

7

From Gods to Zoos



Jeni Magnusson on a replica of the Komodo Dragon on display at Taronga Park Zoo, Sydney. Photo by Bill Magnusson.

Long before humans entered Europe after the last ice age, and perhaps as much as 40,000 years ago, Australian Aborigines revered the Rainbow Serpent, a giant snake from the Dreaming Time that crawled across the landscape making the channels of what we now recognize as rivers. Due to my young age, I have never seen the Rainbow Serpent in the flesh, but its image is common on bark paintings produced by aboriginal people in Arnhem Land. When I asked about the snake, I got the standard answer outlined above, but I am sure that the Rainbow Serpent means much more to these people, who have an oral history that dates back thousands of years.

Much later, Europeans associated serpents with medical, veterinary and pharmaceutical sciences, and the symbol can still be found in modern medical centers. Many modern Christians still believe the biblical tale of Eve's seduction by a snake, and members of some cults place deadly coral snakes in their mouths; a practice that has led many a believer to meet their maker prematurely. Other cultures more or less wove snakes into their spiritual beliefs, and snake charmers still draw crowds of tourists in India and South-East Asia. I watched a snake charmer in Thailand and I was impressed by his skill as he kissed a giant king cobra, even though I didn't like the way he mistreated many of the harmless snakes in his show. I asked how long he kept the snakes, and he said that he regularly released the snakes and caught fresh ones that behaved more naturally. I hoped that the released snakes recovered.

The Aztecs of Mexico worshiped a snake god, as well as other gods represented by powerful animals, such as eagles and jaguars. It is said that the wandering Aztecs saw an eagle holding a snake on a cactus on an island in a lake, and because of that omen they started the land fill that would eventually result in Mexico City. Later, the Mayas of the Yucatan Peninsula undertook extensive trading with other cultures, including the Aztecs and Incas, and in the process adopted many of their gods.



Photo 7.1 Image of a rattlesnake, on a wall in the Mayan city of Chichen Itza. The snake god was one of several that the Mayans adopted from Aztec culture.

Photo by Bill Magnusson.

I visited the Mayan city of Chichen Itza in 1987, long before it became the buzzing tourist center of today. It was apparently an important trading hub, and the Mayan culture there was influenced by almost all the great civilizations of South, North and Central America. On my last visit, the guide said that analysis of the gold from the sacrificial sink holes near the city indicated that it was of mixed origin, all of the major gold mines in the Americas having contributed to the artifacts that ornamented the children who were sacrificed by being thrown into the sink holes.

Because of the mix of cultures, the spectacular carvings of Chichen Itza include images of many gods, including that of the serpent. It is easy to see how the city would have impressed the religious pilgrims, because it was built not

only for grandeur; its designers used science, mathematics and astronomy to reinforce their message. The steps that lead from the top of the 30 m high central Pyramid end at ground level with a carving of the head of a snake. At the annual solstice, and only at the solstice, the shadow from the steps makes the pattern seen on a rattlesnake's back, so that a giant snake seems to be sliding down the pyramid onto the grass.

I was impressed by the art and engineering of the Mayas, and found it hard to imagine the complex knowledge of mathematics and geometry that would be necessary to design such buildings. This was a time before electronic or even mechanical computers, and all the calculations had to be done by hand. Unfortunately, the Spanish priests, perhaps worried that their seduction-of-Eve story paled beside the rich religion of the Mayas, ordered all the written records of the Mayas destroyed. Today, what is known of the culture has been recovered from the only three parchments and a handful of stone tablets that survived.

I have lived in many cultures, each of which has its own creation stories, so I am not a believer in any particular one. However, I can feel the power and majesty in any religious edifice, whether it be natural, like Mount Roraima in Venezuela that represents the stump of the tree of life cut down by the first Indians to reach the region, or man-made, such as mosques or Inca shrines. The Mayan temples were even more impressive because they were alive. No, I had not been drinking Tequila! Most of the gargoyles that jutted from the walls were stone images of ancient gods, but some were just square or triangular bricks, and on them sat black spiny-tailed iguanas⁹², their shape and color blending in with the inanimate carvings.



Photo 7.2 A black spiny-tailed iguana, *Ctenosaura similis*, doing a good imitation of a gargoyle on a wall in the Mayan city of Chichen Itza. The lizards eat plants as well as any small animals they can catch. Photo by Bill Magnusson.

One of the most important buildings surrounding the central pyramid in Chichen Itza is the Temple of the Warriors where captured enemies or particularly lucky chosen warriors from the home city were sacrificed by having their beating hearts cut out as they lay on the Chac Mool, the sacrificial bench placed high on the imposing building, which looked like a truncated pyramid. Most of the people who saw the sacrifices would not have been allowed to climb the steep steps and would have had to watch from the grass below. Today, even tourists are no longer allowed to climb the steps, but we could back in 1987.

It was midafternoon and too hot for comfort by the time we got to the Temple of the Warriors, and we were already tired from climbing the central pyramid. Each step was as high my calf, making it an uncomfortable climb. Having been

to the top of the pyramid, I expected the view from the Temple of the Warriors to be something of an anticlimax. It wasn't, but the surrounding landscape was not the most spectacular thing about the top of the pyramid. Sitting on the top was a baby rattlesnake!

I am sure that nobody put it there, and I couldn't see how it got there by itself. It seemed too small to have navigated the steps. I was worried that someone would kill it or that it would perish in the hot sun on the exposed stones. Therefore, I carefully caught it, put it in a sock, and carried it down to the base of the pyramid, where I released it. Maybe it was a good deed, or maybe I was a modern pagan, removing a God that was starting the process of reviving Mayan culture; we'll never know!



Today, most people have lost the feeling of wonder experienced by most of our ancestors when they saw a snake or giant lizard. The only visual contact most people have with live snakes is in zoos or wildlife parks. I must admit that I am generally not impressed by reptiles in zoos. Most reptiles either do not move very much or they move too much and appear stressed when restrained in small cages. Maintaining native species, such as water dragons in Australia, iguanas in South America, and monitor lizards in South-East Asia, walking around free on the zoo grounds seems much better than having animals in cages. Nevertheless, I have met many dedicated zoo keepers who have devoted much of their lives to presenting reptiles to the general public in zoo settings or other displays.



Photo 7.3 A Yucatan Neotropical rattlesnake, *Crotalus simus tzabcan*, that we found on the top of the Temple of the Warriors in the Mayan city of Chitzen Itza in 1987.

Photo by Bill Magnusson.

It takes a very special sort of person to work in a zoo, as much because of the human relations as the animal husbandry. To get an idea of the difficulties and gratifications of zoo work, I recommend Peter Brazaitis' book, *You Belong in a Zoo*⁹³. I met Peter many years ago, and he invited me stay at his house in New York and visit the Bronx Zoo. Peter is married to Myrna Watanabe, who has studied crocodilians and has a special fondness for Chinese culture.

Although I have kept pets, I have never been one for close physical contact with dogs, cats and other furry beasts. Myrna prepared a wonderful Chinese meal for me and I was impressed by the variety of dishes, but I was a bit taken aback when her big furry cat jumped onto the table, walked over the dishes and then vomited a fur ball onto the table cloth. I thought that Myrna would be

angry at the cat, but she just murmured something like “You silly cat,” wiped the vomit from the table cloth, turned, smiled and said “Let’s eat”.

The meal was terrific and I slept on the couch afterward. It was very comfortable, but I had a nightmare in the early hours. I felt as though a dry cloth was being shoved down my throat and I couldn’t breathe. I tried to open my eyes, but it felt as though someone was pushing cotton wool into them. Dreams don’t last long, but when you are in them they seem to go on for hours. I was choking and trying to wake, not being able to scream because of the stuff in my throat. The air wouldn’t come and I seemed to be slipping into that final state that invites death, but eventually I sat up and the cat fell off my face.

When I got the fur out of my mouth and eyes I looked down to see the cat looking at me with a bemused smile on its face. It seemed to be saying “If I’d had another couple of minutes I’d have got you.” I had probably seen too many horror movies, and of course I didn’t say anything to Peter and Myrna, but I kept one eye on the cat for the rest of the time I spent with them.

Peter is from the Bronx and it is hard to imagine anyone better to give you a resident’s tour of New York. He took me to the harbor side and showed me where they shoot most of the city’s bridge scenes for movies and I chuckle at the director’s lack of originality every time I see another film with a scene taken from exactly the same point. He also took me into the new rainforest exhibit that was being built at the zoo. For me, it was perhaps more impressive than a functioning exhibit because I could see the complex engineering needed to build the huge trees and make the stream flow as though through a tropical forest. Even the simplest zoo exhibit is the work of a team that follows the directions of the animal keepers to maximize the contact of the public with the animals and minimize the effect of the people on the captive fauna.



Photo 7.4 Right: Myrna Watanabe with her cats. The brown one almost ended this book before it started. Left: Peter Brazaitis eating guava in Venezuela in 1984.
Photos by Bill Magnusson.

Peter has a special interest in crocodiles, but the animal that most caught my attention was an Australian taipan. The snake, which must have been more than two meters long, was not on display, but was in a round enclosure made from a converted cattle tank, a bit like a giant children's swimming pool without water. It was moving continually, circling its enclosure and investigating all the nooks and crannies. I could not imagine how the keepers could clean its cage or move it from one cage to another without great risk to their lives in such an enclosed space, but it was only after reading "*You Belong in a Zoo!*" many years later that I fully realized just how dangerous and demanding zoo keeping can be.

Strangely, the most emotional moments I have had with reptiles in zoos have been in relation to varanid lizards, the ones Australians call goannas and the rest

of the World calls monitor lizards. These intelligent lizards are very active and usually do not let humans get close to them in the wild. Very often, whether you see them or not depends on the luck of the draw, and I have been both very lucky and very unlucky.

I took my wife, Albertina Lima, and my daughter, Jeni, on a trip from Darwin to Alice Springs because I wanted to show them the unique lizards of the Australian desert. Considering the short time we had to wander through the bush between long legs on the bus, we were quite lucky, especially for geckos. Near Mataranka we found spiny-tail geckos⁹⁴, which have round tails with black spines that exude white goo when the lizard is molested. At Uluru, which used to be called Ayres Rock, we found knob-tailed geckos⁹⁵, which are much like thick-tailed geckos, with large heads and delicate bodies held high off the ground on spindly legs. Most geckos have large tails that can be used to store fat or to serve as sacrificial offerings to predators, two uses that you would expect to be at a premium in the desert. However, knob-tailed geckos have a tiny tail with a bead on the end that does not appear to be of any use for either of those functions. Like the thick-tailed geckos on Hopkins Island, they looked to be too delicate for life in one of the World's harshest climates.

The species I really wanted to see, however, was the perentie⁹⁶, Australia's largest and most spectacularly colored goanna. I had read Eric Pianka's account of trying to find the elusive animals and they had become a symbol of lizard cunning for me. Someone told us that wild perenties could be seen wandering around the Alice Springs Desert Park and the park also had displays of a wide variety of desert lizards, many of which we still hadn't found on our trip. Jeni and I signed up for a trip to the Park, but Albertina just said "I hate zoos; I'm going to look for lizards around the caravan park." I tried to explain to her that a chance of seeing a Perentie made the time in the zoo worthwhile, but she was adamant.



Photo 7.5 The smooth knob-tailed gecko, *Nephrurus levis*, has a tiny tail in comparison with other geckos of similar size, and it is not clear why they don't use their tails as a large fat store like most desert lizards. Photo by Bill Magnusson.

As it turned out, the lizard displays in the park were the best I have seen anywhere in the world. Even the smallest enclosures were designed to mimic the desert scenery, the lizards were running around, digging or displaying to each other as though they were in the wild, and I was able to get some great action shots. Even the thorny devil⁹⁷ put on a good show with its clockwork movements and strange postures. Nonetheless, we were unsuccessful in our main objective of seeing a free-ranging perentie.

When we returned to the caravan park, I told Albertina about the wonderful reptile displays, but she was unimpressed and maintained that seeing the animals in captivity would have depressed her. When I asked her what she had been up to, she said “Oh, I climbed up that hill behind the caravan park. There wasn’t much there, but I found two big lizards over a meter long with big black

circles on their backs.” While we had been at the reptile park, Albertina had been watching perenties in the wild!

That’s my bad luck story, but I have also had some good luck with goannas. I was once travelling down the North Coast of NSW with my mother and we stayed overnight in the Yuraygir National Park. I decided to spotlight for mammals after dark, but my mother, who was in her seventies, said that she was tired from the long drive and would go to bed early. I had not gone far from the camp when I found a beautiful pair of sugar gliders, small marsupials that can glide from tree to tree on flaps of skin stretched between their front and back legs. I was happy to see them, but sad that Mum had missed them.

The next morning, we were sitting beside the car eating breakfast and I had no sooner told my mother about her bad luck in not seeing the sugar gliders than the raucous calls of a pair of magpies caught our attention. The big black and white birds were dive bombing something near the base of a standing dead tree. We walked over to see that they were attacking a lace monitor about 1.5 m long that was climbing the tree.

The big lizard ignored the birds even though it was taking some hard hits, and continued climbing the tree. It was about two thirds of the way up when we saw what it was after. The two sugar gliders emerged from a hole in the tree and looked nervously down at the climbing lizard. They must have heard its claws scratching as it climbed and knew what was coming. They glided to another tree while the lizard was still several meters below them. The goanna must have seen them leave, apparently decided that there was no longer any potential reward in taking the magpie’s pecks, and it dropped down into the bushes and disappeared. My mother just looked at me and said “See, I didn’t have to go out at night to see possums.”

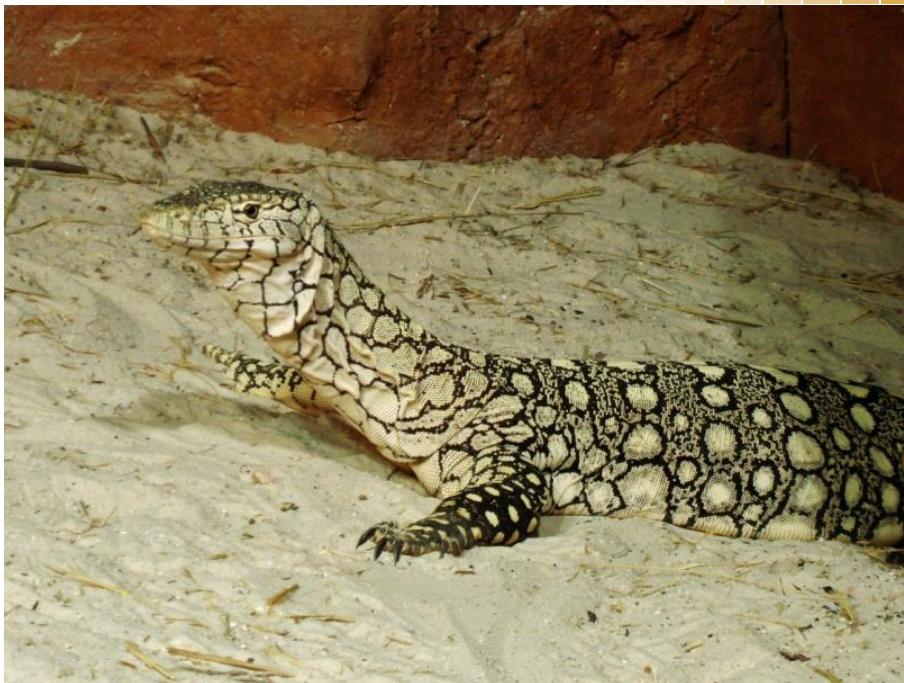


Photo 7.6 The Perentie, *Varanus giganteus*, is the largest and most spectacularly marked monitor lizard in Australia. They are wary predators of the deserts and are rarely seen. Photo by Bill Magnusson.

I have also seen monitor lizards stalking around the university grounds in Bangkok, but viewing free-ranging lizards is not the same as watching humans interact with the biggest of them. Sue Schafer gave me a tour of the San Diego Zoo and the high point was when she fed the Komodo dragons⁹⁸. These are the largest living monitor lizards and may reach 3 m and 70 kg. They are famous because they are thought to have venom glands in their mouths, and have even killed humans and water buffalo in their native habitat on islands in Indonesia.

Sue threw dead chickens into the enclosure and the giant lizards grabbed them daintily and scoffed them down in one piece. All seemed to be going well until two grabbed the same chicken. Sue said “Oh no, they’re going to hurt each other,” ran into the enclosure armed only with aluminum tongs and dragged the

chicken away from both of them. I would have been astounded at her going into the enclosure at any time, but coming between two feeding dragons seemed incredibly dangerous. She must have known her charges very well.

I told myself that I would never be silly enough to go into an enclosure with an adult Komodo dragon, but a friend convinced me to do so several years later. He was curator of reptiles at Taronga Park Zoo. There had originally been a pair of dragons at the zoo, but the female eventually died, leaving only the big old male. I wasn't sure how you should act around a Komodo dragon, but my friend told me to just sit on a log and do nothing. The huge lizard, which must have weighed more than I did, walked over, its eyes apparently focused somewhere just in front of me. I was unprepared when it laid its head on my lap like some oversized dog. I don't remember how long it stayed there dribbling on my leg, but I was shocked that it would treat a human as a companion and not as food. Rather than fear, I felt sorry that it's only friends were humans and that it would never have a mate of its own species. After my near-death experience with Myrna's cat, my encounter with the dragon seemed very safe!

