

# Trusted CI Success Story

## Wildbook

### Trusted CI helps Wildbook protect endangered species

All you have to do is take a picture—and you can join a worldwide effort to catalogue and track endangered wildlife through the [Wildbook](#) platform, a project of the non-profit called [Wild Me](#). Thousands of scientists, conservationists, tourists, and nature lovers have taken photographs, which are converted by artificial intelligence (AI) into unique digital tags that identify individual members of a species.

One of the biggest examples of Wildbook community involvement is the [Great Grevy's Rally](#), hosted bi-annually in Kenya to track endangered zebras. In the January 2020 rally, school kids, park rangers, landowners, and vacationers took some 60,000 images with GPS-enabled digital cameras over two days. Using sophisticated stripe recognition software to analyze individual zebras, decision makers estimated the population and health of Grevy's zebras in Kenya and made species management policy.

The Wildbook team developed [unique algorithms](#) for identifying species. In zebras, it's their stripes; in whales, it's their tail ridges; in turtles, it's the arrangement of their scales.

"We are losing biodiversity at an unprecedented scale," said Dr. Tanya

Berger-Wolf, co-founder of Wildbook. "We are going through what's termed the sixth extinction. The scale and rate of extinction is increasing."

The collaborative Wildbook effort that provides data for conservationists also poses a security risk, explained Berger-Wolf. "Poachers also use geo-tagged photos to track wildlife. In January 2020, hours after a tourist posted a geotagged elephant in Kruger National Park, there was a poaching attempt," explained Berger-Wolf.

To protect animal privacy and enhance cybersecurity, Berger-Wolf contacted [Trusted CI](#) in 2016. "There were complex aspects of trust and risk as we designed Wildbook. If we opened up the system before securing it, it would have been too late," she added.

Border implications added another complexity. "We have countries that do not trust each other, but are willing to collaborate to protect species, so we have to share data in a secure way," Berger-Wolf explained. "To engender trust, the whole process has to be inclusive and collaborative with transparency and accountability, and we have to balance that with cybersecurity, data protection, and privacy."

At the recommendation of Trusted CI, Wildbook decided on role-based access control (RBAC). Some users just want to look at the charismatic animals, while others upload geo-tagged photos. Meanwhile,



*Unique stripe patterns identify individual zebras.*

scientists make analytic decisions based on a deeper dive into the data. "Trusted CI recommended a log-in system with access control according to the different roles, and this is what we implemented," she said.

Wildbook's security system has held firm. There have been hacking attempts, but they were not successful. "Engagement with Trusted CI provided peace of mind. It was easy to work with them. They brought the expertise that we did not have on our team," said Berger-Wolf. "Trusted CI enabled people throughout the world to use our system securely and safely and ensures that we do not accidentally endanger the species we are trying to protect."

Over the next couple of years, Wildbook is planning an even more sophisticated system with improved access control, enhanced focus on data leakage, privacy from the animal point of view, and expansion of the system to include hundreds of species.