

# ECOLOGY, STATUS, AND CONSERVATION OF THE UTILA SPINY-TAILED IGUANA *CTENOSAURA BAKERI*

GUNTHER KÖHLER

*Ctenosaura bakeri* is endemic to Isla de Utila, a small Caribbean island (12.7 km maximum length, 5.2 km maximum width) which belongs to the Islas de la Bahia on the northern coast of Honduras. Until recently, only six specimens have been reported in the literature: two type specimens of Stejneger (1901) and four juvenile specimens collected by Wilson and Hahn in the late sixties (De Querioz, 1990; Wilson and Hahn, 1973). Ecological and reproductive data are nonexistent, and only black and white photos of museum material have been published (Bailey, 1928; Köhler, 1993). In April and May of 1994, I had the opportunity to do systematic and ecological studies of *C. bakeri* on Utila.

The few juveniles collected in this century were "taken on rocks and in grass along beaches..." (Wilson and Meyer, 1973). So we started looking for this species in typical *Ctenosaura* habitats, which we knew to be hot, dry, sunny areas with hiding retreats like rocks, fallen trees, etc. We encountered spiny-tailed iguanas along the beach of Utila, but they all belonged to the common species *C. similis*.

After several unsuccessful days of searching for *C. bakeri*, we did some work with basilisks (*Basiliscus vittatus*) in the mangrove swamp which covers most of the island. Then—unexpectedly—we discovered our first Utila spiny-tailed iguana. It was a large male sitting approximately 10 m high on a branch of a huge tree. We successfully captured this impressive animal and were able to examine it more closely. It measured 295 mm SVL with a total length of 692 mm. That is much more than the previously reported maximum size of 230 mm SVL for this species (De Queiroz, 1990). In the following weeks we discovered more specimens of *C. bakeri* in the mangrove swamp, but none in the hot, dry beach areas. Thus, the habitat of the Utila

spiny-tailed iguana is very extraordinary for a *Ctenosaura* species!

We had the luck to be on Utila during the egg-laying period of *C. bakeri* (May and April), and found that the females migrate to sandy nesting areas close to the beach. Because optimal nesting sites are rare on Utila (most of the island is covered by swamp and forests; the shore is either rocky or covered by mangrove; and there are only undisturbed open sandy areas), the females seem to concentrate at a few sites during egg laying.

Native iguana hunters know these sites and the time of egg-laying, which makes them very effective at capturing gravid females. Only one out of 31 gravid females we examined at a nesting site appeared to be older than two years. This suggests that an alarmingly small percentage of females successfully reproduces. The poor reproductive output of *C. bakeri* on Utila is reflected in the scarcity of juveniles.

In collaboration with Lic. Geovanny Rodriguez and Lic. Roger Cruz from the Cooperacion Hondurena de Desarrollo Forestal (COHDEFOR) I am working on a conservation program for *C. bakeri* and *C. oedirhina*. Our plans are summarized below:

1. Inform the local people about the endangered status of these iguanas to help them realize that the "garrobo de Utila" is a unique animal found on their island only and nowhere else in the world. They will have no more iguanas to hunt in a few years if they continue to kill them as they are doing at present.
2. A ban on hunting during the egg-laying period should be very effective. Due to the high reproductive potential of spiny-tailed iguanas the population should increase within several years. COHDEFOR will ban iguana hunting on Utila for the months of April and May, and on Roatan for the months of May and June.

3. We will conduct research on the reproductive biology and population structure and dynamics of these two species. The more we learn about these species, the more effective our conservation program can be.
4. *C. bakeri* and *C. oedirhina* should be included in Appendix I of CITES to prevent international trade of these species.
5. Each year a group of international scientists and amateur herpetologists as well as technicians from COHDEFOR will be sent to Utila during the egg-laying period of *C. bakeri* to conduct the research on reproductive biology and to help enforce the ban on hunting.

If you have an interest in participating in the conservation program of *C. bakeri*, please contact me for further information.



### Acknowledgements

Lic. Geovanny Rodriguez and Lic. Roger Cruz from the Cooperacion Hondurena de Desarrollo Forestal (COHDEFOR) deserve special thanks for the support and permission to do scientific investigations with *Ctenosaura* species in Honduras. I wish to thank Elke Schlagehan, Offenbach, Dirk Braun, Grevenbroich, Tobias Eisenberg, Rodenbach and Dir Rittmann, Hagen, for great field assistance and companionship in Honduras.


### Literature Cited

- Bailey, J. W. 1928. A revision of the lizards of the genus *Ctenosaura*. Proc. U.S. Nat. Mus., Washington, D.C. 73(12):1-55.
- De Queiroz, K. 1990. *Ctenosaura bakeri*. SSAR Catalogue of American Amphibians and Reptiles 465:1- 2.
- Kohler, G. 1993. Schwarze Leguane - Freilandbeobachtungen, Pflege und Zucht. - Hanau (Verlag G. Kohler). 126 S.
- Stejneger, L. 1901. On a new species of spiny-tailed iguana from Utila Island, Honduras. Proc. U.S. Natl. Mus. 23(1217):467-468.
- Wilson, L. D. and D. E. Hahn. 1973. The herpetofauna of the isles de la Bahia, Honduras. Bull. Florida State Mus., Biol. Sci. 17(2):93-150.

### Herpetoculture Today...

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and oldsters alike who keep "herps," to keep at it just for the enjoyment of seeing our fellow creatures at their finest. Give anybody and everybody a pat on the back for a successful breeding of any animal, not just the expensive or rare ones. If we can get even one more herpetoculturist started by helping them obtain their first starter animal by either giving it to them or letting them make payments or allowing them to work it off, the whole hobby will benefit. Once we get them started, then all it will take is a little guidance and encouragement to hopefully keep them on the right track.

Just one person's thoughts. 

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## THANK YOU

**Classic Pet Supply** of Warren, Michigan recently made a \$75.00 donation to The International Iguana Society. They raised the donation from entry fees for their **1st Annual Iguana Contest**.

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Fifty iguana owners entered their pets in the contest, which was judged by a local veterinarian, in six categories: Longest Iguana, Shortest Iguana, Largest Throat Fan, Tallest Spikes, Greenest in Color, and the Grand Prize category of Best Looking. Prizes included various iguana care supplies and the Grand Prize was a \$100.00 Gift Certificate to Classic Pet Supply.

The International Iguana Society would like to thank Classic Pet Supply for their generous donation...we look forward to news of the 2nd Annual Iguana Contest!