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Adult male, *Cyclura rileyi cristata*, on Sandy Cay, Bahamas.
Photograph: Carl Fuhri

Statement of Purpose

The International Iguana Society, Inc. is a non-profit, international organization dedicated to the preservation of the biological diversity of iguanas through habitat preservation, active conservation, research, captive breeding and the dissemination of information.

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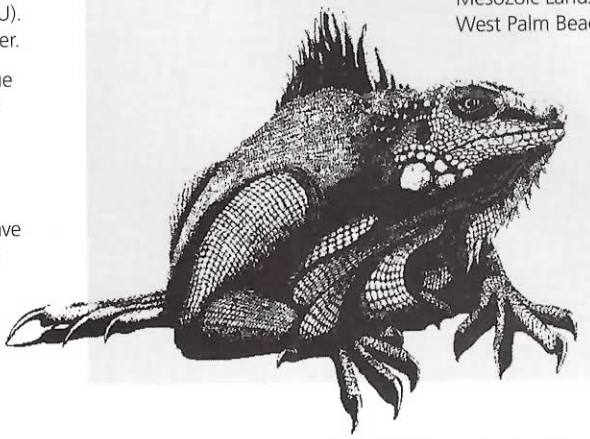

Status of the Sandy Cay Rock Iguana, *Cyclura rileyi cristata*

Carl Fuhri

I met Dr. William Hayes in November of 1995 at the International Iguana Society conference in San Salvador, Bahamas. After working with him and Dr. Ron Carter there, I was asked if I would ever be interested in helping in the future. Naturally, I immediately responded in the affirmative.

In April of 1997, I received a call from Dr. Hayes, asking if I would like to join him and his graduate assistant, Shawn Fry, in the Bahamas. They were going to Sandy Cay in the Exumas to collect data on *Cyclura rileyi cristata*. Bill said he would need the extra hands to catch and process specimens. After pleading with my very understanding boss and getting the time off, I called Bill back and said I would be happy to go.

Our "home" for the trip was a camp site set up on the east end of the island. We chose a flat sandy area near the shade of a Casaurina tree. We slept in tents and had a ten-foot-by-ten-foot shade tent to work under. We also set up a short wave radio for communication with the rest of the world in case of emergency. It was later determined that a simple marine radio would be the best for local communication. When I returned home, I sent an old one that I had to Shawn.

Sandy Cay is a small island off the main islands in the southern Exumas. It is approximately one kilometer long and one half kilometer wide. The structure is typical of many of the small islands of the Bahamas. It is primarily crumbly limestone with some sandy beaches. Sand has also collected in many of the low areas and cracks and crevices.

The vegetation on the island varies from one end to the other. The west end is covered with a small Bahamian silver palm. The rest of the island consists of low rocky promontories, rocky pans, and sparse vegetation. The vegetation is comprised of approximately 25 species of plants. Sea grape, ink berry, and strumphia, an interesting evergreen bush, make up a large part of the vegetation.

The only inhabitants of the island are the iguanas, a couple of species of anoles, numerous insects

Subadult male, *Cyclura rileyi cristata,* on Sandy Cay. *Photograph: Carl Fuhri*

and other invertebrates, migrating and a few nesting birds, rats, mice and a raccoon. Historically, *Cyclura rileyi cristata* was the top herbivorous inhabitant on the island. Sometime in the past, European rats found their way to the island. This was not good for the iguanas. The raccoon was presumably the pet of one of the locals on Little Exuma. It's arrival, at an unknown time, has been devastating to the cay. *Cyclura rileyi cristata* is found in no other place in the world; this tiny island is its only home.

This subspecies has been on the decline for many years. Last year Drs. Hayes, Carter and John Iverson visited the island and over a period of three days, caught more than 30 iguanas. The crew was able to catch enough animals in a couple of hours each day for processing. Bill tells me that although the population was thought to be small, he felt that because of the ease with which they captured the animals and the number that they saw, the population appeared to be in reasonable shape. They were, however, concerned that no females were caught. This year, in the week that I was on the island, things seem to have worsened considerably. After one week of spending six to eight hours a day trying to capture animals, we were lucky to catch seven a day. Some days we caught as few as three the entire day. The worst part of this was that up to the time I left the island NO females had been captured. It is difficult to tell if we saw any, as the females can only be differentiated from juvenile and subadult males by probing after capture. The culprit in this severe depletion of iguanas is most likely the raccoon. There appears to be preferential predation of female iguanas. But, there must also be other factors in this equation. We are sure the raccoon is one of the culprits because, in examining the feces of the raccoon, we found the claws of mature iguanas and iguana skin. Every effort is now being made to rid the island of the raccoon.

It now appears that *Cyclura rileyi cristata* may be the rarest and most endangered species of *Cyclura*. This is why the data being collected by Bill are so critical. The Bahamian Government is going to have to make some hard decisions. The process of saving this and several other species of *Cyclura* within their sovereign borders will be a difficult task. There are many variables in the formula. In any situation where difficult decisions must be made, reliable and plentiful information must be available.

Having worked with Bill in San Salvador in 1995, I was familiar with what information would be needed. Once an animal is caught, the following data are recorded: length of head from tip of snout to rear of tympanum, snout-vent length, tail length, and length of regenerated tail, if applicable. Next, the length of the front and hind legs of the animal is measured from the center line of the ventral side of the animal to the inside of the first digit. The width of head between eye ridges is measured with calipers. The femoral pores are checked and a representative one is measured with calipers. The size of the center black section of the pore is recorded. The number of pores on each leg is counted and recorded. All of the animal's digits are checked; if any are damaged or missing this is recorded. The animal is then probed to determine sex. The sex and the depth of the probe are recorded. Next the animal is weighed and that information is recorded.

Adult male, *C. r. cristata*. *Photograph: Carl Fuhri*

In the beginning of the article I men-

Healthy adult male, *C. r. cristata,* with an identification number painted on it's side, along with a small radio transmitter. *Photograph: Carl Fuhri*

tioned Dr. Ron Carter's name. Although he was not with us the week I was there, as he was conducting research on another island, his work as a geneticist is crucial to the research. Each animal that is caught has 1 ml of blood extracted from a vessel on the ventral side of the tail. Dr. Carter later does a DNA work-up on the animal. Using this information along with the location where the animal was caught, populations can be checked for relatedness and genetic variance. Lastly the animal is given a permanent mark. This is done by piercing the nuchal crest with a sewing needle and inserting a piece of 80 pound mono-filament with four colored glass beads attached. This may sound as though it is painful to the animal, but it is much like having an ear pierced; there is no blood and the animal doesn't even flinch. The colors of the beads are recorded and this information is used on successive trips to identify previously caught iguanas. The week I was on the island we caught several animals that had been caught the previous year. All were in good health and had grown significantly.

A considerable amount of information is collected on each animal. This information is then taken back to Loma Linda University where Bill and Ron collate it and put it in publishable form. The resultant paper will be sent to the Bahamian government so that they can decide what action, if any, can be taken on behalf of the iguanas, and may also appear in *Iguana Times.* Quite often the directors of the IIS will get together to discuss whether there is any action that might be taken by the Society on behalf of the iguanas with the blessing of the Bahamian Government. Our recourses are very limited but the need is very great. We therefore try to do as much as we can to help the cause. One of the ways we have accomplished this in the past is to have large durable signs made and erected on those islands where populations are in severe danger. This has just been done in San Salvador where the animals are protected, but are also fed on a regular basis by boat loads of tourists being ferried over from the main island by Club Med. This may sound harmless, but it really isn't. Those animals have lost most of their natural fear of humans. The tourists also leave their garbage on the island after feeding the animals. This could later be ingested by the iguanas.

Shawn Fry will be staying on Sandy Cay for a month to try to video tape either the breeding behavior or egg laying behavior of the females, if any can be found. Radio transmitters will be attached to the skin of a small number of animals. These will later fall off as the animals shed their skin.

Shawn also brought a dozen live-catch rat traps. Any rats caught will be humanely euthanized

Deformed juvenile, *C. r. cristata*, with four tails caught on Sandy Cay. *Photograph: Carl Fuhri*

Shawn Fry (left) and Carl drawing blood from a juvenile rock iguana. *Photograph: William K. Hayes*

and their livers, stomachs and brains returned to the States for research at another university. All rats caught while I was on the island had severe stomach worm infestations. Although this sounds good—make the rats suffer for the harm they presumably are doing—this is not the case, it just makes them eat more than they normally would to feed their infestation. One of the keys to saving many of the endangered populations of iguanas in the West Indies is the TOTAL elimination of rats from their respective islands. Rats reproduce at a phenomenal rate. Given an environment with no predators, such as an island, and plenty of food, the progeny of a single pregnant rat can produce tens of thousands of offspring. The information gained from the rats will aid in eliminating them. It will be a difficult and costly proposition for the Bahamian Government, but it is possible, and the process must start soon. In the last few years since these data have been recorded, the number of lizards has been declining rapidly on many of the small islands, and in some instances may have disappeared for good. Each time this happens we lose another very beautiful creature from the face of the earth. When an animal can only be found on one island in the world, and no other place, and that animal is wiped out on that island, it cannot be replaced. Extinction is forever.

Dr. Hayes informed me that the team caught three females in the weeks after I left the island. Three females out of more than 30 is less than 10% of the population. As of mid-June the raccoon still roams the island. All efforts to eliminate the raccoon have failed. The major reason for this is that although we have found numerous fresh tracks we have never been able to find either the raccoon or its den. Shawn Fry will be on the island another full month and hopefully will have some luck in his attempts to dispose of it.

I hope you find this information interesting. I know I had a wonderful experience gathering it and hopefully helped the team with their efforts to save this wonderful reptile.

Editor's Note: In late 1993 at least 14 *Cyclura rileyi* were reported for sale at two Florida reptile dealers. Several others were reported in California in early 1994. The animals were obviously contraband, recently smuggled out of the Bahamas. After I.I.S. publicized the crime, the sale of illegal animals went deep underground. In the April, 1994 issue of *Reptiles* magazine, the cover featured a photograph of one of the smuggled rock iguanas. On page 60 and 61 another contraband animal was pictured. The magazine identified the iguanas as *Cyclura rileyi cristata* which, if correct, would explain part of the rapid decline of this species on Sandy Cay. Some of these animals are still present and being passed around in the back alleys of the reptile trade.

RESEARCH UPDATE

Decline of the Sandy Cay Iguana

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The Sandy Cay iguana, *Cyclura rileyi cristata*, is one of three subspecies of *Cyclura rileyi*, all of which are endangered. Confined to a single small (15 hectare) cay in the Exumas chain of the Bahamas, it is especially vulnerable to extinction.

As described in the companion article by Carl Fuhri in this issue, my first visit to Sandy Cay was in 1996 with colleagues Ron Carter (Loma Linda University), John and Sheila Iverson (Earlham College), and Sandra Buckner (Bahamas National Trust). At that time we discovered the footprints of a large raccoon on the cay, as well as numerous rats about our camp at night and a handful of adult iguana carcasses. Compared to Iverson's visit to the cay in 1980, numbers of iguanas appeared to be quite low. Naturally, our concern for the iguana was quite high.

I returned to Sandy Cay in May, 1997 with my graduate student, Shawn Fry. Shawn had decided to study the iguana during the reproductive season from early May to mid June. During his first four weeks he was assisted in the field much of the time by myself, Ron Carter, Carl Fuhri, and Charles Radcliffe (Denver Zoo). By the end of May we had captured only 42 iguanas, including three recaptures from the previous year. When these data were combined with capture data from 1996, only 3 females were represented in a sample of 61 sexed iguanas. This highly distorted sex ratio (95% male) was particularly alarming since comparable capture data from 10 other populations of *Cyclura rileyi* sampled at the same time of year (May) yielded more expected sex ratios of 50% male.

To estimate population size we conducted population surveys using a laser rangefinder to measure the distance between the transect line and each iguana found. Our statistics suggested that the number of iguanas that remain in the wild was between 136 and 204, depending on assumptions of how many iguanas we missed while conducting the transects. (We have excellent data from other populations to base such assumptions on.) We also conducted a Lincoln-Peterson mark-resighting study which considered the ratio of marked iguanas to unmarked iguanas. This technique yielded an estimate of 174 iguanas remaining.

When both sex ratio and population size are considered, the sobering fact is that there may be as few as 10 females left in the wild. By the end of the summer, Shawn had managed to capture only eight adult or subadult females. To our knowledge, there are none in captivity—legally, that is. Accordingly, this creature is one of the most endangered lizards in the world.

We now know that the raccoon has been a major predator on the iguanas. Of ten iguanas that Shawn affixed radio transmitters to, four—including two females—were killed and consumed by the raccoon before he left the cay in mid-July. Iguana parts were conspicuous in the occasional feces that we found. Despite a constant vigil in camp and long hours in the field during both daylight and darkness, only footprints and scats were ever seen of the wary raccoon, which was active almost exclusively at night. For six weeks it repeatedly toyed with but never got captured by a spring trap. In response to pressure from certain individuals in Nassau (the capital of the Bahamas), an effort was made to remove the raccoon alive. At one point the raccoon consumed a large dose of oral anaesthetic, but an overnight rain storm obliterated the raccoon's tracks. Several weeks later, on July 30, the raccoon was found dead; whether the anaesthetic contributed to its death is uncertain.

The rats, however, remain in large numbers on Sandy Cay. Their potential impact is difficult to assess, but even if they do not prey on eggs and juveniles (which some of our data suggest) they may negatively alter the vegetation.

Encounter with the Iguana Mama

James W. Hatfield, III
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When was the last time you won the state lottery for $10 million? In the past, it seemed that herp hobbyists faced better odds of winning the lottery than successfully breeding iguanas in captivity. Even the major zoos in the world had trouble raising iguanas in captivity, let alone breeding them.

The first gigantic leap forward in captive breeding of iguanas was started in Panama by Dr. A. Stanley Rand, senior scientist with the Smithsonian Tropical Research Institute, and Dr. Dagmar I. Werner, a German-born, Swiss-educated biologist. In 1983, the Smithsonian Institute funded their first-of-a-kind biology experiment to raise iguanas in captivity for future release back into the wild.

To make a long story short: Project support ended after about five years, the political climate changed in Panama, and Dr. Werner packed up 2,400 iguanas and years of research data and headed for Costa Rica in a small pickup truck. The story of getting her animals and truck to Costa Rica is an adventure in itself. All the details on arriving, acquiring the land to raise the iguanas, procuring funding to keep the project alive, and dealing with Costa Rica officials who embraced Dr. Werner and her iguana project deserve a special story some day.

The independent iguana research project now being conducted by Dr. Werner in Costa Rica is partly to release iguanas back into the jungle to re-populate devastated local iguana colonies. But the project is also layered like an onion—returning iguanas to the jungle, creating a stable and nutritious food source for the *campesinos* (peasant farmers), encouraging the growth and retention of more trees, boosting local economies, stimulating ecology awareness, saving the rainforests, and more.

I feel that to really know about iguanas you need to pick the brains of the top people in iguana research worldwide. When I was in Costa Rica, I was lucky enough to learn much needed information about iguana breeding from Dr. Werner, sometimes called the "Iguana Mama," and Daisy, her main support person.

Every trip I take to Latin America seems to turn into an adventure, and the saga of visiting Dr. [Dagmar] Werner's iguana research station in Costa Rica was no exception.

Before I left for Costa Rica, I had sent a series of long letters to Dr. Werner explaining why I wanted to visit her research station (farm). Several months later I arrived with my photographer and translator (Amanda) in San José, Costa Rica. The next morning, without missing a beat, we were off to the iguana farm, as excited as two children heading for the candy shop with a wad of dollar bills. By midday we'd feel more like we held Monopoly money instead.

The vigorous, the healthy, and the happy survive and multiply.

— Charles Darwin
(from The Origin of Species)

The two-hour bus ride from San José to the Pacific-slope town of Orotina was the easy part of the journey. Finding the iguana farm was the first obstacle. In retrospect we were in the center of the bull's-eye and couldn't see the target. We asked several local people where the farm was and each time they headed us in a different compass direction. In Latin American countries it is considered impolite not to help people, and it's bad manners not to give directions when directions are requested. Even when the local people we encountered didn't know the answer, out of politeness they often made one up.

After heading in all the wrong directions for more than an hour, we ended up walking down a long, desolate, dirt jungle road that ended at a heavily fortified steel gate. The sign next to the gate more or less said, "Scram, get out of here, and don't bother us." For the very brave, the sign did have a phone number to call. We retraced our steps back up the road, finally found a working phone, and called the number.

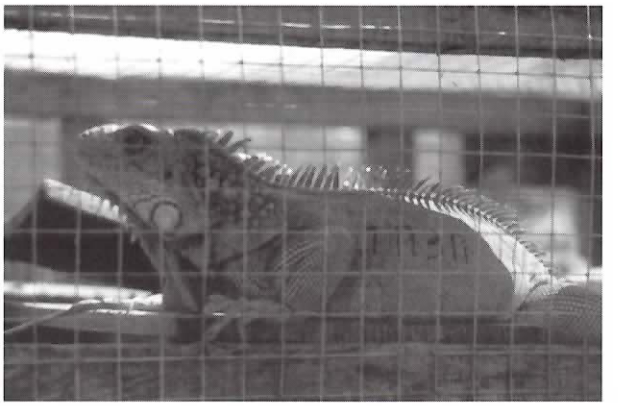
The person who answered the phone was the "Iguana Mama" herself. Dr. Werner asked what I wanted (probably more surprised that anyone would dare to call). I told her about the letters and what I wanted to accomplish. She said she never received any letters, and from there she verbally shredded me like a pit bull at dinner time. She said, "You can't come in...you must leave." The innocent, excited child in me sank with a thud. I had been forewarned that Dr. Werner can at times be very difficult (make that a capital D). She said that she was very busy and had no time for outsiders.

I made a last-minute attempt to get permission to see the iguana farm. I said, "When I got into San José I called your office to see if I could come out to the research station, but I got no answer." I wanted to let her know that I didn't just drop by that day and expect people to jump for me. In a biting manner, she asked how I got her office phone number. I told her I got it from Dr. Gordon Burghardt (one of the world's leading iguana experts and co-editor of the classic book *Iguanas of the World;* I'd corresponded with him since starting my own book research).

She said, "You *know* Dr. Burghardt?" I said, "Yes." She said again, *"You know* Dr. Burghardt?" I said, "Yes." She seemed very surprised at this concept. I said that Dr. Burghardt had given me much useful research information on iguanas over the years. I was just telling her the truth.

And as though I were caught in a scene from a child's story book, "Dr. Burghardt" was the magic word for the day, like "Shazam" or "Open Sesame." Again she said, *"You know Dr. Burghardt?"* I said, "Yes."

She said, "Good. Then be at the gate tomorrow morning at 9:00 a.m. We won't wait if you are not there. And you will not be treated special. We have important people coming from Sweden. We will be releasing 1,000 juvenile iguanas into the jungle. The press will be there—and you can come along." And she hung up.



This adult iguana is part of the breeding stock at Dagmar Werner's iguana farm in Costa Rica. The Branded code on the side of the iguana is for genetic and breeding reference. *Photograph: A. H. Iles*

See the farm! See the iguanas! See the "Mama Iguana" and be part of the team releasing iguanas back into the wild! All of the troubles getting back into San José that day didn't even register on the stress meter. We were going to see and be involved in some amazing things the next day.

I am sure that most of you are thinking by now that the "Iguana Mama" appears to be less than a caring mama, essentially treating us like insects. There is no way to describe in 100 words or less Dr. Werner's real contribution to preservation. She is taking on a giant project: to save iguanas, but in the bigger picture to save the rainforests. I know her onion-layered plan and it is well thought-out, correct, smart, and she is going about all the levels in the right way.

She is very focused, like a laser beam. And sometimes things in the path of a laser beam get a little singed. She can't be bothered by anything that could slow her progress. Luckily, I knew what I was up against, so I didn't allow her not-so-pleasant manner to affect me. I see her as a champion. If I had a crucial project and needed some good back-up, I would love to have someone like her on my side.

The *Reader's Digest* version of just getting back to the "farm" the next day was mostly no sleep and waiting for hours at the gate. We arrived very early, at about 7 a.m., to make sure we didn't miss anything. After 11 a.m. we were beginning to think that perhaps the previous day's Central American high heat and humidity had triggered hallucinations that I had actually talked with Dr. Werner. But about 11:30 a.m. we heard cars, then we saw the dust rising in the distance, and then

around the corner came a small pickup truck with two cars trailing behind. By the time the vehicles arrived at the gate my body was drowning in adrenaline.

Little did I realize that the difficult task of getting into the iguana farm was not over yet. I ran up to the pickup truck, spotted Dr. Werner, and said I was Jim Hatfield. All she said was, "Open the gate." This adventure to the farm now had all the elements of a Greek tragedy, but written by Mel Brooks.

I ran to the gate and opened it. I stood at attention like a soldier as the three vehicles passed. The vehicles stopped long enough for someone to yell, "Close the gate" (guess who?). I was laughing inside and having one of my best days. Like someone once said, "Attitude is everything."

As I closed the gate, the lead vehicle with Dr. Werner moved ahead. I ran after the pickup and in one smooth leap I cleared the edge of the pickup bed and landed inside the moving vehicle with near-perfect form. We approached the next gate, and before Dr. Werner could even open her mouth I jumped out of the moving truck, ran to the gate, and opened it—and of course I stood at attention.

The parade of cars and trucks proceeded without slowing down while I closed the gate, ran and caught up with the moving target, and again the jump into the pickup bed. The Swedish people in the two cars following the lead truck, who were from World Wildlife Fund, were laughing and seemed to be completely entertained by my actions.

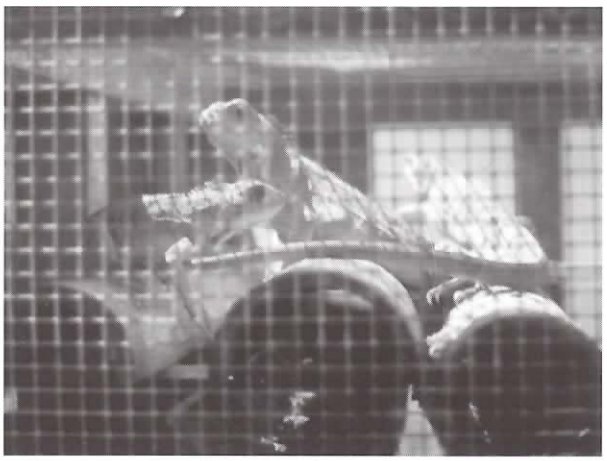
One more gate, one more jump, and we arrived at the compound. When the cars stopped, the Swedish people immediately came over and introduced themselves and seemed delighted to meet me. When Dr. Werner got out of the truck I asked her (with a little grin on my face) if I closed all of the gates properly. I was just trying to finish one more line of this Mel Brooks movie that I had invented inside my head. She said, "Yes, it was fine." At the corner of her mouth a slight smile started to curve upward. She also got a twinkle in her eye that she seemed unable to control. As stern as she would like to appear, she was somewhat melted by this bizarre gate experience. Mel Brooks would have loved the way the script turned out.

After that, she seemed to soften toward me with her speech and actions. She was actually very nice. I think she liked the fact that I didn't crumble under her iron rule. That I would, and could, work for her. In fact, later that day I would literally kill for her iguana cause.

She spent some time with me at the farm and then said, "I am sorry, but I must be with the people from Sweden." Daisy, second in command to Dr. Werner, gave us some research information on the farm and showed Amanda and me the iguana compound. There was the research center, breeding stations, and cages for the more than 5,000 hatchling, juvenile, and adult iguanas. Each iguana was beautiful and perfect.

As we toured the facilities everything was clean and spotless—almost Eden-like. But then we rounded one cage of large adult iguanas and found a snake in this iguana paradise. The snake, which looked to be about 4' long, had threaded its body through part of the 1" to 1½" square wire cage mesh. The last 7" to 8" of its body was woven into the wire like thread in a piece of fabric, but its upper body was moving freely toward the adult iguanas in the cage.

I feel that iguanas truly have personalities and physical expressions, and the contorted looks on the two iguanas in the cage was of terror. I yelled at Daisy to tell her what was happening, and she motioned to one of the farm workers. In a split second that 4' snake sprang and extended to 6', stopped no more than an inch from the side of Daisy's neck, then fell to the ground. The only thing that prevented the snake from biting Daisy's neck was that its lower body was still threaded into the wire mesh. It sprang full speed and full length, missing the target by less than the width of its open mouth.



In these cages hatchlings can choose to be in direct sunlight or shade. This photograph shows the hollow bamboo tubes they can hide in if frightened. *Photograph: A. H. Iles*

As soon as the snake struck, missed its target, and fell to the ground, Daisy said, "SON...OF... A...BITCH" in this long, drawn-out, adrenaline-filled, breath-catching pace. Then, with an agitated hand motion, she hurried the farm worker to where we were standing. The worker arrived with a rake to hold the snake's head down and a machete for killing the intruder. But he wasn't going to do it, and Daisy wasn't going to do it, either. They both turned and looked at me. The worker, with both arms straight out, held the machete in one hand and the rake in the other. He dangled each tool from just his thumb and forefinger, as if the implements were contaminated. He came closer and pressed the tools next to me. I don't speak Spanish but I do read body language. I thought, "Hell, I don't work here...and I don't like killing any animals."

Then I again saw the look of extreme terror on the iguanas' faces and without hesitating I killed the snake. Before the machete made contact, I mentally wished the snake no pain. There was no anger in the deed I was about to perform. I wished the snake the best in the next life, understood it was doing what all animals do (try to survive), but I had a responsibility at that particular moment in the cosmos to protect the iguanas.

When the snake was dead, no one would get close to it. Daisy and the workers thought the snake might be a Fer-de-Lance. That's a snake that once it bites you, you don't even have time to dial 911 for help.

So, like I said in the beginning, trips to Latin America can become epic adventures very easily. It's all part of the challenge of gathering research information. Often the best information is the "stuff" you can only get in person.

One example of the information I picked up at the farm from Dr. Werner was that female iguanas are basically lazy. If you can provide an alternative to them having to dig tunnels for laying eggs, they will easily adapt to that situation.

A Delicate Situation

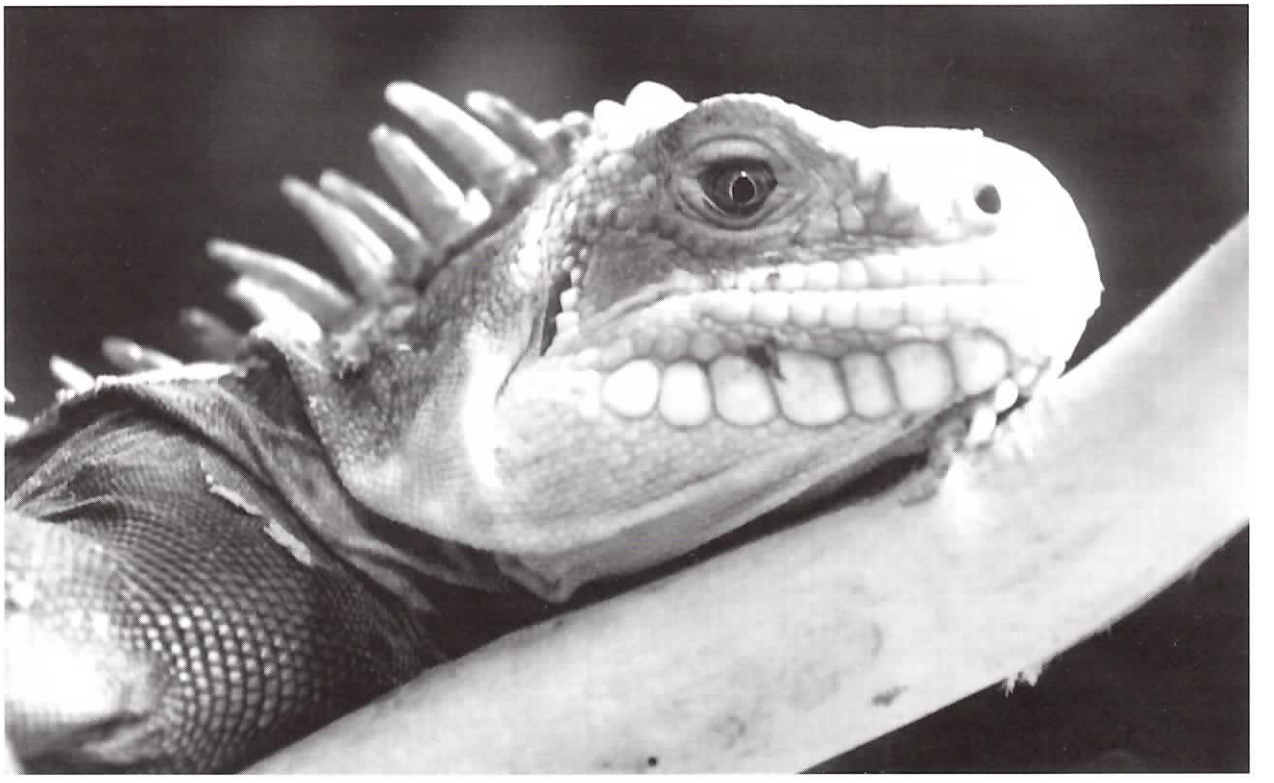
Iguana delicatissima at the Jersey Wildlife Preservation Trust

John Bendon

For the first time ever, in captivity, a pair of *Iguana delicatissima*, aged about six years, have bred and produced one live young. To those in the know, this is an extremely significant event. *Iguana delicatissima* are notoriously difficult to keep in captivity. This species comes from the Antilles and is not of the same mental attitude as the common green iguana. Specimens are held in zoos at Memphis and San Diego where both have had no luck in breeding.

The Jersey Wildlife Preservation Trust (located on Jersey, one of the Channel Islands, off the coast of France) was set up in 1963 by Gerald Durrell as a unique center for the breeding of rare and endangered species in captivity. The trust is now the center of a worldwide organization, with two major supporting associates, W.P.T. International in the U.S.A. and W.P.T. Canada, that are united in the common goal of preserving endangered wildlife through carefully controlled breeding programs, promoting field work and research into the species' requirements in the wild, discussing and negotiating with governments to protect and conserve these species in the wild, and communicating their work through public and professional education programs to a wider audience around the world.

The pair of iguanas live in a large cage about 8 ft (2½ m) by 16 ft (5m) by 10 ft (3m) high, the environment being as close to their home as possible with correct temperature and humidity settings and correct periods of light and heat. They are cared for by curator of reptiles Richard Gibson who is there all day every day. The clutch of about ten eggs quickly deteriorated and eventually only one egg produced a live animal. This creature is exactly like a hatchling green iguana except for the lower jaw line which has a row of large, white scales along it as opposed to one large scale in greens. The hatchling is being reared in a 3 foot



Six year-old female, *Iguana delicatissima,* at the Jersey Wildlife Preservation Trust. *Photograph: John Bendon*

Six year-old male, *Iguana delicatissima,* at the Jersey Wildlife Preservation Trust. *Photograph: John Bendon*

cube of a cage which has been decked out forest-style. Unfortunately, it refuses to eat and is being given baby food and vitamins through a tube. It is extremely nervous and Mr. Gibson is concerned for its survival. It is weighed every day and given D_3 supplements according to the details worked out by Mr. Roger Lamb of Birmingham, England. Due to the set up at the zoo, neither parents have access to direct sunlight and it was advised to put the little baby lizard out in the sun every day for a time. It is hoped that the sunlight will stimulate the creature into behaving more naturally and to begin eating on its own. All the iguana diets in the zoo are herbivore.

Delicatissima are somewhat of an anomaly at the moment. There is discussion about them being descended from green iguanas and them being the ancestors of rock iguanas (*Cyclura*). According to Richard Gibson, recent DNA studies show that, if anything, it is the other way around. The mitochondrial DNA shows that *Cyclura* existed before *Iguana*. Because *delicatissima* habitat is between the two others it is assumed that it is a *Cyclura* in the process of changing and becoming *Iguana,* but this has not yet been proven. *Cyclura* have a 'toe-comb' on the fourth toe of each back foot. Both species of iguana have none. More studies of evolutionary relationships are being done but it will be a long time before the truth is known.

These animals are listed by the I.U.C.N. as endangered. Stories of green iguanas being let loose in the habitat of the Antillean iguana, to breed together producing a hybrid and mixing up the gene pool, are rife. This must be stopped immediately. The Antilles is the only home for *delicatissima* whereas the greens number in the hundreds of thousands and live from central Mexico all the way down through Central America and beyond. More knowledge is needed so that they may be bred successfully. Specialist captive breeding programs can be instigated where the resulting offspring can indeed be returned to the wild without fear of them infecting the existing wild population. This *will* come in time, but will it *be* in time?

Anyone interested in the work of the trust may become a member by sending £20 in British funds to: The Jersey Wildlife Preservation Trust, Trinity, Jersey, Channel Islands.

YOUTH IN SCIENCE

The following report was submitted to us by a 17-year-old member living in Belize, Central America. Originally from Britain, she moved to the jungles of Belize with her family to help set up a lodge and nature preserve. Already a dedicated wildlife conservationist, she plans to study veterinary medicine.

Pook's Hill Green Iguana Project, 1996-1997

Cara Snaddon

In late March, five gravid female green iguanas were humanely caught and kept in an enclosure for one to two weeks. They were checked about 6 times during this period; two of the times when gravid females were placed in the enclosure, and twice when released after laying. The cage was entered only to place females in, or to take them out for release. Each female was released within 24 hours of laying. No damage was done when the females were caught, and they were released in the same condition. A cover was placed on the wall of the cage as a "hide" to check on the females. The cage was not approached unless necessary, to reduce stress. The females spent most of their time in the pond—a natural protection instinct against predators.

The eggs were placed on moist sand in buckets, in an incubator made from a 44-gallon drum buried in the ground. The bottom third was filled with water in which stood a metal rack, built to hold the buckets containing the eggs. The metal drum top was replaced by a laminated plywood lid.

The temperature was monitored by an indoor/outdoor thermometer and kept between 27°C and 33°C. Some eggs with excess moisture from either being laid in the pond, or having condensation drip onto them, developed fungus. For the first two weeks the incubator was opened once a day and infertile eggs were removed. The incubator was then only opened once a week. This was decided as a prevention against the coffin fly.

Hatchlings were immediately released into the enclosure. In the early stages two problems were encountered. The first was that some hatchlings did not accept food. The other was a fungus infection. This was cured by the application of anti-fungal cream, quarantine, and changes to the enclosure. In the enclosure a ledge was built on the far side of the pond and a plywood roof was installed to give the iguanas a drier environment.

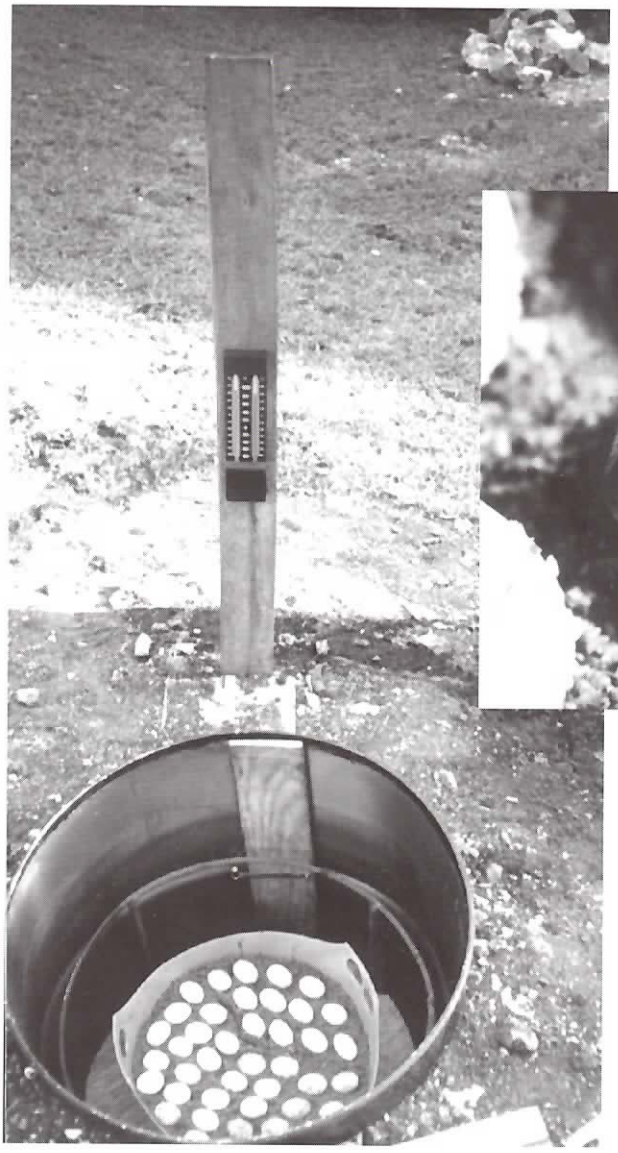
They were fed a diet of carrot, cabbage and other greens, which in the later stages was progressively changed to wild vegetation to prepare them for release.

I am very interested in helping anybody who might be researching or studying green iguanas and would be delighted to involve them in my program.

Cara Snaddon
Pook' s Hill
P.O. Box 14
Belmopan
Belize, Central America

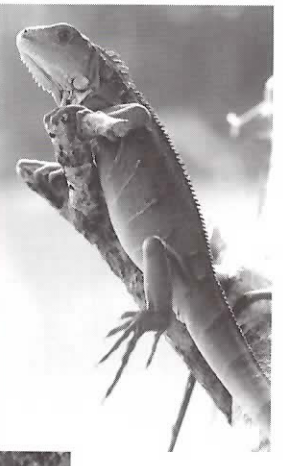
Telephone: 501-8-12017
E-mail:
pookshill@pobox.com

On the 10th of March, 1997 at a remote location in the heart of the jungle, 120 one-year-old green iguanas discovered freedom.



Iguana eggs lay in moist sand in a bucket placed in one of the 44 gallon drums used as an incubator.

A green iguana emerging from it's egg—one of many successfully hatched at Pook's Hill Iguana Release Program. The program has been set up to raise green iguanas through their most vulnerable stage—when they are in the egg and during the first year. This program will hopefully help restock the wild population in the Pook's Hill and Tapir Mountain Reserves in Belize, Central America.



The enclosure is 50 feet in circumference and 201 sq. feet in area. It is a 7 foot-high wooden frame structure on a concrete foundation with 3 feet of sheet metal at the base. The rest of the enclosure is covered with 1/2" wire mesh. A moat and pond have been built around the inside edge of the enclosure, making the center an island of sand. There is also a climbing frame, constructed of branches.

Iguana Times

MEMBERS ONLY: For a limited time, the International Iguana Society is making sets of back issues of *Iguana Times* available to all current IIS members at a reduced price. ***Quantities may be limited, so act now!***

Volume 3

Volume 3, Number 1
March 1994

Articles Featured:

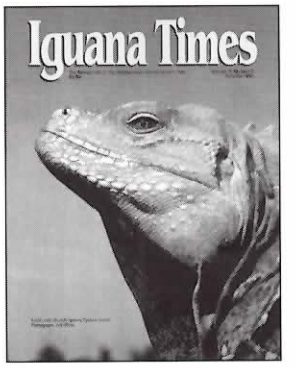
Herpetoculture and Conservation; Smuggling... Bahamian Iguanas; Cesarean Section in a *Cyclura;* Full Spectrum Lighting; Respiratory Diseases in iguanas; Lizard Letters; Iguana Newsbriefs; Treasurer's Report

First full-color cover!

Volume 3, Number 2
June 1994

Articles Featured:

Muy Dificil: *Ctenosaura similis* and *defensor*; The Indianapolis Zoo's *Cyclura* Program; IIS Vegetation Studies on San Salvador; Iguana Smuggling, A Sign of the Times; Iguana Newsbriefs



Volume 3, Number 3
October 1994

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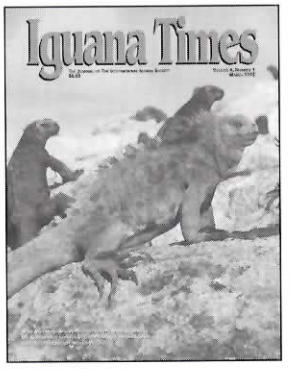
Adaptations to Herbivory in Iguanine Lizards; Herpetoculture Today: One Person's Thoughts; Ecology, Status, and Conservation of the Utila Spiny-tailed Iguana, *Ctenosaura bakeri*; Book Review: *Iguanas: A Guide to Their Biology and Captive Care*; Treasurer's Report; Iguana Newsbriefs

Volume 3, Number 4
December 1994

Articles Featured:

The Paleate Spiny-tailed Iguana, *Ctenosaura palearis stejneger:* Distribution and Life History; A Reintroduction Program for the Iguanas of Guantanamo; A Trip to Mona Island; Reflections on Mona Island; Just My Opinion: A Commentary on Zoos and the Private Sector; Lizard Letters; Iguana Newsbriefs

Volume 4



Volume 4, Number 1
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Volume 4, Number 2
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Articles Featured:

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Volume 4, Number 3
September 1995

Articles Featured:

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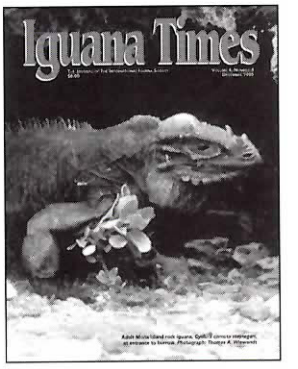

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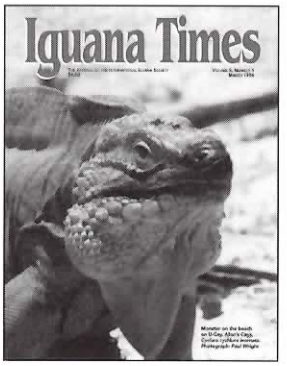

Volume 5, Number 1
March 1996

Articles Featured:

Psychosocialization of the Green Iguana: How to Better Handle Your Pet; Green Iguanas are Social Beings; International Sweep Targets Reptile Smugglers; Illegal Trade in Reptiles: Traffic Protected by Legal Void; Abstracts of Scientific Presentations from the 3rd Annual IIS Conference in San Salvador; Iguana: Survival of the Tastiest; Book Reviews; Lizard Letters; Iguana Newsbriefs

Volume 5, Number 2
June 1996

Articles Featured:

Lost in Time: Galapagos Land Iguanas; Northern Exposure: *C. c. cornuta*; Greasy Lizard Stuff; Iguanas, Salmonella and Herpetoculture: A Conflict of Interest... and Conscience?; Swampa Goes to Kindergarten to Help its Survival; Utila Iguana Gets Helping Hand from Foreign Friends; Lizard Letters; Treasurer's Report; Iguana Newsbriefs

Volume 5, Number 3
October 1996

Articles Featured:

Lost and Found: Hope for the Jamaican Iguana; Genetic Studies of the Jamaican Iguana; *Cyclura* Forest Habitat; IIS *Cyclura* Island Habitat Classification System; Iguana Newsbriefs; News of the Society

Volume 5, Number 4
December 1996

Articles Featured:

Any Hope for Grand Cayman's Blue Iguana?; Scalation Renderings of *Cyclura nubila lewisi* and *nubila*; Surviving Atlantis: The Molecular Evolution of the Galapagos Iguanas; Iguana Report from Japan; IIS Conservation Award: Edwin Duffus; Lizard Letters; News of the Society

Volume 5

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LIZARD LETTERS

Dear Editor,

This is my response to the video review of "The Captive Care of The Green Iguana" reviewed by Shawn Fry, Scott Delay and William Hayes. I refer to the unjust comments made concerning myself, Roger Lamb, and my section on breeding which they found highly amusing. I quite assure them that anyone who is interested, or has had problems in getting iguanas to breed and lay without leaving the female in need of veterinary care, would not find it amusing, nor is it intended to be. It is meant to be of help! (1) Firstly the comment "it's so easy and simple" must be in another video, as the statement I made said that "Iguanas aren't difficult to breed in captivity providing the right conditions are met." (2) The "elaborate egg laying chamber" referred to is made from Melamine, purchased from a local hardware store and screwed together, with a plant trough acting as the egg chamber entrance, being simple to make and requiring little intelligence to build. (3) The "sophisticated incubator" is a fish-transporting, polystyrene box with a simple thermostat and some external temperature probes. I think this "sophisticated incubator" has been used by most herpetologists for many years and is not only effective but is cheap and simple to make. (4) I am also interested to know how these simply designed items can "be greatly simplified," yet work effectively? I await your comments. The egg laying chamber was designed as simply as possible, yet made to the satisfaction of the female iguana to hopefully reduce any extra stress made upon her. (5) It is common knowledge (and also now stated in most iguana books), to anyone who knows anything about green iguanas, that a male iguana can express an interest in, and have on occasions attacked, female humans—most notably around their menstrual cycle—common knowledge to any one, that is, but you, the reviewers. (6) The photoperiod was only mentioned by me as I think it is one of the main factors we can vary in captivity indoors. I don't have any rain clouds in my enclosures and make do with spraying my iguanas daily. I personally have had no requirement, or cause to create, a constant high humidity which would not only affect my iguanas, but would also rot away my enclosures and house in the process. Other than slightly lower night and day temperatures during the British winter period I have no requirement to alter my temperature settings or to my knowledge has it ever affected the mating process by altering the temperature or humidity to date. My second generation iguanas are very healthy, thank you. (7) Yes, the eggs probably do appear somewhat dehydrated. That's because they were old iguana eggs filled with sand—this part of the video was only an example how the eggs are laid in the simple egg laying chamber. Although I have plenty of video footage of eggs just laid, the film quality was not good enough to be used in the video.

As you have probably gathered I am not amused by the negative and unprofessional approach you gave my particular chapter on breeding. On this point if I have offended you, then good, as you offended me. The next time you review a video I suggest you understand something about the subject you are reviewing. To the Directors and staff (excluding William Hayes) I am sorry to have had to respond in this manner, but I needed to address the facts, as anyone intending on buying the video may not take the breeding side seriously.

I first began attempting to breed common green iguanas in 1989. My first success was in 1992 and I have hatched 116 first generation green iguanas up to 1995. I then concentrated my efforts on breeding my first generation iguanas. I have bred a total of 29 second generation iguanas up to 1996 and now only have one pair left, as I am concentrating my efforts on breeding other species of iguana. I have accumulated 8 years of common green iguana data from the iguanas I first owned and ones I have since bred, such as daily records breeding charts, weight and lengths etc.

I do not consider myself proficient to have bred green iguanas, and believe what experience I have gained to be on the first rung of a ladder. As time goes on, and more knowledge is gained by iguana owners, those who are serious about breeding these fantastic creatures will be able to supply those who are serious about looking after them. It is in part for this reason that I have stopped breeding green iguanas. After all the hours and effort spent by my understanding wife, Tracey, and me to produce second generation offspring, I found myself selling them at the trade price of wild caught and captive farmed iguanas. I realized that most people wishing to own a green iguana neither bothered, nor cared, where it came from, but only how cheap they could purchase one. I feel these people do not deserve to own an iguana. Iguanas are for life and not just for Christmas!

Roger Lamb

Editor's Note: Roger Lamb is a longtime I.I.S. member in England and Great Britain's most accomplished iguana breeder. (This letter was edited for clarity and length.)

The video may be purchased for $12.95 + tax and shipping (U.S.) from Pet Warehouse at 1-800-443-1160.

LIZARD LETTERS

Dear Editor,

Having read "Mayaguana Blues" by John Bendon, I am pleased to learn that apparently healthy numbers of *Cyclura carinata bartschi* remain on the only cay they exist on today. However, there were some misleading comments made by the author regarding gravid females, which he believed he had seen. Given what we know about the reproductive biology of *Cyclura* and John Iverson's studies of *C. carinata* in particular, it is highly unlikely that any gravid females were seen during Bendon's visit to Mayaguana during the month of March. Mating activities should not begin until well into April, and females should not have extended abdomens until later in May. From my own experience studying *C. rileyi* in the Bahamas, even late term gravid females are difficult enough to recognize by palpation, much less by visual cues.

I should also point out that the apparent health of an iguana population based on a brief visit may be misleading. For example, an undetected predator or disease may cause problems that a simple population survey might not reveal. During a 1996 visit to Sandy Cay, the only remaining home of *C. r. cristata,* we saw dozens of iguanas during the first few hours. On the third day, however, we located raccoon footprints—probably those of some ignorant fool's castaway pet.

Several rats were also seen about the camp at night. After returning in 1997, numbers of iguanas were dramatically reduced, and remains of adults were even seen in raccoon feces. From detailed surveys we estimated that between 130 and 180 individuals remain on Sandy Cay, far fewer than Iverson had estimated during his visit in 1980. Worse yet, our capture data clearly indicated that females are substantially underrepresented, with as few as 10 adult females remaining. With such a skewed sex ratio, the functional population size is critically small! Of five adult females with radio transmitters installed, two were killed within a few weeks by the raccoon, which has eluded all efforts to trap it but will soon be removed by other means. Thus, as encouraging as Bendon's observations are for *C. c. bartschi,* we must take little comfort in leaving things as they are and support immediate research to determine the true nature of its status.

Sincerely,
William K. Hayes, Ph.D.
Loma Linda University

Editor's Reply:

Although Dr. Hayes is correct, concluding that John Bendon's visit to Booby Cay was before the breeding season of *Cyclura carinata bartschi* by several weeks, (based on the studies of Dr. John Iverson of the closely related *Cyclura carinata carinata*), the photograph accompanying the article does indeed appear to be that of a gravid female. John saw two other large females in similar condition.

Iguanas can retain sperm from a previous breeding season and produce fertile eggs during the following breeding season without insemination by a male. We know of a case involving a female *Cyclura nubila,* whose mate was removed from her cage in March, 1994, before he had an opportunity to mate with her. In July of that year she laid seven eggs, three of which hatched in October. Apparently, her eggs were fertilized by sperm from the 1993 mating season.

We discourage the palpation of late term gravid female iguanas. We recommend against any handling of gravid females, especially endangered ones. Healthy female iguanas are especially vulnerable to mortality from stress and dehydration in the period before egg laying. In a population of iguanas with one or more unnatural predators or competitors this danger is greatly amplified.

Whenever an ecological emergency occurs in a small island system, measures taken to control that emergency should pre-empt all other activities.

John Bendon's observations on Booby Cay are encouraging. They suggest that the population of *C. c. bartschi* is stable and healthy. However, the occupation of the cay by goats can potentially have an adverse affect on the vegetation that is vital to the survival of the iguanas.

Steps that need to be implemented are: 1) Trapping to verify that rats are not present on Booby cay. 2) Constructing a corral or enclosure on Mayaguana for the goats (as suggested by John) to ensure their permanent removal from Booby Cay.

Sometimes leaving well enough alone is an excellent course of action. Preservation of habitat is the best way to ensure that a species survives until the time when we can study and learn from it. Iguanas have survived on the West Indian islands for tens of millions of years before we came along. The only way they will survive is if we allow them their space.

Robert W. Ehrig
I.I.S. President

IGUANA NEWSBRIEFS

▲

Brachylophus vitiensis bred at Taronga Zoo

SYDNEY, AUS - A rare adult Fijian Crested Iguana, and his 2-month-old offspring on display during the announcement of the hatching of the baby iguana at Taronga Zoo, on World Environment Day, Thursday, June 5, 1997 in Sydney. Taronga has the only captive breeding program for the endangered species native to the South Pacific Island nation of Fiji.

The Pittsburgh Herpetological Society–July 1997

Reptile Smugglers Indicted

On January 31, 1997, the U.S. Justice Department issued the following press release: William A. Keefer, United States Attorney for the Southern District of Florida, and Jorge Picon, Senior Resident Agent, U.S. Fish and Wildlife Service, announced that Michael J. Van Nostrand, Dale Marantz, and Strictly Reptile, Inc., of Hollywood, Florida, were indicted by a Federal grand jury in Miami charging them in a thirteen count indictment with conspiring to smuggle various reptiles from Argentina into Miami International Airport in violation of the Endangered Species Act and CITES. Michael J. Van Nostrand, Dale Marantz, and Strictly Reptile, Inc. have also been charged with four counts of receipt, sale, and facilitating the transportation of two species of smuggled boa constrictors, Chaco tortoises, and Tegu lizards in violation of the smuggling statute, Title 18, U.S.C. section 545. In addition, four misdemeanors are charged against each of the defendants under the Endangered Species Act for their activities involving trade in protected species. Finally, the grand jury brought four felony charges against each defendant for violation of the Lacey Act, a conservation statute that permits the United States to assist other countries and the international community by giving effect to their wildlife protection laws in the United States.

According to allegations of the indictment, the defendants engaged in a protracted effort to secure wildlife illegally from Argentina over the period from November of 1990 through April of 1992. The Indictment identifies six different species of wildlife allegedly smuggled into the United States by the coconspirators, totaling over 750 specimens of boas, tortoises, turtles, and lizards. Because these animals are species of wildlife listed on Appendix I and II of CITES, they are prohibited from importation into the United States without first obtaining a valid CITES permit from the exporting country. According to the allegations of the indictment, at all relevant times, the three defendants failed to obtain or possess the required permits or certificates to engage in their trading and sales activity with respect to the specimens identified in the charges.

If convicted on all counts, Van Nostrand and Marantz each face maximum penalties of five years in jail for each of the nine felony charges against them and up to one year in jail on each of the misdemeanor counts. They are also subject to fines up to $250,000 on each of the felony charges and $100,000 on each misdemeanor count. The corporate defendant faces criminal fines of $500,000 on each felony and $200,000 on each of the misdemeanor charges. Additionally, the indictment contains five forfeiture counts which permit the Government, upon a conviction in the case, to seize the proceeds of the illegal activity and any property derived therefrom. In the event the forfeitable property cannot be located, substitute property of the defendants may be seized and forfeited.

Mr. Keefer commended the efforts of the Special Agents of the U.S. Fish and Wildlife Service, Miami Resident Office, who investigated this matter on behalf of the United States.

United States v. Bronx Reptiles

Zachary W. Carter, United States Attorney for the Eastern District of New York, and Adam O'Hara, Special Agent in Charge, Law Enforcement, U.S. Fish and Wildlife Service, announced today the sentence imposed in a significant criminal wildlife case, United States v. Bronx Reptiles, Inc., 949 F. Supp. 1004 (E.D.N.Y. 1996). On December 17. 1996, Bronx Reptiles was convicted of unlawful importation of 73 Solomon Island frogs under inhumane conditions, in violation of the Lacey Act, 18 U.S.C. 42(c). The importation led to the deaths of all 73 of these rare amphibious animals, which the Lacey Act seeks to protect by requiring shipment under humane conditions. On Wednesday, Magistrate Judge Cheryl L. Pollack sentenced Bronx Reptiles to the maximum penalty permitted by law, $10,000, and she additionally placed the company on five years probation to ensure prospective compliance with the Act's legal requirements.

Defendant Bronx Reptiles, located in Yonkers, New York, is one of the nation's largest wholesale importer

IGUANA NEWSBRIEFS

of live reptiles, amphibia, and other wildlife for sale to the pet trade. In this case, Bronx Reptiles imported frogs in a box with none of the required careful packaging, and, most importantly, with no source of water. The International Air Transport Association (IATA) Live Animal Regulations provide specific guidance for packing frogs, stating that they "must be kept damp as they breathe through their skins; if their skins are allowed to dry, the animals will die quickly."

In her earlier decision, Magistrate Judge Pollack concluded that "[d]epriving a frog of sufficient moisture is virtually a guaranteed death sentence for that frog..." She rejected Bronx Reptiles' claim that it could shift the blame to the overseas exporter, holding that "Bronx Reptiles, one of the largest importers of its kind in the country and responsible for numerous shipments of amphibians and reptiles, was not only aware of the industry guidelines for shipping these types of animals, but was also very familiar with the regulation holding the importer responsible for ensuring that humane shipping conditions are used."

In announcing the sentencing decision in this case, Mr. Carter stated: "This conviction should encourage Bronx Reptiles and other wildlife importers to take all necessary precautions to assure that live animals are imported under humane conditions, which do not cause suffering or death to animals."

Mr. O'Hara stated that "the U.S. Fish & Wildlife Service is committed to enforcing the humane shipment provisions of the law which plainly hold United States entities responsible for the shipping conditions from their overseas suppliers."

Jaws of Life—Westside iguana goes to Florida to have surgery

Munchiken the iguana was having trouble munching his leafy greens and tofu because of a jaw malformation that could have led to his death.

Instead of accepting that fate, Santa Monica resident Barbara Inatsugu boarded a plane with her 5-foot iguana and flew him to the College of Veterinary Medicine in Gainesville, Fla., where an exotic animal surgeon is performing groundbreaking procedures to repair the deformity.

For Inatsugu, administrative secretary to the Santa Monica-Malibu school board, deciding to send Munchiken across the country for a $2,000 operation was a tough choice, but the only one she could make.

"I don't like putting him through the pain and the separation, but I could see him starting to waste away," she said. "He could have starved to death."

The spiky lizard is one of four green iguanas living with Inatsugu and her husband in their Sunset Park home, along with a sailfin dragon lizard, a cat named Apollo and a dog called Ayla. Munchiken joined the Inatsugu household about 10 years ago after the family purchased him as an inches-long baby from a local pet store.

Inatsugu noticed something was wrong with Munchiken several years ago, when his lower jaw, or mandible, stopped growing. While the rest of his body continued to grow, the stunted jaw made it hard for the lizard to eat and, eventually, more and more difficult for him to breathe.

Worried, Inatsugu sought the help of Santa Monica veterinarian Frank Lavac, who referred Munchiken to veterinary surgeon Avery Bennet in Florida.

Inatsugu and Munchiken arrived in Florida on May 26. The iguana underwent the first of several surgeries on May 30. Bennet said Munchiken's jaw deformity is the result of a metabolic bone disease, a common ailment among iguanas living in captivity. Iguanas need high levels of calcium in their diet and exposure to intense ultraviolet rays, which aid their bodies in producing vitamin D. The vitamin D, in turn, helps iguanas digest the calcium, Bennett said.

During the initial surgery, Bennett cut Munchiken's lower jaw on both sides and affixed a horseshoe-shaped device that slowly is pulling the mandible outward. If the movement is slow enough, the bone will eventually fill in the gap Bennet created. To date, Munchiken's jaw has been pulled out about a half-inch, a quarter-inch shy of Bennet's goal.

Bennett had hoped to do a bone graft to fill in some of the space Wednesday, but an infection in Munchiken's jaw kept him from operating. Bennett said he'll wait several weeks for the infection to clear before scheduling more surgery.

Even now, with the jaw pulled out a half-inch, Munchiken's breathing has improved, Bennett said. The iguana is being fed through a tube until the surgeries are complete.

What makes this procedure unique, Bennett said, is the use of the bone-lengthening apparatus, which works almost the same way a dental retainer does, by applying gentle, steady pressure.

Experts at the College of Veterinary Medicine, part of the University of Florida at Gainesville, believe this is the first time such a device has been used to repair an iguana's jaw.

If all goes well, Munchiken could be home within a month.

Source: Daily Breeze, 06/27/97

Iguana takes the wheel for man charged with DUI

June 13, 1997

CLEARWATER, Florida — (CNN) Forget Toonces the driving cat — here's Finley the driving iguana.

Heads were turning in Clearwater, Florida, Thursday when they saw a car apparently being driven by the 3-foot-long lizard, his claws clenched around the wheel.

Two plainclothes cops say they were among those doing double-takes, and they followed the car for a couple of miles until it pulled over.

They then found Finley's owner slouched down in the seat. He was arrested for drunken driving and taken to jail. Finley was taken to an animal shelter.

IGUANA NEWSBRIEFS

Rhino Iguanas Breeding in England

We successfully hatched our *Cyclura cornuta* for the first time on 5 October 1991 after eighty-two days incubation. The female laid eight fertile and one infertile egg on the 15 July. Five eggs deteriorated rapidly succumbing to fungal growth on the shell and suggesting that the embryos had died only a short time after the eggs were laid. The surviving three eggs were incubated at temperatures about 90°F and hatched into one male and two females. These animals are now on show to the public.

On 27 September 1993, after an incubation of 71 days, two young *Cyclura c. cornuta* hatched and these have now been identified as two females. Again the incubation temperature was 90°F+. The female originally laid seven eggs and four eggs were incubated at a lower temperature. These eggs plus one egg incubated at 90°F+ failed to hatch.

Since then, only one more clutch of eggs was laid in 1994 and all eggs failed to hatch. Mating behaviour is a regular occurrence in our *Cyclura* colonies and we are hoping this year will be a successful one for us again.

9 April 1997
Karen King-Sharp
North of England Zoological Society
Animal Division
Zoological Gardens
Upton, Chester CH2 1 LH
01244 650223

NEWS OF THE SOCIETY

IIS Helps Utila Iguana

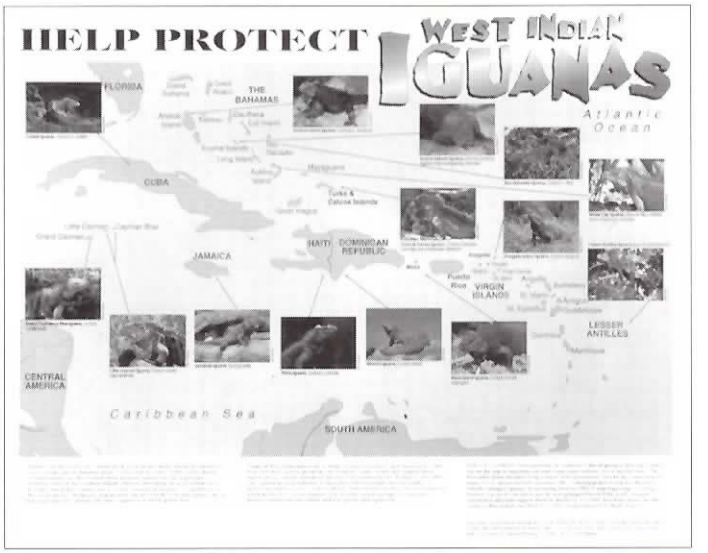
On 22 July, 1997, the International Iguana Society donated $400.00 to help support the Utila Iguana Conservation and Research Project organized by Dr. Gunther Köhler in Frankfurt, Germany.

The project on Utila island, Honduras will further the conservation efforts for *Ctenosaura bakeri*.

The contribution will be put toward the salary of an iguana warden hired to enforce the ban on hunting of the iguana.

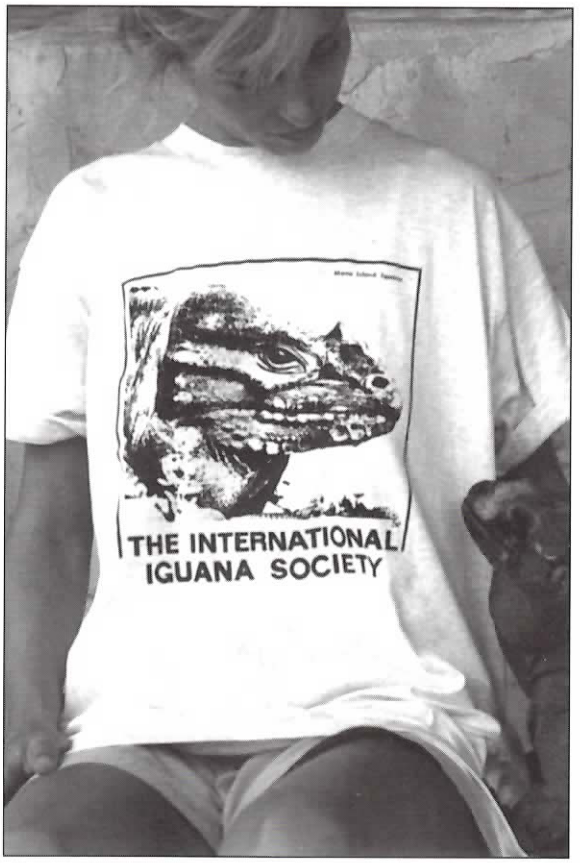
Iguanas of the West Indies Poster

The Fort Worth Zoo announces the publication of a beautiful new poster highlighting the conservation of Iguanas of the West Indies. Featuring rare and exceptional color photographs of 14 of the 18 *Cyclura* and *Iguana,* this high-quality poster measures 20 x 26 in. and is printed on a heavy-duty paper stock suitable for framing. Produced to assist the IUCN/SSC West Indian Iguana Specialist Group in promoting the preservation of these endangered lizards, all proceeds from the sale of this poster will help to fund critical iguana research and conservation projects throughout the Caribbean. Posters can be obtained in the U.S. for $13.00 including postage and mailing tube; international orders are $16.00. Checks or money orders (in U.S. currency) should be payable to the Fort Worth Zoo. Mail requests to:



Rick Hudson
Fort Worth Zoo
1989 Colonial Parkway
Fort Worth, TX 76110

The Official International Iguana Society T-Shirt



$12 plus $2 for postage & handling ($1 P&H for each additional shirt)

Sizes available in Small, Medium, Large, and X-Large (model and iguanas not included).

Send check or money order to:
International Iguana Society, Inc.
PO Box 430671
Big Pine Key, FL 33043

I.I.S. Bookstore

Photograph courtesy of Jayme Gordon

As a service to our members, a limited number of publications will be distributed through the I.I.S. Bookstore. The following publications are now available:

Iguanas of the World: Their Behavior, Ecology and Conservation, *Edited by Gordon Burghardt and A. Stanley Rand.* 1982. Most complete single iguana book ever written. Highly recommended. 472 pp. **$60.00** (including postage); **$75.00** (non-members) ***(Limited copies available)***

Out of Stock

The Green Iguana Manual, *by Philippe de Vosjoli.* 1992. **$7.00** (including postage); **$8.75** (non-members)

Guide to the Identification of the Amphibians and Reptiles of the West Indies (Exclusive of Hispaniola), *by Albert Schwartz and Robert Henderson.* 1985. **$19.00** (including postage); **$27.00** (non-members)

Schwarze Leguane, *by Gunther Köhler.* 1993. **$19.00** (including postage); **$24.00** (non-members). Excellent Ctenosaur guide book, photographs, range maps, text in German.

Iguana Times Back Issues available: Vol. 2, #2, Vol. 2, #3, Vol. 2, #4 for $6.00 each. Add $1.00 for shipping & handling for single issues, and $2.00 for 2 or more issues. *All other issues are currently sold out, but may be reprinted in the future.*

Send check or money order (payable to International Iguana Society) **to:**

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Iguana delicatissima at St. Martin Zoo.
Island of origin unknown.
Photograph: Carl Fuhri