Save the Elephants

What should be done with a herd of marauding elephants? This was the problem recently confronting officials at Pilanesberg National Park in South Africa. A number of orphaned male elephants had been transported to the park in order to provide them with a safe and nurturing environment. However, this step to protect the elephant population soon threatened another endangered species.

The young elephants had entered must, like puberty, a state of heightened hormonal activity and increased aggression. The elephants went on a killing spree, slaying almost 40 rhinoceros—including incredibly rare black rhinos. The park officials did not want to kill the young elephants, but they could not afford to have any more rhinos slaughtered.

Oddly enough, the solution to this disastrous situation was to bring more male elephants into the park. This time, however, they were full-grown bull elephants. In almost no time at all, a previously impossible hierarchy had been established, and the orphaned males fell right into place. No more rhino killings were reported.

The Pilanesberg story had a positive ending, but many elephants are not as lucky. The elephant population in Africa has been drastically reduced by loss of habitat to cultivation and urbanization, and many have been orphaned by poachers cashing in on the illegal ivory trade. Some biologists believe that if elephant numbers continue to drop, it will soon be impossible to save the species.

Elephants are amazing creatures. As well as holding the title of "largest land animal," they are also among the most intelligent. An elephant has 150,000 muscle units in its trunk, can swim long distances without tiring, walks almost silently despite weighing about 7 tons, can travel up to 6,000 miles in a year while searching for food, and can live 60 years. Full-grown elephants have no natural enemies, other than humans.

Like most animals, elephants have an enormous effect on the other animals in their habitat. Eating 165-330 pounds of food a day, an elephant can clear thick brush into open savannah in no time, creating an open habitat for other animals. Several tree species rely almost solely on elephants to scatter their seeds. If the elephant were to disappear, these life-forms would bear the consequences.

With only 2 elephant species left out of 600, the danger of extinction is imminent. If the population in any particular area drops below 100 individuals (as it has in several parks), that population is virtually doomed, having entered an "extinction vortex." Continued inbreeding leads to genetic deterioration, which results in fewer reproductive males and females being born. The numbers begin to drop, and the cycle continues until the population completely dies out. Evidence of this genetic deterioration can be seen in elephant tusks, which are gradually becoming smaller. All elephants with exceptionally large tusks have already been poached.

Humans have always taken advantage of the incredible strength and endurance of elephants. Hannibal, the Carthaginian general, used elephants to carry his supplies across the Alps in the third century. Elephants have been ridden onto the battlefield, have been trained to carry heavy logs, and were even used during World War II to drag military equipment up steep slopes. We have used elephants to our advantage for more than 2,000 years. Now we are destroying them. Poaching is the chief reason that elephants are brought closer to extinction every day. From 1986 to 1989, 300,000 African elephants were killed for their ivory tusks. In 1986 alone, 75 percent of raw ivory came from illegal poaching—the equivalent of 89,000 elephants. Recently, laws have been instituted that completely ban any hunting of the endangered elephants. However, this has only made poaching easier; without professional hunters carefully patrolling their favorite hunting blocks, park rangers alone are left to deal with poachers. Carrying outdated World War II rifles, the rangers are no match for ruthless poachers with AK-17's, who have been known to kill rangers, local farmers, and even tourists to avoid capture.

The poaching trade began in earnest in 1971, when a severe drought killed 9,000 elephants in a Kenyan game reserve. Neighbors of the park moved in to collect ivory. They found it was very profitable, and when the supply dwindled and they could no longer simply pick it up from the ground, they turned to the living elephants. In 1973 there were 167,000 elephants in Kenya. By 1987, there were only 20,000 left.

Raw ivory is shipped by smugglers to factories where it is either carved into sculptures or converted into Chinese medicines (which may actually have very little medicinal value). Criminals in a "Gang of Eight" nations conduct this lucrative trade: ivory is smuggled out of Kenya, Tanzania, and Uganda through middlemen in Vietnam, Malaysia, and the Philippines, and then smuggled into China and Thailand. The demand for ivory—as well as the price paid to poachers, smugglers, and middlemen—has increased over the years, in some places by 1000 percent. Weapons are also more available due to the civil wars and political unrest in certain African countries. These factors have contributed to increased poaching and will ultimately contribute to the demise of elephants.

Many attempts have been made to stamp out poaching in African game reserves, but law enforcement has proved extremely difficult. Lack of funding for conservation projects and for staff to patrol the parks is a major obstacle in the quest to protect threatened species. In addition, many poachers are not the professionals seen on TV, with trucks full of supplies, traps, and technologically advanced weapons. Instead, they come from poor communities adjacent to major parks. The people in these communities have to put up with harassment from wild animals, and they rarely get anything in return. Consequently, they do not object to making some money at the expense of an elephant or two. The scenario is common in the poor countries of Africa, such as Kenya, where 30 million hungry people are crowded into an area the size of Texas.

Officials in Zimbabwe and Botswana have tried to remedy this problem in an interesting fashion. They granted ownership of all the wild animals in a certain area to the nearest village or community. Contrary to public expectations, this method was relatively successful. The communities managed resources carefully, monitored their animals well, and even earned money from safari expeditions. Safaris turned out to pay better than trophy hunting. For every trophy hunter who paid a small fortune to shoot a single animal, hundreds of thousands of tourists paid a large fortune to look at the animal. Unfortunately, community ownership of animals seemed to work only in areas with large areas of land and few people.

Another approach taken to prevent peasants from turning to poaching was to use money generated by park tourism to build clinics and provide educational programs for surrounding communities. However, because some parks do not attract as many tourists as others do, and also because of the sheer number of poor villages, the benefits were spread too thinly.

In recent years, the number of elephant killings due to poaching has decreased, largely due to the worldwide ban (since 1990) on the trade of ivory. However, the illegal trade continues, and as long as it does, poachers will be a part of it. The poaching problem is incredibly intricate. Fueled by the illicit trade to southeast Asia and the rest of the world, it is also the result of a lack of education and public services in African villages.

It is evident that a single country cannot successfully combat poaching and the loss of elephant habitat. The world needs to unite like never before if we want to save our remaining elephants.

Student Entrepreneur Reaches for Dreams of the Sky

"You've got to know your own value, know what you want, and stick with it."

That's what T. McDowell's advice to others is, and it's certainly worked for him. This high school senior is currently the sole owner of Immersion Immaging, a successful company specializing in Internet commerce solutions and online financial databasing. McDowell began the company in 2012, although it was originally called 4th Dimension Graphics. Two years later, the company was reorganized as Immersion Immaging. Surprisingly, he didn't begin the company with the assistance of any partners, but instead founded it on his own with the experience and contacts that he already had.

"It's always been a one-person operation, and it's going to stay that way for a while. I could easily take on partners or expand the business some more, but I want to keep it this way for now," McDowell said. Even now, McDowell does everything himself, from marketing and management to the actual coding that he writes for his clients' Web sites. "I remember one time that I worked for over 800 hours on one site and never really got paid for it. I've learned since then," McDowell said.

Thus far, he has worked for such companies as Online Devices International, Greystone Peripherals, and Publicard, Inc. He works on Web site design along with Internet marketing solutions and other aspects of Internet commerce.

"I don't have any lack of contracts right now. I like it because it's flexible, so that if I need more income, I can get the business I need; and if I take a break for a while, I don't have any problems," McDowell said.

Spending between 30 and 60 hours a week at his business, Immersion Immaging, provides him with a steady income, although he admits that it takes up much of his free time. "A lot of the time [on the business] is spent after school and late at night, and my parents don't really like that too much. Otherwise, though, they're really supportive of the whole thing," McDowell said.

Part of the reason McDowell ended up in the computer industry might be explained by the exposure he had as a child. Even as a teenager, most of his friends were older and connected to the computer industry. "Even though I'm younger than most other people in the technology business, it hasn't mattered much. A lot of my friends throughout my life have been older than me, so I'm used to it," McDowell said.

In his freshman year, McDowell worked at a company called PC Powercomp and familiarized himself with the business and the technical aspects of it. Having already started learning various online languages at the beginning of junior high school, McDowell was well prepared to enter this field.

"When I started out with computers, it was mainly because I didn't have much else to do; so it was a good way to use my time, and it's turned out to be pretty good," McDowell said. However, he spends his free time on more than just computers. His real interest lies in aviation, which he has pursued for more than six years. As a licensed pilot, he currently owns two airplanes and has ambitions to enter the aviation field one day, probably in airplane design.

"Now I work with computers mostly because it gives me a reliable source of income. I'd really rather be in aviation, but I may keep this going so that I'll always have it to fall back on," McDowell said.

For now, aviation is still a hobby, but if his entrepreneurial spirit and success with his business are signs of what's to come, McDowell won't have a problem realizing his dreams of the sky.