

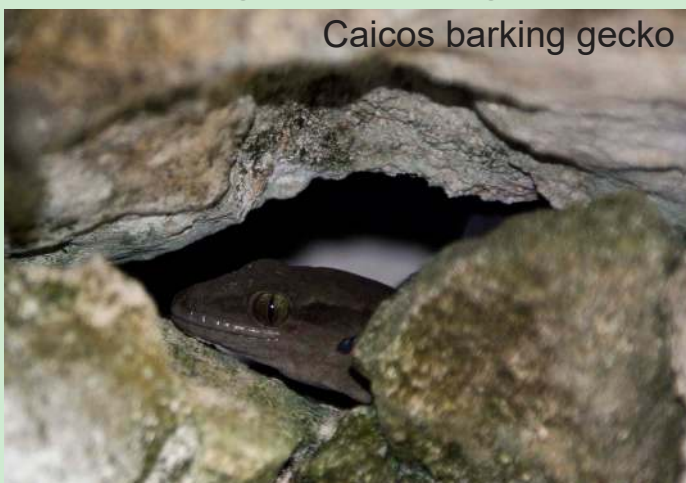
*Championing UK's most special species:
the wildlife of UK's Overseas Territories (UKOTs) and
Crown Dependencies (CDs)*

FACT-SHEET ON:

TCI endemic reptile species
UK Overseas Territory: Turks & Caicos Islands

The UKOT of the Turks & Caicos islands is responsible for the conservation of at least 9 reptile species and more subspecies which occur nowhere else in the world. Here, we give just 3 examples.

Caicos Barking Gecko *Aristeliger hechti*



Caicos barking gecko

Caicos Barking Gecko, occurring only in TCI, was thought to be extinct until rediscovered by Bryan Naqqi Manco during UKOTCF surveys in the early 2000s. © Dr Mike Pienkowski, UKOTCF

Importance: The Caicos Barking Gecko is the Turks & Caicos Islands' largest gecko species, and its rarest lizard. For unknown reasons, it survives only in very limited local habitats throughout the islands. It had been thought extinct until rediscovered in the early 2000s by a project run by UKOTCF with local partners, and support from UK Government.

Ecosystem: This gecko is known only from a few sites in the Caicos Islands, including the tall tropical dry forests of western North Caicos, the rocky xeric forests of Big Ambergris Cay, and the dune habitat of French Cay. The inconsistency of the habitats in which it is found are thus far unexplained, but it is apparently absent from large areas of what seem to be suitable habitat.

Threats: This rare gecko is threatened by its already very limited range, but also by clearance of land for human development where it lives and the introduction of non-native invasive species such as cats and rats.

Needs: The Caicos Barking Gecko needs further study on its range and population to gauge how rare it is, and it requires protection from invasive species within its range. A lesser requirement, but one that is potentially significant, is the need for protection from the commercial reptile trade and illegal poaching and international trade connected to that. Setting up an *ex-situ* captive breeding conservation population in a *bona fide* conservation institution may be a desirable goal to ensure its long-term survival.

Caicos Pygmy Boa *Tropidophis greenwayi*



This tiny Caicos Pygmy Boa (here, an unusually large one sits in the palm of a hand) is found only in TCI. It is the smallest constrictor in the world and feeds mainly on small lizards and frogs. Like all snakes in TCI, it is not venomous and poses no threat to humans. © Dr Mike Pienkowski, UKOTCF

Importance: Believed to be the smallest boa constrictor in the world, adults are roughly the size of a writing pen. They feed primarily on another endemic species, the Caicos Dwarf Gecko *Sphaerodactylus caicosensis*.

Ecosystem: Restricted only to islands on the Caicos Bank, these tiny snakes live under rocks in the threatened tropical dry forest habitat. Their favoured ecosystem is also the preferred habitat for farming in the Caicos Islands.

Threats: Caicos Pygmy Boas are already rare because of their minuscule natural range and low reproductive rate (live birth of 1-6 young per year per mature female). They are additionally threatened by: large-scale land-clearance for agriculture and built development; by predation from introduced non-native invasive species, including cats, dogs, chickens, and rats; and direct killing by humans as they are commonly perceived as dangerous due to religious influence. (No native snakes in TCI are venomous.)

Needs: Caicos Pygmy Boas require large tracts of undisturbed "upland" tropical dry forest habitat, which is increasingly rare in the Turks and Caicos Islands. ("Upland" is the local term for normally dry land on rock, rather than normally wet land on mud; it is, at most, only a few metres above sea-level, and often just centimetres.) They also need protection from invasive species in their natural habitats. A lesser requirement, but one that is potentially significant, is their need for protection from the commercial reptile trade and illegal poaching and international trade connected to that. Setting up an *ex-situ* captive breeding

conservation population in a *bona fide* conservation institution may be a desirable goal to ensure its long-term survival.

Turks & Caicos Rock Iguana

Cyclura carinata



Turks & Caicos Rock Iguanas display on the shore of Little Water Cay.
© Dr Mike Pienkowski, UKOTCF

Importance: The Turks & Caicos Rock Iguana is the smallest of fourteen species of rock iguanas endemic to the Caribbean, but it is the largest native land animal of the Turks & Caicos Islands. It has been studied as a model organism for the diets, reproduction, and habits of other even more endangered rock iguanas. It is a vital ecosystem engineer of the dune habitats, dispersing seeds of plants key to the formation of dunes (many of which have seeds that fare better when passed through the gut of an iguana). Their role in the preservation and expansion of sand-dunes makes them key to coastal defence and protection against sea-level rise and climate-change. They also play an important role in the ecotourism market of the Turks and Caicos Islands, as many tourists go to see them in their natural habitat.

Ecosystem: Once found throughout the coastal and forest habitats of the Turks & Caicos Islands, the Turks & Caicos Rock Iguana is now restricted only to small offshore cays where introduced non-native mammals have not become established.

Threats: The most significant threat to Turks & Caicos Rock Iguanas is introduced non-native predators, particularly cats, dogs and rats. In one striking case, the reduction of a population of 27,000 Turks & Caicos Rock Iguanas on Pine Cay was reduced to functional extinction in only ten years following the introduction of cats and dogs to that island. The largest population of rock iguanas is on Big Ambergris Cay, an island now under development and the consequential threat of introduction of invasive non-native mammals.

Needs: Several international conservation agencies and local conservation institutions are involved in work on iguana conservation, but there are needs related to ensuring biosecurity protocols for iguana islands are maintained and to ensuring that developments that threaten those islands are not allowed to occur.