

CoLP & King's Forensics: WILDLIFE INITIATIVES

What was the situation before?

Most African nations have fingerprint databases, but they are invariably paper based and used to prove the identity of an individual, rather than to identify an offender. Few have access to automated fingerprint recognition and crime scene mark searching is non-existent. Therefore, offenders are able to repeat their crimes as authorities have no way of checking if they have been arrested previously or are wanted for other offences. Essentially, they must be caught and photographed in possession of a prohibited item, which may result in the case going to court but not always in successful prosecution.

The UK has had a fingerprint database since 1901 and currently employs automated fingerprint recognition to great effect. More than 40% of forensic sanctioned detections are still made using fingerprints and IDENT1, the UK national database, currently contains the fingerprints of over seven million people. Its search algorithms have recently been updated and it now performs with even greater efficiency.

How did CoLP become involved?

In 2015, the Director of Forensic Services at City of London Police, Tracy Alexander, who is a Fellow of King's College London, was involved in research at King's to find the best way to obtain fingermarks from ivory. The International Fund for Animal Welfare (IFAW) funded customised fingerprinting kits based on this research and distributed them, in collaboration with the Foreign & Commonwealth Office (FCO), to African wildlife crime police units and park rangers to enable them to develop fingermarks on seized ivory items.

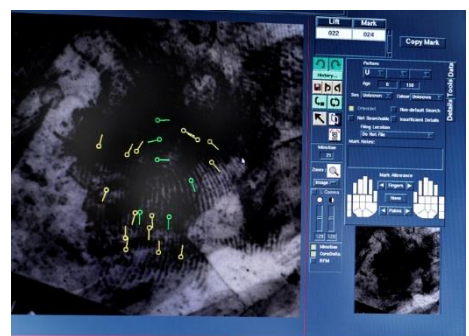
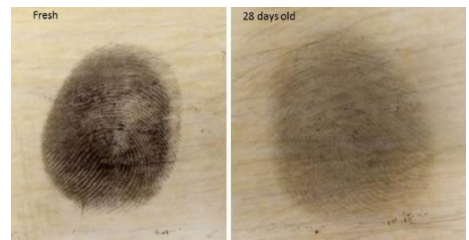
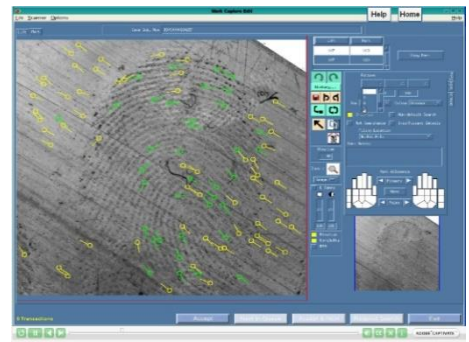
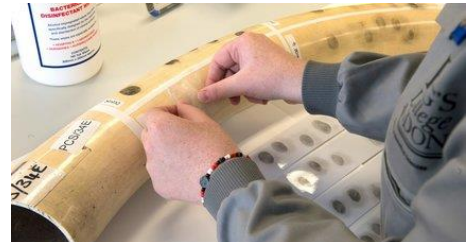
What have we done already? What benefits, results?

In 2017, Tracy Alexander attended the Interpol Wildlife Crime Working Group in London in order to assess the results of this kit distribution. After liaising with the FCO and the countries involved, she discovered that very little had been achieved in terms of prosecution as the investigative teams had no access to databases for comparison. Marks were being lifted and then filed away.

What are we doing now?

Last year, City of London Police Forensic Services and King's College London delivered an intensive crime scene training programme in Harare, **Zimbabwe** for the Mineral Flora and Fauna Unit (MMFU), a branch of the Zimbabwean Republic Police Criminal Investigation Department (CID). This focussed on evidence collection and crime scene management for ivory, but also for a variety of other evidence types, such as fibres/hairs, cigarette butts and blood.

Following this, specialised scanners were installed to enable the Zimbabwean Fingerprint Bureau to scan fingerprints of individuals who are arrested and who are known, or suspected, to be involved in wildlife crime. Dedicated laptops were also installed to allow these fingerprints to be sent to the City of London Police Fingerprint Bureau.



This collection is now held as an operational response database (**ORD**) within IDENT1. The ORD is specific to the country concerned - the marks are held separately and are in no way connected to the UK database. The fingerprints remain the “property” of the Zimbabwean Fingerprint Bureau at all times; the City of London Police bureau are custodians of the fingerprint data only. All biometric data is anonymised without affecting our ability to search and compare.

Using these devices, the MMFU send crime scene fingermarks to the City of London Police bureau, following which they are matched with records in the ORD. They are then sent back to the officer and the legal team, which has been funded by an NGO, to take the cases to court. We are working with these lawyers to ensure they prosecute under the appropriate legislation, which we already know is part of the Zimbabwean criminal justice process. There are currently 18 cases pending.

What are we proposing to do in the future?

Following the success in Harare, we are planning trips to **Zimbabwe North** (the Victoria Falls Wildlife Conservancy Area), followed by **Zambia**, then **Malawi**. We will deliver our intensive training programmes, install scanners and set up separate databases for each group, with the ultimate goal of facilitating automated fingerprint recognition for each of these countries so that they can do it for themselves.

We have recently signed a strategic alliance with ‘King’s Forensics’ King’s College London to develop and expand research and training.

The CoLP has long been involved with King’s Forensics and offers police focussed research projects to their MSc Forensic Science students. These have been very successful, and we are now offering projects with a wildlife focus. We also have a joint PhD student who will be exploring better methods for detection and identification of fingermarks that will be suitable for use in on wildlife evidence and function in the local environmental conditions.

The training programme outlined above was devised and developed by the CoLP with input from King’s. We are exploring options to deliver mentoring, on-line refresher videos, and set up instant messaging app support groups. We wish to have these of training programmes approved and accredited by King’s College making them internationally recognised.

