

Saving the Rhino: Veterinary Genetics Laboratory of the Faculty of Veterinary Science at the forefront of the fight against Rhino poaching

By CH/CvB

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Pic: Sonja van Buul

The poaching of rhinos has reached alarming levels in 2010. With the specific aim of providing a tool to support the forensic investigation of the poaching cases, the Veterinary Genetics Laboratory of the Faculty at the Onderstepoort Campus established a method to successfully extract nuclear DNA from rhinoceros horn and genotype it using a set of DNA markers.

The development and validation of this method started in 2007 following a DNA forensics course held at the faculty in collaboration with the Trace Wildlife Network that is now based at the Royal Zoological Gardens of Scotland. The work on the African rhinoceros is continuing through this ongoing collaboration.

This method provides a means of individual identification of a rhinoceros from its horn, in essence an individual DNA fingerprint that can link the horn to a poached animal or can link a horn to a DNA profile on a database from a sample collected previously. A further application of this technique is that it finally provides a viable platform for the potential establishment of a managed and controlled method of legal trade in rhino horn and perhaps the only avenue left to save the rhino from its imminent devastation at the hands of ruthless poachers.

According to Dr Cindy Harper, Director of the Veterinary Genetics Laboratory (VGL), this test is simple, cost effective and currently available. The VGL is currently in the process of establishing a comprehensive DNA database of rhinos in the country in order to make this data available for forensic interrogation.