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Adult female West Indian
Rock Iguana, *Cyclura carinata*
bartschi, on Booby Cay,
Bahamas. Photograph:
John Bendon



Statement of Purpose

The International Iguana Society, Inc. operates as 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.

Subscription Information

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Members of the I.I.S. are encouraged to contribute articles, letters to the Editor, news items and announcements for publication in *Iguana Times*. General articles can deal with any aspect of iguana biology, including conservation, behavior, ecology, physiology, systematics, husbandry, or other topics. Submission of photographs to accompany articles is encouraged.

Manuscripts based on original research are solicited to communicate recent findings not only to other scientists but to the general public as well. We wish to instill in our readers a greater appreciation for scientific research and a better understanding of how it can contribute to the conservation of threatened iguana populations or the well-being of captive specimens.

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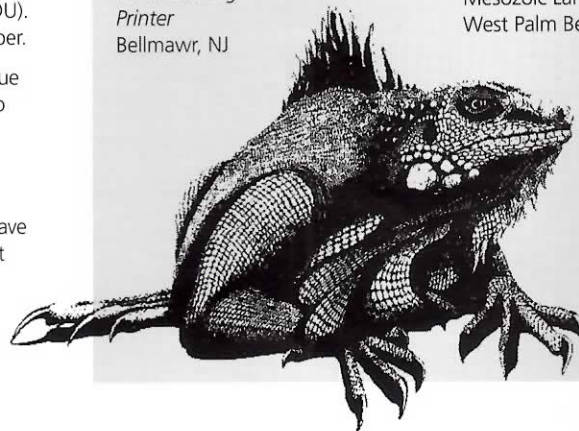
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Mayaguana Blues

John Bendon

After riding at high speed over choppy seas to reach Booby Cay, I saw *Cyclura carinata bartschi*, out in the hot Caribbean sunshine. There they were, same as always, but now—how many remain?

17 March 1997

Amongst the great sprawl of the Bahamian islands, way over to the south-east, north-east of the flamingo-populated isle of Inagua, sits the little known island of Mayaguana, 25 miles (40 kilometers) long, 6 miles (10 kilometers) wide, at about 22°N and 73°W. To the east of this sits a small island known as Booby Cay, upon which exist a small population of the West Indian Rock Iguana, *Cyclura carinata bartschi*. This is the only known place on earth where they are found. Just how many there are remains to be seen. The last survey was carried out by David Blair (see *Iguana*

Times Vol. 1, #6), about 8 years ago. He saw a fair number of iguanas (about 40), but even so, classed them as very seriously endangered. Perhaps only 200 existed at that time, less than *Cyclura rileyi rileyi* found in 1995 (J. Bendon, *Iguana Times Vol. 4, #4*). The cay is 2000 meters long and 500 meters wide (1¼ miles x ½ mile) and iguanas were only spotted on the western side in 1988. I'm going there because nobody knows what has happened in the interim and it's certainly time for another look. It involves taking a boat from the main settlement of Abraham's Bay and travelling about twenty miles east, a two hour journey for a small, fast seacraft.

18 March 1997

When the next day dawned it was obvious that I would not be going anywhere. Fierce winds and showery squalls were doing their thing. So I chat-



Large male, *Cyclura carinata bartschi*, in habitat on Booby Cay. Photograph: John Bendon

ted with the locals, as much information can be gleaned from sitting on a front porch in the Caribbean with local folk.

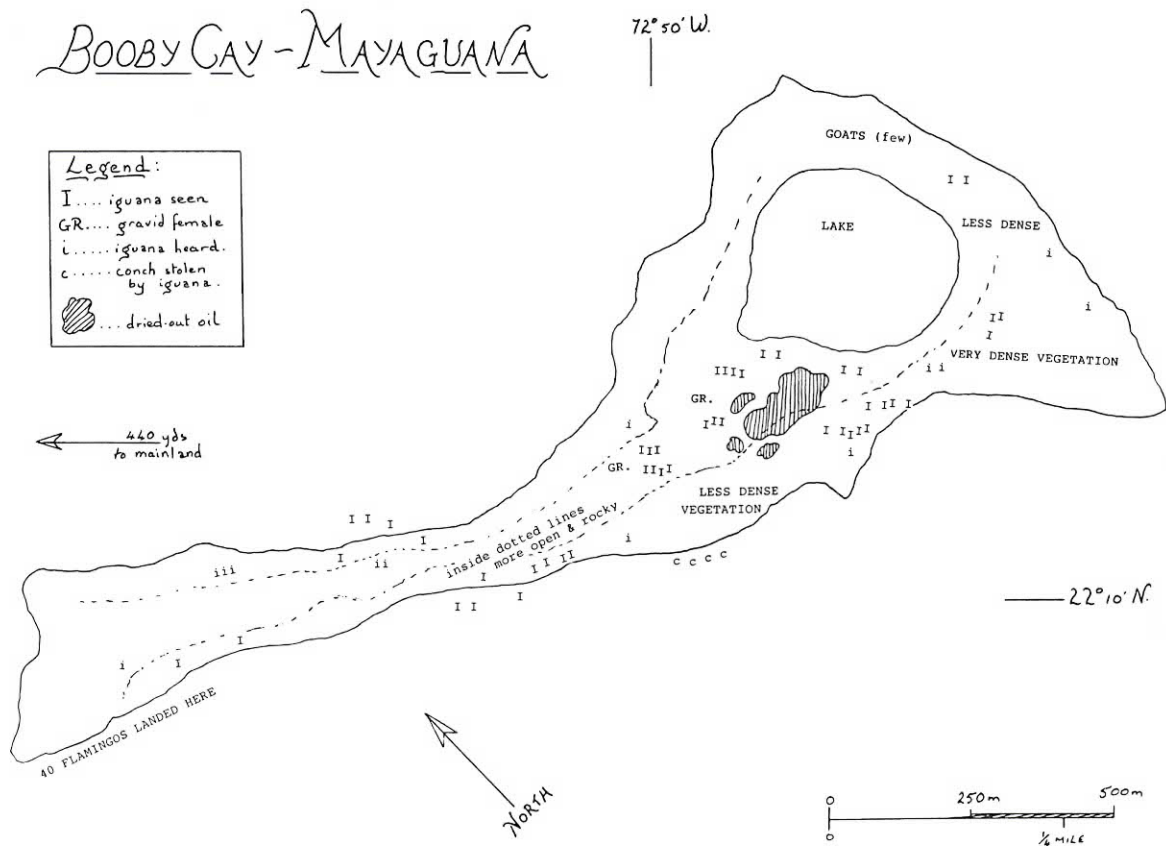
The first thing I learned was that the iguanas on Booby Cay will eat small amounts of conch! I was assured that the reptiles indeed still existed, but I would have to see it for myself to believe it. Apparently, when the fishermen go down that way, they catch conch, extract it from the shell, and leave it out to dry in the sun. Normally it is left out quite high off the ground, not on rocks, perhaps on tree branches or bushes. This is because the moment their backs are turned iguanas rush out from nowhere to steal and eat it! "Gwanas, dey steal de conch!"

Usually on small islands the stories one hears which sound like rumors are actually truths. One local resident told me his uncle used to catch iguanas with a forked stick, pinning them to the ground by their necks. He would then take them back to the mainland, put them in a cage and, after a few days would cook and eat them. Once, he told me, two iguanas escaped and were wandering around the immediate area for a few days. His



Southern shore of Booby Cay looking to the West and Mayaguana. Photograph: John Bendon

uncle noticed that usually they got sick and died. However if he kept them in cages and fed them, they stayed healthy until he would kill and eat them. He seemed to think that it was not possible for them to live on the mainland of Mayaguana.



I questioned him about the vegetation and discovered that there are certain things growing on the cay that don't grow on the mainland. Maybe they ate something that poisoned them. Perhaps they were attacked by cats, or perhaps a more reasonable explanation is that they were not in their proper habitat. Nobody alive, apparently, has ever seen them running around the mainland, even the part just opposite Booby Cay (separated by water just two feet deep and four hundred yards wide). Another woman told me that when they were kids they used to bring "gwanas" back from the cay and set them free by the coastline away from the town; but they always turned up dead, she said.

The other thing I discovered was that the locals didn't really understand anything about conservation. When I suggested that a breeding program might be needed, if there weren't many animals left, they asked, "what use are they, the iguanas?" Apparently it didn't matter to them if the iguanas died out. It turns out they didn't realize that this subspecies exists only on Booby Cay. They thought it would also occur elsewhere—in

fact they thought that iguanas were iguanas wherever they were—all the same species. They also thought that iguanas and lizards were different entities. They knew the flamingoes were protected by law and not to be touched, but were surprised to hear that iguanas had the same status. This is why it is up to us, the iguana-lovers, the I.I.S., and the Bahamas National Trust to do the conservation work. This island is very remote, very poor, and sparsely populated (about 500 people). Even the two policemen I met had nothing much to do.

19 March 1997

I finally got out there, even though the sea was a bit rough. I had to beat the weather and the locals went out of their way to get me a boat and a couple of fishermen who wanted to earn some money "taking this gwana man to Booby Cay."

After what I would call "the boat ride from hell," which in actual fact was quite exciting, as well as a little dangerous, because of the waves, they dropped me off and went fishing. I had about six hours. As soon as I got onto the beach, a



Adult gravid female. Photograph: John Bendon



Large male, *Cyclura carinata bartschi*, retreats into habitat on Booby Cay. Photograph: John Bendon

1-year-old grey iguana tripped lightly past me. I didn't realize it was an iguana at first, because I wasn't expecting much from this trip—I feared that they were, perhaps, extinct.

I went up over the dune that surrounded the cay and stepped into another world. Walking around, I found nothing. I thought, “None left? Exterminated by egg-eating rats? Starved out by voracious goats?”

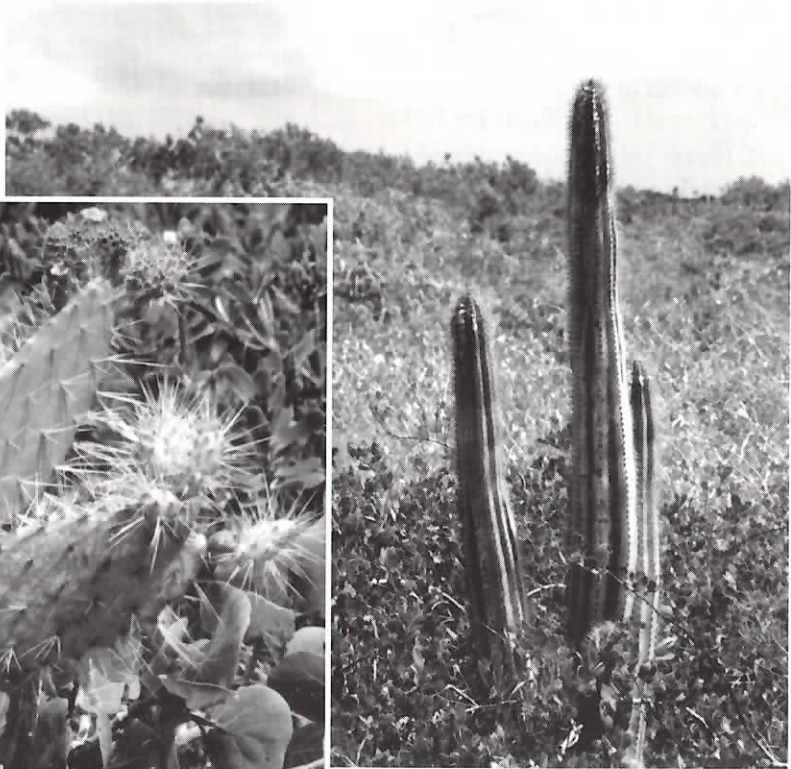
Then I heard the unmistakable snorting noises that indicated iguanas. They cannot sweat through their non-porous skin and so they snort salty water through their nostrils. I stood very still. Suddenly a bush rustled and a female iguana ran out. Next, a large male came charging out after her and they both disappeared into another bush, which shook violently. Everywhere I went, I disturbed lizards of all sizes.

After a while I sat on the ground to get out the camera and eat a sandwich. After a few minutes I noticed a female sunning herself. She must have been there all the time. I wanted to get some pho-

tos and so I crept nearer and nearer while she, in accordance, crept away. I broke off some bread and threw it her way. Iguanas seem to have a penchant for bread even when they've never seen it before. This one was no exception and came nearer to eat it. I laid a trail towards my lunch-rock, then went back and sat there with the camera. The creature ended up two feet away and looked up at me. I got some really good shots.

One male that I saw was about two and a half feet long and had enormous jowls with large round scales on them. He posed for me for quite a while. His color was basically grey, no stripes, white spines on the crest, dull yellow to orange tail, the jowls being pinkish white. The best female I saw was much the same, but with much smaller jowls and crest spines. None of these animals, upon spotting me, compressed themselves laterally. I obviously was not a threat, which led me to believe that they were easy to catch. I did not try this—I had no desire to do so—it was just nice to see them operating in their natural environment.

Cephalocereus bahamensis, Columnar Cactus on Booby Cay (right). Photograph: John Bendon



Opuntia Millspaughii (right), is a cactus limited to distribution in the southern Bahamas. Photograph: John Bendon



The flora of Booby Cay is actually more similar to the vegetation of the Turks and Caicos Islands. *Melocactus* sp, Turks Cap Cactus (right) is not found in the central and northern Bahamas. Photograph: John Bendon

I found no rat droppings and saw no rats, but spotted a few grey anoles. The few goats on the cay were on the opposite side of the lake from the lizards.

Goats are put on the cay by Mayaguana residents to avoid having to build fences, although it seems a long way to come to do this. The settlement at Abraham's Bay is overrun with the noisy creatures, who jump up onto cars. They are put on the cay to fatten them up for eating. Every now and then, a resident comes along and removes a couple of them for the dinner table. Then someone else comes along and puts one or two back there. So the very small population goes up and down, but never steadily increases. This is a lot better than was thought—that there was a large breeding herd there. This is not true.

Where I found iguanas, I found little evidence of destruction of habitat. I saw plenty of room for the animals to live and reproduce, although there is a physical limit as to how many iguanas can occupy a certain square footage. They occupy much

more than just the western part of the island, as was assumed in the last survey, perhaps because the lake was smaller. The vegetation on the cay is quite varied; there appears to be plenty to eat. It includes *Opuntia* cactus, but unfortunately it seems to be afflicted with the same predator found in San Salvador, home of *Cyclura rileyi rileyi*, the larvae of the South American moth *Cactoblastis cactorum*, and seems to be cay-wide. Curiously, I saw no such infestation on the mainland.

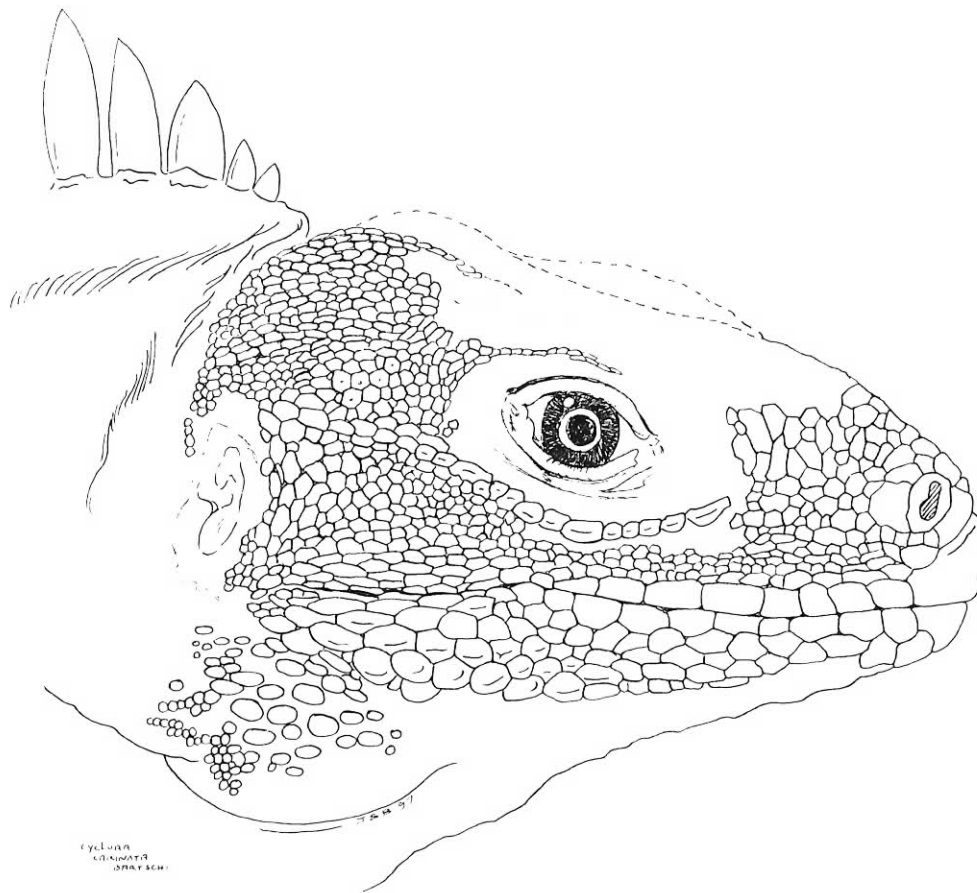
I watched the iguanas go about their daily business for a long time, and although I saw only 46 individuals, I heard lots of snorting coming from bushes and under rocks. I am convinced that there are many more than I saw.

20 March 1997

Before leaving, I spoke with three schoolteachers on Mayaguana, promising to send them photographs of my visit to Booby Cay. I asked them to teach their students about the iguanas out there, and the fact that they are something unique



Adult female in habitat on Booby Cay. Photograph: John Bendon




Scalation rendering of female *Cyclura carinata bartschi*. Illustration: John Bendon

that they should be proud of, and that they should be left there, and indeed be left alone.

Conclusion

The trip out there was exhausting, but I returned confident that these creatures, the last of their species, were not dying out, but living happily and healthily in the environment that they know, as they always have done. There is another subspecies, *C. c. carinata*, that lives in the Turks and Caicos Islands fifty miles to the southeast, and it prompts me to think that, cons ago, some of them somehow floated over to Booby Cay and became the *Cyclura carinata* known as *bartschi*.

Whatever happened, I'm glad they are there. When I'm back home and thinking of the trip, I will be happy knowing that there are iguanas on Booby Cay—in their prime, running around and living without too much threat. Live long and prosper, *Cyclura carinata bartschi*. 

List of Iguanas Spotted on Booby Cay, Mayaguana, Bahamas, 17-20 March, 1997

Adults:	23, including 2 large males
Babies (6 months old?):	9
Yearlings (18 months old?):	4
3- to 4-year-olds:	7
Gravid Females:	3
Total Seen:	46
Probably Exist:	200
Plus Babies:	30 (estimate)
Possible Total:	230

Conservation and Research Project: Utila Iguana

Gunther Köhler

Introduction

The Utila spiny-tailed iguana is a large iguanid (210 mm SVL) that only occurs on the small Caribbean island of Utila (Islas de Bahía, Honduras). On this island its distribution is limited to the mangrove swamps, which cover approximately one-third of the island. After the rediscovery of *C. bakeri* in 1994 (Köhler 1994 a,b, 1995a), initial research revealed that this species is threatened with extinction. Estimates of

the population size did not exceed several hundred animals. An additional danger to the survival of the species is that the population appears to consist mainly of adult males, while females and juveniles were rarely observed. The main reason for the drastic reduction of the iguana population on Utila is doubtlessly the intensive hunting pressure by the local community. Preferably, locals follow gravid females to the place where they deposit their eggs, in order to obtain the prized iguana eggs. There-



Adult male *Ctenosaura bakeri*, basks on a dead tree limb. Photograph: Gunther Köhler

fore, the main focus of this conservation program is to keep the local people from hunting the iguanas. The enforcement of a year-round ban on hunting, as well as a broad education and information program for the local community are definite and important steps in the right direction. Additional goals of the project are the investigation of the natural history and reproduction of the Utila-iguana as well as the protection of its natural habitat. Also, a survey of the entire herpetofauna of Utila has been started (Köhler 1995b,c, 1996a).

Results from 1996

In 1996, scientific research and conservation measures for the project were carried out during two visits to the island (April 1-30, and 15 September to 9 October).



Public presentation of the spanish version of the TV-documentary "La Iguana de Utila."
Photograph: Gunther Köhler

Thanks to the year-round ban on hunting and the presence of local and foreign iguana conservationists on Utila, the hunting pressure on the Utila-iguana was reduced during 1995 and 1996. Bill Bodden, employed for the project as a full time wildlife ranger since March 1996, is a definite asset to the protection of *C. bakeri*. His motivation and his friendly, problem-solving way of dealing with the people that enter the domain of the Utila-iguana are an invaluable factor in the success of our activities on the island.

A direct result of the reduced hunting pressure on the iguana population can be seen in the increase of juvenile iguanas in July/August 1995 and September 1996, as compared to 1994. Our activities have clearly made it possible for more female iguanas to bury their eggs undisturbed and thus to reproduce.

In 1995, a camera crew of the German public television channel Südwestfunk accompanied the research and conservation team on their assignments. This resulted in a high quality documentary, both in content and visually, that was broadcasted in two 30 minute programs in March 1996 in the series "Abenteuer Überleben (Adventure Survival)." As was agreed upon earlier, the Südwestfunk also produced a Spanish version of this documentary which was presented to the people of Utila in September 1996. Since that date, it has

been broadcast several times on both of the island's TV channels. The reactions of the local people were very positive, in general. The continuous information and education on the uniqueness, significance, and rarity of the Utila-iguana as well as the necessity of conservation measures, going on for over three years now, clearly has had its effects. Because the local community has been closely involved with the project from the beginning, it has not only made the peo-

ple realize the significance of *C. bakeri*, it has actually made more and more people proud of this animal that only lives on their island!

The scientific research on habitat, natural history, and reproduction of the Utila-iguana was continued in 1996. Additionally, the veterinarian Peter Ammerman examined the health of two free-living iguanids (*Ctenosaura bakeri* and *Iguana iguana*) as part of his Ph.D. dissertation. His research included parasitology (endo- and ectoparasites), hematology (cytology and clinical-chemical

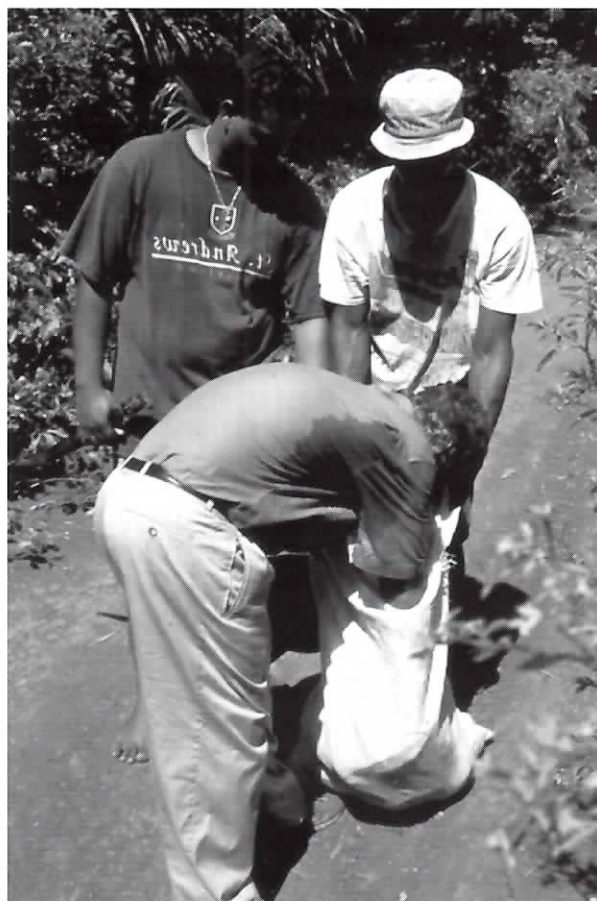
blood parameters), and virology. The results of this study, the so-called 'normal values' form an important basis for the medical care of iguanid populations living in captivity.

The survey of the herpetofauna of Utila has resulted in addition of nine species to the known herpetofauna of this island, including the description of two new species of anoles (Köhler 1996b,c). Although not as many undescribed species and first records for Utila are to be expected in next couple of years, the herpetofaunal list for the island is still incomplete. For example, a small hylid frog (*Hyla microcephala* [?]) and a large, brown terrestrial snake were sighted but could not be collected. Additionally, the local people have on several occasions reported on "green, slow-moving arboreal lizards with a crown" (*Laemanctus* sp.?) and "red frogs" (?).

Further plans and perspectives

The continuous ban on hunting, from now on also enforced year-round, has already resulted in a slightly better population status for *C. bakeri*. This is in a large part the result of the trustworthiness of the wildlife ranger that was employed by the project. However, there is also some less positive news from Glenn Pedersen (in lit. February 1997), who reports that "more mainlanders are coming to the island every day to live off the island's wildlife." For strict enforcement of the ban on hunting, it is vital that more than one wildlife ranger guard the critical areas. If funding is assured, a second ranger will be employed starting March 1997.

In the annual report of 1995, the importance of a permanent research and breeding station on Utila was stressed. At present, the chances that the funding for the entire project will allow us to realize this station this year, seem hopeful. However, since tourism on Utila has boomed in the last couple of years, no time should be wasted in implementing conservation measures if we want to save the unique flora and fauna of this island. The station will be a base for researchers and conservationists and it will also facilitate an in-situ breeding program for *C. bakeri*. By educating and guiding tourist groups, the station can help in generating funds for financing the conservation project in the long term. One of the members of the project, Miss Elke Blinn, will be a full-time resident of



Bill Bodden, employed for the project since March 1996, as a full-time wildlife ranger, is a definite asset to the protection of *C. bakeri*. His friendly way of dealing with people that enter the domain of the Utila iguana are an invaluable factor in the success of our activities on the island. Photograph: Gunther Köhler

Utila starting April 1997. She will be responsible for the local implementation of the projects' goals and objectives.

Furthermore, we intend to organize two annual project-related tours, each lasting two weeks, for anyone interested (Köhler 1996d). These tours will lead naturalists to Utila and selected areas on the mainland of Honduras, for which they will each contribute approximately US \$375, to the Conservation and Research Project Utila Iguana. During these tours, the participants will not only experience the project, the island of Utila, and the different habitats of Central America, at the same time they will also contribute to the protection of an extraordinary and almost extinct animal.

At present, the preparations for the Utila 1997

field trips are in full swing. Between mid-March and late April, European and Honduran researchers will again join hands in examining the biology of the Utila-iguana, and in developing further education and conservation measures, in order to ensure the survival of this species. In August 1997 a second group of people will visit Utila to start construction on the research and breeding station, that is, if funding will be assured by then.


In retrospect, the combined experiences with the project are extremely positive. The extensive support from the people of Utila and from various organizations, both German and foreign, gives a positive outlook on the long term survival of the Utila spiny-tailed iguana and the numerous unique plants and animals of Utila. A permanent station on the island, as planned, would significantly increase the effectiveness and control of our efforts.

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Although they were working under sometimes very harsh field conditions, the TV crew of the Südwestfunk, led by Mr. Eberhard Weiss, Baden Baden, Germany, produced an extraordinary documentary. Both the German and especially the Spanish version of this film are of invaluable importance to the success of this conservation project.

Without these people, institutions and organizations, this research and conservation project could never have taken place in the present form. Many thanks to all. 

Literature

- Köhler, G. (1994a): Vom Aussterben bedroht: Utila-Schwarzleguan. - DATZ, Stuttgart, 47(11):688-689.
- Köhler, G. (1994b): Ecology, status, and conservation of the Utila Spiny-tailed Iguana. - *Iguana Times*, Big Pine Key, FL, 3(3):12-13.
- Köhler, G. (1995a): Freilanduntersuchungen zur Morphologie und Ökologie von *Ctenosaura bakeri* und *C. oedirhina* auf den Islas de la Bahía, Honduras, mit Bemerkungen zur Schutzproblematik. - *Salamandra*, Rheinbach, 31(2):93-106.
- Köhler, G. (1995b): Schutz- und Forschungsprojekt Utila-Schwarzleguan – Bericht 1995. - *Elaphe N.F.* 3(4):73-78.
- Köhler, G. (1995c): Schutz- und Forschungsprojekt Utila-Schwarzleguan – Bericht 1995. - *Mitt. Zool. Ges. Arten- u. Pop.schutz* 11(2):9-11.
- Köhler, G. (1996a): Schutz- und Forschungsprojekt Utila-Schwarzleguan. - *BNA aktuell* 1996(1):31-36.
- Köhler, G. (1996b): A new species of anole of the *Norops pentapirion* group from Isla de Utila, Honduras. - *Senckenbergiana biol.*, Frankfurt, 75(1/2):23-31.
- Köhler, G. (1996c): Additions to the known herpetofauna of Isla de Utila (Islas de la Bahía, Honduras) with a description of a new species of the genus *Norops*. - *Senckenbergiana biol.*, Frankfurt, 76(1/2):19-28.
- Köhler, G. (1996d): BNA-Projektreisen - Schutz- und Forschungsprojekt Utila-Schwarzleguan. - *BNA aktuell* 1996(3/4):65-68.

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VIDEO REVIEWS

🦎🦎🦎🦎 = Highly Recommended 🦎🦎🦎 = Worth Purchasing 🦎🦎 = Questionable Value 🦎 = NOT Recommended

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Captive Care of the Green Iguana

*Scimitar Film Productions, North Somerset, UK. 1996.
Written by Dr. Adam Britton and Melissa Kaplan.
Presented by David Woodland. 70 minutes (color).*

From the opening scenes of iguanas that appear to be in their natural habitat in the tropics, the viewer is immediately impressed that this video is a piece of art. Indeed, the quality of the video is apparent throughout. The photography is superb, the writing excellent, and the graphics and special effects well done. Experts are interviewed throughout the video, with careful attention given to every detail. Although somewhat lengthy at 70 minutes, the production is a pleasure to watch. Most important of all, the authors who wrote most of the text are exceptionally well-informed and provide an abundance of interesting and accurate information.

In the introduction, the viewer is warned about the difficulties of keeping iguanas and reminded that they will grow to become large animals. Only those who are serious about keeping an iguana in good health should consider keeping one as a pet. Information is then presented in six sections, each lasting roughly ten minutes.

In "Obtaining an Iguana," criteria are given for selection of a young, healthy animal. Captive-bred animals, though scarce and more expensive, are considered preferable to those from the wild. Advice is offered on transportation of the pet, handling, taking the pet to a vet, and on early acclimation and taming. In the section on "Accommodations," the owner is urged to plan ahead to allow for rapid growth of the iguana. Detailed information is provided on cage dimensions, heating, lighting, cleaning and use of plants in the cage. The examples of cages shown were highly attractive and appealing, which hopefully will inspire owners to provide the best home possible for their pet.

The "Feeding and Diet" section is particularly detailed, with excellent advice on giving a balanced diet. The importance of herbivory and diversity in the diet are stressed, and a recipe for a balanced diet is offered. Vitamin and calcium supplementation is recommended, though with appropriate cautions.

The basics of intestinal fermentation (via bacteria and nematodes) are explained and the hazards of excess animal protein in the diet are discussed. "General Care" is just that; misting, cleaning and claw-clipping are described, as well as giving the iguana a daily bath.

The segment on "Breeding" was amusing because Roger Lamb says it's so easy and simple. He then goes on to show the construction of an elaborate egg laying chamber and a sophisticated incubator. It all seemed pretty high tech and a lot of work. In reality, the process could be greatly simplified. We were also amused to learn that male iguanas often express interest in female humans during stages of their menstrual cycle. Although skeptical at first, our correspondence with colleagues suggests there is compelling evidence for this during both ovulation and menstruation. Controlling the photoperiod was emphasized by Lamb. As with birds and mammals, which respond to increasing daylength during spring, changes in temperature are also important for stimulating breeding in reptiles, though rainfall or humidity may exert an influence. Lastly, the eggs that were shown shortly after being laid appeared to be somewhat dehydrated.

The final topic, "Health Care," offers useful advice from Stephen Divers, D.V.M., on metabolic bone disease (from inadequate nutrition or uv lighting), chronic renal disease (from excessive animal protein in the diet), egg retention and both external and internal parasites. Surprising to us, there was no mention of salmonellosis here or elsewhere in the video. Some of the visual aids, such as before and after x-rays of an egg-bound female iguana that underwent surgery, were particularly interesting.

Because the video was made in Britain, the pronunciation of some words, particularly "vitamin" and "iguana," may come across as amusing to Americans and Canadians. Further evidences of the British way of life include prices expressed in pounds and a steering wheel on the right side of a car. Nevertheless, keeping iguanas in any country offers similar challenges, and it is refreshing to be reminded that cultures elsewhere have much in common with our own.

The most disturbing aspect of the video, however, reflects the powerful influence of commercialism in our own country. To market the video in the U.S., a large distributor (Ocean Nutrition) insisted that a statement be added to the feeding and diet section that condones commercial iguana foods as an appropriate substitute for the fresh foods diet recommended (this statement was not present in the UK version we viewed that was kindly loaned to us by Melissa

Kaplan). The producer added the comment with neither the permission nor knowledge of the authors, who disagree with the statement.

Regardless, the video is extremely well done and offers a wealth of information and advice. Novices and experts alike will be sure to want this video, not just for the benefit of their pets, but for pure watching pleasure as well. A pleasant surprise will also greet members of IIS at the very end: the address of the International Iguana Society is provided, much to our appreciation.



Green Iguanas: The Video Guide to Care and Breeding

*Hardin Productions, Dallas, Texas, USA. 1994.
Written by Brian J. Hardin. 60 minutes (color).*

This video is of high quality and it is obvious that a lot of work and planning went into its production. Its goal is to present the viewer with facts to assist with the captive care and breeding of the “pet of the trendy set” (as quoted from the Los Angeles Times). Unfortunately this video contains serious errors that cause it to fall short of its goal and could lead to inappropriate care by new iguana owners.

After a brief introduction during which the viewer is told that nine out of ten pet iguanas die in their first year, the commentator describes how to get started by purchasing a good book on iguana care, acquiring a satisfactory cage, and choosing a knowledgeable veterinarian. The next section describes how to build an ample-sized cage. Advice is offered on cage substrates, cleaning, misting, heating, lighting and the housing of two or more iguanas together. Next, the attributes of a healthy iguana are discussed to help one select the best pet available, preferably a young one. This is followed by details on maintaining your pet’s health, with an emphasis on avoiding metabolic bone disease, the “number one killer” of pet iguanas. During a lengthy discourse on providing a nutritious diet, emphasis is given to preparing a fresh, diverse salad of vegetables. In the section on handling, safety guidelines are appropriately mentioned as is the need for good hygiene to avoid salmonella infection. Tips on breeding are offered next, along with some interesting shots of iguanas doing what any animal instinctively knows to do well—except for the one that attempts to mate a toy iguana! With the concluding remarks, some charming scenes are shown, such as an iguana pulling aside the covers of a bed to sleep beneath them.

Despite the well-organized and highly informative presentation, the video has its detractions. From the very first scene of a harness-restrained iguana on a stroll outdoors, it quickly becomes apparent that much of the footage was taken from the homes and

yards of highly devoted iguana lovers. This, unfortunately, lends a “home video” quality to the production, and one quickly gets the impression that if you truly love your iguana, you will offer it not just an attractive cage but the full room as well—if not the entire home. Many of the graphics also are crudely drawn and seem unnecessary to illustrate a point.

Throughout the video a number of individuals are interviewed, including a wildlife biologist, a vet, an animal trainer and a handful of owners. Their often unpolished performance and distracting background visuals suggest that the video could have benefitted from better planning.

Of more concern are some of the misleading statements sprinkled throughout the video. For example, the viewer is told that the diet should contain animal protein (20% for juveniles; 5% for adults) and suggests that this be provided by monkey chow, dog food or certified pesticide-free insects. Scientists, however, have aptly demonstrated that green iguanas in their natural home are near-exclusive herbivores throughout their life (reviewed by W. Hayes, 1996, *Iguana Times* 4(3):48-49). The video even shows an iguana swallowing a neonatal mouse, which may have difficulty passing through the valves of the anterior colon that apparently facilitate digestion of plant material. The video also states that if there is insufficient time to research the nutritional balance of the diet you prepare, your pet should be weaned onto a commercial iguana diet that is “more likely” to be nutritionally complete. In reality, most commercial diets are probably inadequate in both nutrition and fiber. If one does not have time to prepare an appropriate vegetable diet, then they should not own an iguana.

Furthermore, short shrift is given to full-spectrum light bulbs, which can be important especially in northern climates for providing uv radiation, necessary for vitamin D synthesis. The video claims that full-spectrum lighting may bring out the animal’s colors but is unlikely to emit sufficient uv wavelengths to be of any benefit to the animal. Vitamin D supplementation is offered as the best alternative to natural sunlight. However, a properly designed lighting system, with bulbs less than 12 inches from the lizard’s basking spot for 10-14 hours a day, can indeed provide sufficient UV for those who cannot offer access to sunlight for their iguanas. As the video admits, over supplementation of vitamins and minerals can, in fact, be detrimental.

Despite these concerns, the video does offer considerable information that is accurate as well as entertaining. Nevertheless, we’d be more enthusiastic about recommending it if the producers would release an updated version without the misleading statements.

Inside the Labyrinth

Why Numbers of Iguana Imports Do Not Add Up

*Melissa Kaplan
melissk@sonic.net
<http://www.sonic.net/~melissk/>*

Opening Cans of Worms

It has long puzzled many of us observers of the pet trade in the U.S. that the numbers of imported reptiles being sold in the U.S. were greater than the numbers that one was able to get from LEMIS, the U. S. Fish & Wildlife Service's (FWS) data reporting system. For example, in a recent article in *The Bridge*, Paula Morris quoted a U.S. Fish and Wildlife inspector as stating that the number of iguanas imported in 1996 was 238,000.

I spoke to a FWS wildlife inspector and found out that, for the same year, Columbia had CITES approval to export 700,000 green iguanas, and Guyana approval for 840,000. Even given the fact that not all exported iguanas end up in the United States, the vast majority of them do, and 238,000 is quite a bit different from 1.5 million.

CITES Export Quotas

Countries who are signatory to CITES (Convention for International Trade in Endangered Species) and who are exporting wild-caught animals and plants are required to file their annual proposals for exports of those species with the CITES Secretariat. The proposals are supposedly reflective of the numbers of those plants and animals covered under CITES which can be harvested without adversely affecting the remaining wild populations. However, as Bruce Weisgold, of the FWS Office of Management Authority relates, quotas can be based on criteria in no way relating to the maintenance of sustainable wild populations. For example, Indonesia's quotas on reptiles are based on adding a small amount to the total numbers of animals exported the previous year. Other countries may base their quotas on what the anticipated maximum number of plants or animals that the ranches or farms may be expected to reasonably produce.

Since CITES is concerned with the threat to wild populations, the trade in captive bred CITES II animals and plants are of little concern to them

since their trade does not affect wild populations, aside from founder stock removed from the wild for breeding purposes. (The captive breeding of critically endangered CITES I plants and animals, however, opens a huge can of worms that is confusing even to those charged with administering the CITES and related management programs, as it gets into commercial and noncommercial use of live plants and animals and animal parts.) Technically, countries claiming to export only "farmed" or "ranching" iguanas do not have to submit their quotas to CITES for approval. However, most countries exporting green iguanas (and other live reptiles and reptile skins) are thought—some known—to be laundering wild-caught iguanas, often with the knowledge of their governments. El Salvador, whose government quietly admits it knows that its "farmers" are exporting wild iguanas along with their ranching ones, shrugs and says it can do nothing to control it...yet, since they claim to be exporting only captive hatched iguanas, they are not required to file annual quotas with CITES. The CITES Secretariat warned all signatory countries to CITES to not deal in CITES wildlife trade with Nicaragua due to the fact that Nicaragua had so stripped their wild populations (including exporting heavily parasitized, sick, and injured wild-caught adults iguanas) that their exports could no longer be sustained. Apparently, we have to wait for the same to happen in El Salvador before anything will be done there.

Some countries, such as Mexico, just do not have the funds to pay biologists and law enforcement personnel to survey wild populations to be able to find out what, if any, export levels their country can sustain. There is a similar lack of funding to support monitoring of wildlife shipments, so these countries have simply closed their doors to wildlife export—legal wildlife export, that is. Wild-caught animals are still laundered throughout Central and South American countries, smuggled over ill-protected borders into countries that are exporting.

Enter the Labyrinth

CITES also gets information from countries importing plants and animals. In the United States, the FWS has their data system, LEMIS, which collects information on imports. U.S. Customs also has ABI, their data system used by Customs personnel and import brokers. By law, Customs is to upload the data they collect on wildlife imports to the LEMIS system. This data uploading is being done on a regular basis. The combined data in the LEMIS system are used to report data to CITES. However, if a private citizen or organization requests LEMIS data, what they get is only the data collected directly by FWS. The data will not include figures collected by Customs and uploaded from their system to LEMIS.

This means that any agency or individual trying to get information on just the numbers of plants or animals imported into the U.S. is getting data not reflective of what is actually coming in.

When asked about this, FWS said that they are currently bound by the Freedom of Information Act (FOIA) to release only their data. Customs, which, like the FWS law enforcement division that collects and disseminates data, is technically a law enforcement agency. They refuse to release data to any individual or organization. This is, apparently, not based on their law enforcement status but by their claim that to release such information violates trade secrets.

As it is, the data collected by Customs in their ABI system does not include all the information FWS needs for its LEMIS system, and it includes information they do not need. FWS is going to try to surmount this problem by inputting data from a paper form that is already required to be filed by all importers, whether or not the importers or their customs brokers file directly with the ABI system. An indirect benefit to organizations and individuals doing research in this area will be that the figures they will be able to obtain from FWS/LEMIS under the FOIA will represent the actual numbers of the plant or animal imported.

When talking with FWS officials in Los Angeles, San Francisco and their headquarters in Virginia, I found all of them to have rather strong feelings (generally of frustration and political wariness) about the interfacing of the systems and data access. The law enforcement inspectors and officials couched their words most diplomatically, but it is

significant, perhaps, that no one agreed to let me identify him or her by name.

Blackmail

One concern expressed by the FWS law enforcement official in Virginia was that there have been some mutterings by organizations or individuals who have talked about suing Customs to obtain access to the wildlife import data. Customs may lose such a suit, which would mean that they would have to release the import figures. The trouble, he says, is that if Customs wins, not only will they not have to release their data, but FWS will no longer be able to release their own LEMIS data to comply with the Customs position—that release of such data constitutes violation of trade secrets.

This opens up as many questions as it answers. We now know why the figures released publicly from LEMIS do not match actual imports. But what is it in the data that constitutes “trade” protection? Since countries must apply to export CITES plants and animals, apart from any quotas applied for with the CITES Secretariat, and their export permits must contain the exact numbers of plants and animals, by species, who is being harmed by these data being released? The names of importers and exporters are not part of the data released. Not all of the data entered into the LEMIS system or into the new and improved LEMIS II system are or will be released to the public. Some of the data are proprietary and confidential, but not all of it needs to be. So, one wonders why Customs feels it must protect all of its data, even those items related to the monitoring of protected species and having nothing to do with protecting trade interests, just the monitoring of protected species.

Cyberlinks

If anyone is interested in finding out more about Customs, FWS, CITES, and the trade in wildlife, information can be obtained on- and offline from the following agencies and organizations:

U.S. Customs
1301 Constitution Ave., NW
Washington DC 20229
202-927-1210
<http://www.customs.ustreas.gov/>

U.S. Fish & Wildlife Service
 Division of Law Enforcement
 P.O. Box 3247
 Arlington, VA 22203-3247
 703-358-1949
<http://www.fws.gov/>

CITES Secretariat
 15 Chemin de Anemones
 Case Postale 456
 CH-1219 Chatalaine
 Geneva, Switzerland
 41 (22) 979 91 39
<http://www.unep.ch>

TRAFFIC (USA)
 World Wildlife Fund
 1250 Twenty-fourth Street, NW
 Washington, DC 20037
 (202) 293-4800
<http://www.panda.org>

World Conservation Union (IUCN)
 IUCN/US
 1400 16th Street, NW
 Washington, DC 20036
 202-797-5454
<http://www.iucn.org>

Mood Swings for Iguanas

Musician and songwriter Stevie Legend seems to have a passion for something in addition to music—iguanas. Besides being pictured on the back cover of his CD, *Mood Swings*, with two of his iguanid friends, he is also responsible for the illustration on the front cover. Legend has also decided to donate part of the proceeds from the sales of the CD to the International Iguana Society, as stated on the back cover.

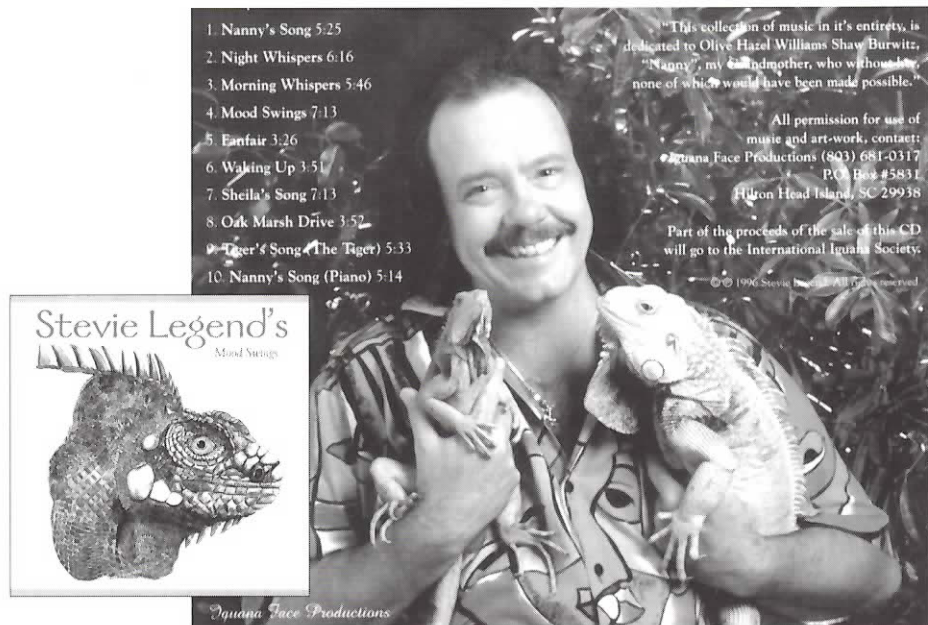
The following is an excerpt from a recent review of the CD:

“With the exception of an occasional riff or two, there is nothing bluesy about Stevie Legend’s first solo CD release *Mood Swings*. As a consummate keyboardist with a reputation for strong R&B/Jazz performance, this full 10-piece effort is in stark contrast and clearly represents another side of the man’s diverse talents. *Mood Swings* is an all instrumental work and with the exception of some guitar and percussion

work on three of the cuts, is performed entirely by Legend using piano, organ, bass guitar and synthesizers.”

If you’re unable to find a copy in your local music store, you can order it by mail. Send a check or money order for \$10.00 + \$3.50 for shipping and handling to:

Iguana Face Productions
 P.O. Box 5831
 Hilton Head Island, SC 29938
 (803) 681-0317



YOUTH IN SCIENCE

The following research article was submitted to us by an 8th grade student from Gretna, Louisiana. It was originally entered as a science project at her school, and, we are told, "the judges were fascinated" by it. The International Iguana Society would like to congratulate and thank this future scientist for her enthusiasm and interest in iguanas and wish her success in her new career.

The Green Iguana in Captivity: *Do Iguanas Have the Ability to Adapt to Common Environmental Stimuli?*

Jane Cagle

Introduction

This was a project dealing with the common Green Iguana. The point was to prove that iguanas can adapt to common noises and color. Basically there were two parts to my experiment. An Auditory Response part and a Color Response part (visual). For the color response part I used cloths and for the Auditory part I used a cassette tape with various sounds on it. The point I wanted to make is that I believe my hypothesis ("I think iguanas have the ability to adapt to changes in their environment") is correct.

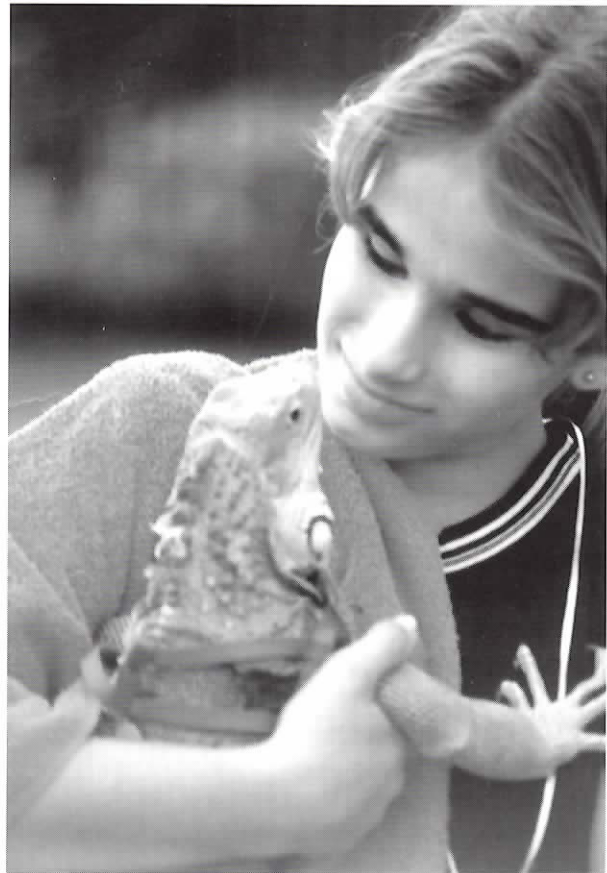
My project included 2 five and a half foot long iguanas. What I had hoped to achieve in this project is that I wanted to test them and see if they adapted to different colors and sounds.

The procedure I did is as follows: I did the Color Response test with different colored cloths such as bright red, metallic aqua, etc. I tested 9 different colors with them altogether. When they liked a color, they did not respond with any kind of enthusiasm. In other words, they just looked at it. However, when they did not like a color, they became stressed. When becoming stressed they had these symptoms: pupil dilation, the dewlap being out, heavy breathing, leaning to one side and wild eyes.

For my experiment, the iguanas were known as Subject A and Subject B. Subject A was a 3 year old male who was 5 and a half feet long and 8 lbs. Subject B was a 4 year old female who was 5 and a half feet long and weighed 9 lbs. When they were tested with colors, they responded slowly in the beginning, but more easily towards the end. The first color they encountered was hot pink. This alarmed Subject A the first couple of days, but the last recorded result was that he was mildly

stressed instead of extremely stressed. As for Subject B, she started out with almost no stress at all!

Another color they experienced was dark blue. Although it is a dull color, it still frightened Subject A. Subject B pretty much had no stress. In my opinion of the two, I think Subject A was a little more nonrelaxed. When he was bought 3 years ago, he had been wild and since then he has not



Jane Cagle with Tigger Lee, a 4-year-old, 5 foot long, male green iguana, weighing in at 8 lbs. Photograph: Florence Cagle

changed. Subject B, on the other hand, had been a stressful specimen, but adjusted better.

The next cloth material was grey fur. Subject A didn't mind this and Subject B had many written as "no stress." The next color choice was Bright yellow. Subject A of course did not like this, but Subject B was stressed—she tried to bite it. There really is one solution for this: iguanas like bananas, especially Subject B. She probably mistook the brightly colored hue for a banana.

Another color was emerald green. Subject A surprisingly did not show any stress towards this color. Subject B also had "no stress" on her part of the chart.

An interesting color tested on them was metallic aqua. Subject A was mildly stressed at this color, while Subject B was extremely stressed. Although not every color is listed, this is just a brief summary of what my experiment was like for the Color Response.

The other part of my project consists of sounds. This is my Auditory Response chart. The same subjects that were in the Color Response chart participated in this section. The following tested were different sounds such as songs, and other common noises.

One of these sounds was rap/R&B. Both of the subjects listened to the wacky, sultry group, Salt & Pepa. Neither Subject A, nor Subject B liked this selection of sound. I think they didn't like it because to them it probably had a negative tune, and created much confusion with the rapping and the bass being so loud.

The next selection picked out for them was country music sung by Merl Haggard. They also did not like this piece. There was a steel guitar in the song that they did not show much interest toward. Besides both of the iguanas reactions they got used to the sounds pretty well.

Out of all the selections, I would have to say that opera was their favorite. They made no attempt to stick out their dewlap and had no pupil dilation. They pretty much sat on their cages and acted natural.

Other than these sounds, there were some sounds that Subject A did not get used to. The sound that he never adjusted to was the sound of a weed wacker. Every time this sound was played he would run under the couch. He wasn't stressed, but he was merely trying to save himself from the dreadful noise. This, I believe, proves

that iguanas in captivity can adjust to sounds and colors. Therefore, my hypothesis was accurate: I think iguanas have the ability to adapt to changes in their environment. In conclusion iguanas are considered to be intelligent animals.

Materials and Procedure

Materials:

- Cloth (different colors)
- Audio tape (cassette)
- Tape player
- Two 5 and a half foot long, green iguanas
- Data book

Procedure:

1st step: *Color:* I showed the specimens the colored cloths. *Auditory:* I made them listen to different sounds on the cassette.

2nd step: *Color:* I copied down both of the responses in my data book. *Auditory:* same as color.

3rd step: I rearranged all my information into one whole report.

Conclusion

In my conclusion, I would like to say that I agree with my hypothesis 100%. I pretty much proved that iguanas do have the ability to adjust to their surroundings. I proved that once exposed to different colors and sounds, the iguanas would eventually get used to seeing and hearing the same things every day.

Results

As it turned out, my results agreed with my hypothesis. Iguanas can adjust to their surroundings. The male iguana just did not adjust to a couple of things but the female did fine. Even though the male did not pass every test, he still did well. My honest opinion is that females are easier to work with and it is a well known fact that females are easier to train because I trained my female iguana to go to the bathroom on newspaper like a dog.

Note: If Jane looks familiar to you, there's a good reason—this isn't her first appearance in *Iguana Times*. A photograph of her sitting with a friend accompanied an article in Volume 3, Number 1, March 1994 (page 20).

IGUANA NEWSBRIEFS

Ecuador Urged to Maintain Order in Galapagos

The World Wide Fund For Nature called on the Ecuadorean government to guarantee the rule of law and the safety of personnel and researchers in the Galapagos Islands, after a National Park employee was shot in the stomach following a week of unrest due to a government crack down on illegal sea cucumber harvesting.

Park warden Julio Lopez was shot in the abdomen March 19 while participating in the inspection of an illegal sea cucumber-processing camp on the western coast of Isabela Island. According to a Galapagos National Park press release, the inspecting party was attacked by a group of approximately 20 heavily armed men who opened fire on the wardens, wounding Lopez in the stomach. He was last reported in serious but stable condition.

The attack follows a series of incidents that have tarnished the image of Ecuador's main tourist attraction in recent times. On March 16, a party held in a bar by local officials to celebrate the new independent administrative status of Isabela island was abruptly brought to an end when masked men assaulted the group, injured a bar employee and threatened to kill the captain of a park patrol boat.

On March 6, a fishing boat was captured off the coast of Isabela with an illegal cargo of about 40,000 sea cucumbers, worth approximately \$200,000. The seizure of the fishing boat was the first ever since the government outlawed sea cucumber extraction in 1995.

"It is totally inadmissible that lawless acts of this nature should happen in a place with such an international profile like Galapagos," said Teodoro Bustamante, Executive Director of Fundacion Natura, the Ecuadorean associate of WWF. "If things are going to be kept under control, the government must make it a priority to continue the trend of successful enforcement it has had in recent times and apply all the weight of the law on the people responsible for these acts."

One of the world's most renowned natural protected areas and a UNESCO World Heritage Site, the Galapagos Islands have been in a state of undeclared emergency ever since the Ecuadorean government abolished non-artisanal fishing around the wildlife-rich islands early in 1995, after a legal sea cucumber harvesting trial quota was repeatedly violated by hundreds of boats lured from the mainland by the creatures' high international market price. Following the decision, groups of the angry newcomers reacted by holding staff from the Charles Darwin Research Station and National Park personnel hostage for several days.

"It is in the best interest of Ecuador to ensure that the law enforcement situation in the islands improves," warned Miguel Pellerano, Galapagos Coordinator for WWF. "Conservation activities cannot take place when the well being of the people working in the field is constantly under threat. And without conservation there won't be much of Galapagos left to show the world in a few years time."

In the meantime, Galapagos National Park Director

Elicier Cruz vows to pursue legal actions against Lopez's attackers. "The National Park rejects the violent demeanor of the illegal fishermen and we ask the National government to act in order to guarantee that we'll be able to carry out our conservation activities in Galapagos in all safety."

For more information, contact Javier Arreaza, WWF, +41 22 364 9550.

International Reptile Smug-gler Sentenced to Nearly 4 Years in Jail

On January 10, 1997, one of the most severe sentences ever handed down in a reptile smuggling case was imposed against a German national for his involvement in an international smuggling ring. In Orlando, Florida, Federal Judge Ann Conway sentenced Wolfgang Michael Kloe, 33, of Rauenberg, Germany, to serve 46 months in jail for his role in a reptile smuggling scheme. Kloe was also fined \$10,000. Simon David Harris, 25, of Blairgowrie, South Africa, and a partner in the smuggling conspiracy, received 3 years probation and 6 months in a community corrections facility for his role in the conspiracy.

Kloe, Harris, and four others, were indicted by a Federal grand jury in August 1996 for participating in an international wildlife smuggling conspiracy. They moved hundreds of protected reptiles from Madagascar through Europe and Canada into the United States. In October 1996, Kloe pleaded guilty to charges of smuggling,

conspiracy, Lacey Act violations, money laundering, and attempted escape.

Their most recent smuggling attempt was intercepted at the Orlando International Airport on August 14, 1996, when officials found 61 Madagascar tree boas (*Sanzinia madagascariensis*) and 4 spider tortoises (*Pyxis arachnoides*) concealed in Harris' personal baggage. Harris had arrived on a commercial flight from Frankfurt, Germany, to attend a large commercial reptile trade show. Harris cooperated with the investigators and identified Wolfgang Kloe as a partner in the conspiracy and the intended recipient of the smuggled reptiles. Kloe was arrested 2 days later.

In this case alone, the wildlife had an estimated commercial value of more than \$250,000. The United States is the world's largest importer of wildlife and the demand for live reptiles has increased rapidly in the past few years. During a 2-year period, the individuals involved in this conspiracy smuggled at least 107 Madagascar tree boas, 25 spider tortoises, 51 radiated tortoises (*Geochelone radiata*), and 2 Madagascar ground boas (*Acrantobis dumerili*) into the United States where they are prized by collectors of exotic reptiles and commercial reptile breeders.

These species occur naturally only in Madagascar. They are each protected under CITES. The radiated tortoise is also classified as endangered on the U.S. Endangered Species list. It is considered one of the most brilliant species of tortoises, with a bright yellow head and high-domed black shell with yellow starburst designs.

IGUANA NEWSBRIEFS

Four additional defendants in the case remain outside this country. The United States has begun formal extradition procedures against defendant Enrico Joseph Truant of Windsor, Ontario, Canada. The other defendants not yet arraigned are Frank H. Lehmeier, Roland Werner, and Olaf Strohmann, all of Germany.

This case was investigated by special agents from the U.S. Fish and Wildlife Service. The prosecution was led by the United States Attorney's Office in Orlando, Florida, and assisted by the Wildlife and Marine Resources Section of the Environment and Natural Resources Division of the U.S. Department of Justice.

Source: U.S. Fish and Wildlife Service

Small boa leads to big smuggling operation

MIAMI — It started with one little boa and blossomed into a major smuggling operation carrying more than 1,100 reptiles from Argentina to a Hollywood, FL pet store, federal prosecutors charge. The snakes, tortoises and lizards were carried onto jets by the smugglers or hidden in their luggage, destined for Strictly Reptiles Inc., an indictment charged. For the squeamish, the reptiles tended to be small, well-fed juveniles—conditions that make them easier and less risky to transport. “Smaller ones are more easily concealed or docile. If they’ve been fed recently they’re incredibly docile,” Assistant U.S. Attorney Thomas Watts-FitzGerald said Monday. “They’ll almost go into a torpor.”

STRICTLY REPTILES, its president Michael Van Nostrand and employee Dale Marantz were charged in a sealed indictment Jan. 30 with illegal trade in wildlife protected by international treaty and fraud conspiracy.

The indictment charges that the smuggling started with a rainbow boa constrictor on Nov. 19, 1990. Eleven trips later, in March 1992, a shipment consisted of 347 red-footed tortoises, 14 rainbow boas and three Argentine boas.

Van Nostrand is accused of placing orders for the reptiles, and Marantz allegedly paid cash for the deliveries and was told when the animals had been packed and when they arrived. He needed the information because he took care of the pets-to-be after their arrival. Federal agents intercepted some later shipments, but “some

of those were successfully smuggled, entered the stream of commerce and are long gone these four or five years,” Watts-FitzGerald said. All of the shipments were governed by an endangered species treaty setting strict import regulations for animals threatened by or in danger of extinction.

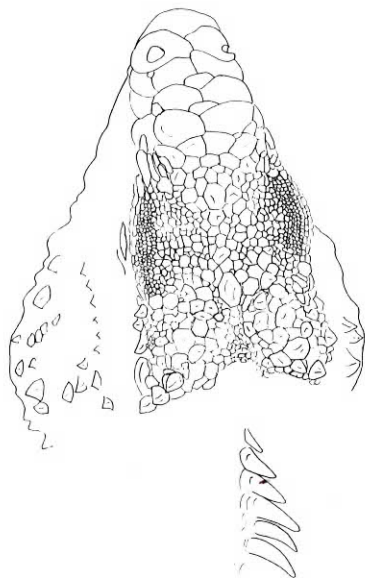
In addition, all animals reaching The United States must be inspected by the U.S. Fish and Wildlife Service and the U.S. Customs Service, but none of the 12 shipments listed in the indictment was examined.

The two men each face 12 counts of illegal reptile trading and one count of conspiracy, carrying a possible sentence of 49 years in prison and a \$2.65 million fine. The company faces the same charges and a \$5.3 million fine.

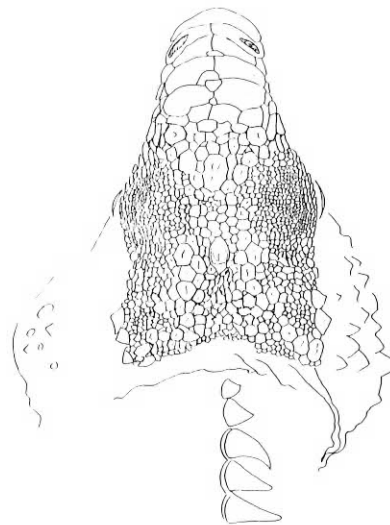
Source: The Tampa Tribune

Correction...

In the previous issue of *Iguana Times* (Volume 5, No. 4), two of the scalation renderings by John Bendon on pages 80-81 were reversed. Below are the correctly labeled top views.

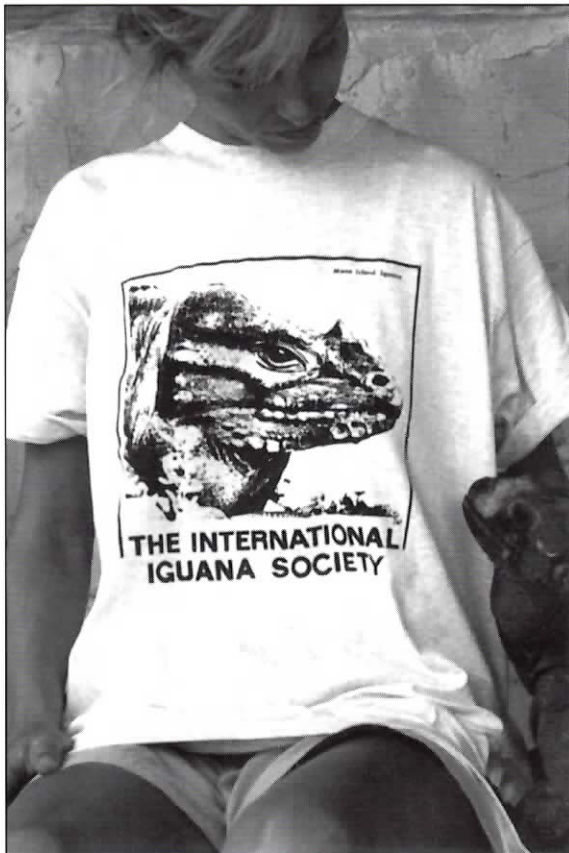


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Juvenile *Ctenasaura bakeri*,
on Utiia island. Photograph:
Gunther Köhler

