

# Cayman Islands

Between latitudes 19° 20' N and 19° 43' N  
and longitudes 79° 50' W and 81° 21' W

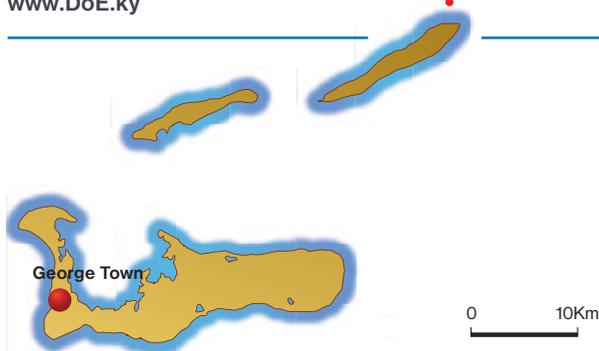
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# Cayman Islands

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More information available at -  
[www.DoE.ky](http://www.DoE.ky)



## Basic facts and Figures

<b>Location</b>	The Cayman Islands are located in the Greater Antilles of the Caribbean between latitudes 19° 20' N and 19° 43' N and longitudes 79° 50' W and 81° 21' W.
<b>Area</b>	260km <sup>2</sup>
<b>Number of islands</b>	The territory consists of three islands, Grand Cayman (197km <sup>2</sup> ), Cayman Brac (38km <sup>2</sup> ) and Little Cayman (28km <sup>2</sup> ).
<b>Population</b>	47,862 inhabitants (2008). Most of the population lives on Grand Cayman.
<b>Topography</b>	The islands form emergent peaks of a partially submerged mountain range which extends from southeast Cuba across the northwest Caribbean to the Gulf of Honduras. 'The Bluff' on Grand Cayman at 43m is the highest point. The Cayman Islands are mostly surrounded by fringing reef. There is a shallow terrace reef located at a depth of 5-10m, and a deep terrace at 15-20m, culminating in a deep fore-reef with a precipitous drop-off at an average depth of 22 meters. The islands' shelf widths average 500m.
<b>Main economic sectors</b>	The islands' economy is based on tourism and the offshore financial sector.

## Legislative and Policy Framework

### Multilateral environmental agreements

The Cayman Islands has been included in the UK's ratification of 20 MEAs. Status of the ratification of key MEAs:

Multilateral Environmental Agreement	Included in ratification?
Convention on Biological Diversity	✓
Convention on International Trade in Endangered Species	✓
Convention on Migratory Species	✓
Ramsar Convention on Wetlands	✓
World Heritage Convention	✓

### National environmental legislation

The Cayman Islands have five main pieces of legislation dealing with area protection and the conservation of a limited number of animal species. There is no legal protection for plants. A comprehensive National Conservation Law has remained pending Cayman Islands Government approval for the past eight years. See Appendix 1 for more details on current legislation.

### National environmental strategies

The Cayman Islands has a Biodiversity Action Plan (BAP) ([www. DoE.ky](http://www.DoE.ky)) published in 2009. Nineteen Habitat Action Plans and thirty Species Action Plans were developed out of the BAP process. Two other strategies: The Cayman Island Development Plan and National Sustainable Development Strategy are also relevant. See Appendix 2 for further information.

### Protected Areas

The Cayman Islands Department of Environment (DOE) has established a well-structured network of marine protected areas. Land-based protected areas are limited to Animal Sanctuaries and National Trust property. A detailed breakdown of protected habitats is included in Appendix 3.

## Research Priorities

See also Appendix 4

- Identification of native trees to promote landscaping with native species, and reduce the reliance on exotic imports and potential for the introduction of invasives.
- Developing monitoring protocols for endangered species e.g. Cayman Parrot (*Amazona leucocephala caymanensis* and *A .i. hesterna*), Sister Islands iguana (*Cyclura nubila caymanensis*) and red mangrove restoration to determine success and cost-effectiveness.
- Continue to contribute to the identification of previously unknown species of animals and plants such as past successes with Cayman sage *Salvia caymanensis*, feared extinct.

## Institutional Arrangements

**Government:** The Department of Environment which sits under the Ministry for Health, Environment, Youth, Sports and Culture is the main government agency responsible for the management and conservation of the environment and natural resources in the Cayman Islands and the implementation of the CBD and other MEA commitments. [www.DoE.ky](http://www.DoE.ky)

**Non-Governmental Organisation:** The National Trust for the Cayman Islands has powers to buy, lease, sell, hold or deal in property of any nature. The Trust has steadily been purchasing lands, currently some 1,980 acres which have been secured through direct purchase, gifted or by Crown transfer.

## Ecosystems and Habitats

**Terrestrial:** The dominant vegetation consists of dry sub-tropical forests, shrubland and mangrove swamps. Shrubland is a biodiverse habitat and of particular importance for reptiles, particularly the Grand Cayman Blue iguana. The Central Mangrove Wetland (CMW) on Grand Cayman represents the most significant area of wetland in the islands and remains largely intact, extending to some 8,639 acres.

**Marine:** Coral reefs are perhaps the most significant feature of the Cayman Islands marine environment, from both biodiversity and economic perspectives. The Cayman Islands are mostly surrounded by fringing reefs enclosing shallow, sand and seagrass filled lagoons. A detailed breakdown of habitat types is included in Appendix 5.



Diving in Cayman © Nikki Chapman

## Species

Some 716 species of vascular plants are now known. Twenty-six species are endemic (Proctor 2011). Close to 75% of the reptiles found in Grand Cayman are native, including the Grand Cayman Blue iguana *Cyclura lewisi*. A variety of invertebrates, including a scorpion, centipede and numerous species of land snails are endemic. Some 222 species of birds (100 species of waterbirds and 122 species of landbirds) have been recorded in the Cayman Islands. (Bradley 2000). See Appendix 6 for Cayman Islands species designated for protection.

### Summary of the 2008 IUCN red listed species for the Cayman Islands

Critically endangered	Endangered	Vulnerable	Near Threatened	Extinct (Extinct in the wild)	Lower risk/ conservation dependent	Data Deficient
6	7	20	17	1	1	20

## Threats

**Invasive species:** The *Casuarina equisetifolia* and *Scaevola sericea* exact most significant impact, especially in coastal regions in terrestrial environments. The Brazilian Pepper is newly established in Cayman Brac and spreading rapidly. In the marine environment, the Lionfish *Pterois volitans* is likely to cause extreme impact to reef biodiversity, despite the plethora of control measures.

**Climate change:** Local long range implications of climate change remain largely unknown but elevated sea temperatures over the past two decades have resulted in significant increases in major coral bleaching episodes and subsequent rise in coral disease and mortality in the Cayman Islands. Major storms have also resulted in substantial impacts to the shallow and fringing reef environments.

**Legislation:** There is a lack of appropriate legislation that enables a comprehensive approach to biodiversity conservation. The (draft) National Conservation Law has been under consideration by successive governments for the past eight years, however, to date this crucial legislation has not been enacted.

**Land use and human impact:** Development in the Cayman Islands proceeds with little consideration for environmental impact through weak planning laws, poor enforcement of existing planning legislation and lack of requirement for Environmental Impact Assessments (EIA) even for major projects. See also Appendix 7.

## Projects

The Cayman Islands have run a number of terrestrial and marine projects over the last five years.

### Case Study: Creation of the National Biodiversity Action Plan for the Cayman Islands

The NBAP is the major biodiversity project to have been undertaken by the Department of Environment in the past five years. Production of this document provided an opportunity for assessment and collation of existing and well-established projects and data, and also to identify gaps in data, towards facilitating better-informed planning of further project priorities, and more ready identification of valuable opportunities for collaboration with outside institutions and agencies.

**The NBAP has contributed directly to the development of a variety of new projects, including:**

- Lionfish control programme
- Parrot survey
- Marine Parks review
- Cat control
- Native tree nursery (pictured)
- Caribbean Hub

Native Tree Nursery © Department of Environment  
Cayman Islands Government.



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### **National Trust for the Cayman Islands**

Website: [www.CaymanNationalTrust.org.ky](http://www.CaymanNationalTrust.org.ky)

## Project Partners

The Cayman Islands works with a number of organisations and researchers on island, regionally and internationally.

## Bibliography

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See also Appendix 8

## Appendices

All Appendices referred to in this chapter are available at

<http://jncc.defra.gov.uk/page 5749>