



2014

WILDLIFE CRIME  
TECHNOLOGY  
PROJECT

Google Global Impact Award

## WILDLIFE CRIME TECHNOLOGY PROJECT

INTEGRATING TECHNOLOGIES TO COMBAT POACHING OF ELEPHANTS, RHINOS & TIGERS



“Poaching of wildlife is a global problem that requires innovative technology and scalable solutions.”

Jacqueline Fuller  
Director, Google.org

### Illegal Wildlife Trade: A Global Challenge

The global illegal wildlife trade, worth an estimated \$10 billion annually, is emptying our forests, landscapes and oceans. This criminal industry devastates wild species, damages ecosystems, and threatens local livelihoods and regional security.

The world is dealing with an unprecedented spike in wildlife crime. An estimated 30,000 elephants were killed for their ivory in Africa in 2012, with recorded ivory seizures at an all time high. Asian rhino populations are at historic lows, and pressure on African rhinos has increased dramatically in recent years— over 1,000 rhinos were poached in South Africa in 2013, compared with 13 in 2007.

Fighting wildlife crime requires new and innovative monitoring and enforcement systems, as well as demand-reduction strategies. Committed to science-based conservation, WWF is incorporating the latest research and innovation to address this threat.

### The Google Global Impact Awards

In 2012, Google awarded a \$5 million grant to WWF as part of its Global Impact Awards program. Global Impact Awards support organizations using technology and innovative approaches to tackle some of the world's toughest human challenges.

Given the overwhelming threat to elephants, rhinos and tigers, WWF came up with a new approach: create an umbrella of technology to protect wildlife. WWF is using its Global Impact Award to work in collaboration with national governments to adapt and implement specialized aerial and ground-based surveillance systems, wildlife tagging technology and ranger patrolling to increase deterrence and detection of poaching activity in pilot sites in Asia and Africa.



## WWF's Wildlife Crime Technology Project

This experimental project provides a landmark opportunity to integrate new technologies that will enable conservation managers to jump two steps ahead of poachers.

Through this project, WWF is collaborating with governments to test and deploy integrated technologies for situational awareness that reduces risks to field staff and wildlife. In its first application in Namibian Parks, this project is integrating:

- ✓ **Unmanned Aerial Surveillance Systems**
- ✓ **Radio Frequency Mesh Network for Data Integration & Secure Communications**
- ✓ **RFID Wildlife Tags**
- ✓ **Experimental Affordable Patrol Tracking Devices**
- ✓ **Spatial Monitoring and Reporting Tool (SMART) Compatibility**

## Implementation Strategy

Currently active in Namibian Parks, this project will be implemented in a phased approach over a three year period in sites in Africa and Asia that are home to elephants, rhinos or tigers.

The first phase has proven the concept for technology systems integration, and focused on installation and operational training of Namibian Ministry of Environment and Tourism Wardens.

The goal is to enhance and add value to ongoing anti-poaching and wildlife monitoring work, for maximum protection of Namibia's high-value wildlife. The project will scale-up to provide a model approach that can be adapted by other governments internationally.

## Contact us

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## Milestones

- > **November 2012:**  
WWF convenes more than 100 experts to **rethink integrated approaches** to stop wildlife crime.
- > **February – March 2013:**  
After evaluating candidate sites, **Namibia is selected for Phase One** in agreement with the Namibian Ministry of Environment and Tourism.
- > **May – June 2013:**  
WWF's Request for Information and Proposals receives over 50 international submissions. This is the **first assessment of technologies** to support anti-poaching efforts.
- > **November 2013:**  
Field trials in two locations conducted. Over 30 Namibian park wardens join WWF staff and technology experts for a **successful proof-of-concept** for integration of technology systems.
- > **March – April 2014:**  
WWF **delivers first instalment** of technologies and training to Namibian Park Wardens.

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