**News from around the INTERPOL WCWG**

**Ivory Workshop for Enforcement Officials – Hosted by The Environmental Forensic Sciences Centre of Charles University in Prague**

Pavla Rihova

Wildlife crime is considered a serious and highly lucrative type of crime that has a demonstrable negative impact on biodiversity, the economy, security, and public health worldwide. Offenders target valuable commodities such as ivory, rhino horns, tiger bones, rare parrots, reptiles, etc. Detecting cases is very complex and often requires the help of experts with special biological knowledge, experience in forensic procedures, or the ability to carry out the necessary laboratory analyses. The Czech Republic has a high rate of wildlife crime, and Czech citizens are involved in many illegal activities worldwide. The number of wildlife crime cases is increasing and so is the need for cooperation with experts. Unfortunately, there are very few experts in our country, which was one of the reasons to establish the Environmental Forensic Sciences Centre as a specialized university workplace in January 2021. Its activities focus on applied research of forensic methods used for evidence in cases of wildlife crime and on the professional support of state administration authorities in this area (source).

One of the centre’s projects is the Project ForWild supported by the Ministry of Interior of the Czech Republic (security research programme Impakt, No. VJ01010026 - Effective use of forensic evidence methods to combat wildlife crime). Project ForWild aims to improve wildlife forensic techniques in mammals via morphology identification, genetics, stable isotopes, radionuclides, and chemical analysis focused on carbofuran poisonings. The target species were selected regarding serious cases investigated in recent years in the Czech Republic, e.g., trade in tiger products (Operation Trophy 2018), poaching and trade in trophies (Operation Hunter 2019), trade in rhino horns (Operation Rhino), and ivory (Operations Ebur, Mammoth). The Centre conducts research but also cooperates closely with law enforcement authorities, supports them, and provides them with, e.g., training on problematic wildlife commodities and the possibilities of using forensic methods under the umbrella of Project ForWild.
European Ivory Trafficking

One of the biggest problems of wildlife crime is the illegal ivory trade, which also affects Europe. Ivory is transported to Europe in a different form than it is smuggled into Asia. No huge multi-tonne shipments in shipping containers are involved but it is in a more dispersed and covert way using couriers and smaller shipments. This means tens or hundreds of kilos in individual transports. The problem is that we do not know how many such couriers and consignments there are in total, what the routes are, and the modus operandi. Ivory in Europe tends to escape attention, individual seizures are dealt with as isolated cases, information is not shared, and enforcement activities are not coordinated. There is a lack of overall awareness of the scale of the trade and the involvement of organized networks. The European 'ivory route' is thus still not well mapped.

It's not just about small things or individual pieces of products. In the Czech Republic, there have been several seizures of suitcases full of raw ivory (transported by Vietnamese couriers on the Prague-Hanoi route). Similar cases were also reported in Germany and Austria. Genetic analyses of the origin of this ivory, which the Czech law enforcement authorities commissioned from Prof. Samuel Wasser's team at the University of Washington, showed that the origin of this ivory was not from one place but from different parts of Africa (a mix of savannah and forest elephants). Part of the ivory even came from places where the Lord Resistance Army operates. Unfortunately, it has not been possible to find out how the ivory got to Europe (one of the interviewees, however, stated off the record that on average up to 1 tonne of ivory a year passes through the Czech Republic...). The geographical origin then rather suggests the existence of some sort of trans-shipment site or warehouse where the various ivory sources come together.

A specific feature European feature is the frequent association of the ivory trade with the antiquities trade. Objects processed of recent ivory are often artificially aged by various chemical processes to make them look antique. Law enforcement should not rely on antiquities experts' expertise. Radiocarbon dating carried out in selected
Czech cases has shown that 68% of seized ivory items declared as antiques were made from modern ivory (while many of these objects were accompanied by reports from antiquities experts attesting to their age). Unfortunately, radiocarbon analyses show that the opinions of antique experts are unreliable regarding the actual age of ivory (Kufnerová et al. 2021; another article in press), and the age of ivory can only be reliably verified by radiocarbon dating using C\textsuperscript{14}. Radiocarbon dating is carried out by the Czech Academy of Sciences (Institute of Nuclear Physics), our partner in the project ForWild, which owns a unique Milea accelerator mass spectrometer (Ionplus).

Ivory and teeth identification is one of the key topics for the morphology team of the ForWild project. Its staff attended the Society for Wildlife Forensic Science conference and Ivory Identification workshop at the National Fish and Wildlife Forensic Laboratory in Ashland (Oregon, USA) in October 2022. The 2-day workshop was highly beneficial. It was an opportunity to gain new information, exchange experience from ivory cases with other forensic colleagues, and especially see huge collections of various materials in this laboratory. After this experience, our team decided to organize a similar workshop for wildlife enforcement authorities in the Czech Republic.

Ivory Trade workshop
As one of the ForWild Project outputs, the Environmental Forensic Sciences Centre organized a special workshop called Ivory Trade on 13-15 February 2023. It was attended by a total of 60 police officers, customs officers, and wildlife inspectors. The main topic was the identification of ivory and similar material, however, the topics were further expanded to include information on illegal trade, legislation, investigated cases, etc. The participants were also given several hours of practical exercises, where they had the opportunity to see and identify materials. The lecturers were from Charles University, the Czech Academy of Sciences, Czech CITES Management and Scientific Authorities, along with conservationists from NGOs working in elephant conservation in Africa.

The workshop atmosphere was excellent. Law enforcement officials gained a unique collection of information, knowledge, and expertise from a wide range of experts. Participants now have a comprehensive overview of information related to this special commodity and contacts with experts who deal with these matters. It can help them in their work to combat the illegal ivory trade. We hope to repeat a similar workshop in the future for a larger number of participants, and it would certainly be beneficial if similar events were held in other countries.

Workshop topics
• Identification of ivory and similar materials (elephant ivory, mammoth, walrus, hippo, narwhal, sperm whale, orca, warthog, forest pig, helmeted
hornbill, plant ivory, artificial imitations, fakes...)

- Practical exercise in ivory identification (visual identification of different samples using a microscope, UV light, spectrometers)
- History of ivory trade, development of ivory trade regulation through CITES, MIKE and ETIS programmes
- Ivory legislation in the EU, differences between European countries
- Illegal trade in ivory worldwide
- Biggest ivory cases and seizures of ivory in the Czech Republic
- Testing of ivory using spectrometers (ED-XRF, Raman)
- Radiocarbon dating - determination of age
- Using stable isotopes to determine the geographic origin of ivory
- Ivory poaching and illegal trade in Africa.

Africa, Asia, Europe, North America and South America and representatives from ICCWC, other international inter-governmental, Wildlife Enforcement Networks and non-governmental organizations, attended the meeting. The Task Force meeting culminated with the agreement of an outcome document that identifies strategies, measures and activities to improve international collaboration regarding the enforcement of the Convention to address illegal trade in specimens of big cat species. Further discussions on this matter were held at the 77th meeting of the CITES Standing Committee.

CITES Enforcement – Recent Events and Useful Resources

Caroline Fitzgerald

To further enhance efforts and responses to address illegal trade in big cats, in April 2023 CITES convened the CITES Big Cats Task Force meeting in Entebbe, Uganda. Over 70 representatives from 28 countries across