

The Anegada Iguana Headstarting Facility

Upgrade Project 25 August–3 September 2001*

John Binns

International Reptile Conservation Foundation
Cyclura.com

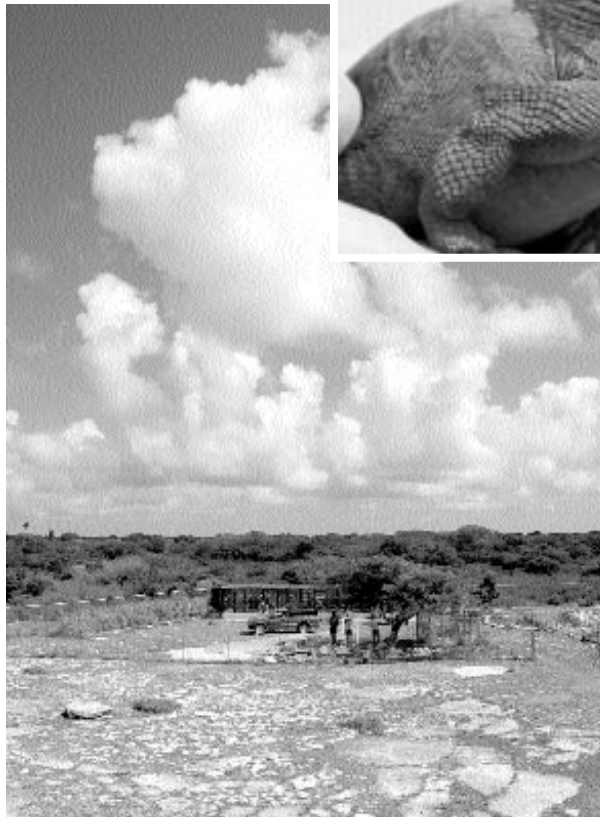
In July 2001, during a meeting to draft the five-year Anegada Iguana Recovery Plan, visitors to the Anegada headstarting facility for *Cyclura pinguis* determined that the condition of the facility had decayed since its construction in 1997. Operational procedures and protocols were minimal, and husbandry training of the part-time keepers had stalled. However, the 52 captive juveniles were healthy, albeit

showing some signs of dehydration, and, as in other reports, the juveniles remained undersized in all age groups.

The headstarting procedure involves collecting hatchlings from the wild and raising them in captivity until they reach a size at which they are less subject to predation by feral animals and can be released. Typically, the term for fostering is about two years.

Concern focused on inadequate diet and habitat conditions in the facility and on the need for husbandry training for the keepers. In addition, the headstarting facility was filled to capacity, but the release of young animals into the wild was being delayed by the slow progress of proposed feral animal removal, land tenure disputes, and poor growth statistics.

Without adequate housing at the facility or immediate construction of an additional cage system, hatchlings would have to be released with little chance of survival in habitat that had not been assessed. With the remaining number of *Cyclura pinguis* in the wild estimated at less than 200 and identified nests expected to yield up to 60 hatchlings, the potential loss could have approached 30% of the total wild population.



This picture shows the small outpost called the Anegada Head-Starting Facility, which struggles to prevent the extinction of the oldest extant *Cyclura* species. Remote and without communications, operating on a shoe-string budget, efforts go on daily in an attempt to overcome the odds of extinction. Photograph by John Binns.



One of the older juvenile *Cyclura pinguis*, most likely collected in 1998. These captives remain undersized for their age. Photograph by John Binns.

* Adapted from a report published originally in the *Iguana Specialist Group Newsletter* 4(2):12–13.

Sensing the urgency imposed by the combined threats to this species, I assembled a team of individuals to address these conditions in an accelerated timeframe. Funding came from various sources, and Alberto Alvarez from the Mona Island Headstarting Facility provided expertise. The National Parks Trust of the British Virgin Islands provided supplies, two laborers, and full access to BVINPT personnel.

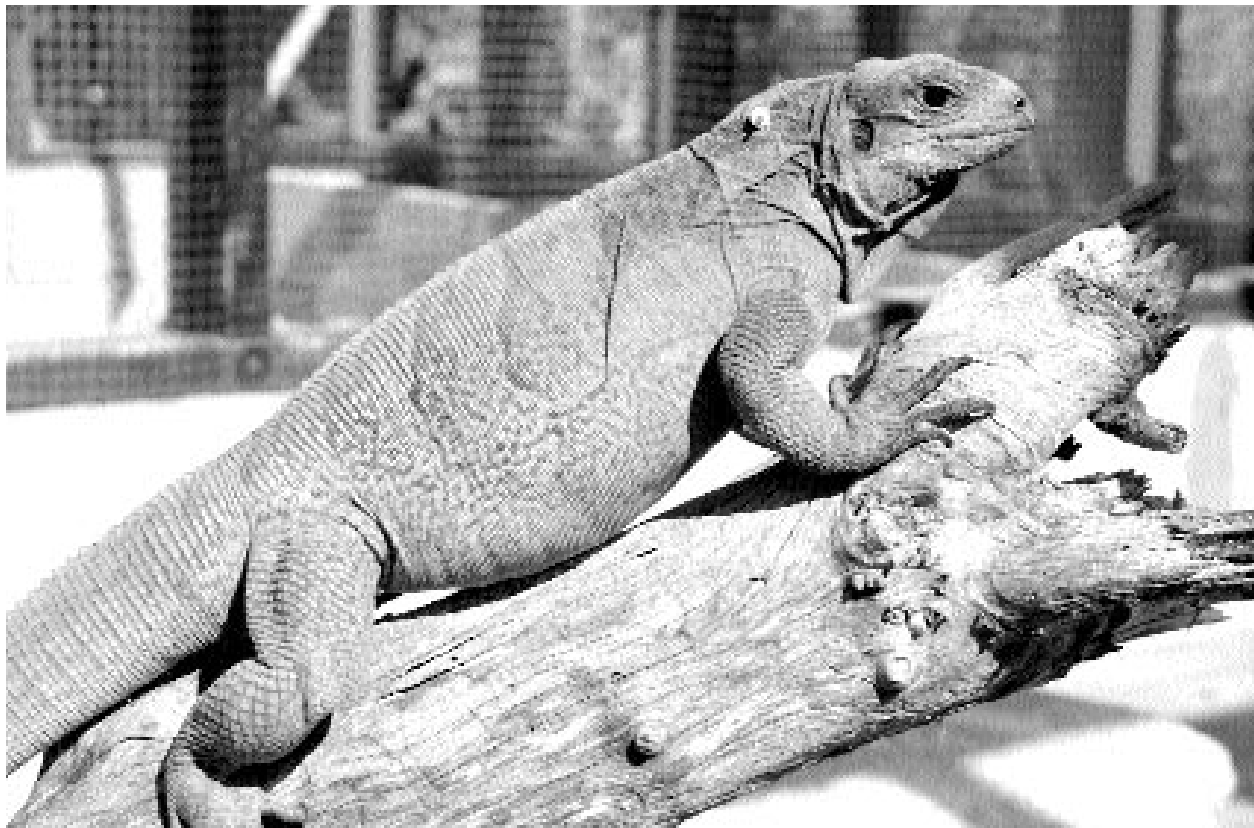
Following our arrival from various parts of the world, work commenced immediately. The team broke into two groups, each with a list of objectives. Juliann Sweet and Sandy Binns were responsible for husbandry training/procedure/protocol, diet, and health. John Binns, Alberto Alvarez, and Joel Friesch focused on construction. BVINPT personnel helped both groups throughout the project.

All objectives of the project were successfully addressed: (1) the diet program was restructured to enhance growth rates; (2) water sources were incorporated within the enclosures; (3) a broad spectrum of husbandry training was provided; (4)

cages were subdivided in order to double short-term capacity of the facility to 104 animals; (5) three vegetable boxes with watering systems were built to provide a supply of fresh greens; (6) one new cage was provided to enable animal isolation or hospital utility; (7) all habitats were rehabilitated



Collected in 2000, this young juvenile again exemplifies the slow growth of the *Cyclura pinguis* at the facility. At the time of this photograph, this animal had not yet been tagged. *Photograph by John Binns.*



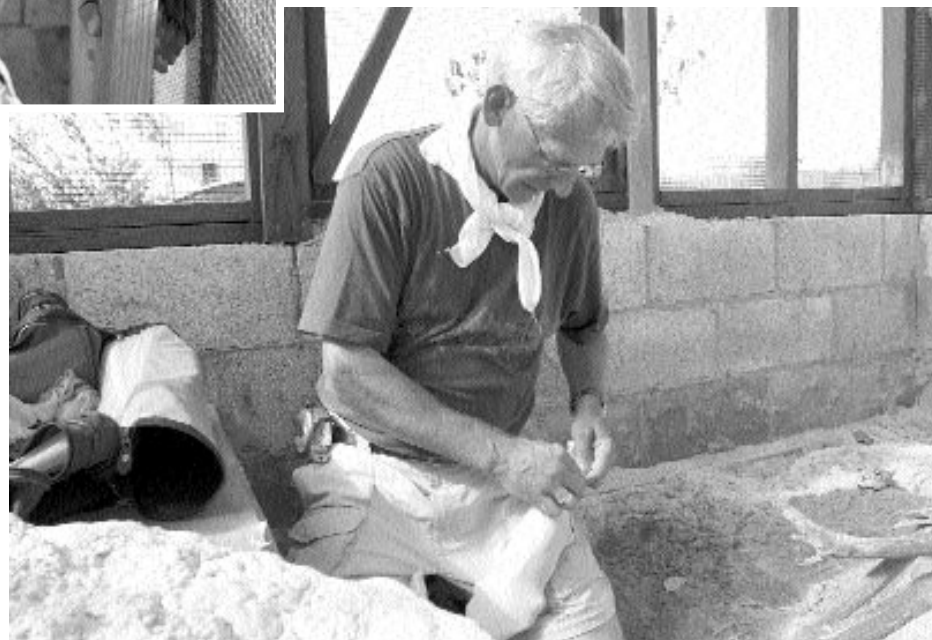
One of the largest of the captives (ca. 950 g), collected in 1998. *Cyclura pinguis* on the island of Guana reportedly weigh from nearly two to almost three kilograms (4–6 lbs) at about three years of age. *Photograph by John Binns.*



Team members of the Anegada Head-Start Facility Upgrade Project, July 2001 (from left to right): Dr. Juliann Sweet, Joel Friesch, Alberto Alvarez, John Binns, and Sandy Binns.



Reconstruction of the cage system. Here Joel Friesch fits a new stud divider to split each large cage into two sections. Alberto Alvarez assists in background. *Photograph by John Binns.*



John Binns carefully extracted juveniles from their tunnels and burrows prior to starting reconstruction. The juveniles were placed in surgical socks and placed in a cool area during the day while construction was underway. Each night, the juveniles were returned to their respective cages.

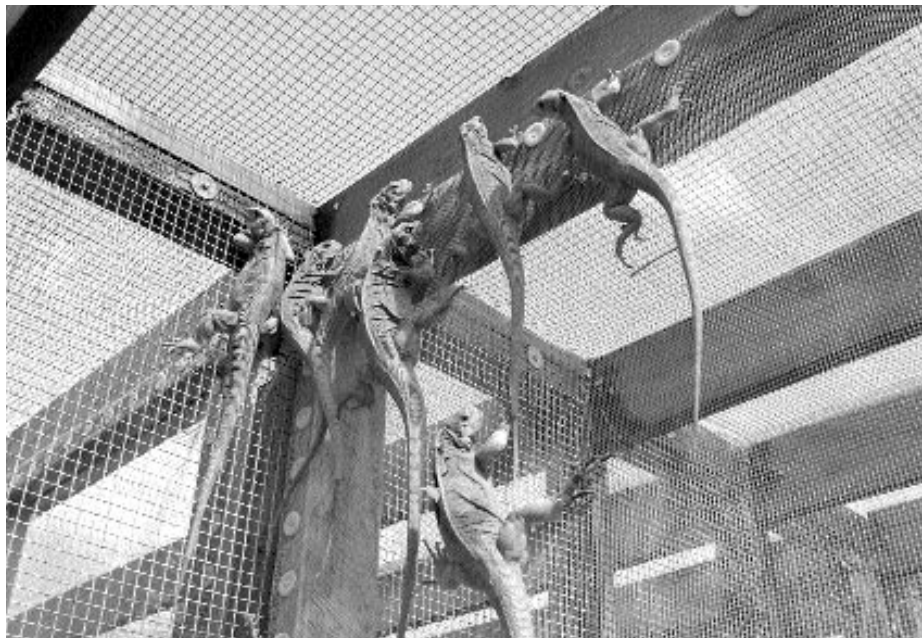
with large hide-tubes, plants, branches, floor-tubes; (8) existing facilities were repaired; and (9) food plants, cacti for fruit, and trees for shade were planted and a watering system was installed.

During our visit we discovered a new land clearing directly across from a known *C. pinguis* nesting area. The clearing was slightly less than one hectare in size. Not only was the clearing in a protected area known to be inhabited by *C. pinguis*, the land had not first been cleared of animals, but rather set on fire and dozed flat. The number of *C. pinguis* lost in this devastation of habitat is not known. This action was reported to BVINPT.

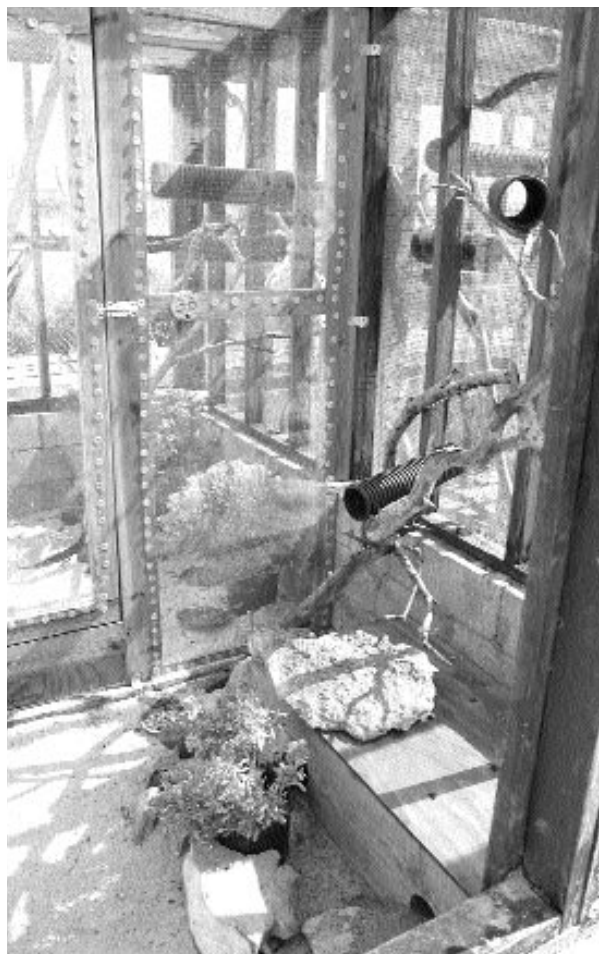
Four members of the team also spent a day searching the Eastern End of Anegada for any signs of *C. pinguis*. Iguanas had been reported in that area in the past. Although we covered a substantial amount of ground, no tail drags or other iguana signs were found. We did find, however, heavy concentrations of feral cattle and increases in the numbers of goats as we moved east. These areas were similar to known iguana habitats, but cattle tracks covered much of the ground and livestock had destroyed much of the pristine environment.

Although the Upgrade Project was a success, a visit to Anegada instills a painful awareness of the precarious situation facing the remaining *Cyclura pinguis*. The continuing destruction of habitat by feral cattle and goats, predation on juveniles by cats, and human encroachment into the nesting areas increase daily the likelihood of extinction. 🦎

One of the completed sub-divided cages. Sand substrate, plants, large diameter hide-tubes, and climbing branches were provided. Note the burrow box in the lower right corner of the photograph. Photograph by John Binns.



A group of juveniles getting acquainted with the new configuration of the cages. This was a typical sight when we reintroduced animals to their cages. In about two days these captives were establishing areas within the cage and populating the new hide tubes. Photograph by John Binns.





Feral livestock, such as these free-ranging goats, consume all available primary food sources over the entire island, leaving only highly toxic secondary vegetation for the iguanas. Prior to the release of livestock on Aneгада during the 1970s, the island provided an abundance of plants and fruits for the Aneгада iguana, the entire wild population of which now suffers from the effects of a limited food supply. *Photograph by John Binns.*



The second land clearing in the RAMSAR area by an individual interested in staking property before Aneгада land tenure issues are resolved. This land was known to support *Cyclura*, but was not cleared of iguanas before being burned and bull-dozed flat. The number of iguanas lost is not known. The area of this clearing is about one hectare. *Photograph by John Binns.*

Aneгада sunset taken at the Neptune's Treasure where the Team lodged during our stay. Neptune's Treasure offered excellent service, accommodations, and fully supported our reconstruction efforts, including donations of badly needed supplies. *Photograph by John Binns.*

Epilogue

A year has passed since I initially reported on the upgrade project and, sadly, many of the problems facing this species remain unresolved. The headstarting facility now houses about 80 juveniles, an increase of 30 animals collected after our upgrade effort, but all captives still face a not so promising future. My work continues promoting protection and survival of this species with researchers, organizations and the BVI National Parks Trust by assisting wherever possible to facilitate conservation efforts. Proactive steps are essential if the problems facing *C. pinguis* are to be addressed before it's too late.

Individuals who admire *Cyclura* need to know that most populations are in decline, with total populations of some species numbering less than 100 in the wild. Considering one local pet store's inventory is about 200 animals, this dramatically exemplifies how few of these *Cyclura* remain and how truly critical their situation is.

If you are interested in donating funds to support the conservation of species such as *C. pinguis*, you can contact the following organizations: International Iguana Society; International Iguana Foundation, or the International Reptile Conservation Foundation. All of these organizations are not-for-profit corporations with the primary mission of preserving iguana populations throughout the world. All donations are tax-deductible.

International Iguana Society:

Contact AJ Gutman.....ctenosara@cyclura.com

International Iguana Foundation:

Contact Rick Hudson...iguanahudson@aol.com

International Reptile Conservation Foundation:

Contact John Binns.....jbinns@cyclura.com

