

Marine turtle management and legislation

Before 1995 there was an active local turtle fishery in Anguilla when thousands of green and hundreds of hawksbill turtles were caught each year. In 1995 a five-year moratorium on turtle fishing was introduced which was extended for a further 5 years in 2000. The moratorium prohibits any harvest and use of marine turtles, their meat and their eggs. Since the moratorium has been in place most fishers have respected the law and stopped turtle fishing. Though there are conservation benefits in not allowing turtles to be fished, some local people feel it is their right to make use of their turtles as a natural resource. Research is urgently needed in Anguilla to find out more about the status of the turtle populations and address the concerns of the fishermen.

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 Anguilla



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
The Anguilla National Trust P.O. Box 1234 The Valley, Anguilla, B.W.I
Tel: (264)4975297 Fax: (264)4975571 www.axanationaltrust.org
The Department of Fisheries and Marine Resources P.O. Box 60, The Valley, Anguilla B.W.I Tel: (264) 4972871 Fax:(264) 4978567 e-mail: fisheriesmr@gov.ai



Front cover images:
Leatherback hatchling, Doug Perrine/seapics.com • Green turtles awaiting release on Scrub Island, leatherback turtle nest, Captain's Bay, hawksbill turtle over seagrass, Peter Richardson/MCS





Leatherback turtle nesting



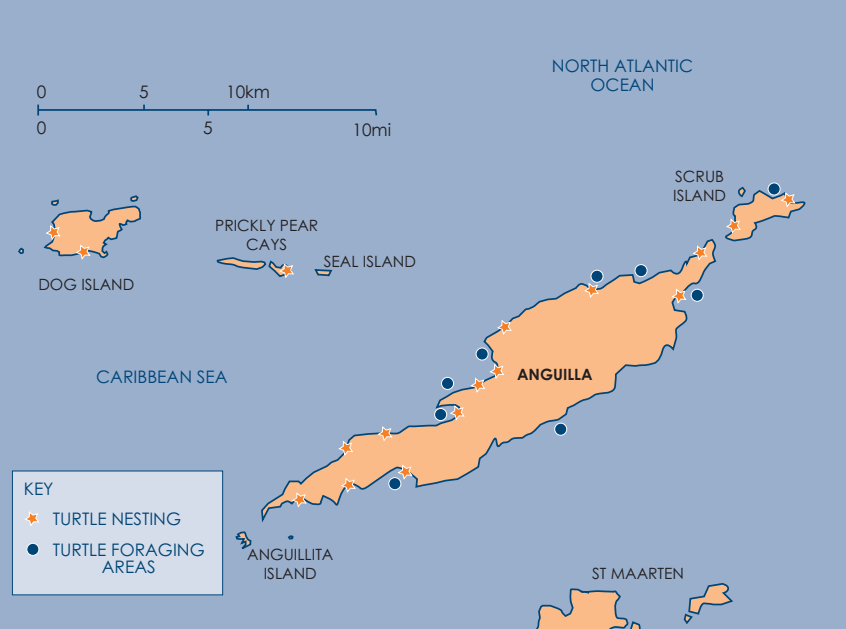
Hawksbill turtle



Loggerhead turtle



Juvenile green turtle



Marine Turtles of Anguilla

The people of Anguilla have had a long relationship with marine turtles. Since the time of the Taino Indians turtles have served as a food item, a cultural symbol and a tourist attraction and have added to the diversity of this unique island.

Marine turtles migrate vast distances between their breeding grounds and feeding areas and visit the waters of many different countries on their travels. Anguilla's turtles are therefore a shared resource and their conservation depends on international cooperation.

Marine turtle nesting in Anguilla

Though Anguilla's sandy beaches are potentially good nesting sites for turtles, research has shown that few nests are laid on the main island with turtles preferring the quiet undisturbed beaches of the outlying cays and islands. Leatherback, green and hawksbill turtles are known to nest in Anguilla, but in critically low numbers and urgent conservation action is needed to ensure the survival of the nesting populations. The Department of Fisheries and Marine Resources is monitoring turtle nesting in Anguilla, so please pass on any information about nests. Their contact details are listed on the back of this leaflet.

Marine turtles in Anguillan waters

At some sites around Anguilla you are very likely to see young green and hawksbill turtles popping their heads above water to breathe. These juvenile turtles are quite abundant around the island, but are mostly unrelated to the nesting turtles. They come to Anguilla to feed on the reefs and seagrass beds. Once they reach a certain size they will leave Anguilla's waters and travel to distant foraging sites. As adults they will return to the nesting beaches, where they themselves were hatched, to breed. Loggerhead turtles are also occasionally spotted in Anguillan waters.

Images: Leatherback turtle and hawksbill turtle, Peter Richardson/MCS • Loggerhead turtle and juvenile green turtle and fish, 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. Though the turtle fishery in Anguilla is banned, Anguilla's turtles are exposed to all the pressures of large scale, industrialised fisheries when they leave Anguilla's waters.

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. In Anguilla, the tourism industry has gone through a boom since the 1980s and sand mining for construction as well as lighting and noise have all reduced the quality of the local nesting habitat.

Climate change

Anguilla is no stranger to turbulent weather and Anguillians have survived severe hurricanes, like Luis in 1995, which devastated much of the island. 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 Anguilla. 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 predated upon by other animals including crabs, birds like night herons, 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 at Windward Point and sunloungers at Shoal Bay, Peter Richardson/MCS • Night heron, Crocus Bay, Juliet Savage



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.



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)