

Turks and Caicos Islands

21° 45' N, 71° 31' W

17



Turks and Caicos

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Basic facts and Figures

Location	The Turks and Caicos Islands are an archipelago located in the Atlantic Ocean that lie between 21° 45' N and 71° 31' W, approximately 920 kilometres southeast of Miami, Florida.
Area	Approximately 430km ² . The islands can be divided into two distinct groups: The Caicos Islands and the Turks Islands which are separated by a deep water channel called the Columbus Passage which is approximately 35 kilometres wide.
Number of islands	Nine inhabited islands and 40 uninhabited cays. Providenciales, North Caicos, South Caicos, Middle Caicos, Pine Cay, Parrot Cay, Big Ambergris Cay, Grand Turk and Salt Cay are inhabited.
Population	22,352 inhabitants (2008).
Topography	Turks and Caicos Islands are relatively flat. Providenciales island rises to a high point of 50m above sea level while Flamingo Hill on the north western point of East Caicos has an altitude of about 49.68m. Sinkholes, caves and ridge formations are common. The islands consist largely of Pleistocene oolitic limestones and unconsolidated Holocene sands.
Main economic sectors	Tourism is the main economic activity. The offshore financial sector is also significant. Fishing for export to the US (mainly lobster and conch) is the third most important economic sector.

Legislative and Policy Framework

Multilateral environmental agreements

Turks and Caicos Islands have been included in the UK's ratification of 16 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

There are approximately 15 ordinances relevant to environmental management, and biodiversity and habitat conservation. See Appendix 1 for a list of legislation.

National environmental strategies

Turks and Caicos Islands Government (TCIG) signed its Environment Charter with the UK in 2001. In 2003 the TCIG approved the Strategy for Action to Implement the Environment Charter. There are additional national strategies related to environmental and biodiversity conservation.

Protected Areas

There are 35 protected areas on Turks and Caicos - 11 national parks, 11 nature reserves, four designated sanctuaries and nine areas of historic interest. These protected areas are managed by the Department of Environment and Coastal Resources (DECR). The Turks and Caicos National Trust currently manages three protected areas. See Appendix 2 for a brief description of each of the protected areas.

Research Priorities

- Marine and coastal ecosystem mapping and vulnerability assessment, including considerations for climate change to assess temporal and spatial variations.
- Management of protected areas:
Development of management plans for all protected areas and wetlands; capacity building to improve management skills; public awareness.
- Protection and conservation of flora and fauna, specifically endemic and endangered species, fisheries, invasive species, birds and other wildlife.



Mangrove, East Caicos © David Stroud

Institutional Arrangements

Government: DECR is mandated to ensure sustainable utilization of the natural resources of the TCI, through biodiversity conservation, managing protected areas and maintaining economic prosperity through sustainable development approaches.

Non-Governmental Organisation: The Turks and Caicos National Trust (TCNT) is mandated to safeguard the cultural, historical and natural heritage of TCI through the preservation of areas, sites, buildings, structures and objects of cultural, historical or natural significance. The Turks and Caicos Reef Fund (TCRF) aims to dedicate more than 85% of all funds raised to marine conservation projects in TCI. The National Museum focuses on the islands culture and history.

Ecosystems and Habitats

Terrestrial: There are 40 terrestrial habitats described for Turks and Caicos (see Appendix 3). The vegetation of TCI consists of dry forests and mangroves. The archipelago has 26,700ha, of wetlands and 38,000ha of inter-tidal sand banks and mudflats (Sanders 2006). The wetlands also include periodically flooded mangroves, but also different types of swamp and complex estuaries, which merge with underwater sands.

Marine: The archipelago has the least damaged coral reef in the entire Caribbean region. Its surface area is estimated at some 1,200km². The north coasts of the four largest islands are fringed by a single reef. Most of the reefs are healthy with a large diversity of corals (30+ species) (Petit and Prudent 2008).

Species

The bird life of the archipelago includes 204 species, 58 of which are nesting birds (Sanders 2006). The territory is home to an important number of migratory and nesting birds, many of which are endemic. The Turks and Caicos has one of the largest populations of Rock Iguana in the Caribbean *Cyclura carinata carinata* - 30,000 adults. See Appendix 4 for endemic, near-endemic and selected native species lists.



School children © Brian Riggs

Summary of the 2008 IUCN red listed species for the Turks and Caicos Islands.

Critically endangered	Endangered	Vulnerable	Near Threatened	Extinct (Extinct in the wild)	Lower risk/ conservation dependent	Data Deficient
6	10	18	17	0	3	12

Threats

Invasive species: In TCI's marine ecosystems, the invasive lionfish *Pterois volitans* has affected both the fisheries industry and tourism. On land, the invasive pine tortoise scale insect has significantly damaged the population of the TCI national tree, Caicos Pine *Pinus caribaea* var. *bahamensis*. The Cowbush *Leucaena leucocephala* and Australian Pine *Casuarina equisetifolia* and Feral domestic mammals are also significant pests that threaten endemic species. See Appendix 5 for invasive species lists.

Climate change: The large mangrove areas and sand banks are particularly at risk from rising sea levels and prone to flooding. These areas are important nesting grounds for migratory birds and nurseries for economically important fisheries. In the marine environment, coral bleaching has been observed (Petit and Prudent 2008).

The Built environment is another major threat.

Projects

Over the last five years, the DECR has undertaken a number of externally funded projects to recover/restore habitat and important native and endemic species; map the islands' habitat; control invasive species and monitor specific species. See Appendix 6 for more details.

Case Study: Turks and Caicos Islands Invasive Lionfish Control Program

Funded by: United Kingdom's Joint Nature Conservation Committee (JNCC)

Dates: 2010 – April 2011

**Project partners are: JNCC,
TCI Government: DECR**

The Lionfish *Pterois volitans* is native to the tropical waters of the Red Sea, South Pacific and Indian Oceans but has now invaded waters off the east coast of the United States and much of the Caribbean. In 2009, three Caribbean countries (Cayman Islands, Virgin Islands and Turks and Caicos) requested financial assistance towards monitoring, control and raising awareness of the growing threat posed by the invasive Lionfish in Caribbean waters.



Lionfish © David Stone

In order to protect the marine waters of the Turks and Caicos Islands, this project has encouraged individuals in the community to get involved in the monitoring and control of the lionfish. Individuals have been asked to report any sightings. In addition, tournaments for the capture of the fish have been promoted and the products used in various dishes to encourage the consumption of the species. A Turks and Caicos Islands lionfish recipe book was published in 2011.

Contacts

See also Appendix 7

Department of Environment and Coastal Resources

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North Caicos: District Commissioner's Office, Bottle Creek

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Project Partners

DECR works with a number of organisations and researchers including the Joint Nature Conservation Committee (JNCC); Marine Conservation Society (MCS); Royal Botanic Gardens (RBG Kew) Kew; San Diego Zoo Conservation and Research of Endangered Species; Society for the Conservation and Study of Caribbean Birds (SCSCB); Turks and Caicos National Trust (TCNT); Wildfowl and Wetland Trust (WWT)

Bibliography

Carleton, C. & Hambrey, J. 2006.

Review and Re-Assessment of the TCI Protected Area System. Nautilus Consultants.

Correll, D.S. & Correll, H.B. 1982.

Flora of the Bahamas Archipelago. Gantner.

McNary-Wood, K. 2003.

Flowers of the Bahamas and Turks & Caicos. MacMillan Caribbean.

Petit, J. & Prudent, G. 2008.

Climate Change and Biodiversity in the European Union Overseas Entities. IUCN, Brussels. 196 pp.

Pienkowski, M. (ed.) 2001.

Plan for Biodiversity Management and Sustainable Development around Turks & Caicos Ramsar Site. Turks & Caicos National Trust and UKOTCF.

Reefcheck – available online: www.reefcheck.org

Sanders, S. 2006.

Important bird areas in the United Kingdom Overseas Territories. Priority sites for Conservation. Sandy, UK: RSPB.

Appendices

All Appendices referred to in this chapter are available at

<http://jncc.defra.gov.uk/page-5758>