

Faculty's rhino DNA profiling method featured in 'Rhinos under threat' film at Rio+20 Conference

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The Veterinary Genetics Laboratory (VGL) of the Faculty of Veterinary Science, University of Pretoria highlighted the importance of DNA profiling in the fight against rhino poaching in a short movie, *Rhinos under threat*, which was screened at the Rio+20 Conference on 18 June 2012.

The film was produced by United Nations TV (UNTV) in collaboration with the Secretariat of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) to raise public awareness of the crisis faced due to the poaching of rhinos and illegal international trade in rhino horn.

The VGL, headed by Dr Cindy Harper, created a rhino DNA database, with the aim to collect DNA profiles of all the rhinos in Africa. These profiles' most important purpose is to assist with the investigation of rhino poaching cases and the prosecution of poachers.

In the film, it is shown how blood is taken from a rhino, identifying markers are cut into the animal's ears and microchips are inserted to track the horn. This allows any rhino horn, whether it is seized by the police at border crossings or at airports, to be identified and connected to a poaching incident, linking all perpetrators along the crime chain and help bring about prosecution.

"Investigators provide us with samples from all the rhino poaching cases," explains Dr Harper in the film. "We could also look at the equipment they've used, like knives and axes and as for recovered horns, we can do the DNA profiling on the recovered horn and link that back through DNA to the actual poaching case."

According to Prosecutor Marilé van Heerden from the National Prosecuting Authority of South Africa, the DNA database is invaluable to their prosecutions. In 2012, three rhino poachers were sentenced to 25 years imprisonment, the toughest sentences ever handed down for rhino poaching in South Africa.

The film further depicts the brutality of rhino poaching as well as the impact on local communities, from the national parks in South Africa and Swaziland to the black markets of Hanoi in Vietnam. It explores the factors driving the demand for rhino horn products in Asia, the role of organised syndicates and investigates the measures taken by authorities to fight these crimes.

According to a statement released by CITES, 13 rhino were poached in 2007, rising to 448 in 2011 and 245 so far this year, while 161 arrests have been made.

"If the current trends in illegal killing continue, we will drive the rhino, this iconic species, to extinction in the wild," said Mr John Scanlon, CITES Secretary-General. "We need to work together at national and international levels to stop the poaching, stop the smuggling and stop the consuming. It will be tough, but if we manage to work together, we will win this fight."

[Click here](#) to watch the *Rhinos under threat* film.

[Click here](#) for the CITES press release.