



JOHN BINNS

Glenn releasing a re-captured *Cyclura pinguis* after replacing the bead-tags used for individual identification (July 2001 at Bones Bight, Anegada, British Virgin Islands).

## P R O F I L E

# Glenn P. Gerber: Doing It His Way

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Childhood photographs by Glenn's parents unless otherwise indicated.

“What are you going to be when you grow up?” When a child is asked that by a favorite aunt, it’s just a question, a bit of small talk. By high school, the question takes on added weight, and by college, it can be a real source of stress for many students. Students often jump from major to major, seeking something that excites them or in which they think they can excel. Many students, for example, enter college with a career in medicine in mind, until an unfortunate experience in an organic chemistry or physics course suggests otherwise. The person who “knows” early in life what he or she wants to do with that life, and is able to follow through, is fortunate indeed. Glenn Gerber is such a person.

Born a long time ago in Salt Lake City, where his Dad taught English at the University of Utah, Glenn was the



Glenn at age 4 in the spring of 1964 in San Luis Obispo, California; his preschool graduation and the beginning of a long career as a professional student.



Glenn in 1965 holding two of his presents on his fifth birthday. His sister, Vivien, looks on suspiciously.

youngest of three children. The family moved to San Luis Obispo, California while Glenn was still a toddler. In California, he discovered reptiles. Lizards were abundant, and Glenn and his brother caught them and put them in shoeboxes for storage in the garage. Glenn’s mom, Gene, remembers that the boxes were always tipping over, resulting in a healthy population of lizards in the family woodpile. Glenn decided, at that very young age, that he wanted to be a herpetologist, and he even knew what the word meant. Being a cowboy or fireman just wasn’t good enough.

After a move to Vermillion, South Dakota, in 1966, the family finally settled in Brockport, New York, where Glenn’s dad was a member of the faculty of the State University of New York at Brockport. Glenn started kindergarten in Brockport and began to amass a library of books on reptiles and fish. He collected shells (labeling each with the common and scientific name), cacti, and fossils, and began to fill the house with aquaria and cages. He kept all sorts of animals that he had caught himself and any animal that didn’t respond well to life as an exhibit had to be returned to the exact spot where Glenn had caught it. This meant that animals in Glenn’s care tended to live to ripe old ages, but everything has to die eventually. When that sad event inevitably occurred, the carcass was rele-



Glenn at age 13 in his bedroom with a Green Iguana — a look to the future?

gated to the freezer, where it shared space with the ice cream until Glenn performed the post-mortem on an old cutting board in the kitchen. He had arranged for a steady supply of mice to feed his snakes from the biology department at the University, but occasionally had to rely on a pet store when his usual source dried up. His Mom often was delegated to pick up the unfortunate rodent, and, at least once, one escaped from its box on the way home and made driving difficult as it ran around on the floor and under the pedals.

As he progressed through grammar school and high school, Glenn developed an interest in art and photography, and he retains those interests today. In the field, he wouldn't be caught dead without his camera, and he's a wonderful photographer.

Glenn graduated from high school in 1979 and attended Cornell University as an undergraduate, graduating in 1983 with a Bachelor of Science degree in Biological Sciences. Following a year of working in the Rocky Mountains and Grand Teton National Park, he enrolled as a graduate student in Biological Sciences at the State University of New York at Brockport. The budding herpetologist's Master's thesis was on the behavior and ecology of centrarchid and salmonid fish in Lake Ontario. The project had strong conservation overtones and, among other things, involved radiotracking fish from an airplane in all sorts of weather. Graduating in 1987, he was probably happy to move to the warmer environs of Knoxville, Tennessee, where he enrolled in the doctoral program in ethology to study lizards. His dissertation research dealt with behavioral and ecological interactions between a native lizard, the Green Anole (*Anolis carolinensis*) and an introduced relative, the Brown (or Cuban) Anole (*Anolis sagrei*). The Brown Anole had been introduced accidentally about 50 years earlier in southern Florida and was expanding its range rapidly northward (it has now reached South Carolina). Upon the arrival of Brown Anoles in a new area that is occupied by Green Anoles, and especially if

that area is disturbed in some way, the Brown Anole population flourishes while that of the Green Anole declines. Glenn's study was intended to gain a better understanding of the mechanisms by which an introduced species has such a negative effect on a closely related relative. The study had unanticipated consequences. Glenn learned that Brown Anoles had been introduced to Grand Cayman, an island south of Cuba. A small island, Grand Cayman is home to a unique anole, the Grand Cayman Blue Anole (*Anolis conspersus*), and concern was expressed that the same fate suffered by Green Anoles in Florida might affect the native lizard on Grand Cayman. Glenn and his adviser just had to go to Grand Cayman to check this out — and that led to many trips and to an expansion of Glenn's dissertation topic. To cut the story short, the native anole on Grand Cayman apparently can hold its own against the invader.

During one of these trips, Glenn's adviser took him to Little Cayman to see the rock iguanas (*Cyclura nubila caymanensis*). Glenn took an immediate interest in the iguanas. Part of this was driven by the knowledge that the native iguana on Grand Cayman, the Grand Cayman Blue Iguana (then *Cyclura nubila lewisi*; now thought to be a distinct species, *Cyclura lewisi*) was nearly extinct, and efforts to develop recovery and management plans were hampered by a lack of information on the lizards' ecology. Nevertheless, the iguanas on Grand Cayman are closely related to the iguanas on Little Cayman, which were still fairly abundant. So an ecological study of the animal on Little Cayman might offer clues that would assist in developing plans to save the Grand Cayman population. Glenn applied for and



Capture! Glenn on French Cay, Turks & Caicos Islands, another of the cays to which iguanas were translocated.



SUE KEALL

Glenn holding one of the offspring of the original group of Turks & Caicos Iguanas translocated to Middle Cay.

was awarded a Fulbright Fellowship to study the iguanas on Little Cayman. He had completed the fieldwork associated with his dissertation research, and the plan was for him to spend nearly a year on Little Cayman studying iguanas while writing the dissertation. He headed off to the island with his computer and a library of books and papers on anoles, but he should have known better. The last thing one wants to do after spending all day under the tropical sun in intense heat is work on a dissertation. He learned a great deal about iguanas, and his efforts did contribute substantially to the conservation of the Grand Cayman Blue Iguana (he was given an award for his efforts by the National Trust for the Cayman Islands), but completion of his doctoral program was delayed considerably — and, those puny little anoles seemed a lot less interesting than their relatively huge relatives. Glenn was hooked on iguanas.

Not only was he hooked, he was an expert. That meant that, while still trying to finish his dissertation, he was being asked to take part in all sorts of fun and interesting field research on West Indian rock iguanas. However, to the delight and relief of his research adviser (and his parents), finish he did. Subsequently, he accepted a Millennium Postdoctoral Fellowship with the center for Conservation and Research for Endangered Species (CRES) at the San Diego Zoo. CRES had a long history of working with rock iguanas, as well as monitor lizards, and had funded Glenn's proposed reintroduction program for the critically endangered Turks & Caicos Iguana (*Cyclura carinata carinata*). His previous work surveying over 120 islands and cays in the Turks & Caicos Islands (TCI) had



TREVY GRAHAM

Glenn weighing an egg on Little Water Cay, Turks & Caicos Islands, while doing a nesting study in 2004.



SUE KEALL

A little GPS work to log iguana data on Little Water Cay, Turks & Caicos Islands (2004).



TAREN WACENER

Glenn and Joe Burgess taking a blood sample from an iguana on Little Water Cay, Turks and Caicos (2004).



GLENN GERBER

Fighting male iguanas on a small cay in Chalk Sound, Turks & Caicos Islands (1995).

prepared him well for designing a translocation program that would rescue and restore these remarkable animals to uninhabited islands on which they had once occurred.

Glenn quickly identified two source and four translocation islands that would serve as the basis for this ambitious program. He knew that Big Ambergris Cay, a hidden jewel at the southeastern end of the Caicos Bank, was slated for extensive development in the near future. Supporting over 18,000 iguanas by Glenn's estimation, Big Ambergris held key genetic diversity that could not be squandered. With a practiced eye, Glenn selected Six Hills Cay East and French Cay as two islands that would be capable of supporting healthy populations of iguanas, but which had lost their populations in the recent past, most likely the result of predation by introduced species.

At the same time, Glenn had long appreciated the ecological and social importance of Little Water Cay at the opposite end of the Caicos Bank. The Turks & Caicos National Trust had successfully developed this small cay into an ingenious model ecotourism operation that was generating more than \$100,000 per year for iguanas and other conservation endeavors. Although the iguana population on Little Water was robust and healthy, Glenn had documented the recent invasion of feral cats onto the island. Knowing how quickly iguana populations can be deci-

imated by these ruthless and efficient predators, Glenn immediately realized that the valuable genetic diversity represented in the Little Water population must be safeguarded as well. He proposed moving a limited number of iguanas from Little Water to repopulate Bay and Middle Cays, part of the Five Cays, a group of protected islets just offshore from the island of Providenciales. The government quickly and wisely granted permission for both the Big Ambergris and Little Water translocations to take place the following year.

Now the real work began. The Turks and Caicos banks collectively support seven major islands and more than 200 smaller islands and cays. From a logistical perspective, the translocations could proceed only with a dedicated research vessel. Finding the right boat wasn't easy, but fortunately Glenn knew exactly what he needed. After one false start that involved investigating the cramped and rough-water challenged *Gingerbread*, Glenn spied the 50' catamaran *Aquanaut*, and knew his search for the perfect research vessel was over. All she needed was a little work, right? A full year and a complete retrofit of water, electrical, and power systems (not to mention the addition of sleeping bunks, functional toilet, and customized iguana transportation roof rack) later, the project account was \$70,000 poorer, but Glenn had learned more than he had ever hoped to know about boats — and the program was up and running.



GLENN GERBER

Female iguana looking for flowers on a Turk's Cap Cactus, Ambergris Cay, Turks & Caicos Islands.



ALLISON ALBERTS

Fieldwork is hard work!



GLENN GERBER

Male iguana on Little Water Cay, Turks & Caicos Islands (2003).

Appropriately rechristened the *Cyclura*, her maiden voyage to Big Ambergris under the unflappable Captain Gerber was a huge success. In a memorable experience, the *Cyclura's* first crossing of the Caicos Bank was marked by mirror-flat calm waters and an escort of dolphins. That was the first of many such voyages (some not nearly so calm and uneventful) that resulted in the successful repatriation of 218 iguanas over a two-year period. By collecting samples both pre- and post-translocation from source and translocation islands, Glenn spearheaded a groundbreaking study of the nutritional and physiological stress experienced by translocated animals. Although evidence suggested initial stress and weight loss, Glenn worked with a dedicated group of scientists, veterinarians, and stalwart volunteers to document full recovery within five months of translocation. The translocated iguana populations have grown at a phenomenal rate, and females as young as two years have reproduced, truly remarkable for a species in which the usual time to reproductive maturity is six to seven years. Glenn continues to monitor the reintroduced populations, which have shown an astounding 95% survival rate. By all accounts, the program continues to be an unqualified success. In 2002, Glenn was honored with the Conservation Award of the Turks & Caicos National Trust for his many achievements related to iguana conservation in the TCI.

At one point, Glenn's work in Turks & Caicos had led to his own physiological stress. With a couple of other biologists, he was on the boat miles from a medical clinic in Providenciales, the most populated island in the Turks & Caicos Islands, when he became seriously ill. His colleagues, who were not exactly seasoned sailors, had to get the semi-delirious Glenn back to civilization. There, he was diagnosed as having pneumonia, and ultimately was flown to Miami, where he had access to better medical care, but his condition was still

misdiagnosed. Not until months later did a suggestion by another CRES biologist lead Glenn to insist on the blood test that would confirm that he had Dengue Fever.

Always at home in the field, Glenn has continued to mentor fellow iguanophile Kelly Bradley in her studies of headstarted Anegada Iguanas (*Cyclura pinguis*) in the British Virgin Islands. Together, they designed an innovative experiment that would determine the optimal size at which to reintroduce headstarted juveniles back into the wild. Their hard work has led to the successful repatriation of over 100 iguanas into their native habitat, a vastly improved captive management program, and the basis for a model educational campaign that teaches visitors and residents alike about the need to conserve iguanas and their habitats. This year, Glenn will be working closely with the non-profit group Island Conservation to develop much needed invasive species management plans for both Little Water Cay and Anegada Island. Glenn continues to serve the IUCN SSC Iguana Specialist Group as a long-time Steering Committee member and to provide critical advice and assistance to iguana conservation programs worldwide.

Glenn's postdoctoral fellowship ended in 2005, but the San Diego Zoo was fortunate to be able to keep him on as an expert consultant. Soon thereafter, he became the full-time Caribbean Program Head at CRES, where he continues his work with iguanas. He recently founded the TCI-based non-profit Caribbean Wildlife Foundation, dedicated to the conservation of iguanas and other native wildlife throughout the Caribbean. Glenn is a gifted and dedicated colleague who has done more to advance the cause of science-based iguana field conservation than anyone we know, and we all owe him a tremendous debt of gratitude. He is a conservation biologist who has truly made a difference. Although neither he nor his parents realized it at the time, his toddler's interest in reptiles turned into an exciting career.