

## WILDLIFE CONSERVATION

## **Technology for Rhinos**

by Geoffrey Chege | Chief Conservation Officer & Matthew Mutinda | Veterinary Officer

Poaching continues to pose a great threat to rhino across their range states, placing immense pressure on those responsible for protecting these iconic pachyderms. To counter this threat, vital and dynamic proactive measures have become an absolute necessity, particularly those which facilitate intensive and precise monitoring of the animals. Technology is proving invaluable in wildlife conservation and, lately, Lewa and other organisations have started using innovations in this field to help combat poaching.

Late last year, the Conservancy began to implant GPS-GSM enabled transmitters into rhino horns in an effort to significantly improve monitoring and patrol efforts and thereby security of the animals.

The procedure is quick and painless – after the rhino is tranquilised a hole is drilled into the horn and the system placed inside. The hole is then sealed to conceal the chip. The movement of the rhino is then tracked via a Google Earth interface.



A transmitter is fitted into the horn of a sedated black rhino allowing its location and movement to be monitored 24 hours a day.

## BENEFITS OF THE TRANSMITTERS

 Ability to monitor and track individual rhinos from any location within the Conservancy. This provides Lewa's security team with a tremendous advantage. Previously,

- the team relied heavily on foot patrols, which posed several challenges, not least trekking across Lewa's rugged terrain
- Regular reporting the chips transmit signals at regular intervals, making hourly monitoring a reality
- Assisting in collecting data to establish animal behaviour and patterns.



Technology is proving increasingly valuable in ensuring the safety of Lewa's black and white rhinos, a population of over 130 animals.

## GEO-FENCING

Increasingly, GPS-GSM tracking is being combined with geofencing to enhance rhino protection and security.

A geo-fence is described as a predefined set of boundaries or perimeter; and the latest technology makes it possible to install custom digitised geo-fences. The chips in rhino horns are programmed to trigger an alert in the event of movement outside the geo-fence perimeter, thus facilitating swift follow-up procedures.