

# Horned Aliases

Texas Christian University charges forward with its Rhino Initiative, a global effort to prevent the extinction of a critically endangered species.

*Warning: This story contains images that some readers may find disturbing.*

| by Jennifer-Casseday Blair |

Dr. Michael Slattery, director of the Institute for Environmental Studies at TCU, and Dr. William Fowlds, a South African veterinary surgeon, joined forces to prevent the extinction of the critically endangered African rhino.

**It's a tranquil night on the South African savannah. The full moon silhouettes the gnarled baobab trees, and a symphony of nocturnal insects begins as the grazing rhino plucks and chews another leaf from a bush.**

For the slow-roaming giant, nights are long with no certainty of survival until morning due to the ever-lurking danger of its evil predator. A low hum and vibration grow louder as something approaches, and then the jeep comes to an abrupt stop. Boot-clad men hit the ground with dart guns, trodding through the grass. They find him, aim and shoot.

As the rhino lies defenseless, the poachers quickly wield their axes, hacking deep beneath the surface of the rhino's face to carve out the horn. Morning comes, and he will eventually open his eyes. The weakened beast snorts and makes an attempt to get to his feet. The struggle leads to defeat. Now he will bleed to death slowly and painfully.

Nearly 1,200 rhinos were massacred in South Africa last year, many in the same manner as just told. In a 2011 case, poachers used dogs to chase a female rhino off of a cliff. They partially butchered her and chopped off her horn. Her calf made its way to the bottom of the cliff and was found lying next to its dead mother.

It's stories like these that got the South African-born director of the Institute for Environmental Studies at Texas Christian University, Dr. Michael Slattery, involved with saving the African rhino. In 2014 he co-founded the TCU Rhino Initiative, which is a global partnership dedicated to saving the endangered animal. Its efforts are already making a remarkable impact.

## Defining the Crisis

Estimates in the early 20th century showed a thriving rhino population of 500,000 across Asia and Africa. Today, poached to the brink of extinction, there are fewer than 30,000 rhinos left in the wild.

Rhino horn has for a long time been believed to possess medicinal properties, but only in small amounts. China's belief that rhinoceros horn reduces fever, headaches and other illnesses dates back hundreds of years. "Modern science has proven that these coveted horns carry no medicinal value whatsoever, as they are nothing more than compressed hair or what makes up our fingernails," Slattery said.

The killing spree began in 2008 due to a spike in demand in Asian countries. In Vietnam the horn is desirable among the wealthy class as a novelty and is considered a symbol of power. It's used as an ingredient in party drugs and to enhance virility.

"Rhino horn is found in detox drinks and to cure hangovers for the nouveau riche. In business deals, giving an entire rhino horn is considered the ultimate sign of respect... What really fueled the frenzy was a statement made on TV by a politician stating that rhino horn cured his cancer. The message had been orchestrated by organized crime to drive the demand," Slattery said.



A group of 15 students from all different fields of study traveled to South Africa last summer.



TCU students were able to work directly with Dr. Fowlds as he was performing medical procedures on the rhinos.



TCU's Rhino Initiative supports ground efforts in South Africa by sending students to help with the rehabilitation of rhinos that survive poaching.



Poachers can dehorn a rhino in 10 minutes. Within 24 hours, the horns are transported to airports and shipped to Asia. Horns are smuggled into the country and sold to the illegal horn dealers usually no more than 20 hours after that, which means that within 48 hours a horn can go from rhino to the black market.

Currently a rhino horn sells from \$65,000 - \$100,000 per kilogram. That's more than the going rate for cocaine (\$30,000 per kilogram) or gold (\$50,000 per kilogram). The average horn weighs four kilograms, which means a percentage of a \$25,000 - \$400,000 payout upon delivery. "What the poacher sees when he looks at the rhino is a gold bar on the front of the rhino's face," Slattery said.

A soaring demand in the market has attracted international crime syndicates such as the Boko Haram. These gangs are supplying poachers with highly sophisticated equipment to help them track and kill the rhinos. Because poachers are armed and dangerous, anti-poaching teams are putting their lives at risk to protect the rhinos.

### Help From Afar

Dr. William Fowlds, a South African veterinary surgeon, stands face to face daily with the bloody horror of rhino poaching. Fowlds conducts life-saving surgery on poached rhinos and is involved in a wide range of conservation initiatives.

Responding to an invitation from Slattery, Fowlds came to lecture about the poaching crisis at TCU. Leveraging TCU's Global Innovator Program, which brings together the university and scholars working across the world, Fowlds and Slattery teamed up to form the Rhino Initiative.

Working on several fronts, the Initiative most notably supports ground efforts by sending TCU students to South Africa to help with the rehabilitation of rhinos that do survive poaching.

A group of 15 students from TCU, from all different fields of study, traveled to South Africa last summer. Their first week was spent in Johannesburg and Cape Town to become acclimated to the South African culture.

The next 10 days were spent at the Amakhala Game Preserve.

Situated in the Eastern Cape of South Africa, the 18,000-acre preserve was founded in 1999 and is home to lion, elephant, rhino, buffalo, cheetah, giraffe, zebra, wildebeest, monkeys, tortoise and antelope. Students work directly with Fowlds, performing medical procedures on the rhinos.

Katie Smith is majoring in Environmental Science at TCU and attended the first trip to South Africa last summer. "The biggest challenge I faced was trying to understand the poaching industry in its entirety. It's an issue that involves government corruption, desperate people, a complex network and ultimately a high market demand," Smith says. The trip is an experience that she would like to relive. "If we aren't able to save this species, how are we going to save the multitude of other species that aren't as well loved and charismatic?"

TCU Rhino Initiative involves plans to begin work on a collaborative research, education and protection center known as the African Rhino Community Center (ARCC). Located in the Amakhala Game Preserve, the ARCC will provide anti-poaching support and veterinary care for three subspecies of black and white rhinos across the region.

"Right now everything is very scattered. People are frantically running around trying to protect these animals. The ARCC will act as a space where they can coordinate rhino security, conservation, outreach and surgical procedures from one location," Slattery said.

The facility will house a drone and fixed-wing gyrocopter program to monitor rhinos in the area. TCU wants to build a research and education wing, and Fowlds and his medical team will base a small veterinary practice out of the ARCC.

TCU's Vietnamese Students Association is creating a public awareness campaign explaining the poaching atrocities and reiterating that the horn has no medicinal value. The message will be spread locally but also translated and shared in Vietnam. "You can have all the security you want and all the initiatives you want. Even the biggest guns won't shoot our way out of this crisis because at the end of the day, you have to reduce the demand in Vietnam," Slattery says.

### Problems With Protection

Most rhinos on reserves are collared so that rangers can track them through telemetry. Armed guards are assigned to protect the rhinos 24 hours a day, which is a significant investment and not always effective due to losing the location of rhinos that have hidden deep in the bush.

One school of thought is that preserves should simply remove the horns, making the rhinos worthless to poachers. Problem solved. But the issue is much more complicated than that.

Even if the horn is sawed off responsibly as a precautionary maneuver, the stub of the horn is still left under the skin. Poachers are still going after that stub due to its high profit. In other instances, rhinos that had their horns removed were killed by poachers to avoid the wasted time of tracking them again.

Another troublesome factor is that horns grow back. After three years, the horn could be nearly full size again. Experts recommend dehorning every 12 - 24 months to be an effective deterrent, which is an incredibly costly process.

Outside of unmanned crafts or drones, other innovative tracking tactics are being tested. Preserves are utilizing canine teams to keep tabs on the rhinos.

While deterring poachers is critical, there is no easy answer to the current crisis. A multi-faceted approach is needed, including monitoring patrols, environmental education and awareness, community-based conservation, demand reduction and resources...lots of resources.

Modern man has been around for 200,000 years, but rhinos have existed on this planet for more than 50 million years. In the last decade, we've managed to nearly wipe them from the face of the earth. And for what? 🐘

### Save the Rhino

Here are ways in which you can help make a difference.

A monetary contribution can be made to support students at TCU by helping them travel to South Africa to participate in the wildlife conservation course. Visit the College of Science and Engineering homepage at [cse.tru.edu](http://cse.tru.edu) and click on the "Make a Gift" button. You may also contact Valerie DeSantis, assistant dean for Advancement, at 817.257.7020 or [v.desantis@tcu.edu](mailto:v.desantis@tcu.edu).

To donate directly for Dr. Fowlds' initiatives on the ground in South Africa, visit [chipembere.org/donate](http://chipembere.org/donate) or [wildernessfoundation.co.za](http://wildernessfoundation.co.za). The Wilderness Foundation focuses on rescue while the Chipembere Rhino Foundation focuses on local security, including tracking and telemetry collars. You can make note in the submission where you'd like your gift to go.

### Where the money goes:

- Saving one rhino requires a number of injections (antibiotics, anesthetics and vitamins). Each injection costs approximately \$8.
- A donation of \$13 would sponsor a child to have a wildlife experience in a game reserve with Coaching for Conservation.
- Educating a number of Vietnamese youth by providing the opportunity to have a wilderness experience in South Africa, where they will learn about the rhino poaching crisis on the ground and take the message back to their peers and families.
- Support anti-poaching resources on the ground. For example, to fund a dog patrol unit for one year costs approximately \$9,500.