990 (By SRO)	23/1990
2nd Sch Table Forms	8/1989
Amendment 1990 (By SRO)	23/1990
Sec I Commencement	(a)
Maritime Areas Act 1984	3/1984
Sec I Commencement	
29 Maritime area (establishment of safety zones Around insallations) Regs 1995	13/1995
National Conservation & Environmental. Protection Act 1987	5/1987
Amendment 1996	12/1996
2001	21/2001
Sec I Commencement (3.7.1989)	14/1989
1st Sch Constitution of the Conservation Commission amendment	5/1987
2nd Sch Legal description of Brimstone Hill ?ress National Park	5/1987
3rd Sch Wild Animals and Wild Birds	5/1987

4th Sch Desc. Of Bath Hotel	5/1987
Sec I. Commencement (3.7.1989)	14/1989
Sec 20: Brimstone Hill Fortress National Park	11/1991
Regs 1991 (Wet 15.4.91)	49/1983
Brimstone Hill Regs 1983	11/1991
Revoked 1991	
Sec 54 B Substances that deplete the Ozone layer(control) regs 2004	6/2004
Nevis Coastal Protection Levy Ordinance 2002	2/2002
Nevis Land Development Ordinance 1984	(N)1/1987
Renamed	1988
As "Nevis Housing & Land Dev. Ordinance	(N)4/1984
(All entries under new title) (supra)	(N) 2/1988
Nevis Solid Waste Mgmt Authority Ordinance 2002	6/2002
Sec I: Commencement (wef 1.1.2003)	7/2002
Pesticides Act 1973	1/555
Repealed 1999 (By Sec 5C)	18/1999
Sec 11 : Commencement Prog (1.2.1974)	5/1974
3: Pesticides (labeling etc Container) Regs 1975	1975
Pesticides and Toxic Chemicals Control Act 1999	18/1999
Mosaic Disease Regs.	6/279
Plant Protection Act (Cap97)	2/821
Amendment 1974 (By implication)	4/1974
1976 (Wef 1.6.1977) (8/1977)	7/1976
1986 (Ordinance renamed Act)	8/1986
Sec 2 Gumming disease proclamation	6/286
2 Amendment 1974 (By Act) By implication	4/1974
Mosaic disease proclamation	6/287
2 Love Vine Pest Proclamation	6/288
5 ? od Fruit(USA) Prohibition Proclamation	6/280

Amendment 1974 (By Act) (By implication)	4/1974
5 Import of articles(general) prohibition proclamation	6/281
Amendment 1962	1/1962
1974 (By Act) By implication	4/1974
Pond Drainage Ordinance (Cap224)	3/1803
Repealed 1976(ref 1.6.1977) (8/1977)	7/1976
Protection of Animals Act (Cap111)	2/891
Amendment 1976 (ref1.6.1977)(8/1977)	7/1976
Public Parks Regulation Act (Cap 304)	5/2753
Amendment 1976(ref 1.6.1977 8/1977	7/1976
1986 (Ordinance renamed Act)	8/1986
1987	3/1987
1996	8/1996
1998	12/1998
2000	6/2000
Schedule: List of Public Parks	5/2754
St Christopher and Nevis Solid Waste Mamt Corp. Act 1996	17/1997
Amendment 1997	8/1997
Sec I Commencement ss 1-3, 17, 18, 20 & 21 ref 21.7.1997	63/1997
ss 14-16 and 19 ref 1.12 1997	63/1997
St Christopher Nevis Anguilla	
Restyled 1981 (in all existing laws) By Act	
St Christopher and Nevis ref 19.12 1980	10/1981
By Statutes (Adaption) Act 1981	
(Amendments have not bee noted under relevant statutes	10/1981
St Christopher Tourism Authority Act 1999	8/1999
Amendment 1999	11/1999
Seal Fisheries (North Pacific) 1912 (UK)	8/2122
Sec 4-Application to Leeward Is. Order 1913	8/2199

Sugar Estates Land Acquisition Act 1975	2/1975
Amendment 1975	8/1975
1975 (By SRO)	5/1975
Sec 10 Appointed Day Order 1975 (31.1.1975)	4/1975
Town and Country Planning Act (Cap 264)	4/2263
Amendment 1967 No 223 (By Implication)	App/1967
1974	4/1974
1975	17/1975
1976 (ref 1.6.1977) (8?/1977)	7/1976
1986 (Ordinance renamed Act	8/1986
Water Courses and Waterworks Act (Cap 185)	3/1981
Amendment 1962	8/1962
1974 (By implication)	4/1974
1986 (ordinance renamed act)	8/1986
Sec 10: Watercourses and waterworks Regs	3/1481
Revoked 1973	33/1973
10: Watercourses and Waterworks Reg 1973	33/1973
Amendment 1975	21/1975
1976	40/1976
12 Water Service Rates	
1958 (R 32/1973)	6/631
1973 (R 23/1976)	32/1973
1976	23/1976
Whaling Industry (Regulation) Act 1934 (UK)	
Amendment (1983 No 882)(In respect of St Christopher and Nevis)	

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Animal (Diseases and Importation Act (Cap 9-17) 2001 Rev.

Beach Protection Act Cap.6.06) 2001 Rev.

Boats (Licence & navigation) Ordinance Cap 81 2/48

Botanical Station (transfer) Ordinance Cap.235(0) 4/93

Caribbean Community Act 2004 (revised T. of Cap) 12/2004

Crown Lands Act (Cap 7.02) 2001 Rev

Environmental Protection 00000 Act (Cap 15.2) 2001

Fisheries Act (Cap 7.15) 2001 Rev

Fishing Boat sowns Act Ordinance (Cap 4) 1/403

Fishing Industry(Assistance) Act 1972 (0) 35/1972

Forest soil and water conservation Ordinance (Cap 7.09) 2001 Rev

Geographical Indications Act (Cap. 13.14 2001 Rev

Land adjudication Act (Cap 5.06 2001 rev

Land Acquisition Act (Cap 5.04 2001 rev

Land Conservation and Improvement Act (Cap 5.10) 2001 rev

Maritime Areas Act (Cap 1.16) 2001 rev

Montreal Protocol (substance that seplete the ozone layer (Cap 6.09)

Pesticides & Toxic Chemicals Control Act (Cap 11.15) 2001 rev

Physical Planning )))) Act 2001 2a/2001

Plant Protection Act (Cap 7.12)

Power Craft Act (Cap. 8.06)

Public Health (Sewege Drainage) Act (Cap 11.02)

St Lucia Solid Waste Management Authority Act (Cap 6.10)

Special ))) Acres Act (Cap 15.2a) 118/2000 11/2003

Tourism Incentives Act (Cap 15.30)

Tourist Industry Der Act (15.32)

Turtle Lobster and Fish protection Act 1979 13/1971

Repealed 1/1985

Section preserved 10/1984

Waste Management Act 2004 8/2004

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Animals(Diseases and Importation) Control Act Cap 48 1990

Animal (National and International Movement and Disease Prevention )Act 1994

Beach Protection Act (Cap 331) 1990 rev

Beekeeping and Bee Products Act (Cap 50) 1990 REV

Biological Weapons Act 1992 9/1992

Botanical Gardens Act (Cap 56) 1990 rev

Amendment 1992 29/1992

2005 24/2005

Distribution & OOO of Plants 22/2005

Caribbean Food Corp

Caribbean Community Act 2005 5/2005

Caribbean Community (Movement of Factors) Act 2004 23/200?

Central Water and Sewage Authority Act 1991 17/1991

Charcoal Act (Cap 57) 1990 rev

Convention on Oil Pollution Damage Act 2002 6/2006

Crown Lands Act (Cap 238) 1990 rev

Amenment 2001 28/2001

2003 20/2001

2003 21/1001

2003 22/2001

Crown Lands Act Sec 5 ref to Forest Act

Environmental Health Services Act 1991 14/1991

Amendment 1996

34/1996

1997 2/1997

Environmental Levy Act 1991

13/1991

Fisheries Act (Cap 52)		1990 rev
Fisheries ? (1987)		1990 rev
Amendment (2006)		12/2006
(Fish & Fisheries Products) Reg 2001 (rev)	2/2001	
	2006	12/2006
Birds & Fish (Oysters) Closed season (Cap 44)		
Turtle Closed Season Order 1978		61/1978
Lobsters Closed Season Order 1978	65/1978	
Bird Sanctuary		
Young Island (1947)		43/1947
Kings Hill (1947)		43/1947
Great House Grounds Land & Gardens	43/1947	
Mulligen Law (1947)		43/1947
Pigeon (Ranier) Island (1950)	82/1950	
Isle de Quatre (1950)		82/1950
Under Fishing Nets Act (Cap 171)		
Sec 4 of Seine Net Mesh Order 1916	2/1916	
		1976 SRO at 2
Under Fishing Industry Act 1961 (Nil)	19/1962	
Forest Resources Conservation Act 1992	47/1992	
Forest Act (Cap 58)		
Repealed 1992 ref		47/1992
Sec 6 Crown Lands Forest Reserves (Provisional)Order (1946-48) 1970		
Sec 10 Crown Lands (Prohibited Areas)Order(1948)	1990	
Sec 24 Crown Lands Forest (Forest Produce Rules (1946) 1990.		
Geographical Indications Act 2004		24/2004
Sec I Commencement (ref 30.11.2004)	32/2004	

High Seas Fishing Act 2001	26/2001
Amendment 2003	25/2003
1st Sec Application to licence to fish on the high seas ref 2003	
Sec 23 High Seas Fishing Ref 2003	35/2003
Kings Hill Enclosure Act (Cap 239)	1990 ref
Litter Act 1991	15/1991
Marine Parks Act 1997	9/1997
Marine Parks(Tobago Laws) Dec.Order	1997 40/1997
Marine Parks(Tobago Laws) Regulations 1998	26/1998
Amendment 2006	23/2006
Maritime Areas Act (Cap 333)	1990 rev
Admendment 1994	5/1994
Admendment 206	8/2006
Sec 5    Sea (12 miles)	15/1983
Sec 7 EE2 (200 miles)	15/1983
And see Continental Shelf Act (Cap 332)	
Minerals (Vesting)Act    Cap 243	1990 rev
Montreal Protocol(Substances that deplete the ozone layer)Act 49/2003	
49/2003	
Sec 3 Mont. Prot. (Sub that dep. The Ozone layer) Conrol Leg. 2005	
14/2005	
National Emergency & Dis. Manag. Act 2006	15/2006
National oooooo Act 2002	33/2002
Natural Disaster (relief) Act Cap 277	1990 rev
Oil in Navigable Waters Act (Cap 366)	1990 rev
Oil Pollution (liability and compensation) Act Cap 367/1990 rev	

Pesticides Control Act (Cap 42)	1998 rev
Amendment 1991 (By SRO)By Implication (Inc in	1990) 9/19991
Plant Protection Act 2005	16/2005
Sec 1 Commencement ?	
Sec 39 Preservation of previous subsidiary	
Legislation Under Plant Protection Act (Cap 48 R16/2005	
Plant Protection Act Cap 43	1990 rev
Repealed 2005with ?	
Sec 4 Transfer of seed ? restriction	
15 Plant Protection Reg (1942)	
17 Plant Protection ((?) ?) Order	
Protection of Animals Act (Cap 53)	1990 rev
Sec 19 Protection of Animals Reg (1948)	
Quarries Act (Cap 346)	1990 rev
Sec 19 Quarries Reg (1952)	1990 rev
Quatre Isle Act 2006	38/2006
St Vincent & the Grenadines National Trust Act(Cap 329)	
Sec 5 Frigate Island Conveyance Approval Registration 1993 33	
St Vincent & the Grenadines Waste Mgmt Act 2000	31/2000
Amendment 2005	26/2000
Sec 48 Solid Waste Mgmt Regs. 2006	11/2006
Seal Fisheries (North Pacific) Act 1912 UK	
Part stalled to be in force (By local Act) (Cap 8)	
Sec 5 extended to Overseas Territories (1913 NO 488) (UK)	

Town and Country Planning Act 1992	45/1990	
Amendment 1993		18/1993
Amendment 1993		19/1993
Amendment 2005		2/2005
Amendment 2006		17/2006
Zoned Area dec. (Pt Elizabeth Bequia) 1997	15/1997	
Amendment		14/1997
Zoned Area dec. (Beach) Order 1994	16/1994	
Zoned area dec. (Bery St) 1999	18/1999	
(Kingstown) Order 2000		14/2000
(Beachmont/Murray Road) Order 2002	25/2002	
Twon and Country Planning (Fees) Regs 1996	37/19?	
Whaling Industry (Regulation) Act 1934 (UK)		
Amendment (1979 No 917) (In respect of St Vincent App/1979		
Sec 13 Whaling Industry(Regulation) Order 1936 No 716)		
Amendment 1938 No 1603		
Amendment 1941 No 790		
Wildlife Protection Act (Cap 55)	1990 rev	
Amendment 1991 (? 1990 rev		16/1991
Amendment 1992		67/1992

## APPENDIX 9. SAINT KITTS AND NEVIS VEGETATION CLASSIFICATION SYSTEMS COMPARISON

Island Resources Foundation, 1999	Britton, 1901 (in Burdon, 1920)	Beard, 1955	Rodrigues, 1990 (Nevis only)
I.A.1.N.a. (1.a), I.A.1.N.a. (1.b), I.A.1.N.c. (1), I.A.1.N.c. (2) I.C.1.N.a. (1), II.A.1.N.a. (1)	Mesophytic Flora	Rain Forest Dry Evergreen Forest Montane Thicket (Nevis)	Montane Forest Dry Evergreen Forest
I.A.1.N.c. (3) II.A.1.N.a. (2), II.C.1.N.a. (1), III.A.1.N.a. (1), III.A.4.N.i. (1), III.A.5.N.e. (1)	Mountain Summit Vegetation Xerophytic Vegetative Belt	Palm Brake Elfin Woodland Dry Scrub Woodlands	Palm Brake Elfin woodland Dry Scrub Woodland
I.A.5.N.b. (1.a), I.A.5.N.b. (1.b) I.A.5.N.d. (1), II.A.1.N.d. (1), III.A.1.N.g. (1), VII.C.4.N.d. (1)	Littoral Vegetative Belt		Littoral Vegetation Cactus Scrub Mangrove Woodland
			Riparian Forest
II.A.1.C.a. (1)			Coconut Plantation
	Cultivated Belt		Urban, Suburban and Agriculture
I.A.1.N.d. (1), II.A.1.C.a. (2), II.A.1.N.a. (3), II.C.1.N.a. (2), V.A.1.C.a. (1), V.A.1.N.g. (1), V.A.2.N.c. (1), V.A.2.N.c. (2), V.A.2.N.c. (3), V.B.1.N.b. (1), V.C.1.N.a. (1), V.C.1.N.a. (2), V.C.1.N.a. (3), V.C.1.N.b. (1), VII.A.1.N.a. (1), VII.A.2.N.a. (1), VII.C.2.N.b. (1)			

I.A.1.N.a.(1). *Siamea saman*-*Mangifera indica*-*Bambusa vulgaris* lowland tropical or subtropical broad-leaved evergreen closed tree canopy Alliance

I.A.1.N.a.(1.a). *Siamea saman*-*mangifera indica* Association

I.A.1.N.a.(1.b). *Bambus vulgaris*-*Mangifera indica* Association

I.A.1.N.c.(1). *Dacryodes excelsa*-*Sloanea montane* tropical or subtropical rainforest

I.A.1.N.c.(2). *Podocarpus coriaceus*-*Euterpe globosa* montane tropical or sub-tropical rainforest

I.A.1.N.c.(3). *Euterpe globosa* montane tropical or subtropical rainforest

I.A.1.N.d.(1). *Miconia* spp. montane tropical or subtropical cloud forest

I.A.5.N.b.(1). *Coccoloba uvifera*-*Hippomane mancinella*-*Thevetia peruviana*-*Cordia obliqua* lowland tropical or subtropical broad-leaved evergreen sclerophyllous forest Alliance

I.A.5.N.b.(1.a). *Coccoloba uvifera*-*Thevetia peruviana* Association

I.A.5.N.b.(1.b). *Hippomane mancinella*-*Cordia obliqua* Association

- I.A.5.N.d.(1). *Rhizophora mangle* seasonally flooded/saturated tropical or subtropical broad-leaved evergreen sclerophyllous closed tree canopy
- I.C.1.N.a.(1). *Coccoloba pubescens*-*Guettarda scabra* lowland tropical or subtropical semi-deciduous forest
- II.A.1.C.a.(1). *Cocos nucifera* Grove
- II.A.1.C.a.(2). Orchards and groves
- II.A.1.N.a.(1). *Acacia* sp.-*Haematoxylon campechianum* tropical or subtropical broad-leaved evergreen woodland
- II.A.1.N.a.(2). *Cyathea arborea* tropical or subtropical broad-leaved evergreen woodland
- II.A.1.N.a.(3). *Philodendron giganteum* elephant ear tropical or subtropical broad-leaved evergreen woodland
- II.A.1.N.d.(1). *Rhizophora*-*Avicennia*-*Laguncularia* semi-permanently flooded tropical or subtropical broad-leaved evergreen woodland
- II.C.1.N.a.(1). *Pisonia subcordata*-*Bursera simarouba* tropical or subtropical semi-deciduous woodland
- II.C.1.N.a.(2). *Hippomane mancinella*-*Cordia obliqua* tropical or subtropical semi-deciduous woodland
- III.A.1.N.a.(1). *Erithalis fruticosa*-*Pilosocereus royeri* tropical or subtropical broad-leaved evergreen shrubland
- III.A.1.N.g.(1). *Rhizophora*-*Avicennia*-*Laguncularia* semi-permanently flooded tropical or subtropical broad-leaved evergreen shrubland
- III.A.4.N.i.(1). *Clusia* sp.-*Philodendron giganteum* tropical or subtropical broad-leaved evergreen montane shrubland
- III.A.5.N.e.(1). *Pilosocereus royeri*-*Croton flavens* extremely xeromorphic evergreen shrubland with a sparse tree layer
- V.A.1.C.a.(1). *Saccharum officinarum* tall tropical or subtropical grassland
- V.A.1.N.g.(1). *Acrostichum aureum* seasonally flooded tropical or subtropical grassland
- V.A.2.N.c.(1). *Panicum maximum* medium-tall tropical or subtropical grassland with a sparse broad-leaved evergreen tree layer
- V.A.2.N.c.(2). *Bothriochloa pertusa* medium-tall tropical or subtropical grassland with a sparse broad-leaved evergreen tree layer
- V.A.2.N.c.(3). *Selaginella*-*Lycopodium* medium-tall tropical or subtropical grassland with a sparse broad-leaved evergreen tree layer
- V.B.1.N.b.(1). *Cyathea arborea*-*Selaginella* sp. tall tropical or subtropical perennial forb vegetation
- V.C.1.N.a.(1). *Ruppia*-*Najas* non-tidal tropical or subtropical hydromorphic rooted vegetation
- V.C.1.N.a.(2). *Laguncularia racemosa*-*Conocarpus erectus* permanently flooded tropical or subtropical hydromorphic rooted vegetation

- V.C.1.N.a.(3). *Lycopodium* spp. permanently flooded tropical or subtropical hydromorphic rooted vegetation
- V.C.1.N.b.(1). Permanently flooded tidal tropical or subtropical hydromorphic rooted vegetation
- VII.A.1.N.a.(1). *Strumphia maritima*-*Erithalis fruticosa* cliffs with sparse vascular vegetation
- VII.A.2.N.a.(1). *Jacquinnia arborea*-*Strumphia maritima* pavement with sparse vascular vegetation
- VII.C.2.N.b.(1). *Sesuvium portulacastrum*-*Ipomaea pes-caprae* beach strand vegetation
- VII.C.4.N.d.(1). *Rhizophora*-*Avicennia*-*Laguncularia*-*Conocarpus* tidally flooded mudflats

## APPENDIX 9. RAMSAR SITES

Country	Site	Size (ha)
Antigua and Barbuda	Codrington Lagoon	3,600
St. Lucia	Mankoté Mangrove	60
	Savannes Bay	25

Source: Ramsar website. [http://www.ramsar.org/index\\_list.htm](http://www.ramsar.org/index_list.htm). Basic Ramsar List

# APPENDIX 10. MARINE PROTECTED AREAS

FR=Forest Reserve

NM=Natural Monument

HS= Historic Site

NP= National Park

MMA =Marine Management Area

NR= Nature Reserve

NP= Marine National Park

OA= Other Area

MR= Marine Reserve

PL= Protected Landscape

MS= Marine Sanctuary

PR= Park Reserve

MUA= Multiple Use Area

PS= Protected Site

NL= Natural Landmark

R=Reserve

WR= Wildlife Reserve

Country	Site	Designation	Status	Size (km <sup>2</sup> )
Antigua & Barbuda	Cades Bay	MR	Designated	18.3
	Codrington Lagoon	WR	Designated	35.5
	Crump Island Coral Reef	MP	Proposed	
	Darkwood	PR	Designated	
	Devils Bay	PR	Designated	
	Diamond Reef	MP	Designated	20.0
	Ffryes Bay	PR	Designated	
	Fort James	PR	Designated	
	Goat Island and the Flashes	WR	Proposed	
	Great Bay and Guiana Bay Islands	MS	Proposed	
	Great Bird Island (North Sound)	WR	Proposed	
	Green Island (Mill Reef)	WR	Proposed	
	Green Island Reefs	PR	Designated	
	Guiana Island (North Sound)	WR	Proposed	

Country	Site	Designation	Status	Size (km <sup>2</sup> )
Antigua & Barbuda	Half Moon Bay	NP	Designated	
	Long Island (North Sound)	WR	Proposed	
	Mamora Reef	MS	Proposed	
	Nelson's Dockyard	NP	Designated	41.3
	Northeast Archipelago	PR	Designated	
	Palaster Reef	MNP	Designated	5.0
	Spanish Point	WR	Proposed	
Dominica	Cabrit's	NP	Designated	5.3
	Soufriere /Scotts Head	MR	Designated	
Grenada	Calivigny Island	PS	Proposed	0.05
	Canoe Bay	PS	Proposed	
	High North	NP	Proposed	2.45
	Hog Island	NL	Proposed	0.28
	La Sagesse	PS	Proposed	0.05
	Lake Antoine	NL	Proposed	0.34
	Lauriston Point, Sandy Island, Mabouya	PS	Proposed	2.36
	Levera	NP	Proposed	2.22
	Limlair-Thiboud	PS	Proposed	0.06
	Marquis Island	NL	Proposed	0.03
	Molinere Beausejour	MPA	Designated	1.1
	Mt Hartman	OA	Recommended	4.8
	Mt Hope/Clabony Watershed	MUA	Proposed	2.65
	Northern Seascape	PS	Proposed	1.48
	Quarantine Point	NL	Proposed	0.03
	River Sallee Boiling Springs	NL	Proposed	0.01
Sabazan	PS	Proposed	0.02	

Country	Site	Designation	Status	Size (km <sup>2</sup> )
Grenada	Southern Seascape	PS	Proposed	0.39
	Tyrrel Bay Mangrove	PS	Proposed	1.13
	White and Saline Islands Mangroves	PS	Proposed	3.9
St. Kitts & Nevis	Black Rocks	NM	Proposed	
	Cades Bay	MP	Proposed	
	Gallows Bay Bog	OA	Proposed	
	Greatheeds Pond	OA	Proposed	0.3
	Guana Island	MR	Proposed	
	Half Moon Pond	OA	Recommended	0.17
	Hurricane Bay	R	Proposed	
	Muddy Pond	OA	Recommended	0.3
	Nags Head	WR	Proposed	
	New Castle	MP	Proposed	
	Round Hill/Hurricane Hill	OA	Proposed	
	Sandy Point Reef	OA	Proposed	
	Southeast Peninsula	NP	Designated	26.10
St. Lucia	Anse Ger	PL	Proposed	
	Anse Point Sable – Man Kote Mangroves	MR	Designated	
	Barrel O Beef Rock	MR	Proposed	0.01
	Bigorneau Rocks	MR	Proposed	
	Bois D'Orange Rocks	MR	Proposed	
	Caesar Point to Mathurin Point Reefs	MR	Designated	
	Canaries/Anse La Raye MMA	MMA	Designated	
	Cas-en-Bas Mangroves	MR	Designated	
	Choc Bay Artificial Reef	MR	Designated	
	Choc Bay Mangroves	MR	Designated	0.8

Country	Site	Designation	Status	Size (km <sup>2</sup> )
St. Lucia	Des Bateaux Rocks	MR	Proposed	
	Esperance Harbour Mangroves	MR	Designated	
	Fond D'Or Beach	MR	Designated	
	Four Islands	NR	Proposed	
	Grand Anse Beach and Mangroves	MR	Designated	
	La Tourney Wetland	FR	Proposed	
	L'Islet Island	NR	Proposed	
	Liverpool Rocks	R	Proposed	
	Louvet Mangroves	MR	Designated	0.8
	Maria Islaet Reef	MR	Designated	
	Marigot Bay Mangroves	MR	Designated	
	Marquis Estate Parcel M-I	FR	Designated	1.34
	Marquis Mangroves	MR	Designated	
	Moule-a-Chique Artificial Reef	MR	Designated	
	Pitons Management Area	OA	Proposed	20.0
	Point Sable	NP	Proposed	
	Povert Island	NR	Proposed	
	Praslin Mangroves	MR	Designated	
	Praslin Protecetd Landscape	PL	Proposed	
	Roche Island	NR	Proposed	0.1
	Rodney Bay Artificial Reefs	MR	Designated	
	Savannes Bay Mangrove Area	MR	Designated	5.0
Soufriere (SMMA)	MMA	Designated		
Tapion	HS	Proposed		
Vigie Beach Artificial Reef	MR	Designated		
St Vincent	All Awash Island	WR	Designated	

Country	Site	Designation	Status	Size (km <sup>2</sup> )
St. Vincent	Battowia Island	WR	Designated	
	Big Cay	WR	Designated	
	Catholic Rocks	WR	Designated	
	Chateaubelair Islet	WR	Designated	
	Friagte Rock	WR	Designated	
	Isle de Quatre	WR	Designated	
	La Paz Island	WR	Designated	
	Lagoon Bay Salt Pond	WR	Proposed	
	Miligan Cay	WR	Designated	
	Northern end of Bequia	WR	Designated	
	Petit Canouan	WR	Designated	
	Petit St Vincent	WR	Designated	
	Pigeon (Ramier) Island	WR	Designated	
	Prune (Palm) Island	WR	Designated	
	Sail Rock	WR	Designated	
	Savan Islands	WR	Designated	
	Tobago Cays	MP	Designated	38.85
	West Cay	WR	Designated	
Young Island	WR	Designated		

Source: Sea Around Us Project Website

U.S. Agency for International Development

US Embassy

Wilbey, Barbados

Telephone: (246) 227-4118/227-4154

Fax: (246) 228-8589