With Psychologist at Helm, Zoo Atlanta Gets Wild

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A distinguished, soft-spoken man ambles about the 37.5 hillside acres of multiple environments – here an open rocky slope, around the corner an African rain forest, down there a bamboo stand – all laced together by meandering walkways. He is repeatedly stopped by strangers: “Aren’t you Terry Maple?” It’s almost always the same: a handshake, a word of thanks, mention of how long the visitor has been a supporter, then: “Keep up the good work,” or “We miss not seeing you around.”

A Georgia Tech psychologist, Maple is the former president, CEO, and now director emeritus of Zoo Atlanta. During Maple’s 17 and a half years the zoo has risen from enormous difficulties to become a zoological showpiece. (This summer, APS conventioneers will get to meet Maple wearing both his hats: the behavioral scientist leading a symposium, and the zookeeper hosting an outdoor social event for APS on his urban hillside.)

Maple is also a self-styled “political junkie” and friend of both President Jimmy Carter, a democrat, and Newt Gingrich, the former republican speaker of the US House of Representatives, a frequent zoo visitor and contributor. According to Maple, conservationists and environmentalists owe Gingrich a debt of gratitude for running interference off-camera to stop fellow-conservatives’ attempts to repeal the Endangered Species Act and for otherwise “keeping bad things from happening.”

Maple grew up in San Diego, California, home of one of the world’s pre-eminent zoos. He came of age during the Vietnam era, and when he did his graduate work at the University of California, Davis, “my main interest was trying to figure out why man was inhumane to man. I wanted to find the key to solving the problem of violence.” Then he discovered that “there were a lot of animals in zoos that were going crazy. I began to look at the issues of isolation and social deprivation, the effects of physical environment on behavior.”

He crossed the bridge from human violence to animal behavior. His mentor at UC-Davis was the chair of the psychology department, Robert Sommer, whose 1974 book, *Tight Spaces*, exposed the inhumanity of what he called the “hard architecture” of places like prisons, mental hospitals, schools, airports – and zoos. It influenced Maple’s – and Zoo Atlanta’s – future.

In 1975, Maple took his newly minted PhD to Emory University in Atlanta, and three years later to Georgia Tech. He’d become a disciple of Harry F. Harlow (1906-1981), whose most famous experiments paired infant rhesus monkeys with “mothers” constructed of either chicken wire or cloth and padding. Harlow’s experiments demonstrated that the need for cuddling and affection created a stronger bond between mother and infant than did physical needs, such as for the milk available from the chicken-wire “mom.”

Maple has focused much of his own research on the behaviors of great apes. In 1980 he authored *Orangutan Behavior*, and two years later co-authored *Gorilla Behavior*, two books he says "launched me as a figure in the zoo world."

But how did a research scientist end up running a zoo? It was partly a case of being in the right place at the right time.

The time was June 1984. Atlanta's zoo had just "crashed and burned," as Maple chronicled 10 years later in "Toward a Responsible Zoo Agenda," a chapter in *Ethics on the Arc* (Smithsonian Institution Press, 1995). The zoo was a national scandal. Its budget and management were a shambles. Caged animals were dying of neglect. Its favorite elephant, Twinkles, crippled with arthritis, had been sent to a North Carolina farm where she died. Animals were not allowed to breed. There was no full-time veterinarian.

The zoo was kicked out of the American Zoo and Aquarium Association, ending its accreditation. Animal rights advocates turned the scandal into a cause célebre. The Humane Society of the United States named the Atlanta Zoo one of the 10 worst zoos in America. There were calls for its closure. Almost daily headlines became a Greek chorus heralding the zoo's collapse.

"Just after I'd been promoted to full professor and thought my career was progressing smoothly," a Friday morning newspaper that summer carried yet another article on the scandal.

"I complained to my wife about how they didn't seem to know what to do over there," he recalls. "I was surprised they hadn't picked up the phone and given me a call."

The mayor's office did phone, that same day, to ask if Maple could attend a meeting Monday morning. He went. That gathering in the mayor's office turned out to be an abrupt turning point in his professional life. Atlanta Mayor Andrew Young sought advice from Maple, representatives of the Humane Society of the United States and other animal rights groups, and representatives from Emory University's Yerkes Primate Center, among others. "He wanted the experts to tell him what they could do to stop the bleeding," Maple recalls.

The zoo was being managed from city hall. If it was going to be saved, it needed its own leadership. "It was unlikely the city could hire a good director anytime soon," Maple says, "so we started talking about having an interim director. Before the meeting was over, they were asking me if I would be willing to do it."

It was summer, Maple had some time off, so he said he'd do it "for a few months," but he wasn't sure Georgia Tech would let him do it any longer than that. They agreed to keep the news quiet until he could talk with the person then in charge of the zoo, the city's commissioner of parks, recreation and cultural affairs, but "before I got back to my office, it had leaked. There were reporters camped out at my door."

Those "few months" turned into 17 and a half years.

"I set out to try to change the zoo from being a pariah to a respected member of the zoological industry. We privatized, we grew the budget, we literally changed everything about how the zoo was being

managed." The city's first big present was a $16 million bond issue in 1985. Today, the zoo is divorced from city government and is run as a nonprofit corporation governed by a citizens' board.

With fresh funds and new staff, "my first issue was animal welfare." He hired a full-time veterinarian, then a landscape architect. They converted the traditional zoo houses of Grant Park, imbedded in one of the city's oldest residential neighborhoods not far from the downtown skyscrapers (the park also houses the city's tribute to its Civil War past, Cyclorama, just outside the zoo's gates), into "soft architecture" straight out of Sommer's book. They created a series of natural environments laced together by paved paths. There are fences, but they are hard to see amid the foliage. Almost no animals are housed indoors.

But the zoo's most famous resident has gone. Willie B., the city's cherished silverback gorilla, died at age 41on February 2, 2000. His memorial service was attended by almost 8,000. The eulogy was read by former Mayor Young. Willie B. had been named for another mayor, the legendary William B. Hartsfield, an affable and crusty, old-style politician who had brought the premiere of *Gone With The Wind to Atlanta* in 1939 and had ruled over the growing city all but two years from 1937 to 1962.

When Maple arrived in 1984, Willie B. had already lived 23 years isolated in a glass cage – a large, climate-controlled cage outfitted with a television set he seemed to enjoy watching (he especially liked "M*A*S*H"), but a cage nevertheless – entertaining children of all ages with his antics. He loved people, but Atlantans' favorite had never played with his own kind, had never mated.

Maple wanted much more than one gorilla, more than a couple, even more than a family of gorillas. He wanted "a whole colony of them." He went to the Yerkes Primate Center and offered to "build the perfect gorilla environment if they'd give me the gorillas for it." They obliged with 13 gorillas and 8 orangutans that now romp and chase each other around open spaces and duck inside their favorite hiding places. Since then, 12 more gorillas have been born at the zoo, and another, Ivan, was rescued from a cage in a bankrupt Tacoma, Washington, shopping mall where he had lived alone for 28 years.

As for Willie B., he came out of his cage in 1988 and made new friends. He had continued to be a crowd pleaser, but now he had gorilla friends as well. After so many years alone, "nobody knew whether he'd get along with the others, let alone mate," says Maple. Bumper stickers appeared: "Willie B. – Will He or Won't He?"

He outperformed everyone's expectations. He sired five offspring, four daughters and a son, and became the oldest gorilla to ever become a father in the United States. His son is named Kidogo, Swahili for "junior" or "little one." Maple has a rule that African animals must have African names, but "we call him Willie B., Jr."

All that remains of Willie B. today is an exhibition center dedicated to his memory and a life-size bronze statue that children love to clamber on to be photographed.

Maple and many of his students still concentrate on gorilla studies, examining personality, mating, mothering, paternalistic behavior, gender differences, social behaviors, "you name it," but Maple hasn't been able to do much firsthand research himself since taking on the job of resurrecting the zoo. Until recently he has divided his time between two worlds, 80 percent of it administering the zoo, 20 percent at Georgia Tech.

“I insisted that they allow me to maintain my status as a university professor,” he explains. “I told them I would be a better zoo director if I did, and I know I was right about that. I was able to work the gig at the zoo, then take a step back and look at it as an experience, as a place where I could ply my trade as a scientist.”

Many of his former students now work at the zoo, and others have gone on to other American zoos as resident scientists, part of a young rising tide of scientists finding such berths.

One of those students is Molly Bloomsmith, now Zoo Atlanta’s research director, one of several past and present Maple students who will be on his APS symposium panel, “Psychological Science in the Zoo.”

“The term ‘psychological well-being’ is written into the Animal Welfare Act,” says Bloomsmith. “It says that we must promote the psychological well-being of nonhuman primates held in captivity, whether in zoos or laboratories. I think psychologists are uniquely prepared to study this. Animal welfare is what drew me to this field and has sustained my interest in it.”

She was interested in animals as a child, Bloomsmith says, “but I initially thought that would mean I’d be a veterinarian. Then in high school and my early college years, I discovered there was this field of studying animal behavior.” When she read Jane Woodall, that cemented her choice. As an undergraduate at UC-Davis, where Maple had earned his own doctorate, she assembled a major in animal behavior that combined courses in both psychology and zoology, but when it was time to decide on graduate school, psychology won.

“I was interested in two areas of psychology,” she explains, “animal cognition and also applied animal behavior, using our understanding of animals to improve the way they are held and the way they are cared for in captivity, and that seemed best addressed by the psychological perspective on animal behavior.”

She made Georgia Tech her first choice for graduate work after a professor at Davis told her about Maple’s work in Atlanta. She studied under Maple, and for her doctorate did research at Emory’s Yerkes Primate Center, where she now holds a part-time research position. She also holds an adjunct appointment at Georgia Tech, supervising graduate students’ research at the zoo and in the field. The fieldwork has taken her students to such far-flung places as Brazil, China and Africa.

Atlanta’s is one of only a few zoos working in China to save the diminishing panda population. The China project was launched by then graduate student Rebecca Snyder, who first went there to observe pandas in 1997. She is now Curator of Behavior Management at Zoo Atlanta.

In November 1999, Atlanta’s zoo finally acquired two pandas on long-term loan from China, after years of international negotiations and diplomatic support from former President Carter. The pandas live in spacious outdoor habitats that mimic their homeland, equipped with a “state-of-the-art bamboo misting room” to keep the cut bamboo fresh. Zoo Atlanta’s research with the pandas focuses primarily on their socialization, the process by which they develop from puberty to adulthood, and the zoo supports scientific panda conservation efforts in China, both in the wild and in zoos.

“In my opinion, pandas with at least 18 months of mothering are better prepared for social life, reproduction, and parenting,” Maple wrote in *Saving the Giant Panda* (Longstreet Press, 2000). “By encouraging a normal socialization, giant pandas are free to develop with fewer psychological flaws. The current generation of adult pandas in captivity is tainted by social deprivation. We must act now to improve the performance of future generations.”

Pandas have had notoriously poor fortune breeding in zoos. In the wild, Maple says, they typically remain with their mothers two and a half years. Lun Lun, Atlanta’s female panda, was taken from her mother at only five months old; Yang Yang, the male, was taken at 12 months, but only because “we insisted” on the longer time. He hopes Yang Yang’s longer stay with his mother will help him sire cubs.

Time will tell. Now approaching her fourth birthday, Lun Lun is starting to show signs of accepting the advances of Yang Yang, but data from the wild suggest it could be another two to three years before she has her first litter. Chances are good. His zoo, Maple points out, “has a history of solving mammalian breeding problems.”

Maple retired as the zoo’s CEO this past December and says he expects to have “more fun,” now that his management duties are lifted. He is launching a new Center for Conservation and Behavior at Georgia Tech, hoping to raise a $3 million to $5 million endowment. “It’ll have a strong relationship to the zoo,” he says, “and we’ll provide resources to do research at the zoo and beyond. I’ll be in and out of the zoo the way I was in the old days, before I was the director, when I was doing research there.”

In 1999, he took some of his Tech students to Orlando, Florida, to hear his mentor, Sommer, talk to the Environmental Design Research Association about the quarter century that had elapsed since his *Tight Spaces* had been published. It’s with some pride that Maple recalls Sommer’s conclusion:

“He said that of all the ‘hard’ institutions he had studied over the years, only one had changed, and that was zoos. One of the reasons, in his opinion, that zoos had softened their environment was that zoos had begun to embrace research, they had begun to study themselves. This was a great compliment to me, because I was one of the people who had stepped into that breach. But I don’t think zoos have changed nearly enough. A lot more change is required. I’m still working not only to make zoos change, but to make them even more scientific.”

With fewer administrative responsibilities, Maple says he hopes to spend his time writing up a career’s worth of learning. “I’m fortunate to have had an academic career that was not just spent in an ivory tower, but I have to admit that I’ve accumulated so much knowledge, so much data, that if I don’t get cracking I’ll never make sense of all that I’ve learned. I want to spend the next 15 years contributing what I can to helping zoos take advantage of the opportunity to become centers of learning and observation and research, even as they continue to entertain and inspire.”