

# Case Study



## IoT Y2K Agri-Tech

### Industry: Wildlife

Kwandwe Private Game Reserve adopts the Y2K Animal Monitor for one of its young female buffalos to trial how the device and app works, and to see if it's worth investing in more for their high-value animals.



## About Kwandwe Private Game Reserve

Situated on the outskirts of Grahamstown in the Eastern Cape, incepted in 2001, the award-winning, big five safari destination specialises in high-end eco-tourism. Best-known for quality guiding, understated luxury and the thousands of animals and wildlife that call the reserve home, Kwandwe comprises of 22 000 hectares of pristine private wilderness that stretches either side of the Great Fish River.

The game lodge is also a conservation victory. *"The successful development of this high yield/low impact conservation model is key to furthering our numerous conservation initiatives,"* says Kwandwe Wildlife & Managing Director, Angus Shalto-Douglas. *"Thousands of animals including lion, black and white rhino, buffalo, elephant and cheetah roam the plains, and the Reserve is also sanctuary to numerous other threatened and endangered species. We also currently employ 250 staff members."*


"We have really enjoyed testing the Y2K Animal Monitor on our young female buffalo. It's really been great and we will likely invest in more if they can be fitted to rhinos, for our conservation and anti-poaching efforts."

# The Business Challenge

Thanks to the exponential rise of rhino poaching in Southern African, Kwandwe's majestic giants are their top priority and biggest challenge. **"Rhino security and monitoring, as well as predator management, are the biggest challenges we've faced over the years,"** says Shalto-Douglas.

According to The Department of Environmental Affairs, 1 028 rhinos were poached in 2017 alone. With an estimated 25 000 rhinos left on the continent, it's little wonder that rhino tracking is a massive challenge for wildlife owners.

**"We need a tracking system that works,"** explains Shalto-Douglas. **"We want a solution that allows us to track high-value animals, and monitor our rhinos. Our teams spend ages tracking and finding our animals, and if this could be alleviated it would help us a great deal."**



**"A solution that allows us to track high-value animals, and monitor our rhinos."**

## Benefits

Using the Y2K Animal Monitor has allowed Kwandwe to:

- Set virtual boundaries on their buffalo – like geofencing watering holes – so they can collect data and notice behavioural patterns
- Because buffalos are social animals, they can monitor the buffalo and her herd's habitual activities like grazing
- Predict when she is getting ill, is in heat or pregnant thanks to temperature control
- Promote the protection of the buffalo and her herd
- Improve conservation efforts, tying in with Kwandwe's philosophy

# The Business Solution

Shalto-Douglas was approached by the Y2K team to trial their Animal Monitor on one of Kwandwe's female buffalos. At the time, Kwandwe were keeping tabs on their high-value animals with African Wildlife Tracking VHF and GSM collars. **"The VHF collars and foot collars had reasonable-to-good success,"** says Shalto-Douglas.

**"However, we were drawn to the Y2K Animal Monitor because it offered the same benefits, as well as the ability to track the animal's live position – making them easily accessible – as well as capturing historical movement data to pick up behavioural trends."**

## Implementation

Kwandwe have been using the Y2K Animal Monitor on their buffalo since April 2018, darting her to place the device around her neck. In that time, with no discomfort to the animal, the game lodge has been able to track her via GPS, set virtual boundaries – like geofencing their watering holes – monitor her habitual activities (and that of her herd) like grazing, and predict if she is getting ill, is in heat, or pregnant thanks to temperature control.

**"We are busy trialling the Y2K Animal Monitor to see how the tracking system works,"** says Shalto-Douglas. **"We aim to use it on other animals – and primarily would like to track our rhinos. The Y2K IoT App is easy to install and navigate. It works well and I can understand it efficiently."**

Shalto-Douglas says that the biggest advantage of the Y2K Animal Monitor is its financial benefit. "In terms of positively affecting our business operations, the device saves us costs as we now know where the animal is when we go to look for it. Previously, we were wasting precious time and resources tracking down our animals.

**"We are mainly using the tracker to look at historical movement and present position,"** says Shalto-Douglas. **"It works really well and we have had no issues as of yet. If the Y2K Animal Tracker can be made to fit a rhino, it will have a huge influence on our conservation efforts, save us even more costs and allow us to react to emergencies a lot better and faster. Our priority for research and development is now rhino tracking and monitoring."**

## About Y2K

Innovation and insight combine in Y2K, a market leading end-to-end integrated ICT and telecommunications company. We have an enviable track record of meeting the needs of thousands of consumers, SMEs, large corporates, and public sector organisations. Thanks to our dedicated staff of more than 1 500 people – and our several hundred business partners countrywide – we set the benchmark for service delivery by connecting people through best-of-breed technology.

From data to voice, as well as cloud, business collaboration and conferencing tools, Y2K offers intelligent solutions that connect South Africans to the world, supporting entrepreneurs, customers and commerce, whilst practicing values of integrity, choice and service excellence in all of its dealings.