Science and Technology to meet Legislative and Market Requirements

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USDA Forest Service International Programs
and
USDOJ INTERPOL Washington

Forests and Forestry
U.S. Foreign Policy Interests

- Economic development, trade, income, and jobs
- Livelihoods and cultures of indigenous and forest dependent communities
- Ecosystem services: water, carbon, climate adaptation, soils, etc.
- Biodiversity: most of it (terrestrial) lies within the remaining natural tropical forests

Why does the U.S. Combat Illegal Logging and Associated Trade?

- Illegal logging robs countries, impoverishes forest communities and puts money in the pockets of criminals.
- It undermines sustainable forest management, destroying forests, watersheds and habitat.
- It unfairly competes with legal production and trade.
- Profits from illegal logging have been used to fuel conflict and purchase arms.

The U.S. Approach

- Value and take account of **multiple goods and services** of forest ecosystems – promoting sustainable forest management
- Address **underlying causes** of deforestation (e.g., tenure, corruption, perverse incentives)
- Support **participatory approaches -** raising awareness and building capacity through bilateral and multilateral efforts
- Base policy on the best available **science**
- Strengthen transparency and accountability in the international **trade in forest products**.

U.S. Efforts to Strengthen Forest Governance & Combat Illegal Logging and Associated Trade

- MOUs with Indonesia and China
- Asia-Pacific Regional Dialogue
- Commitments in trade agreements
- Bilateral and regional assistance for forestry
- Support for ITTO Programs and Projects
- Support for RAFT, Forest Legality Alliance, TREE, Interpol Project LEAF/FCWG, GTTN
- **Investment in legality assurance technologies**
- **Amended Lacey Act - adds an enforcement tool**

USAID FROM THE AMERICAN PEOPLE
RAFT Responsible Asia Forestry and Trade
WWF GLOBAL FOREST & TRADE NETWORK
TRAFFIC the wildlife trade monitoring network
FOREST LEGALITY INITIATIVE
FOREST TRENDS
INTERPOL
GTTN Global Timber Tracking Network

Recent Progress

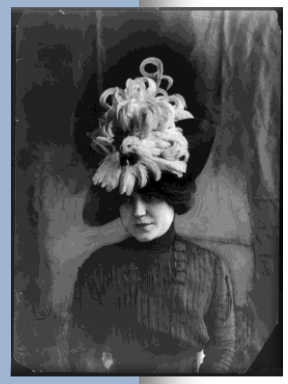
- Markets increasingly demand–and reward–transparency and legality
- Growing recognition that legality is a shared responsibility of consumer, processor, and producer countries
- New legality measures
- Growing attention to illegal logging and forest governance in bilateral and regional trade agreements and negotiations (e.g., Peru, APEC)
- Growing expertise, outreach and capacity building by NGOs and private sector

Beyond Combating Illegal Logging: Focus on Forest Governance

- REDD+ discussions have highlighted FLEG as a key part of the “REDD Readiness”
- Decentralization efforts have catalyzed new thinking on forest governance
- Tenure issues receiving more attention
- Forest governance issues are front-line democracy and participation issues
- Lessons learned for efforts to contain forest conversion and fragmentation

U.S. Lacey Act 2008 Amendments Prevention of Illegal Logging Practices

History of the Lacey Act



- Oldest wildlife protection statute in the U.S.
- Well-established tool to combat trafficking in illegal wildlife, fish and plants
- Amendments provide a tool to assist other countries and U.S. states in combating illegal logging

The Amended Lacey Act

The Lacey Act now makes it unlawful to **import**, **export**, **transport**, **sell**, **receive**, **acquire**, or **purchase** in **interstate** or **foreign commerce** any plant, with some limited exceptions, taken or traded in violation of the laws of a U.S. State, or most foreign laws.

16 U.S.C. 3372(a)

The Amended Lacey Act

1) Expands Lacey protection to broader range of plants and products, including timber
   - Enforcement effective May 22, 2008

2) False Record Provision – it is unlawful to submit a false record or label, or any false identification of a covered plant
   - Enforcement effective May 22, 2008;

3) Introduces new declaration requirement for plant products
   - Enforcement is being phased in

The Plant Import Declaration

- Filed by U.S. Importer
- Declaration requires basic information about the shipment:
  1. Scientific name (genus and species)
  2. Value of importation
  3. Quantity of the plant
  4. Country of harvest

What if the information is unknown?

If the species varies and is unknown:

- ✓ The importer must declare the name of each species that may have been used to produce the product

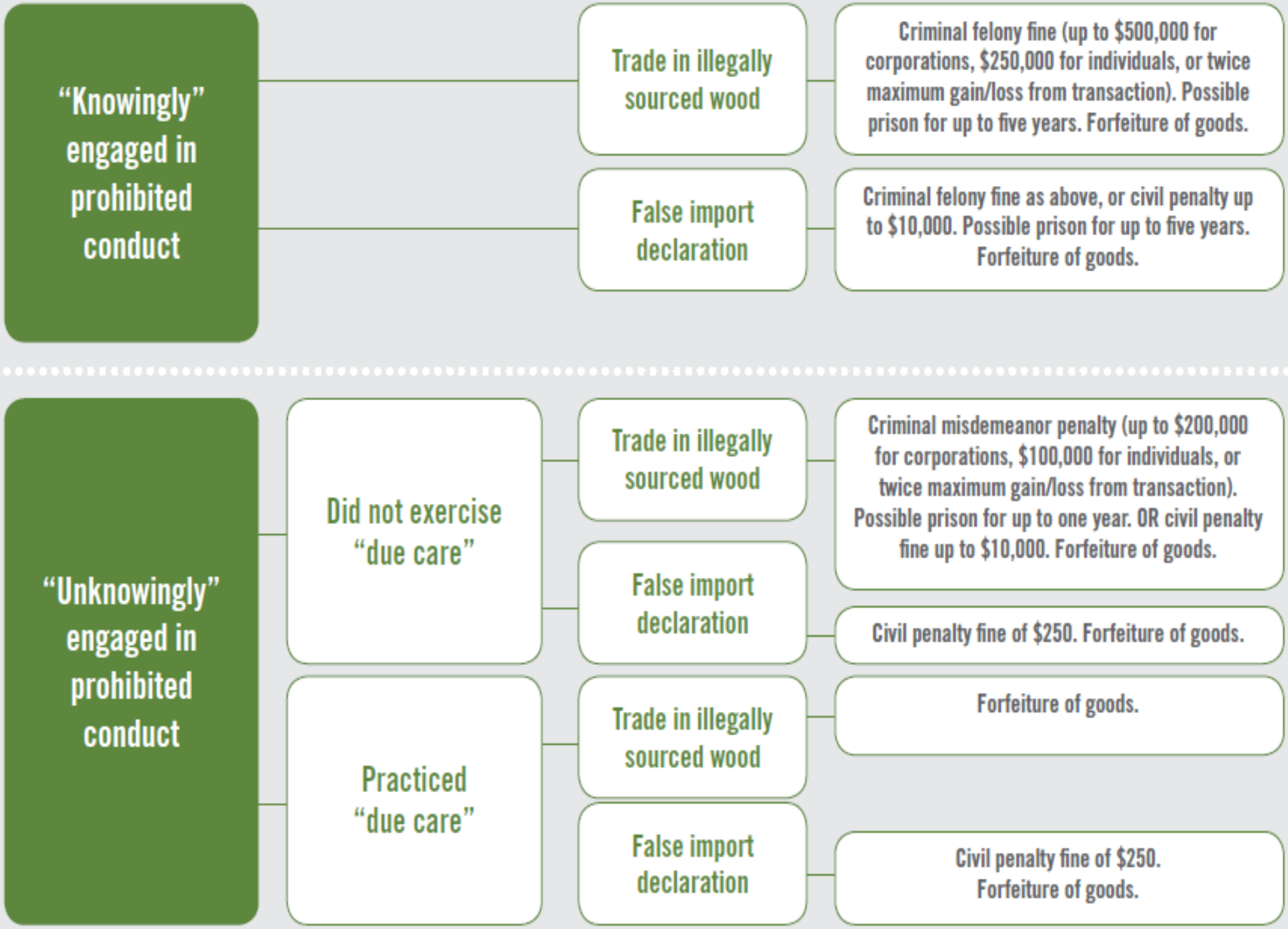
If the species is commonly harvested in more than one country and the country is unknown:

- ✓ The importer must declare the name of each country from which the plant may have been harvested

Lacey Act Enforcement

Penalties for Lacey Act Violations:

- Forfeiture—seizure of product
- Civil Penalties—Monetary penalties
- Criminal Penalties—Fines and potential imprisonment

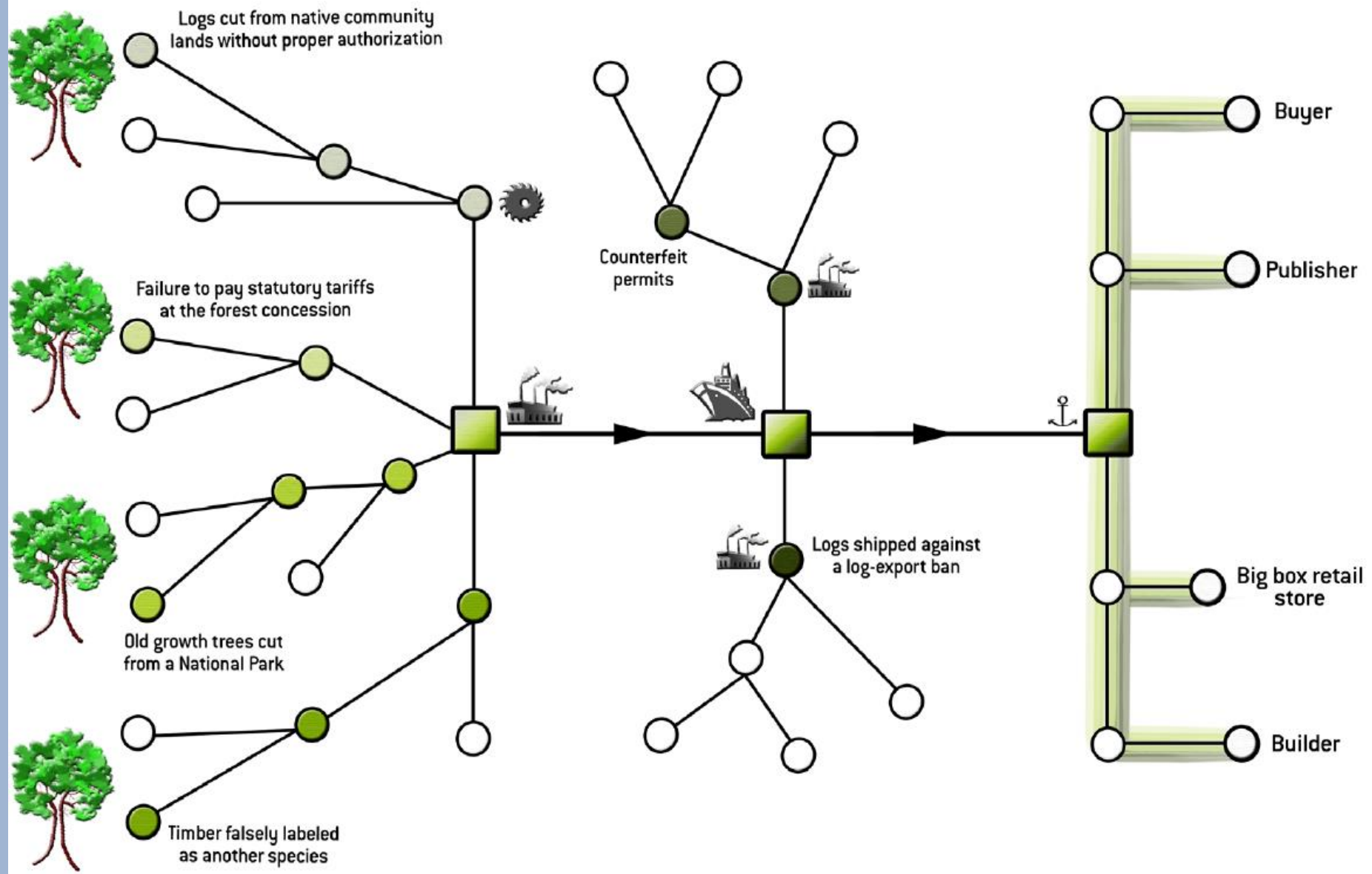

"Knowingly" engaged in prohibited conduct
Trade in illegally sourced wood
Criminal felony fine (up to $500,000 for corporations, $250,000 for individuals, or twice maximum gain/loss from transaction). Possible prison for up to five years. Forfeiture of goods.
False import declaration
Criminal felony fine as above, or civil penalty up to $10,000. Possible prison for up to five years. Forfeiture of goods.
"Unknowingly" engaged in prohibited conduct
Did not exercise "due care"
Trade in illegally sourced wood
Criminal misdemeanor penalty (up to $200,000 for corporations, $100,000 for individuals, or twice maximum gain/loss from transaction). Possible prison for up to one year. OR civil penalty fine up to $10,000. Forfeiture of goods.
False import declaration
Civil penalty fine of $250. Forfeiture of goods.
Practiced "due care"
Trade in illegally sourced wood
Forfeiture of goods.
False import declaration
Civil penalty fine of $250. Forfeiture of goods.

Lacey Act Enforcement

- The underlying foreign law violation does not have to be a criminal violation
- The underlying violation need not be committed by the person charged with violating the Lacey Act – a third party might have taken the product illegally
- Fact-based, not document based approach
- Burden of proof on U.S. government

The Lacey Act: Legality From Stump To Shelf

The Flow of Tainted Goods: An underlying violation to the Lacey Act can occur at any step along the supply chain. Colored circles represent examples of underlying violations. The illegal act "taints" the supply chain.



Exercising Due Care

- “Due care requires that a person facing a particular set of circumstances undertakes certain steps which a reasonable person would take to do his/her best to insure that he/she is not violating the law.”
- Due care “is applied differently to different categories of persons with varying degrees of knowledge and responsibility.”

Lacey Act Enforcement

- Cocobolo, Inc. – Forfeiture Action involving tropical hardwoods from Peru.
- Gibson Guitar Company – Criminal Enforcement Agreement involving tropical hardwoods, taken in violation of the law of Madagascar.
- Lumber Liquidators – 1 Felony violation, 4 misdemeanor violations involving Mongolian oak Illegally harvested in Russian Far East, transported to China for manufacturing, and falsely declared upon import into the U.S.

FOREST LEGALITY ALLIANCE

EU Regulation vs. Lacey: Obligations

EU Timber Regulation	U.S. Lacey Act
Prohibition on trading in illegally sourced timber, applies only to “first placer” on EU market	Prohibition on trading in illegally sourced timber, applies to entire supply chain
“Due diligence”: elaborated process of systems checks with different specified roles for different actors	“Due care”: flexible, up to individual supply chain actors to implement to their own degree of comfort with risk
Point of control: first placing on the EU market	Point of control: any point in the supply chain
Basic traceability requirements for traders	No specific traceability requirements; implicit in concept of due care
No customs declaration	New declaration form (PPQ 505) for designated imported products per phase-in schedule
Applies to internally sourced forest products as well as imported products	Applies to internally sourced forest products as well as imported products

For additional information on the Lacey Act amendments:

Department of Agriculture:
www.aphis.usda.gov/plant_health/lacey_act/index.shtml

EIA – Environmental Investigation Agency:
www.eia-global.org/forests_for_the_world/lacey.html

The Forest Legality Initiative – FLI
www.forestlegality.org

Forest Trends
www.forest-trends.org

Please refer Lacey Act inquiries to:

lacey.act.declaration@aphis.usda.gov

UNODC
United Nations Office on Drugs and Crime

Best Practice Guide for Forensic Timber Identification

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

CITES INTERPOL UNODC United Nations Office on Drugs and Crime WORLD BANK GROUP WORLD CUSTOMS ORGANIZATION

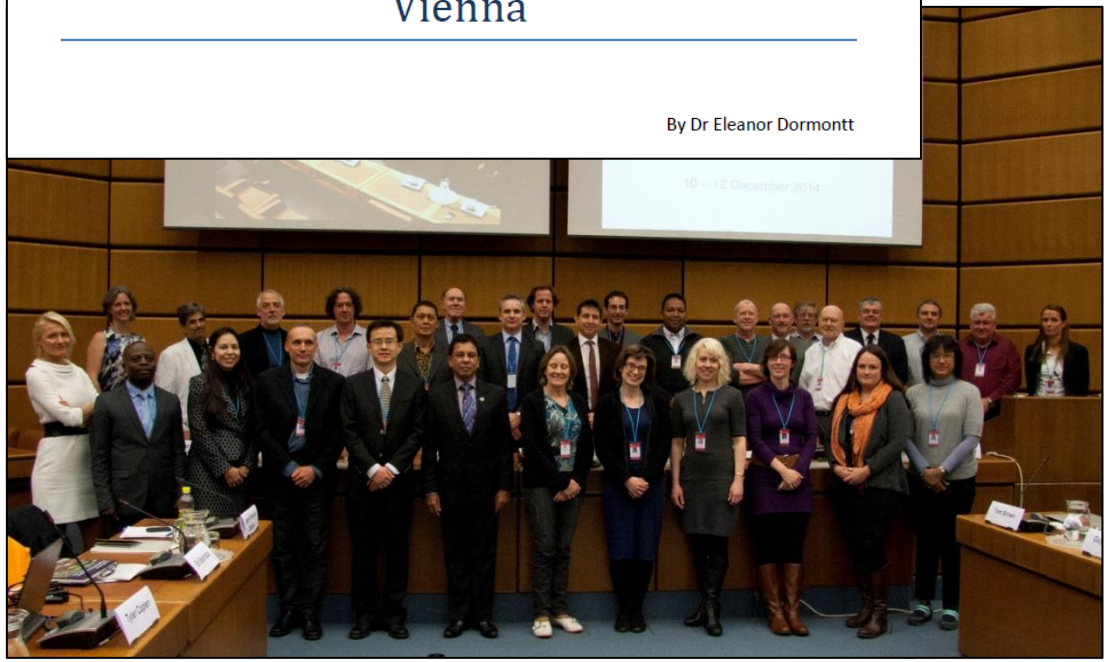
Background

- >600 tree species under CITES control, >400 used for their timber

- UNODC mandate strengthened in field of wildlife and forest crime
  - ECOSOC (Economic and Social Council) Resolution 2013/40 “Crime prevention and criminal justice responses to illicit trafficking in protected species of wild fauna and flora”
  - CCPCJ (Commission on Crime Prevention and Criminal Justice) Resolution 23/1 “Strengthening a targeted crime prevention and criminal justice response to combat illicit trafficking in forest products, including timber”

Approach

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



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journal homepage: www.elsevier.com/locate/bioc

Discussion

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

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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

Opportunities for Improved Transparency in the Timber Trade through Scientific Verification

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In May 2014, the Member States of the United Nations adopted Resolution 23/1 on "Strengthening a targeted crime prevention and criminal justice response to combat illicit trafficking in forest products, including timber." The resolution promotes the development of tools and technologies that can be used to combat the illicit trafficking of timber. Stopping illegal logging worldwide could substantially increase revenue from the legal trade in timber and halt the associated environmental degradation, but law enforcement and timber traders themselves are hampered by the lack of available tools to verify timber legality. Here, we outline how scientific methods can be used to verify global timber supply chains. We advocate that scientific methods are capable of supporting both enforcement and compliance with respect to timber laws but that work is required to expand the applicability of these methods and provide the certification, policy, and enforcement frameworks needed for effective routine implementation.

Keywords: certification, illegal logging, scientific verification, timber trade, wood identification

Forests are important sources of timber, nontimber forest products, and other ecosystem services; tropical forests alone harbor more than half of the world's plant and wild animal species and store about 247 billion metric tons of carbon (Saatchi et al. 2011). Illegal logging is a major cause of forest degradation and subsequent loss (Burgess et al. 2012) estimated to account for between 15%–30% of the global trade in timber and worth US$30–$100 billion annually, including processing (Nellemann and INTERPOL 2012). In tropical regions, illegal logging rates are thought to be even higher, with 50%–90% of timber likely to be illegally sourced (Nellemann and INTERPOL 2012). The consequences of these illegal activities are realized economically, socially, and ecologically. Legitimate concession holders, governments, and local communities are denied vital revenue; armed conflict and corruption are promoted; and regional biodiversity assets and ecosystem services are degraded (Sikor and To 2011, Reboredo 2013).

Illegal logging for the international timber trade is predominantly a response to the external demand for wood products generated by consumer nations; therefore, efforts to curb the practice must address these demand drivers in addition to targeting illegal operations on the ground (Johnson and Laestadius 2011). In attempts to stem such international demand, legislation in Canada (1992), the United States (2008), the European Union (2010), and Australia (2012) now prohibits the importation of timber products harvested or traded in contravention of applicable foreign laws (table 1). Importantly, in each legislation, all actors in the timber supply chain (except the final consumer) are responsible for ensuring the legality of the timber they purchase and must declare the identification and geographical origin of the timber in question. US legislation requires the declaration of the full scientific name (genus and species), whereas the remainder only require trade names, common names, or genus where the full scientific name is unknown. This approach can be problematic in determining legal status because most environmental protection laws are applied at the species level. Legislation in the United States and Canada require only that the country of origin be declared for traded timber, whereas legislation in the European Union requires the region and concession of harvest "where applicable," and Australia requires region and harvesting unit information in all cases. In addition to these declaration requirements, legislation in the European Union and Australia requires buyers to fulfill requirements for due diligence and provide evidence that the timber has not been illegally sourced. Legislation designed to address

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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

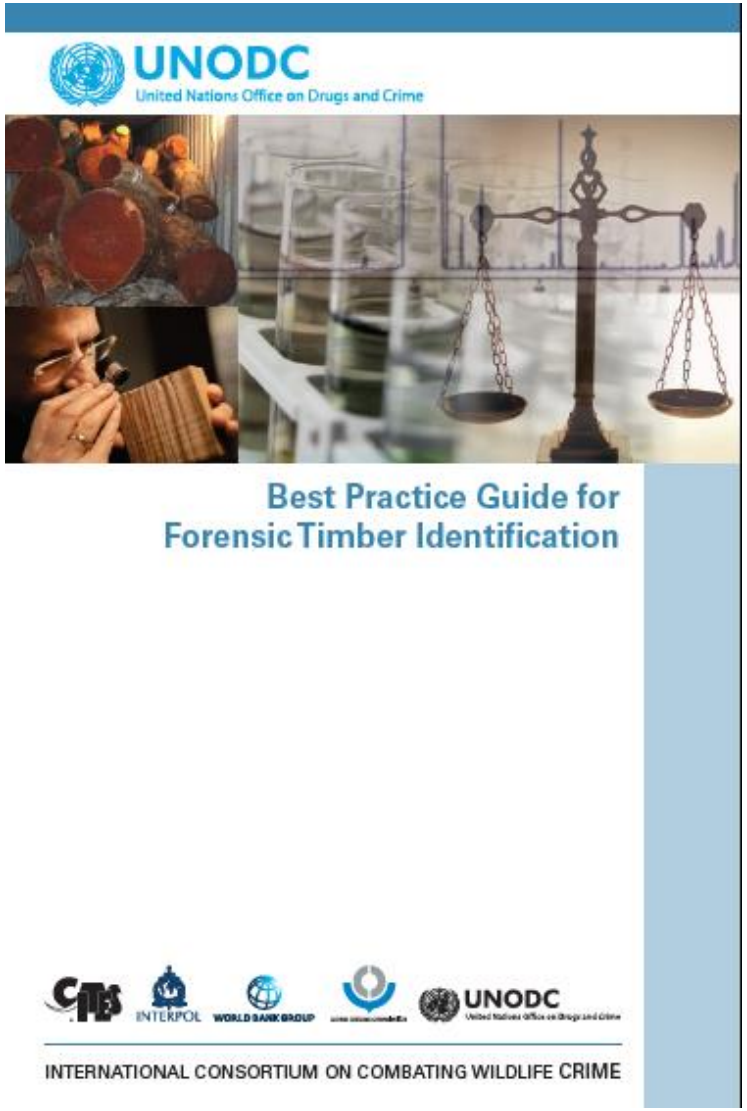
Structure of the Guide

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



Timber Guide:
www.unodc.org/documents/Wildlife/Guide_Timber.pdf

Flow Diagram:
www.unodc.org/documents/Wildlife/Timber_Flow_Diagram.pdf

UNODC Wildlife and Forest Crime Publications:

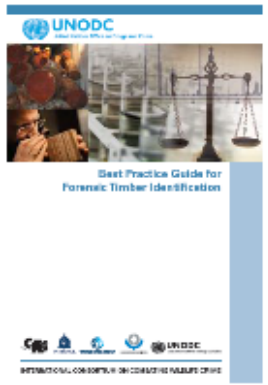
www.unodc.org/unodc/en/wildlife-and-forest-crime/publications.html

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
  - Contact us

WILDLIFE AND FOREST CRIME

Publications

In our determination to combat wildlife and forest crime we have developed informative material aiming not only to raise awareness of the issues but to build technical assistance. Some of our publications are presented below.



Best Practice Guide for Forensic Timber Identification

(English)

Law Enforcement Best Practice Flow Diagram for Timber

(English)

Application/Technical Transfer

Annual ILEA (International Law Enforcement Academy) Budapest

Illegal Logging and Forest Crime course (September 2015, October 2016, November 2017)

- Integration of curriculum with ICCWC tools

Contents

Best-practice flow diagram for timber

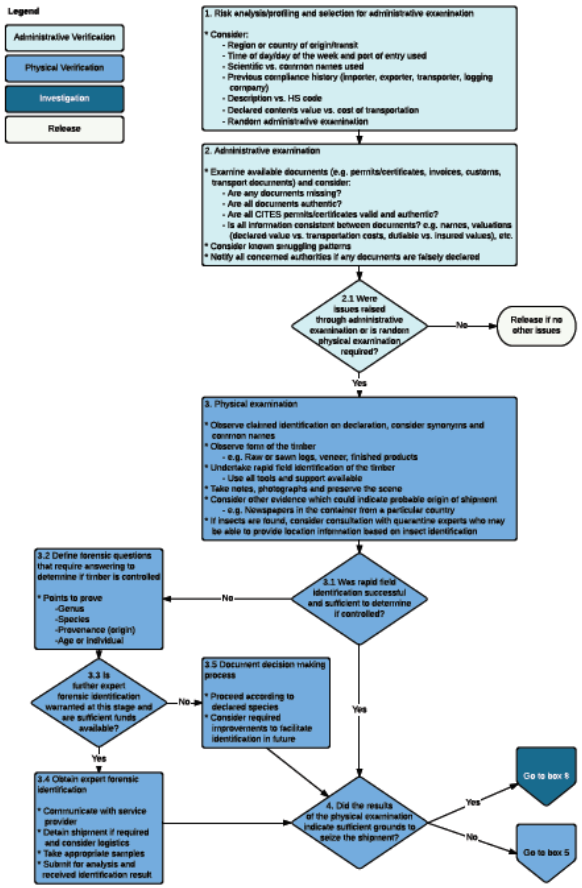


Table A8.1 Method capabilities

Identification need	Wood anatomy	Machine vision	Dendro-chronology	Mass spectrometry	Near infrared spectroscopy	Stable isotopes	Radiocarbon	Genetics
Genus	Yes	Yes	No	Yes	Yes	No	No	Yes
Species	Occasionally	Occasionally	No	Yes	Yes	No	No	Yes
Provenance	Occasionally	Unknown	Occasionally	Yes	Yes	Yes	No	Yes
Individuals	No	No	Yes	No	No	No	No	Yes
Age	No	No	Yes — with growth rings	No	No	No	Yes	No

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

COMBATING
WILDLIFE AND FOREST CRIME
UNITED NATIONS OFFICE ON DRUGS AND CRIME

Thank you

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

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