Another Chance for the Turks and Caicos Rock Iguana

Numi Mitchell
The Conservation Agency

About four hundred adult Turks and Caicos Rock Iguanas (*Cyclura carinata carinata*) are kissing the ground of their new home on Long Cay in the Caicos Bank. All of them were scooped out of the paths of bulldozers on Big Ambergris Cay, where a new resort development is in the early stages of construction.

Big Ambergris Cay supports one of the last large populations of these animals — and it literally teems with them. Iguanas occupy every suitable square inch of habitat on the island. Because all of the usable space is taken, iguanas that find themselves in the way of roadbeds, houses, and canals have nowhere to go as their habitat disappears.

Equally substantial populations existed only decades ago on Providenciales, North, Middle, East, and South Caicos, and on the smaller cays in between. The mistake made again and again as each island was developed was to think: "No problem — we're practically tripping over these lizards with every footstep. How could they ever become endangered?" Only in hindsight did we realize that populations of rough-and-tumble dinosaur-like lizards could actually be fragile. We now know that they cannot coexist with larger mammals, particularly cats, grazing animals, and humans. In fact, predation, competition, and habitat loss caused by these seemingly innocuous sources had wiped out 95% of the world's population of the unique Turks and Caicos Rock Iguana by the mid-1900s.

In 1999, when development on Big Ambergris Cay began in earnest, the government was determined not to repeat the same iguana-extinction scenario that had already occurred on every large developed island in the Turks and Caicos (TCI). That year, TCI's Department of

Cyclura carinata carinata (female). *Photograph by John Binns*

Environment and Coastal Resources (DECR) teamed up with The Conservation Agency and the Denver Zoo, who claimed they could find a home for some of the displaced lizards. The island's owner, Henry Mensen, agreed to help.

This was easier said than done. The problem was finding another, or several other, suitable islands. You couldn't just move iguanas to any island that currently had no iguanas. If the island had humans and the usual entourage of free-ranging cats, dogs, and livestock, it was immediately disqualified. The team needed to find islands without iguanas that also were otherwise uninhabited. Two types were found: (1) very small islands which, because of lack of fresh water, would not support cats, dogs, or livestock, and (2) larger islands with some fresh water that had free ranging cats or livestock that had been released and had survived.

Cyclura carinata carinata (young male). *Photograph by John Binns*

The Conservation Agency, Denver Zoo, and DECR were interested in a long-term solution, and the team was curious as to why the smaller cays that were obviously capable of supporting permanent populations of iguanas didn't already have them. They suspected that hurricanes were the major problem; during storms, small, lower-profile islands can overwash completely. The team chose to tackle a larger island with some topographic relief, in spite of the fact that the habitat would first have to be repaired.

One island stood out: Long Cay, neighboring South Caicos, a thin, unpopulated, 3-mile-long island with a backbone of 100-foot limestone cliffs, sandy scarps, and grassy plains and salt-marshes on the sheltered western side. The 260-acre island was government-owned and already part of the Admiral Cockburn Nature Reserve. The beauty of Long Cay was striking from the cliff tops and the habitat was perfect — except for one fatal flaw — it supported a population of hungry domestic cats whose unwanted ancestors had been released there years ago. Cats are very efficient predators and the relatively small Turks and Caicos Iguanas are quite vulnerable to them, particularly

In June 2000, the Nation celebrated the return of the Turks and Caicos Iguana to Long Cay during Environment Week as Julia Jones, wife of his Excellency, Governor Mervyn Jones, ceremonially cut the ribbon and the iguanas raced across the line into the lush bush of their ancestral home. Numi Mitchell in the dark dress and Julia Jones in the light dress. Note the iguana running to Numi's right. *Photographer: Beth Outten.*

Volunteer Virginia "Gingee" Brewer signed on for the expedition. On her first trip she coerced five of her associates to help with the effort. She is interested in both science and conservation but has an additional concern: she is a homeowner on Pine Cay. *Photographs by Numi Mitchell*

in the early morning when iguanas are cold and slow. A population of iguanas was known to have existed on Long Cay in the 1970s, and individuals had been seen sporadically as recently as the 1990s — but the introduction of cats had made it impossible for iguanas to survive on the cay.

The Conservation Agency and Denver Zoo conferred and concluded that things could be worse. Long Cay could have goats, sheep, pigs, cows, donkeys, dogs, and cats. It had only cats, and not many at that. They took a vote and decided that, with the help of the DECR, they could restore Long Cay and bring the iguanas home.

In June 1999, the team tackled the job of clearing the island of the 5–10 cats whose presence would make iguana recolonization impossible. Using a combination of toxic bait (1080, a plant derivative used successfully in New Zealand to control feral cats and Australian opossums) and box traps, they mounted an intensive campaign.

By January 2000, they were confident that all of the cats were gone. The island was safe for iguanas and, with the help of many game volunteers, the team began catching and moving groups of iguanas from Big Ambergris to the now pristine Long Cay. What kind of people like catching iguanas? You would be surprised. The Conservation Agency, Denver Zoo, and the DECR had no trouble finding "assistants" who enthusiastically agreed to be baked in the sun, serve as dart boards for thousands of mosquitoes, and be scratched, sometimes severely, by thorn scrub. Local volunteers came from South Caicos, Grand Turk, Pine Cay, and Provo to steal around the bush "tossing" iguanas, as noosing is locally called. They used fishing poles with 200-lb-test monofilament loops at the end. Some folks claimed that a whistled rendition of "Yankee Doodle Dandy" would allow you to sneak up on iguanas more easily but, after noosing a couple of hundred myself, I can say it doesn't really make much difference. Nevertheless, people tended to stick with this method and, on capture days in the baking bush of Big Ambergris, one could always hear at least six asynchronous versions in at least three different keys.

Whistling or not, a hunter had to sneak up on an iguana and then distract it so it wouldn't notice the noose being slipped around its neck. That accomplished, with a flick of the wrist, the hunter tweaked the noose tight and lunged forward to grab the furiously flailing iguana. Males turned out to be relatively easy to noose because of their attitude — they stand their ground, even pumping themselves up on stiff legs to look larger as you approach. Females tended to be shy and more apt to try to slip away. Neither is shy when noosed, however. Hunters who made the mistake of putting their hands too close to the mouth of an

indignant noosed iguana became charter members of "The Bite Club." People almost always became members of The Bite Club immediately after laughing at others who had become members just before them.

Boatloads of 25–100 iguanas, traveling with their overheated, sore-muscled captors (most of whom were fantasizing about icy cold beer), were moved from Big Ambergris to the DECR lab on South Caicos, where they were held overnight. Animals were weighed, measured, and each received a unique internal transponder tag that would allow researchers to identify them if they were recaptured. The following day, they were released on Long Cay. Some sported radiocollars and were monitored for the next couple of months as they established themselves on their new island home.

Cyclura carinata carinata. Photograph by John Binns

Cyclura carinata carinata. Photograph by John Binns

While The Conservation Agency, Denver Zoo, and DECR provided the principal workforce, volunteers continued to help in many ways, particularly while radiotracking the new settlers and recapturing them to check their weights and conditions. Many offered to help — kids, fishermen, grandmothers, and government officials — anyone adventurous, curious, or concerned. Even his Excellency, Governor Mervyn Jones, and his wife Julia came to Long Cay to pitch in.

In June 2000, the nation celebrated the return of iguanas to Long Cay during Environment Week. Julia Jones cut the ceremonial ribbon and the iguanas raced across the line into the lush bush of their ancestral home.

Since that summer celebration, the iguanas on Long Cay have been thriving. All rapidly found burrows (many of which were probably once occupied by their ancestors) and apparently found plenty to eat. Iguanas on the cay are proportionately fatter than those from Big Ambergris and are brightly colored (indicating that they are growing rapidly and frequently shedding their skin). One- and two-year-old babies are easy to see on the island — a fact attributable to the absence of cats.

Today, thanks to The Conservation Agency, the Denver Zoo, and the DECR, Long Cay is a Garden of Eden for the rescued iguanas and their offspring. In the big picture, though, it is only one

Cyclura carinata carinata (male). *Photograph by John Binns*

basket of eggs. We need numbers of other reserves, and initiatives like those by the Turks and Caicos National Trust in setting aside the Chalk Sound, Little Water Cay, and Little Ambergris Reserves, and current efforts by the San Diego Zoo to repopulate smaller cays, help to insure that the endemic Turks and Caicos Rock Iguana — found no where else in the world — survives. From the perspective of The Conservation Agency and the Denver Zoo, restoration work needs to continue. More candidate island homesites must be found and "repaired" by removing non-native wildlife that preys on, competes with, or otherwise undermines native or unique Turks and Caicos species.

Restoring habitat for iguanas will restore habitat for other native animals — local and migratory. We all will start to see a wider range of native wildlife reappearing in the TCI. For now, the homeless iguanas of Big Ambergris will continue to provide opportunities to restock many of the islands on which this endemic lizard belongs.

Numi Mitchell photographed during a hike in mid-day heat. *Photograph by John Binns*

Long Cay, Turks and Caicos. *Photographs by Numi Mitchell*

Volume 10, Number 1 March 2003 US$6.00

IGUANA

Journal of the International Iguana Society www.iguanasociety.org

Cyclura ricordii, Ricord's Iguana. *Photographed in the Dominican Republic by John Binns.*

Male *Cyclura carinata carinata*,Turks and Cacios Iguana. ***Photograph taken in the Turk and Caicos Islands 2002 by John Binns.***