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CONSERVATION BY DRONE

You've seen the videos on YouTube – sweeping, breathtaking aerial shots capturing locations inaccessible to most people. On Wednesday Rhino Africa released [a video compiled with drone footage which shows the beauty of Africa](#) and the results are truly breathtaking.

We can now gain access to previously remote areas with drones or UAV's (unmanned aerial vehicles) controlled by remote or with the guidance of software and GPS. These flying robots were named "drones" because they resemble the monotonous sound a male bee makes.



The first drones were utilised in the military, but today civilian use has increased. It is estimated that, by 2015, over a million has been sold. Currently, they are used in many other applications, such as policing and surveillance, aerial photography, and agriculture.

In 2008, Lian Pin Koh, a conservation ecologist and Serge Wich, a biologist, discovered that the available UAVs were too expensive for use in developing countries where they were most needed. The only solution for Lian and Serge was to build their own more affordable version, which ended up costing less than \$2,000.

A year later, they tested their prototype in North Sumatra, Indonesia where the UAV flew over 30 missions and collected thousands of high-quality aerial images and video footage of forests and wildlife. (<https://conservationdrones.org/our-story/>)

As their research became known, the term "Conservation Drone" was coined and by 2012 the International Anti-Poaching Foundation was using UAV's.

<https://www.youtube.com/watch?v=FlrgjCNcDBI>

Worldwide organisations began using drones for conservation. In 2012 the WWF (World Wide Fund for Nature) started using UAVs in Chitwan National Park, Nepal to monitor rhinos, tigers and elephants, but also to deter poachers. In the same year, Google donated \$5 million to the WWF to purchase conservation drones to fly over parts of Africa and Asia in an attempt to help monitor and catch wildlife poachers.

Closer to home UAVs have been used successfully in the Kruger National Park against rhino poachers. In 2012 a UAV was loaned to the South African National Parks authority by its manufacturer, Denel Dynamics.

"In March 2014, the Howard G. Buffett Foundation announced a 255 million rand donation for a three-year initiative in partnership with Nature Conservation Trust, South African National Parks (SANParks) and a South African public benefit organisation (PBO) to combat poaching in Kruger National Park and test new anti-poaching technology. SANParks is testing the use of drones and this year, the Foundation added a further 37.7 million rand to buy a helicopter for use in anti-poaching operations." (<https://www.savetherhino.org>)

In Namibia, the Sea Shepherd Conservation Society used this technology to monitor the annual seal cull and also to combat rhino poaching in Etosha National Park.

Other uses for UAVs include aerial crop surveys, aerial photography, search and rescue, inspection of power lines and pipelines, counting wildlife, delivering medical supplies to otherwise inaccessible regions, and detection of illegal hunting, reconnaissance operations, cooperative environment monitoring, border patrol missions, convoy protection, forest fire detection and monitoring, surveillance, coordinating humanitarian aid, plume tracking, land surveying, fire and large-

accident investigation, landslide measurement, illegal landfill detection, the construction industry and crowd monitoring. ([Wikipedia](#))

[SOURCES: https://en.wikipedia.org/wiki/Unmanned_aerial_vehicle, <https://conservationdrones.org/our-story/>,
https://en.wikipedia.org/wiki/Conservation_Drones,
https://www.savetherhino.org/rhino_info/thorny_issues/the_use_of_drones_in_rhino_conservation]

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