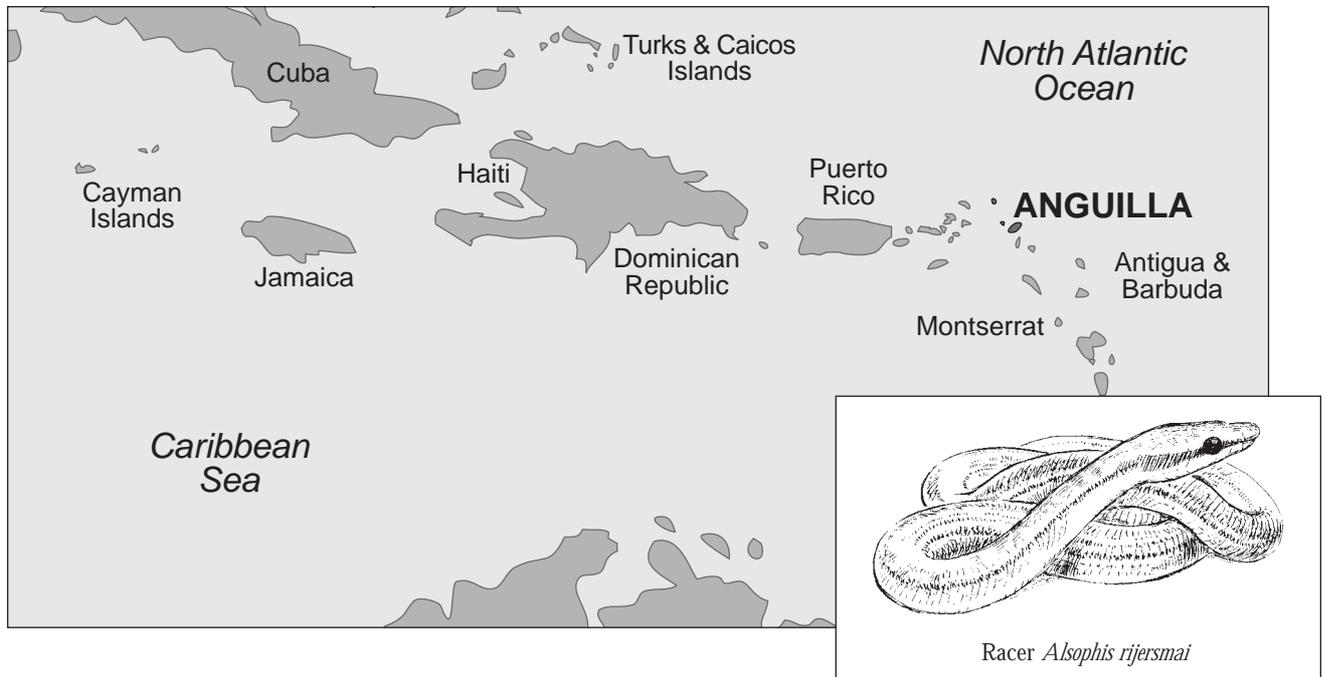


2: Anguilla



Introduction

Anguilla is the most northerly of the Leeward Islands in the eastern Caribbean. It is a low coralline island with an area of 91 km² and a population of about 8,500. The main industries are tourism and fishing. The home fishing industry employs 20% of the population, and territorial waters are also fished by foreign trawlers (Richardson 1984). Tourism developed rapidly during the 1980s: at the beginning of the decade Anguilla had only a few thousand visitors annually, but by 1990 the figure had reached an estimated 70–80,000. Fishing and tourism both pose problems of damage to coral habitats by anchors and spearfishing. The development of tourism is increasingly important to the economy, but it also exerts pressure on natural resources. Together with house building, it is contributing to the current 'building boom' causing environmental problems.

International obligations relevant to nature conservation

Anguilla is included in the UK's ratification of the following international agreements:

- Convention Concerning the Protection of the World Cultural and Natural Heritage (World Heritage Convention)
- Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention).
- International Convention on the Regulation of Whaling

Implementation

Ramsar: Anguilla's decision to join the UK's ratification of Ramsar in 1990 followed an independent review of policy and legislation on wetland protection of the island (Pritchard 1990). There are currently no designated Ramsar sites.

Protected areas

A system of marine protected areas for Anguilla has been developed over the past 20 years. In 1980 the Government requested the assistance of the Eastern Caribbean Natural Area Management Program (ECNAMP) in formulating a management plan for critical marine resources. A major recommendation of that study (Jackson 1981) was the creation of a system of marine parks to protect areas of high ecological value from human activity. The study also recommended the establishment of a multiple-use reserve covering an area of sea to the north of Anguilla.

- **Marine Parks Ordinance 1982.** This enabling legislation for the designation of marine protected areas was passed in 1982. It empowers the Governor "by Order or Regulations published in the Gazette" to "designate any portion of the marine areas of Anguilla as a marine park" and allows him to make regulations covering a wide range of measures.

In 1989 the Anguilla Government put forward a proposal for a comprehensive marine parks programme. The objectives were:

- to develop and implement an effective organisational approach for managing coastal resources;
- to provide site-specific information and technical guidelines for development and management of coastal resources;
- to establish marine parks at Shoal Bay, Sandy Island, Prickly Pear Cays (including Seal Island), Dog Island, Little Bay and Sombrero Island;
- to improve public awareness and understanding of coastal resources, as a means of providing a

base of popular support for protection and sustainable development of these resources; and

- to provide immediate attention to, and amelioration of, known problems of beach erosion and visitor-caused damage to critical marine habitats at proposed park sites and elsewhere.

Elements of the marine parks programme that have been carried out include: inventory and analysis of marine resources funded by the UK Government's British Development Division in the Caribbean (BDDC); provision of public information by the US National Parks Service and WWF-UK; and the establishment of marine parks funded by WWF-UK.

In 1993 five areas were designated as marine parks. These are Sandy Island; Prickly Pear Cays and Seal Island; Dog Island; Little Bay and Shoal Bay; and Island Harbour. A leaflet giving information on the Anguilla marine park mooring system and providing a map of the marine parks has been produced. Subsequently little development of the marine parks system has taken place (Christian, in litt. 1998). At present, responsibility for the marine parks lies with the Department of Fisheries and Marine Resources.

- **Access to Beaches Ordinance No. 2 1981:** defines the beach as "including land adjoining the foreshore of Anguilla and its islands and extending not more than 100 ft beyond the landward limit of the foreshore." Wilful damage to plants, shrubs and trees is prohibited. (Pritchard 1990).
- **The Beach Protection Ordinance No. 10 1988:** provides for the declaration of protected beaches from which the extraction of sand and gravel is forbidden. Seventeen such beaches have been designated.

In 1985 Fountain Cavern National Park was acquired using Government funds. Acquisition of the 1.9 ha site involved investigation by the Archaeological and Historical Society of an

extremely complex landowning pattern and negotiations with the owners (Pritchard 1990). A corporation has been established to take full responsibility for further development of the park. Other sites are being considered as national parks, including Big Spring and Road Point (Elvet Hughes *in litt.*).

Habitats of major significance

Anguilla is a low coralline island, formed from limestone and marls developed on old volcanic rocks. It shares a common submarine shelf with St Martin to the south. The coastline has sandy bays in the south and cliffs in the north. There are extensive reefs off the north coast and fringing reefs along most of the south coast. The 17 km-long reef along the south-east coast is considered to be one of the most important largely unbroken reefs in the eastern Caribbean (Putney 1982).

Coastal and sublittoral habitats of all islands and reefs of the Anguilla group have been surveyed and mapped as part of the Anguilla Marine Resources Inventory Project administered by the Government of Anguilla, funded by ODA (Blair Myers et al. 1995; Sheppard et al. 1995). Based on aerial photography, the detailed atlas is GIS-based, allowing for relatively straightforward updating when facilities in the territory permit. The production of large-format, paper atlases by themselves show the extent and location of all marine and intertidal habitats, the intention being to supply data on important areas during the process of development planning and permitting. Simultaneously, data were collected on terrestrial habitats near the coasts.

Anguilla has small areas of mangroves and about 15 saline ponds of considerable importance for resident and migratory waterfowl (Scott & Carbonnell 1986). A guide to Anguilla's wetlands has recently been produced by the Anguilla National Trust. The guide describes the major ponds, their bird life (with local and scientific names), the plant species around them and includes historical as well as ecological notes (Christian *in litt.* 1998).

Offshore islands hold significant breeding seabird colonies. Detailed ecological surveys of these islands and seabird counts are required (Pritchard 1990).

The vegetation of Anguilla consists of degraded evergreen woodland, with scattered areas of grassland, and low scrub. Areas classed as conservation areas in the National Land Use Plan of 1996 are the south-west peninsula, the north-east peninsula, two areas mid-way along the north-west coast, and Prickly Pear Cays. All vegetation is subject to uncontrolled grazing by livestock. The existing beaches at Prickly Pear provide important nesting habitats for a number of species of birds, and the hawksbill turtle *Eretmochelys imbricata*. The offshore cays are considered critical habitat because they have large rookeries of several bird species, such as the sooty tern *Sterna fuscata*, brown booby *Sula leucogaster*, blue-faced booby *Sula dactylatra*, and noddy tern *Anous stolidus* (Christian *in litt.* 1998).

Remnant natural areas are predominantly on the north coast, with the most extensive tract of thorn-scrub forest in an area between Little Bay and Shoal Bay. Along the coast are many vertical cliffs with sea caves and sink holes. Immediately inland from the cliffs are densely vegetated areas which provide the habitat for Anguilla's reptiles, including the threatened Lesser Antillean iguana *Iguana delicatissima*. Another relatively undisturbed site is the windward point of the island between Savannah Bay and Island Harbour where stunted, salt-spray tolerant vegetation occurs. A smaller area, Katouche Canyon (approximately 1.5 km long and 0.5 km wide), is probably one of the least disturbed areas in Anguilla and is currently free from goats, cats and dogs. The Katouche Canyon is an important site for reptiles and birds (Anon. 1993).

Species of major significance

Plants

There are approximately 500 species of plants recorded for Anguilla, 321 of which are indigenous. One plant species, *Rondeletia anguillensis* (Rubiaceae)

is endemic to the island. It occurs near Deep Waters at the east end of the island and in the vicinity of Little Bay, near Flat Cap Point (Howard & Kellogg 1987).

Reptiles and amphibians

The reptiles of Anguilla and offshore cays consist of 12 lizard species, one species of snake and one species of land tortoise. The endemic reptiles are:

a black ground lizard *Ameiva corvina*: endemic to Sombrero;

a black ground lizard *Ameiva corax*: endemic to Little Scrub Island.

The following species are endemic to the Anguilla Bank:

Leeward Island racer *Alsophis rijersmai* (EN): this snake occurs in Anguilla, Guadeloupe and the Netherlands Antilles. An assesment of the Anguilla population took place in spring 1998.

a ground lizard *Ameiva pleei*: this species is endemic to Anguilla, St Martin and St Barthelemy, where it occurs in dry scrub, mangrove edges and amongst limestone.

a tree lizard *Anolis gingivinus*: occurs on most islands and cays on the Anguilla Bank being ubiquitous amongst coastal scrub, rocks and trees.

a small gecko *Sphaerodactylus macrolepis parvus*: endemic to the Anguilla Bank; on Anguilla it is found only in moist areas, such as caves and canyons, it is most abundant in Katouche Canyon and Cavannagh Cave.

Two other reptiles, the gecko *Sphaerodactylus sputator* and Lesser Antillean iguana *Iguana delicatissima* (VU) are endemic to the northern Lesser Antilles. Of these, the iguana is threatened on the island as a result of tree felling and grazing by feral goats: only about 50 individuals remain.

During 1997 Fauna & Flora International worked with the Anguilla National Trust to assess the status of the Lesser Antillean iguana. Other than those listed above, there is a further threat to this species posed by the arrival of the green iguana *Iguana iguana* which floated to Anguilla on logs during Hurricane Louis in 1995. Several of the latter species have been captured and are being kept by a friend of the Trust to prevent or minimise the risk of interbreeding. Meanwhile a conservation plan is being developed for the Lesser Antillean iguana. Translocation to offshore cays and other conservation areas is being considered as well as captive breeding.

Anguilla is of regional importance for sea turtle nesting sites.

Green turtle *Chelonia mydas* (EN). Together with the hawksbill *Eretmochelys imbricata*, the green turtle is the most common species in Anguillan waters. Important nest sites for this turtle include Dog Island and the Prickly Pear Cays (Groombridge & Luxmoore 1989). Notable foraging sites are Shoal Bay, North Hill Village, Lower South Hill, Long Bay, Meads Bay, Scrub Island, Sandy Island, Sombrero Island, Dog Island, and between South Shoal Bay and Blowing Rock (Groombridge & Luxmoore 1989).

Hawksbill turtle *Eretmochelys imbricata* (CR). The hawksbill is the principal species nesting on Anguilla. Important nesting sites include Dog Island, the main island and on Prickly Pear Cays (Groombridge & Luxmoore 1989). Foraging hawksbills are present year round, especially in the extensive reef to the north of the island and the offshore cays (Groombridge & Luxmoore 1989).

Leatherback turtle *Dermochelys coriacea* (EN). Leatherback turtles are considered to be rare around Anguilla. Nesting has been recorded from the main island and Scrub Island (Meylan 1983); the current status of this population requires evaluation.

Loggerhead turtle *Caretta caretta* (EN). There is

little information about this species in Anguillan waters. Loggerhead turtles have been captured at Scilly Cay, near Island Harbour and are suspected to forage around Dog Island, Scrub Island and Sandy Island (Meylan 1983). There have been no reliable reports of nesting by loggerheads on Anguilla (Meylan 1983).

With the help of the Wider Caribbean Sea Turtle Conservation Network (WIDECAST), the Anguilla National Trust has taken the opportunity of a five-year moratorium on the harvesting of sea turtles, to develop public awareness and education about the four species which may be found in Anguillan waters. The focus has been on the hawksbill, which is Anguilla's predominant nesting species, and the green turtle which forages on Anguilla's reefs and surrounding waters. A second five-year moratorium is now being sought for scientific study of the turtles that will inform the Anguilla Sea Turtle Recovery Plan (STRAP). Each WIDECAST member country will have a STRAP based on the particular needs of their turtle populations. A WIDECAST workshop was held in Anguilla in late 1998, supported by WWF-UK.

Birds

Anguilla is important for seabirds in a regional context, and for waterfowl and migratory shorebirds. Wetland and bird research priorities are specified by Pritchard (1990).

Mammals

Five species of bats, Anguilla's only native terrestrial mammals, reside in the caves and sink holes of the island. Assessment of the bat populations by the Anguilla National Trust, working with Fauna and Flora International (FFI) is currently proposed. The bat species of Anguilla are:

Barbados long-tongued bat *Monophyllus plethodon* (LRnt)

A subspecies of the Jamaican fruit-eating bat *Artibeus jamaicensis jamaicensis*

A subspecies of the Antillean fruit-eating bat *Brachyphylla cavernarum cavernarum*

Mexican funnel-eared bat *Natalus stramineus*

Pallas' mastiff-bat *Molossus molossus*

Migrating humpback whales *Megaptera novaeangliae* (VU) and, occasionally, sperm whales *Physeter catodon* (VU) have been reported off the north-west and west coasts of Anguilla in March/April (Gricks 1994). The sei whale *Balaenoptera borealis* (EN) may occur sporadically in Anguillan waters, although this requires confirmation.

Species protection

- **The Wild Birds Protection Ordinance 1913:** this protects specified wild bird species and their nests and eggs. It establishes a closed season for specified 'game' birds. Protected and game species are listed only by their local names. Updating the Ordinance is desirable (Bradley, undated).
- **The Fisheries Protection Ordinance No. 4 1988:** this applies to territorial waters plus the contiguous 200 mile fisheries zone. It provides for the appointment of Fisheries Officers and gives them enforcement powers. The Ordinance regulates the taking and killing of certain marine species, and establishes close seasons for lobsters and turtles. It repeals the Turtles Ordinance No. 6 of 1984. Details of the policing of fisheries are set out in the Fisheries Protection Regulations No. 12 1988 and the Fisheries Protection (Amendment) Regulations No. 4 1990.

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