

Marine turtle management and legislation

Most of the UK Overseas Territories have specific pieces of local legislation that apply to the management and conservation of marine turtles. In some cases these laws translate effectively into good management practices, while in others the authorities are still working towards achieving the implementation of their domestic legislation.

In addition to the requirements of specific local legislation there are various Multi-lateral Environmental Agreements (MEAs) which provide important frameworks to help ensure the survival of endangered species like turtles and the marine environment on which they depend. The Foreign and Commonwealth Office is responsible for the external affairs of the UK Overseas Territories and works with their governments to decide which MEAs they would like to commit to. The UK Overseas Territory participation in these agreements is summarised here. You can download a complete guide to the UK Overseas Territories and MEAs www.seaturtle.org/mtrg/projects/tukot/MEA_Guide.pdf

KEY	ANGUILLA	ASCENSION	BERMUDA	BRITISH INDIAN OCEAN TERRITORY	BRITISH VIRGIN ISLANDS	CAYMAN ISLANDS	GIBRALTAR	MONTserrat	PITCAIRN ISLANDS	ST HELENA	TURKS AND CAICOS ISLANDS
 Signed up											
 Not signed up											
N/A Not Applicable (This agreement does not apply to this Overseas Territory)											
AARHUS CONVENTION ON ACCESS TO INFORMATION, PUBLIC PARTICIPATION IN DECISION MAKING AND ACCESS TO JUSTICE IN ENVIRONMENTAL MATTERS www.unece.org/env/pp											
CONVENTION ON BIODIVERSITY www.biodiv.org											
WORLD HERITAGE CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE whc.unesco.org/pg.cfm											
CONVENTION ON MIGRATORY SPECIES OF WILD ANIMALS www.cms.int/											
CONVENTION ON TRADE IN ENDANGERED SPECIES www.cites.org www.ukcites.gov.uk											
THE CARTAGENA CONVENTION FOR THE PROTECTION AND DEVELOPMENT OF THE MARINE ENVIRONMENT OF THE WIDER CARIBBEAN REGION (SPAW PROTOCOL) http://www.cep.unep.org/law/cartnut.php		N/A	N/A	N/A			N/A		N/A	N/A	
THE RAMSAR CONVENTION ON WETLANDS OF INTERNATIONAL IMPORTANCE ESPECIALLY AS WATERFOWL HABITAT www.ramsar.org											
THE INTER AMERICAN CONVENTION FOR THE PROTECTION AND CONSERVATION OF SEA TURTLES www.seaturtle.org/iac		N/A	N/A	N/A			N/A		N/A	N/A	
THE UN FRAMEWORK CONVENTION ON CLIMATE CHANGE (KYOTO PROTOCOL) www.unfccc.int											

marine turtles of the UK Overseas Territories



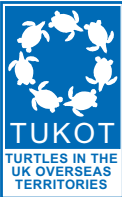
ANGUILLA • ASCENSION • BERMUDA • BIOT • BRITISH VIRGIN ISLANDS • CAYMAN ISLANDS • GIBRALTAR • MONTserrat • PITCAIRN ISLANDS • ST HELENA • TURKS AND CAICOS ISLANDS



Other sources of information:

About the TUKOT project: www.seaturtle.org/mtrg/projects/tukot
About marine turtles in the Caribbean UK Overseas Territories: www.seaturtle.org/mtrg/projects/tcot/
About marine turtles and their conservation: www.mcsuk.org and www.seaturtle.org/MTN

Front Cover Images: Juvenile green turtle with fish, Doug Perrine/seapics.com • Green turtle hatchling, Peter Richardson/MCS • Nestline leatherback turtle BVI, Shannon Gore • Child with turtle, Bermuda Turtle Project





Leatherback turtle



Hawksbill turtle



Loggerhead turtle



Green turtle

Introducing the Marine Turtles of the UK Overseas Territories

There are seven species of marine turtle in the world today and four of these regularly occur in the UK Overseas Territories. All four of these species are listed as endangered or critically endangered by the World Conservation Union (IUCN).

Leatherback turtle

Leatherbacks are the largest of all marine turtles. They are also thought to be the world's widest ranging reptile having been recorded north of Scandinavia and south of New Zealand. While Atlantic leatherback populations appear to be doing fairly well, some Pacific populations have experienced dramatic declines. Leatherback turtles nest in Anguilla and the British Virgin Islands and regularly occur in the waters around Gibraltar and the UK.

Hawksbill turtle

The hawksbill turtle has a dubious claim to fame as the animal which supplied the Western fashion for tortoiseshell jewellery and ornaments, made from its beautifully coloured shell. International legislation has significantly reduced the volume of trade in tortoiseshell and these animals are now the subject of intensive conservation work in many parts of the world. Hawksbill turtles nest in Anguilla, the British Virgin Islands, the British Indian Ocean Territory, Montserrat, the Pitcairn Islands, the Turks and Caicos Islands and possibly the Cayman Islands. Juveniles also occur in these areas as well as in the waters off Bermuda.

Loggerhead turtle

Loggerhead turtles are less common than some of the other species in the OT's as this is a more temperate species which is more abundant in the Mediterranean and off the Eastern seaboard of the USA. Loggerheads nest in the Cayman Islands and the Turks and Caicos Islands. Juvenile loggerheads are frequently seen in the waters off Gibraltar and adults are occasionally recorded in Anguillan waters.

Green turtle

Green turtles were heavily exploited for meat in the last century. This happened on a small scale in local fisheries and on a massive scale to supply international demand. Some conservation efforts over the last 50 years have been very successful and some populations appear to be on the increase. Green turtles nest in Anguilla, the British Virgin Islands, the British Indian Ocean Territory, the Cayman Islands, Montserrat, the Pitcairn Islands and the Turks and Caicos Islands. Juveniles also occur in these areas as well as in the waters off Bermuda.

Images: Leatherback turtle, Hawksbill turtle and green turtle, Peter Richardson/MCS • Loggerhead turtle, Doug Perrine/seapics.com

Threats to marine turtles

Over-exploitation

For centuries marine turtles, their eggs and meat were an important source of protein for fishing communities. In addition, the shell of marine turtles, in particular that of the hawksbill turtle (also known as tortoiseshell), was made into jewellery and sold to tourists. Many marine turtle populations around the world have been decimated as a result of decades of over-harvest.

Incidental capture

Marine turtles are often accidentally caught in fisheries targeting other species. Trawl nets and gill nets entangle turtles and many drown before they can be released. Turtles are attracted to the baited long-line hooks set on the high seas for tuna and swordfish and end up hooked or entangled in the lines themselves. It is estimated that more than 250,000 turtles are caught in long-line fisheries operating around the globe each year. Even where turtle fishing is locally banned, turtles are exposed to all the pressures of large scale, industrialised fisheries when they enter the high seas.

Habitat loss

Loss of habitat, often associated with tourist or industrial developments is a major problem for both nesting and foraging turtles. Foraging grounds, especially coral reefs and seagrass beds, are degraded by declining water quality, boat anchorage, and destructive fishing practices. The global tourism industry has gone through a boom in the last 50 years and sand mining for construction as well as beachfront development and the associated lighting and noise have all reduced the quality of the local nesting habitat.

Climate change

Global climate change is set to create huge environmental challenges for people, but is also considered a massive potential threat to turtles. Sea level rise, increased temperatures and increased storminess may seriously impact nesting and foraging sites in the UK Overseas Territories. Some nesting beaches must be left undeveloped so that they can naturally migrate inland as the sea level rises.

Predation

At all stages of their life cycle marine turtles are preyed upon by other animals including crabs, birds like frigate birds, feral animals, sharks and other large fish. In some cases predator numbers can be unnaturally high. If large numbers of nests are being destroyed, there is no recruitment to the population and this can have devastating effects on marine turtle numbers.

Images: Turtle Eggs, Montserrat Department of Fisheries • Entangled green turtle, Doug Perrine/seapics.com • Digger, aerial image of Anguilla and sunloungers, Peter Richardson/MCS • Frigate birds, Peter Richardson/MCS



The turtle's tale

A marine turtle's life is an epic journey. Throughout their long lives they roam the world's oceans, facing many threats at every stage. This is the turtle's tale.



Green turtles • Doug Perrine/Seapics.com

The mating game

Until they become adults at about 25 years old, male and female turtles look very similar. When males reach maturity they develop a long tail, used to deposit sperm during mating. Courtship and mating take place in the water near the nesting beach and can last for several hours.



Nesting green turtle • Peter Richardson

The big night

Female turtles come ashore at night to lay their eggs on the same beach on which they were born. They are vulnerable on land and are scared by lights and movement on the beach. If undisturbed, the female carefully digs a nest up to 1 metre deep in the sand at the back of the beach. She lays about 100 soft, white eggs. Females nest several times in a season, laying hundreds of eggs.



Green turtle hatchlings • Peter Richardson/MCS

Happy birthday hatchlings

About 6-10 weeks later the eggs begin to hatch. Digging out of the nest is a team effort and the hatchlings emerge from the nest as a group in the cool of the night. They make a dash for the sea, finding their way by heading for the lightest and lowest natural horizon, the sea.



Juvenile hawksbill turtle • Doug Perrine

The lost years

There are many predators in coastal waters including sharks and other large fish. Once in the water, hatchlings instinctively paddle against the waves, swimming non-stop, straight out to the safer open ocean for about 24 hours. This is known as the "juvenile frenzy". It's unclear how hatchlings survive in their first "lost years", but hatchlings of some species have been found in mats of seaweed floating far out in open ocean currents.



Leatherback turtle • Mike Daines

World travellers

Upon reaching adulthood, males and females migrate thousands of kilometres between their adult feeding and breeding grounds. Covering these vast distances takes a lot out of the turtles and so they don't usually undertake their migration every season. Leatherback turtles however are the ultimate ocean wanderers and continually roam the high seas.



Hawksbill turtle • Peter Richardson/MCS

Back in the shallows

In all species other than the leatherback, juveniles migrate back to coastal waters after several years when they are about the size of a dinner plate. They then adopt specific feeding grounds such as coral reefs and seagrass beds. In these nursery areas, young turtles from distant nesting sites live together. They tend to spend long periods at a single site, but will typically use several foraging sites before they reach adulthood.

Marine turtles in the UK and the UK Overseas Territories

Although small in land area, the UK Overseas Territories host extremely high levels of biodiversity, in total far more than Great Britain and Northern Ireland. Many islands are tropical or subtropical and host important habitats for marine turtle nesting and foraging.

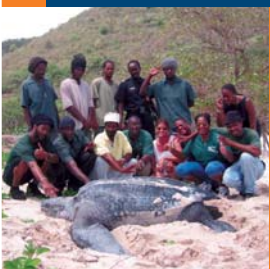
The juvenile turtles foraging in the waters around the Overseas Territories are usually unrelated to the nesting adults. The map below shows which species are found in each of the Territories where turtles occur and whether they are nesting adults or foraging juveniles.

1 TURKS AND CAICOS ISLANDS



There are small nesting populations of green, hawksbill and possibly loggerhead turtles. The islands are a significant foraging site for juvenile green and hawksbill turtles.

2 BRITISH VIRGIN ISLANDS



There are small nesting populations of leatherback, hawksbill and green turtles. The islands are a significant foraging site for juvenile green and hawksbill turtles.

3 BERMUDA



Bermuda's green turtle nesting population is now extinct and only very rare loggerhead nests are laid. Bermuda remains a significant foraging site for green and hawksbill turtles.

4 UNITED KINGDOM



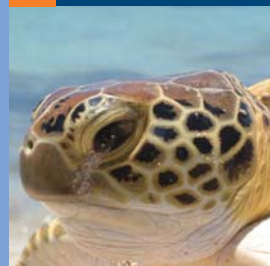
Adult foraging leatherback turtles visit UK waters every summer. Juvenile loggerhead, Kemp's ridley, green and hawksbill turtles are occasionally recorded.

12 CAYMAN ISLANDS



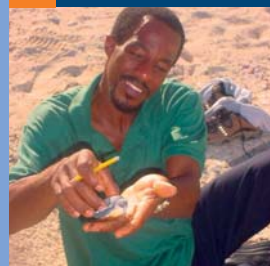
There are small green and loggerhead nesting populations. The islands are a foraging site for juvenile green and hawksbill turtles.

11 ANGUILLA



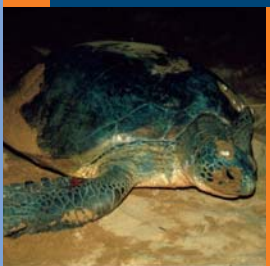
There are small nesting populations of green, leatherback and hawksbill turtles. The island is a significant foraging site for juvenile green and hawksbill turtles.

10 MONTSERRAT



There are small green and hawksbill turtle nesting populations and the island is a foraging site for juvenile green and hawksbill turtles.

9 PITCAIRN ISLANDS



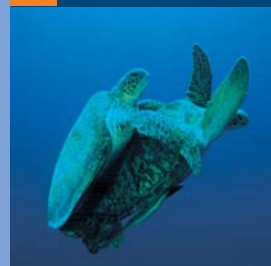
There is a small population of green turtles nesting on these remote and isolated islands. Most nesting occurs on Henderson Island, which is a World Heritage Site.

8 ASCENSION ISLAND



Ascension island has the second largest nesting population of green turtles in the Atlantic ocean (4,000 females/year), and a small foraging population of juvenile hawksbills.

7 ST HELENA



St Helena now has very little sandy coastline, and rare green turtle nests are occasionally recorded. Mating green turtles and juvenile hawksbills are a regular sight in St Helena's waters.

Images: 1. Measuring a green turtle (Peter Richardson/MCS), 2. Staff and leatherback turtle (CFD), 3. Child with hawksbill -Bermuda (Bermuda Aquarium), 4. Leatherback turtle (Mike Daines), 5. Loggerhead turtle (Graeme Cresswell), 6. Juvenile hawksbill turtle - (Brendan Godley)

7. Mating green turtles (Doug Perrine/Seapics.com) 8. Children observing research (Brendan Godley), 9. Nesting green turtle (Peter Richardson), 10. JJ with green turtle hatchling (Brendan Godley), 11. Green turtle (Sue Ranger), 12. Satellite tagged loggerhead turtle (Janice Blumenthal)