

UPDATE

North Andros Island Report

Robert W. Ehrig

Finca Cyclura Reserve, Big Pine Key, FL

There is no place where I have felt at home as quickly as North Andros Island in the Bahamas. It is perhaps because it looks so similar to my own home, Big Pine Key, 200 miles to the west. Andros is the largest landmass in the Bahamas, with an area of 5,959 km². It is 100 miles long and 20–40 miles wide, and is actually not one single island, but several large islands separated by bights. Most of Andros is uninhabited; its human population of 9,000 is found in settlements along the east coast. Nicollstown in the north is the largest. Red Bays is the only settlement on the west coast of Andros and it is also home to some of the last iguana hunters on North Andros. The west coast of

Andros is a maze of saltwater creeks, sand bars, mangrove swamp, and salt marsh. This region is called “Swash” and is known for being very inhospitable. The interior of North Andros is a mix of pine forest, fresh water wetlands, and West Indian hardwood forest, locally called coppice.

Along the east coast of Andros runs an impressive coastal ridge covered alternately with coppice or pine yards. This ridge is the best *Cyclura* habitat on the island and, for the most part, is presently empty of iguanas. The ridge and the land between it and the sea are also the preferred habitat of the human inhabitants of Andros. Off the shore of the east coast is the third largest barrier coral reef formation in the world.



Andros iguana, *Cyclura cyclura cyclura*, May 2000. Middle Bight. Photograph: John Bendon



R.W. Ehrig holds Andros Island Rock Iguana, *Cyclura cyclura cyclura*, 16 June 1991. Twin Lakes, North Andros.
Photograph: Timothy G. Haack.

The largest native terrestrial vertebrate of Andros is the largest iguana species of the Bahamas, *Cyclura cyclura cyclura*, the Andros Island rock iguana. On 13 September 2000, I returned to North Andros after a nine-year absence. Accompanied by I.I.S. president, Joe Wasilewski, I planned on a survey of the most distant logging roads on North Andros. We landed at the small airport at Fresh Creek, where Bill Davis, the Director of Forfar Field Station at Stafford Creek met us.

I had conducted two previous surveys of North Andros for rock iguanas in 1991 with Forfar as my base. The surveys consisted of driving a general pattern in the network of old logging roads. They cover an area from the northwest, south to Fresh Creek, and south and west of Fresh Creek (Ehrig, 1991). Historically, the iguanas were found throughout all uplands of North Andros (Auffenberg, 1976). Auffenberg found iguanas in most of the areas I visited in 1991 (Auffenberg,

1991, pers. com.). The drive would cover 65 to 125 miles of logging roads and walking 2 to 6 miles in areas where iguanas were sighted. The surveys were conducted between 700 and 1700 hours in June and August 1991 and September 2000. Days were sunny at least 50% of the time and rain was encountered twice. The logging in North Andros ceased in 1976. It had been logged of pine, *Pinus caribaea* var. *bahamiensis*. In the more distant past, Andros yielded mahogany, *Sweitenia mahogoni*, cedar, *Juniperus barbadensis* and other valuable woods. Feral European hogs have been present on North Andros for a long time. Iguanas have survived in spite of these negative impacts on the habitats of North Andros.

Road surveys are not an accurate census method for detailed population studies, but they are useful for confirming the existence of iguanas in particular areas. North Andros is massive. Its eastern coastline is over 50 miles long. It is 10 to 15 miles wide in the north, 42 miles wide at its



Andros iguana, *Cyclura cyclura cyclura*, May 2000. Middle Bight. Photograph: John Bendon

center, and 25 miles wide at the south end of the northern bight. Surveying the island completely would take years. By covering the logging roads, the coastlines and the banks of the major creeks, a rough estimate of the iguanas' range can be established. There are many areas where transects can be run off the logging roads, but this could be dangerous. Even the most hardy field worker would find it challenging not to get lost 30 miles into the bush on North Andros.

North Andros has had substantial construction in the last nine years but has still maintained its laid back and isolated atmosphere. We left Forfar early in the morning on September 14, proceeding west then south on the main logging road in the center of North Andros. We traveled directly to the areas where I had spotted a number of iguanas in 1991. The edges of the roads had become substantially overgrown in the intervening years. Australian pine, *Casuarina equisetifolia* had also become more common. A number of white crown pigeons and bobwhite quail were observed.

On 16 June 1991, we spotted and caught our first Andros Island iguana at 845 hours, while it was basking on the road. By 1400 hours we had spotted four *Cyclura* and six hogs. On two day-long surveys in August 1991 we had spotted six *Cyclura* and five hogs and four *Cyclura* and six hogs respectively. All the iguanas were 3.1 ft (1 m) or less in total length (Ehrig, unpublished data). Six of the *Cyclura* sightings occurred while I was walking in areas that we considered likely to harbor iguanas. Most sightings occurred before noon. All animals were young (less than 20 years). Four iguanas were under ten years of age. It is hard to draw any conclusions from such small data, but we did know *Cyclura* were breeding and that hogs were a large factor in the iguana population

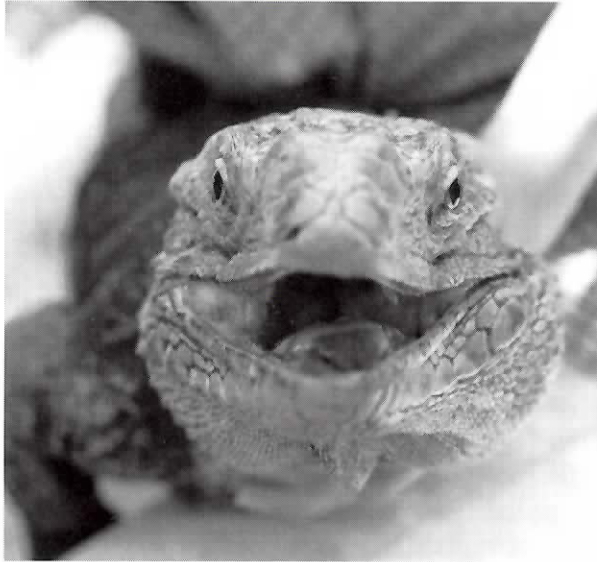
Below: A pair of Black-billed tree ducks, along with their offspring inhabiting a swampy area on one of our survey roads. Right: A Great Lizard Cuckoo, *Saurothera merlini*, displays to another cuckoo. This bird has spectacular displays. As its name implies, this species may feed on hatchling iguanas. Photographs: Joe Wasilewski



Below: A species of racer, *Alsophis vudii*, one of the more commonly seen snakes on Andros Island. Also found on the island are species of island boas from the genus *Tropodophis* and *Epicrates*. Photograph: Joe Wasilewski



dynamic. Most hogs were spotted near areas with iguanas, but several hogs were observed more than 15 miles from any iguana sightings.



Andros iguana, *Cyclura cyclura cyclura*, May 2000. Middle Bight. Photograph: John Bendon

Feral hogs are known predators of young iguanas and their nests. On Andros, *Cyclura cyclura* are known to lay eggs in termite mounds, although they will undoubtedly nest in a more traditional manner when conditions permit. Hunters are present on North Andros and are apparently becoming more numerous. Most hunting appears directed toward hogs. Ducks and pigeons are also hunted. Iguana hunting is illegal, but there is no enforcement. It is more rare these days, primarily because the iguanas are becoming very rare. Every local inhabitant both now and in 1991 made mention of the fact that iguanas are not as common as they were in the past.

On our September 2000 survey, we encountered hunters deep in the interior of Andros. There were two hunters in a truck, one driving and one standing in the bed. The shooter was well armed with a modern looking 12-gauge shotgun. They were friendly to us but they had no idea what we were doing so far out in the bush. When I asked them if they were hunting hogs, they replied, "yes." They seemed too well armed for iguana hunting but I regretted later that I had not ques-



Young male Andros Island Rock Iguana, *Cyclura cyclura cyclura*, North Andros. Photograph from I.T. Vol. 1, No. 3: Timothy G. Haack.

tioned them further. They were recreational hunters and did not appear dependent on making a kill to eat. On this 8½ hour survey we saw no iguanas at all. We were disappointed. We had seen four hogs, slightly fewer than the 1991 surveys but still enough to indicate an ample population was present. Was it just a bad day or were there fewer iguanas than nine years earlier? Only additional surveys will answer the question for sure.



Above: The bromeliad, *Catopsis* sp. uses a *Bucidia spenosa* bush as an anchor. There is an abundance of beautiful bromeliads, along with orchids throughout Andros Island. Photograph: Joe Wasilewski

The Blanket Sound Iguana

In 1991, three different local residents told us the story of a very large iguana that would periodically be sighted at the edge of the Queen's Highway at the turnoff for the settlement of Blanket Sound. This very large male would stand near the road displaying and standing his ground. If approached too closely he would retreat into the thick coppice on the ridge behind him. If not confronted he would sit as long as twenty five minutes before walking back into his forest. This male is apparently still occupying the same habitat nine years later. We once again heard the story of the same iguana from a different trio of local residents. An employee of the Andros Town Airport related seeing this giant while with his young daughter and seemed very pleased with his encounter. We were happy to hear that this iguana is apparently still alive and well.

At Forfar Field Station a dog killed a yearling iguana in August 2000. The specimen is preserved in the library. We talked to employees of the station who had periodically seen young animals right on the station grounds. We also spoke with a local resident in Stafford Creek who had seen an adult animal two miles up the creek about two months earlier. We surveyed up the creek on our last morning for about an hour. As Joe lay in the boat (a victim of jungle fever of the previous evening), I saw some beautiful *Cyclura* habitat on the high



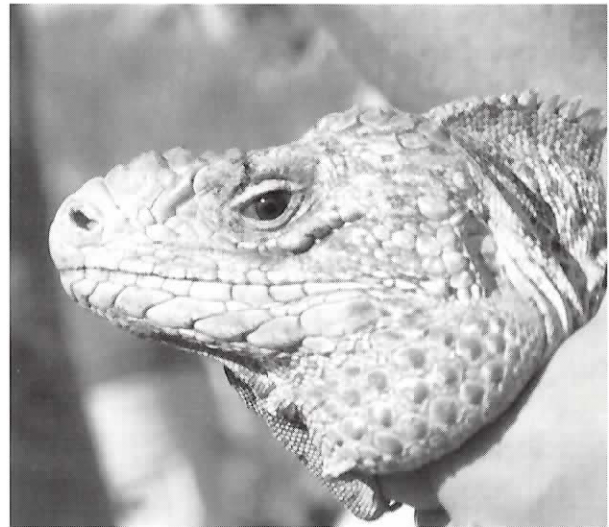
Andros iguana, *Cyclura cyclura cyclura*. Photograph: John Bendon



Andros iguana, *Cyclura cyclura cyclura*, May 2000. Middle Bight. Photograph: John Bendon

banks but unfortunately no animals. Students sometimes see iguanas about six miles up the creek.

The residents of North Andros are enthusiastically embracing an economy of sport fishing and ecotourism. All seem genuinely proud of their island and the Andros iguana. The iguana is not easy to hunt since it is now rare. No one is dependent on iguana hunting. Everyone seems to accept the fact that hunting is one of the main reasons that the iguana is likely to disappear. Many young people have never eaten iguana and have no desire to start. The impact of the population of feral hogs on the iguanas is not known but it is presumed to be substantial. Hunting is known to be very detrimental to the iguana populations. Feral dogs and cats are present but do not seem to be numerous. Feral dogs would presumably have short life spans due to the legendary mosquito populations of Andros and their transmission of heartworm. Some residents are aware of the potential tourism benefits of populations of Andros iguanas. Most people seem to accept the idea of protecting the iguanas. Even the iguana hunters with whom I have spoken have admitted they would not hunt if it was illegal and they knew that the law would be enforced. The people of North Andros are also unique in that they have approached the Government of the Bahamas asking that large



Andros iguana, *Cyclura cyclura cyclura*. Middle Bight. Photograph: John Bendon

areas of North Andros be preserved in a National Park. The time is ripe for the Bahamas to begin to enforce the existing laws and to protect the Andros rock iguana. Sport hunting is increasing on Andros. If hunters are not informed that hunting iguana is illegal and that hunters will be prosecuted if they break the law, the *Cyclura* of Andros will become so rare that most residents will not see one again.

In 1991, the most alarming observation I made was the presence of the Brazilian pepper tree, *Schinus terebinthifolia* on North Andros. This non-native, very fast-growing tree is the worst ecological invader in the state of Florida. Nine years ago, a small population was observed at the San Andros Airport. This population has expanded tremendously and now poses a serious threat to the habitats of Andros. Two other very invasive exotic plants are present on North Andros, Australian pine (*Casuarina equisetifolia* and *Melaleuca* sp.). Without a control program for these species, they will spread and cause tremendous damage to the Bahamas last great wilderness.



Literature cited

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