

Organized Crime, Transnational Criminal Networks and Environmental Crime

Ed McGarrell
Director and Professor
School of Criminal Justice
Michigan State University, USA



Advancing Knowledge.
Transforming Lives.

Focus

- What do we know about organized crime, criminal networks, and ecocrime?
- How do we build knowledge base to support evidence-based practice for prevention, prosecution, and mitigation of harm?

Organized Crime & Ecocrime

- Early studies found organized crime involvement in waste and hazardous waste disposal
- Later studies found more likely involvement of “crime groups” and criminal networks (though may vary by region)
- Williams (2001) documents significant involvement of organized crime groups and networks in variety of ecocrimes
- Also variation in level of organization by crime type and region (e.g., trafficking in birds vs. other wildlife)

Levels of organization within the illegal wildlife trade (Cook, 2002)

Increasing level of organization	Organized illegal wildlife trade, broad categories
	Illegal timber trade
	Caviar trafficking
	Activities linked to illegal drug trade
	Skins, furs, fleeces, TAMS
	Specialist collecting of specimens

Media Reports of Organized Crime Involvement

Type of Offense	Number
Trade in Endangered Species, Poaching	19
Illegal logging	6
Hazardous waste, trash disposal	5
Illegal fishing	3
Ozone Depleting Substances	1
Gravel/Sand Removal	1

Please be cautious in interpretation.
Every continent except Antarctica mentioned.
Source UNEP Environmental Crime Media Update,
2010-March 2012



Advancing Knowledge.
Transforming Lives.

Wildlife Crime

- Trade in Endangered Species

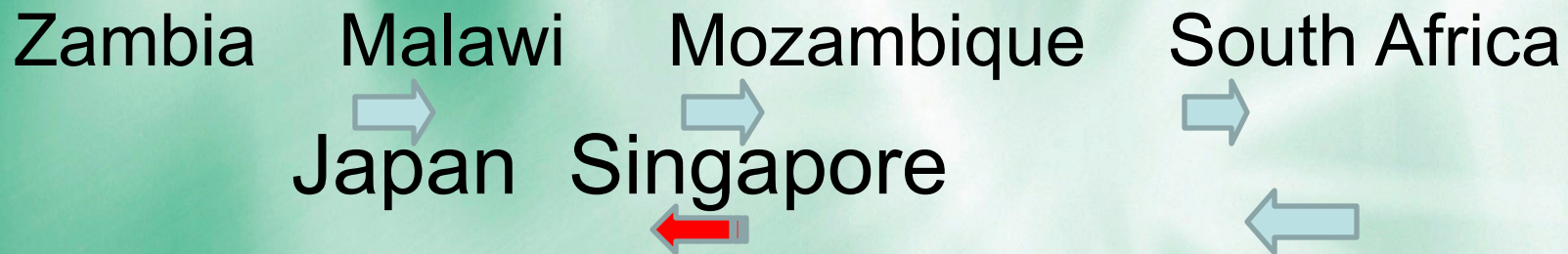


MICHIGAN STATE
UNIVERSITY

Advancing Knowledge.
Transforming Lives.

Key Enforcement Operations

- Operation Baba (2008)
- Operation Costa (2009)
- Operation Ramp (2010)
- Singapore Seizure (2012)
 - “well established syndicate”



Types – Wildlife Crime (IUU Fishing)

- Illegal, Unreported, and Unregulated Fishing

Black market trade, \$1 billion annually with 100 million sharks killed annually (example)



MICHIGAN STATE
UNIVERSITY

Advancing Knowledge.
Transforming Lives.

Wildlife Crime (IUU Fishing)

- *ORGANISED crime groups, including outlaw motorcycle gangs and Chinese underworld networks, are developing a growing taste for Australian black market seafood and the massive profits being made from the illegal trade (UN Newsletter)*
- Rock lobsters, abalone, shark fins, mud crabs and prawns. (examples of prized species)
- One abalone operation \$1 million per year

Wildlife Crime

- Illegal trade estimated at \$8-10 billion per year (WWF 2012)

In sum,

Enforcement operations, government and NGO reports:

Suggest organized crime groups and criminal networks both operating at transnational levels

Pollution Crime

- Black market in Ozone Depleting Substances (ODS)
- Transboundary Dumping of Toxic & Hazardous Waste

Pollution Crime

- Black market in Ozone Depleting Substances (ODS)
- Transboundary Dumping of Toxic & Hazardous Waste
- Global trade in Electronic Waste



E-Waste



... circuit boards and processing residues
AN

ned in the
higher than
Guidelines.
the levels
10 level.

and environmental hea
samples reveal that in
seriously polluted, and
howwidespread the pr
impacted the health of

Circuit Boards Treated with Acid and Burned Along River. Guiyu, China
(www.ban.org)

MICHIGAN STATE
UNIVERSITY

Advancing Knowledge.
Transforming Lives.

Pollution Crime

E-Waste – INTERPOL Pollution Crimes Studies

- Series case studies in Europe found evidence of organized crime involvement
- Second study in US found evidence of criminal networks but unclear on level of organized crime groups (although volume and \$ suggest opportunities)

Illegal Logging & Timber Smuggling



MICHIGAN STATE
UNIVERSITY

Advancing Knowledge.
Transforming Lives.

Illegal Logging & Timber Smuggling

Nature of Harm

- Developing countries lose \$15 billion in lost revenue and taxes (EIA, 2008)
- Loss biodiversity; leads to flooding & forest fires
- 20% carbon gas emissions due to deforestation (driver of climate change)

Papua, Indonesia - Illegal logging of merbau wood (example)

- 2001 Logging Export Ban
 - 15 cargo vessels per month to China; estimated \$600 million worth per month
 - PROCEEDS OF PAPUA'S LOGGING CRIMES
 - Payment made to local community in Papua: US\$ 11.00 / M3
 - Price of log at point of export in Papua: US\$ 120.00 / M3
 - Price of log on arrival in China: US\$ 240.00 / M3
 - Flooring price in China:* US\$ 468.00
 - Retail price in UK or USA:* US\$ 2288.00
- (EIA, 2008)



Advancing Knowledge.
Transforming Lives.

Illegal Logging

UNEP – INTERPOL Study

- Illegal logging valued at \$30-\$100 billion (US)
- Evidence of increased sophistication suggesting organized crime

Source: Green Carbon, Black Trade (2012)

MICHIGAN STATE
UNIVERSITY

Advancing Knowledge.
Transforming Lives.

Emerging Ecocrimes

Carbon Trading Markets

- Emissions Fraud
- Tax Fraud
- Forest Fraud

Renewable Energy Markets

- Fraudulent Renewable Fuel Credits

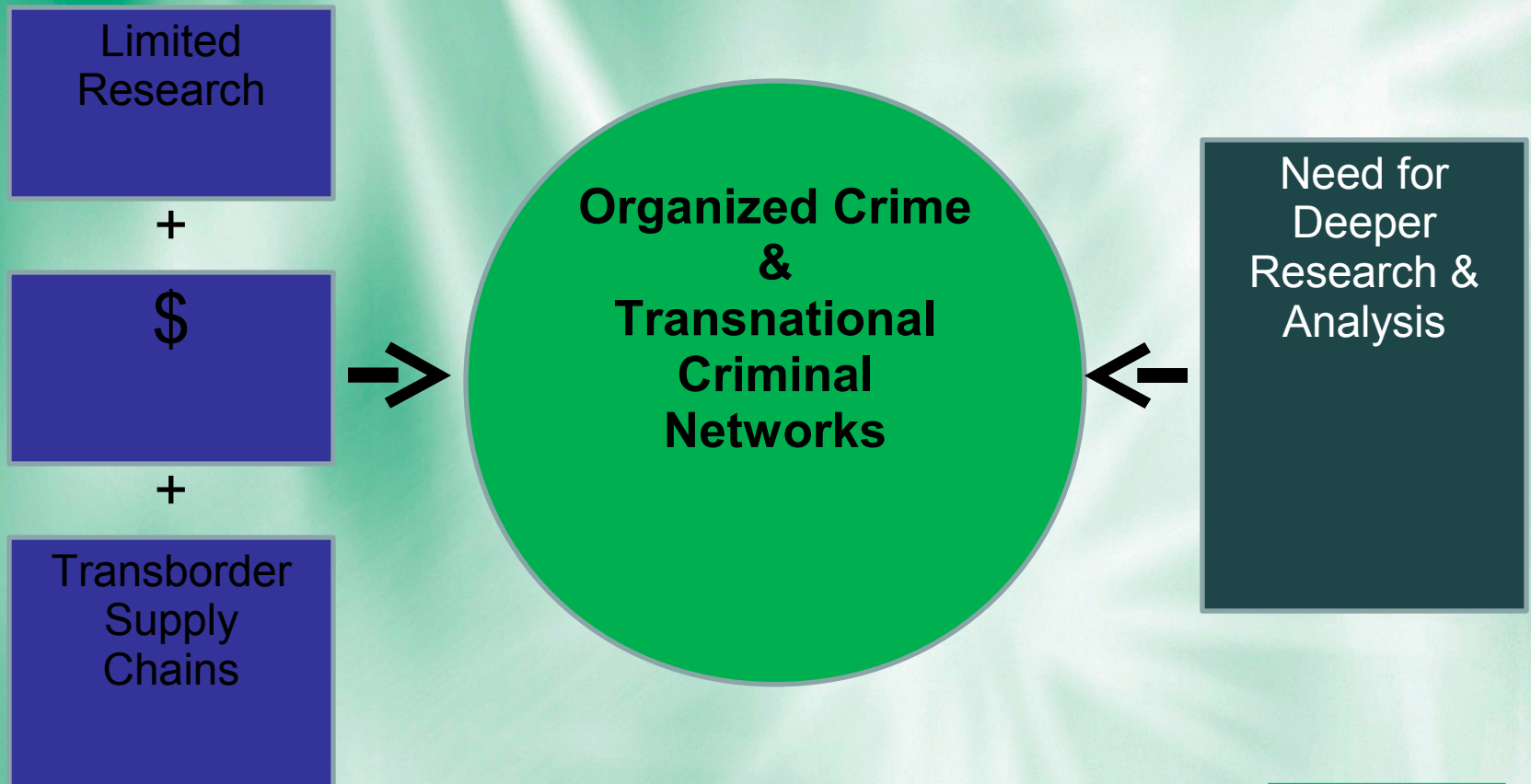
Fraudulent Renewable Fuel Credits

- Texas case = \$41.7 million on the sale of more than 48 million fuel credits
- Maryland case = \$9 million on the sale of 32 million fuel credits

Common Themes

- Large profits
- Low risk
 - Limited enforcement resources
 - Light penalties
- Organized crime & criminal networks
- Transboundary
- Corruption
- Exploit most disadvantaged

Summary of Findings



Having Said This ...

- Limited empirical research on
 - Nature of criminal organizations & networks
 - Risks and harms to human health, environment, economy
 - Evidence-based practice (prevention, prosecution, mitigation)

Law Enforcement – Research Partnerships

- Emerging response to variety of crime types (examples)
 - U.K. Home Office (e.g., repeat victimization; market reduction strategies)
 - U.S. DOJ (Project Safe Neighborhoods; Smart Policing)

Mutual Benefit

- Deeper understanding of dynamics behind particular crime types
- Strategic and tactical intelligence about organized crime, transnational criminal networks
- Assessment of capacity & gaps of global enforcement networks
- Development of performance indicators/metrics
- Ongoing assessment & evaluation

Understanding Ecocrime

Offender

Organizations,
networks

Victim

Human, ecosystem,
economy

**Crime
Triangle**

Location

Local to global

MICHIGAN STATE
UNIVERSITY

Advancing Knowledge.
Transforming Lives.

Research & Enforcement Implications

- What do we know about these groups and networks?
 - Level of organization
 - Variation by type of Ecocrime & region
 - Cooperation with other criminal networks
 - Overlap with other illicit & licit markets
 - Prior records and seriousness of offending
 - Use of violence
 - Financial resources
 - Ability to influence enforcement/governments

Research & Enforcement Implications

- How do we influence potential offenders?
 - Gain voluntary compliance
 - Education/cooperative models
 - Procedural justice
 - Increase risk detection
 - Increase costs

Research & Enforcement Implications

- How do we decrease vulnerability of victims?
 - Legal protections
 - Increase likelihood detection/guardianship
 - Citizen reporting (e.g., community based management)
 - Electronic records (harvests, vessel monitoring, timber tracking)
 - Remote sensing and observation
 - Forensics & DNA testing
 - Customs, Food inspector training
 - Fight corruption



Advancing Knowledge.
Transforming Lives.

Research & Enforcement Implications

- What do we know about context?
 - How do we think about offending globally?
 - What is role of global illicit networks? Overlap with licit markets?
- Implications for
 - Risk-based surveillance & enforcement
 - Increase guardianship
 - Global enforcement networks to combat global criminal networks

Ecocrime = “Wicked Problem”

Not susceptible to technological and single discipline solutions

Need multidisciplinary teams (examples)

Criminology & Law

Environmental Science & Policy

Natural Resource Management

Supply Chain

Forensic Science

Risk Perception & Decision-making

Working with Law Enforcement, Customs, NGOs, Policymakers



Advancing Knowledge.
Transforming Lives.

Opportunities for Research Partnerships (examples)

- Forest Law Enforcement, Governance & Trade
- Global Forest & Trade Network
- Coalition Against Wildlife Trafficking
- Wildlife Enforcement Network
- Operation Sky-hole Patching
- Trace Network
- INTERPOL E Crimes Committee
- World Customs Organization's
 - Regional Intelligence Liaison Office
 - Green Customs Initiative



Advancing Knowledge.
Transforming Lives.

Grazie Merci Thank you

Ed McGarrell

mccgarrel@msu.edu

www.conservacioncriminology.msu.edu

Conservation Criminology | Michigan State University

http://www.conservacioncriminology.msu.edu/

CONSERVATION CRIMINOLOGY MICHIGAN STATE UNIVERSITY

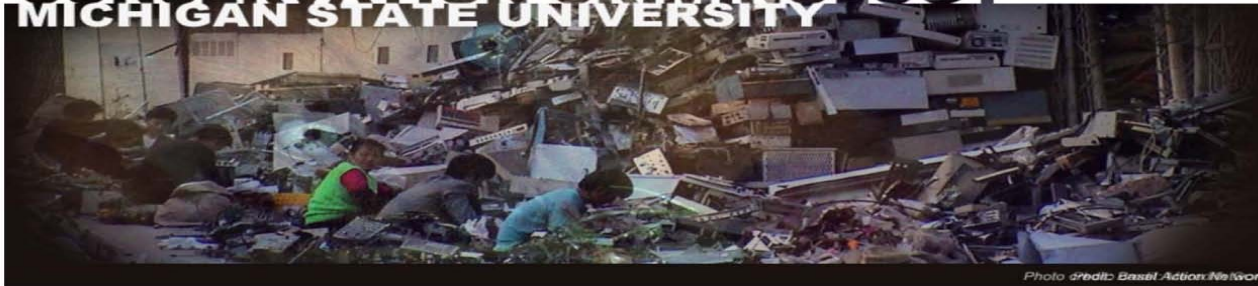


Photo credit: Basal Action Network

- Home
- About CC
- Teaching
- Research
- People
- Engagement



Con-ser-va-tion crim-i-nol-o-gy (n):

the multi- and inter-disciplinary approach to understanding environmental crime and risk

Conservation criminology is an approach to research, teaching and outreach currently under development at MSU. With the goal of improving evidence-based practices related to environmental crimes and risks, conservation criminology offers a conceptual framework that integrates criminology and criminal justice, conservation and natural resource management and risk and decision science. **Research projects** examining a diverse set of crimes and risks created by multiple actors are being used to refine the conceptual model.

A **Master's level certificate program** that examines the practical and theoretical implications of the conservation criminology framework is currently available to traditional and professional students. It consists of three online courses that examine environmental crimes and risks at the individual, corporate and global levels. The program is jointly offered by Michigan State University's **Department of Fisheries & Wildlife**, the **School of Criminal Justice**, and **Environmental Science & Policy Program**.

CC Highlights

CC Faculty in Philippines

Conservation Criminology faculty travel to the Philippines as part of a capacity-building exchange program.

Conservation Criminology faculty member, Meredith Gore presented a poster on risks to white sharks from shark diving at the Annual Society for Conservation Biology meeting in Beijing, China.

Conservation Criminology graduate student, Jessica Kahler blogs about her fieldwork on human-wildlife conflict in Namibia. Follow her blog here!

Conservation Criminology

5th Floor, Baker Hall, Michigan State University, East Lansing, Michigan 48824
E-mail: mmohr@msu.edu | Tel: 517-353-5272 | Fax: 517-432-1787

© 2008-2009 Michigan State University Board of Trustees, East Lansing MI 48824
MSU is an affirmative-action, equal-opportunity employer.

TE
Y
ing Knowledge.
nsforming Lives.