



U.S. FOREST SERVICE

Caring for the land and serving people

United States Department of Agriculture



INTERPOL Washington
U.S. National Central Bureau
U.S. Department of Justice

ICCWC Guidelines for Forensic Timber Analysis

Shelley Gardner

USDA Forest Service International Programs

and

USDOJ INTERPOL Washington





UNODC

United Nations Office on Drugs and Crime

Best Practice Guide for Forensic Timber Identification

Developed by the International Consortium on Combating Wildlife
Crime (ICWC), led by the United Nations Office on Drugs and Crime
(UNODC)



Approach

- Commission of Background Document
- Formation of Expert Group
- Organisation of two Expert Group Meetings
- Coordinated development of Guide





Discussion

Forensic timber identification: It's time to integrate disciplines to combat illegal logging

Eleanor E. Dormontt^a, Markus Boner^b, Birgit Braun^c, Gerhard Breulmann^d, Bernd Degen^e, Edgard Espinoza^f, Shelley Gardner^g, Phil Guillery^h, John C. Hermansonⁱ, Gerald Koch^j, Soon Leong Lee^k, Milton Kanashiro^l, Anto Rimbawanto^m, Darren Thomasⁿ, Alex C. Wiedenhoef^o, Yafang Yin^p, Johannes Zahnen^q, Andrew J. Lowe^{a,*}

^a Centre for Conservation Science and Technology, School of Biological Sciences, University of Adelaide, Adelaide, SA 5005, Australia

^b Agroislab GmbH, Prof. Rehm Strasse 6, 52428 Jülich, Germany

^c Markgraefinger Str. 31, 71696 Moeglingen, Germany

^d International Tropical Timber Organization (ITTO), Yokohama, Japan

^e Thünen Institute of Forest Genetics, Siedler Landstraße 2, 22927 Großhansdorf, Germany

^f National Fish and Wildlife Forensic Laboratory, East Main Street, Ashland, OR 97102, USA

^g USDA Forest Service International Programs, 1 Thomas Circle NW, Suite 400, Washington, DC 20005, USA

^h Forest Stewardship Council (FSC) International, Charles de Gaulle Straße 5, 53113 Bonn, Germany

ⁱ USDA Forest Service, Forest Products Laboratory, Madison, WI 53726, USA

^j Thünen Institute of Wood Science, Leuschnerstraße 91, 21031 Hamburg-Bergedorf, Germany

^k Forest Research Institute Malaysia, 52019 Kepong, Selangor, Malaysia

^l Embrapa Amazônia Oriental, Trav. Eneás Pinheiro s/n, 66.095-803 Belem, PA, Brazil

^m FORDA Centre for Forest Biotechnology and Tree Improvement, Yogyakarta, Indonesia

ⁿ Double Helix Tracking Technologies Pte Ltd., 3 Science Park Drive, #02-12/25 The Franklin, Singapore Science Park I, Singapore 118223, Singapore

^o USDA Forest Service, Forest Products Laboratory, Madison, WI 53726, USA

^p Wood Anatomy and Utilization Department, Research Institute of Wood Industry, Chinese Academy of Forestry, No. 1 Dongdaofu, Beijing 100091, China

^q WWF Germany Berlin, Reinhardtstr. 18, 10117 Berlin, Germany

ARTICLE INFO

Article history:

Received 24 February 2015

Received in revised form 25 June 2015

Accepted 27 June 2015

Available online xxx

ABSTRACT


The prosecution of illegal logging crimes is hampered by a lack of available forensic timber identification tools, both for screening of suspect material and definitive identification of illegally sourced wood. Reputable timber traders are also struggling to police their own supply chains and comply with the growing requirement for due diligence with respect to timber origins and legality. A range of scientific methods have been developed independently with the potential to provide the required identification information, but little attention has been

Aim and Audience

- Aim: Facilitate the employment of forensic science to the fullest extent possible to combat timber crime
- Audience: Law enforcement, the scientific community, prosecutors and the judiciary

Structure of the Guide


Part I. From search decisions to forensic timber identification: Information for law enforcement



Part II. Undertaking forensic timber identification: Information for scientists



Part III. Forensic timber identification evidence in court: Information for law enforcement, prosecutors and the judiciary



Part IV. International cooperation



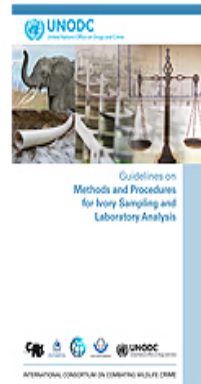
Topics

- [Alternative development](#)
- [Corruption](#)
- [Crime prevention and criminal justice](#)
- [Drug prevention, treatment and care](#)
- [Drug trafficking](#)
- [Firearms](#)
- [Fraudulent medicines](#)
- [HIV and AIDS](#)
- [Human trafficking and migrant smuggling](#)
- [Money-laundering](#)
- [Organized crime](#)
- [Maritime crime and piracy](#)
- [Terrorism prevention](#)
- [Wildlife and forest crime](#)
 - [Overview](#)
 - [Global Programme for Combating Wildlife and Forest Crime](#)
 - [International Consortium on Combating Wildlife Crime](#)
 - [Resources](#)

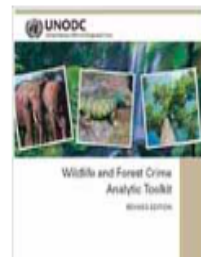
WILDLIFE AND FOREST CRIME

Publications

In our determination to combat wildlife and forest crime we have developed information to raise awareness of the issues but to build technical assistance. Some of our publications are:



Guidelines on Methods and Procedures for Ivory Sampling and Laboratory Analysis (English)



Wildlife and Forest Crime Analytic Toolkit (English, French, Spanish)

UNODC
United Nations Office on Drugs and Crime

**Guidelines on
Methods and Procedures
for Ivory Sampling and
Laboratory Analysis**

CBS INTERPOL WORLD BANK GROUP

INTERNATIONAL CONSORTIUM ON COMBATING WILDLIFE CRIME

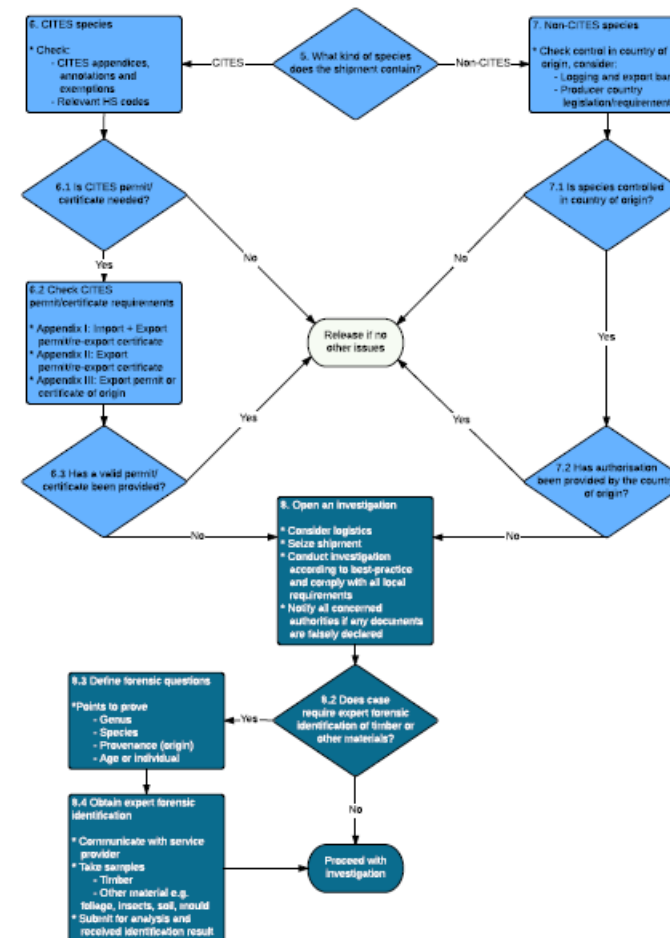
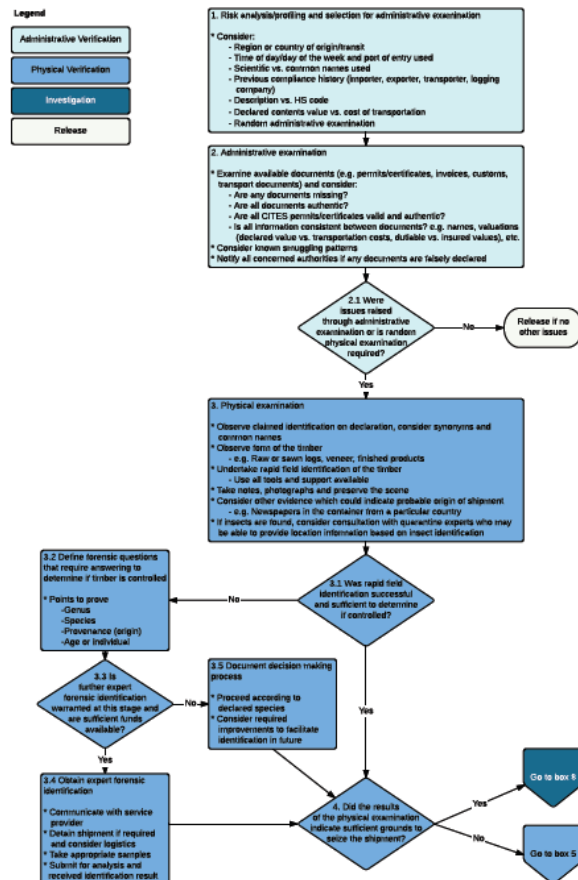
Application/Technical Transfer

First Annual ILEA (International Law Enforcement Academy) Budapest
Illegal Logging and Forest Crime course (September 2015)

- Integration of curriculum with ICCWC tools



Best-practice flow diagram for timber



Appendices

1. Glossary
2. Non-timber forest products and identification considerations
3. Non-timber forest products of CITES listed species
4. List of common risk indicators for trafficking of illegal timber and timber products
5. Information on CITES listed tree species
6. Native geographic distributions and known areas of cultivation of CITES listed tree species
7. Guidance for search of containers, freight vehicles and premises
8. Forensic identification method capabilities, approximate costs and lead times
9. Resources to assist rapid-field identification of timber and timber products
10. CITES listed timbers and lookalikes documented in CITESwoodID
11. One hundred important traded timbers documented in macroHOLZdata
12. Methods currently under development for rapid-field identification of timber
13. Example chain-of-custody form
14. Timber inventory and sampling data collection
15. Resources to assist microscopic identification of timber and timber products
16. Online resources for the acquisition of reference data



UNODC

United Nations Office on Drugs and Crime



Thank you

<https://www.unodc.org/unodc/en/wildlife-and-forest-crime/forensic-guidelines.html>