THE LIBRARY OF ESSAYS ON TRANSNATIONAL CRIME



## Transnational Environmental Crime

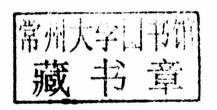
ROB WHITE

# Transnational Environmental Crime

Edited by

### Rob White

University of Tasmania, Australia



**ASHGATE** 

© Rob White 2013. For copyright of individual articles please refer to the Acknowledgements.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher.

Wherever possible, these reprints are made from a copy of the original printing, but these can themselves be of very variable quality. Whilst the publisher has made every effort to ensure the quality of the reprint, some variability may inevitably remain.

Published by

Ashgate Publishing Limited

Wey Court East Union Road

Farnham

Surrey GU9 7PT

England

Ashgate Publishing Company

110 Cherry Street

Suite 3-1

Burlington, VT 05401-3818

USA

www.ashgate.com

#### **British Library Cataloguing in Publication Data**

A catalogue record for this book is available from the British Library.

The Library of Congress has cataloged the printed edition as follows: 2012953432

ISBN 9781409447856



## The Library of Essays on Transnational Crime David Nelken

Titles in the Series:

Transnational Organized Crime • Margaret E. Beare

Transnational Terrorism

Steven M. Chermak and Joshua D. Freilich

Transnational Financial Crime
Nikos Passas

Human Trafficking
Marie Segrave

Transnational Environmental Crime
Rob White

## Acknowledgements

Ashgate would like to thank the researchers and the contributing authors who provided copies, along with the following for their permission to reprint copyright material.

Cambridge University Press for the essay: Ali Mohamed Al-Damkhi, Ali Mohamed Khuraibet, Sabah Ahmed Abdul-Wahab and Faten Abdul-Hameed Al-Attar (2009), 'Toward Defining the Concept of Environmental Crime on the Basis of Sustainability', *Environmental Practice*, 11, pp. 115–24. Copyright © 2009 National Association of Environmental Professionals.

Hart Publishers for the essay: Stephen Farrall (2012), 'Where *Might* We Be Headed? Some of the Possible Consequences of Climate Change for the Criminological Research Agenda', in S. Farrall, T. Ahmed and D. French (eds), *Criminological and Legal Consequences of Climate Change*, Oxford: Hart Publishing, pp. 7–26.

Maklu-Uitgevers nv for the essay: Lieselot Bisschop (2011), 'Transnational Environmental Crime: Exploring (Un)charted Territory', in M. Cools *et al.* (eds), *EU Criminal Justice, Financial & Economic Crime: New Perspectives*, Antwerp: Maklu, pp. 155–83.

Nova Publishers for the essay: Ragnhild Sollund (2008), 'Causes for Speciesism: Difference, Distance and Denial', in R. Sollund (ed.), *Global Harms: Ecological Crime and Speciesism*, New York: Nova Science Publishers, Inc., pp. 109–29. Copyright © 2008 by Nova Science Publishers, Inc.

Office of the INECE Secretariat for the essay: Toine Spapens (2011), 'Cross-Border Police Cooperation in Tackling Environmental Crime', INECE Conference Proceedings, pp. 237–49.

Oxford University Press for the essays: Reece Walters (2006), 'Crime, Bio-Agriculture and the Exploitation of Hunger', *British Journal of Criminology*, **46**, pp. 26–45. Copyright © 2005 Reece Walters; Andrew M. Lemieux and Ronald V. Clarke (2009), 'The International Ban on Ivory Sales and Its Effects on Elephant Poaching in Africa', *British Journal of Criminology*, **49**, pp. 451–71. Copyright © 2009 Andrew M. Lemieux and Ronald V. Clarke.

Sage Publications for the essays: Robert Agnew (2011), 'Dire Forecast: A Theoretical Model of the Impact of Climate Change on Crime', *Theoretical Criminology*, **16**, pp. 21–42. Copyright © 2011 Robert Agnew; Francis O. Adeola (2000), 'Cross-National Environmental Injustice and Human Rights Issues: A Review of Evidence in the Developing World', *American Behavioral Scientist*, **43**, pp. 686–706. Copyright © 2000 Sage Publications, Inc.

Springer for the essays: Glen Wright (2011), 'Conceptualising and Combating Transnational Environmental Crime', *Trends in Organised Crime*, **14**, pp. 332–46. Copyright © 2011 Springer Science and Business Media; Tim Boekhout van Solinge (2010), 'Deforestation Crimes and Conflicts in the Amazon', *Critical Criminology*, **18**, pp. 263–77. Copyright © 2010 Springer Science & Business Media; Vincenzo Ruggiero and Nigel South (2010), 'Green

Criminology and Dirty Collar Crime', Critical Criminology, 18, pp. 251-62. Copyright © 2010 Springer Science & Business Media; Lieselot Bisschop (2012), 'Is It All Going to Waste? Illegal Transports of E-Waste in a European Trade Hub', Crime, Law and Social Change, 58. pp. 221–49. Copyright © 2012 Springer Science & Business Media; Ana Klenovšek and Gorazd Meško (2010), 'International Waste Trafficking: Preliminary Explorations', in G. Mesko, D. Dimitrijevic and C. Fields (eds), Understanding and Managing Threats to the Environment in South Eastern Europe, Dordrecht, NL: Springer in Cooperation with NATO Emerging Security Challenges Division, pp. 79-99. Copyright © 2010 Springer Science & Business Media; Marina Malis Sazdovska (2010), 'Usage of Special Investigation Measures in Detecting Environmental Crime: International and Macedonian Perspective', in G. Mesko, D. Dimitrijevic and C. Fields (eds), Understanding and Managing Threats to the Environment in South Eastern Europe, Dordrecht, NL: Springer in Cooperation with NATO Emerging Security Challenges Division, pp. 123–34. Copyright © 2010 Springer Science & Business Media: Reece Walters (2010), 'Toxic Atmospheres Air Pollution, Trade and the Politics of Regulation', Critical Criminology, 18, pp. 307-23. Copyright © 2010 Springer Science & Business Media; Stephen F. Pires and William D. Moreto (2011), 'Preventing Wildlife Crimes: Solutions That Can Overcome the "Tragedy of the Commons", European Journal of Crime Policy and Research, 17, pp. 101–23. Copyright © 2011 Springer Science & Business Media.

Taylor & Francis for the essays: Diane Heckenberg (2010), 'The Global Transference of Toxic Harms', in R. White (ed.), Global Environmental Harm: Criminological Perspectives, Devon: Willan Publishing, pp. 37-61. Copyright © 2010 Diane Heckenberg and Rob White; Richard D. Clark (2009), 'Environmental Disputes and Human Rights Violations: A Role for Criminologists', Contemporary Justice Review, 12, pp. 129-46. Copyright © 2009 Taylor and Francis; Linda Waldman (2007), 'When Social Movements Bypass the Poor: Asbestos Pollution, International Litigation and Griqua Cultural Identity', Journal of Southern African Studies, 33, pp. 577-600. Copyright © 2007 The Editorial Board of the Journal of Southern African Studies; Carole Gibbs, Edmund F. McGarrell, Mark Axelrod and Louie Rivers III (2011), 'Conservation Criminology and the Global Trade in Electronic Waste: Applying a Multi-Disciplinary Research Framework', International Journal of Comparative and Applied Criminal Justice, 35, pp. 269-91. © 2011 School of Criminal Justice, Michigan State University; Nigel South (2007), 'The "Corporate Colonisation of Nature": Bio-Prospecting, Bio-Piracy and the Development of Green Criminology', in P. Beirne and N. South (eds), Issues in Green Criminology: Confronting Harms Against Environments, Humanity and Other Animals, Devon: Willan Publishing, pp. 230-47. Copyright © 2007 Piers Beirne and Nigel South; Greg L. Warchol (2004), 'The Transnational Illegal Wildlife Trade', Criminal Justice Studies, 17, pp. 57–73. © Taylor and Francis Ltd.

Every effort has been made to trace all the copyright holders, but if any have been inadvertently overlooked the publishers will be pleased to make the necessary arrangement at the first opportunity.

#### Publisher's Note

The material in this volume has been reproduced using the facsimile method. This means we can retain the original pagination to facilitate easy and correct citation of the original essays. It also explains the variety of typefaces, page layouts and numbering.

## **Series Preface**

This international series explores the increasingly important area of transnational crime and criminal justice. As with other well established Ashgate publications in this field, this too aims at being a major resource by bringing together the most significant journal essays in contemporary criminology, criminal justice and penology. Five key areas of transnational crime and criminal justice are analysed. The volume by Margaret Beare discusses types of organised crime, the way they are classified, the role of groups, networks, and markets and the harm that such activities cause. The collection by Nikos Passas explores the definition, types and control of transnational financial crime. That on transnational environmental crime, by Rob White, deals with the often neglected victimisation produced by such crimes, their variety and how they may best be combated. The collection on human trafficking, by Marie Segrave, analyses the framework for dealing with this increasingly debated crime; it then goes on to examine what we know about it and describes current responses (and the possible alternatives). Finally, the work on transnational terrorism, by Steven Chermak and Joshua Freilich considers the patterns, causes, impact of this behaviour and the way nation states and others seek to deal with this threat. As this collection in particular well illustrates, studying the response to transnational crime raises important questions about the legitimacy of state, and international and transnational definitions of threatening behaviour. In all cases, however, the collections make available to researchers, teachers and students a range of essays that are indispensable for obtaining an overview of the latest theories and findings in this fastchanging area. The authoritative introductions to each volume set the selected essays in context and explain their significance.

DAVID NELKEN

Distinguished Research Professor of Law, Cardiff University, UK Series Editor

## Introduction

Much environmental harm is intrinsically transnational in nature. Contemporary discussions of environmental crime for example, deal with issues such as the illegal transport and dumping of toxic waste, the illegal traffic in radioactive or nuclear substances, the proliferation of electronic waste generated by the disposal of tens of thousands of computers and other equipment, transborder pollution that is either systematic (via location of factories) or related to accidents (for example, chemical plant spills), the illegal trade in plants and non-human animals and illegal fishing and logging. This list goes on, but the point is that environmental harm, whether conceptualized in conventional legal terms or based upon more encompassing ecologically based conceptions of harm, is by nature mobile and easily subject to transference.

Moreover, the systemic causal chains that underpin much environmental harm are located at the level of the global political economy — within which the transnational corporation stands as the central social force — and this, too, is reflected in the pressing together of the local—global at a practical level. International systems of production, distribution and consumption generate, reinforce and reward diverse environmental harms and those who perpetrate them (White, 2008; Robin, 2010). These range from unsafe toys to reliance upon genetically modified grains, the destruction of out-of-date ships and planes through to the transportation and dumping of hazardous wastes. A basic premise of green or environmental criminology is that we need to take environmental harm seriously, and that in order to do this we need conceptualizations of harm that go beyond conventional understandings of crime (Beirne and South, 2007). However, the doing of green criminology also requires a sense of scale, and of the essential interconnectedness of issues, events, people and places.

Certainly one expression of this interconnectedness is transnational environmental crime and efforts to control this crime. The purpose of this book is to showcase research and scholarly work that has explored the three constituent aspects of this phenomenon:

- *transnational* (that is, studies and commentaries that deal with crime and/or crime control that crosses international borders);
- *environmental* (that is, the focus is on transgressions against humans, environments and non-human animals related in some way to ecological and species considerations);
- *crime/harm* (that is, the concern is with injustices and harms that connect in some way to criminal justice institutions and/or green criminological perspectives).

Many types of environmental crimes/harms can be considered on the basis of these criteria, such as pollution of air, water and land; illegal trade in endangered species and abuse of animals; deforestation; issues relating to genetically modified organisms (GMO); the corporate colonization of Nature; toxic and e-waste dumping; and so on. There is much going on in the world around us, and much to discuss.

#### **Defining Transnational Environmental Crime**

Transnational environmental crime, as defined in conventional legal terms, refers to:

- unauthorized acts or omissions that are *against the law* and therefore subject to criminal prosecution and criminal sanctions;
- crimes that involve some kind of *cross-border transference* and an international or *global dimension*; and
- crimes related to *pollution* (of air, water and land) and *crimes against wildlife* (including illegal trade in ivory as well as live animals).

These are the key focus of national and international laws relating to environmental matters, and are the main task areas of agencies such as Interpol.

In its more expansive definition, as used by green criminologists for example, transnational environmental crime also extends to *harms* (White, 2011a). It therefore includes:

- transgressions that are *harmful to humans*, *environments and non-human animals*, regardless of legality *per se*; and
- environmental-related harms that are facilitated by the state, as well as corporations and other powerful actors, insofar as these institutions have the capacity to shape official definitions of environmental crime in ways that allow or condone environmentally harmful practices.

The definition of transnational environmental crime is contentious to the extent that extralegal definitions are applied in addition to existing legal definitions. The necessity for the former is dictated by the actions and omissions of nation-states which may well allow harmful environmental activity to occur without it being criminalized (that is, constructed as a crime and subject to criminal law). Perceived national and business interests do not always coincide with the best environmental outcome or ecological sustainability. This is of major concern to green criminologists and environmental activists alike.

The post-World War II period has nonetheless seen major growth in the internationalization of treaties, agreements, protocols and conventions in relation to environmental protection and with respect to the securing of environmental resources. Nation-states have in recent years been more interested in taking governmental action on environmental matters, since much of this pertains to national economic interests. Moreover, the transboundary nature of environmental harm is evident in a variety of international protocols and conventions that deal with such matters as the illegal trade in ozone-depleting substances, the dumping and illegal transport of hazardous waste, illegal trade in chemicals such as persistent organic pollutants and illegal dumping of oil and other wastes in oceans (Hayman and Brack, 2002). A major concern today is the proliferation of 'e'-waste generated by the disposal of tens of thousands of computers and other equipment.

Some of the major international initiatives that formally specify certain activities as offences include (Forni, 2010):

 Convention for Prevention of Maritime Pollution by Dumping Wastes and Other Matters;

- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES);
- International Tropical Timber Agreement;
- Vienna Convention for the Protection of the Ozone Layer;
- Montreal Protocol on Substances that Deplete the Ozone Layer;
- Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal;
- United Nations Framework Convention on Climate Change;
- · Kyoto Protocol.

Through these various international instruments certain kinds of activities are either being banned or highly regulated. Breach of these rules, laws and regulations constitute an environmental crime. The legal framework governing environmental matters in international law is defined by over 270 Multilateral Environmental Agreements and related instruments (Forni, 2010, p. 34). The laws and rules guiding action on environmental crime vary greatly at the local, regional and national levels, and there are overarching conventions and laws that likewise have different legal purchase depending upon how they are translated into action in each specific local jurisdiction. In part, differences in law-in-practice and conceptions of what is an environmental crime stem from the shifting nature of what is deemed harmful or not.

Those who study transnational environmental crime from a social scientific perspective argue that 'harm' needs to be measured and assessed, but in doing so the study of crime has to go beyond existing legal definitions and criteria. This is so for several reasons (White, 2011a).

First, as indicated above, wrongdoing is perpetrated by states themselves, yet it is the nation-state that defines what is criminal, corrupt or unjust. There is a need for the development of criteria and definitions of crime that are not restricted to specific state's laws but that are more universal in nature (for example, appeal to 'human rights' or 'ecological justice' or 'ecocide'). Secondly, harms perpetrated by powerful groups and organizations, such as transnational corporations, are frequently dealt with by the state as civil rather than criminal matters. This reflects the capacity of the powerful to shape laws in ways that do not criminalize their activities, even when they are ecologically disastrous. Thirdly, there are extralegal concepts and factors that need to be studied if we are to fully appreciate the nature of environmental harm, and this requires a different way of framing the issues. An ecology-based analysis of activity may well provide quite a different picture of 'harm' than an economic-based analysis. What is defined as criminal harm, and the measure of the seriousness of that harm, are contingent upon the social interests bound up with the definitional process. The degree to which environmental crime is considered harmful has a major bearing on how and why perpetrators do what they do, and on how criminal justice institutions respond to such harms.

#### Criminal Justice and Transnational Environmental Crime

Defining, interpreting and responding to transnational environmental crime occur within particular institutional and cultural contexts. The nature of 'harm' and the processes of criminalization (and sanction) are inherently intertwined with the dominant conceptions of the Nature–Human relationship, which are manifest in the hegemonic forms of production, consumption and exchange on a world scale (namely, global capitalism). These conceptions

are generally anthropocentric (or human-centred), and they rationalize and sustain particular modes of production that tend to be instrumental and self-serving for humans. In simple terms, this is sometimes referred to as the tension between 'economy' and 'ecology', where the latter is put at the service of the former. To some extent this relationship and prioritization is reflected in existing law, as well as in contests to reform laws. The institutionalization of a particular relationship between Humans and Nature has a number of implications for how transnational environmental crime is dealt with at a grounded or concrete level within the criminal justice sphere.

#### Legal Constructions of Harm

Slowly but surely, against at times ferocious opposition from powerful business and state interests, there is movement worldwide towards viewing environmental harm as a serious social and ecological crime. This is occurring in several different ways, and involves a widening number of criminal justice institutions and personnel. Nonetheless, the backbone of present judicial and criminal justice responses has been generally dictated by a 'business as usual' model of interpretation and intervention.

#### Illegality - malum prohibitum

This area of law refers to conduct that is prohibited by law but generally considered less serious than other types of social harms (such as homicide for example). Harm to the environment is, in many situations, considered to be acceptable because it is an inherent consequence of many industrial activities which provide significant benefits. Cutting down trees and pulling species out of the ocean are thus *not* intrinsically criminal or 'bad' activities from the point of view of the law. It is the context that makes something allowable or problematic. The main issue here is to 'manage the problem' (usually framed in terms of catch limits and allowable levels of pollution or toxicity); this is essentially a matter of regulation (White, 2008). Examples include CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) and the Basel Convention (on the Control of Transboundary Movement of Hazardous Wastes and Their Disposal) which are designed to regulate the international movement of species and substances. Within this framework, it is the illegal aspects of ordinary legitimate practices that are problematic (Situ and Emmons, 2000). A key practical focus is developing the best tools and strategies possible to ensure compliance with licensing provisions and specific environmental regulations.

With regard to environmental regulation, Gunningham and Grabosky (1998) argue that what is needed is 'smart regulation'. This refers to the design of regulation such that it involves selective government intervention in combination with a range of market and non-market measures (such as economic incentives and voluntary compliance). This approach is premised upon the notion of recruiting a range of regulatory actors to implement complementary combinations of policy instruments, tailored to specific environmental goals and circumstances. While in some contexts the adoption of a smart regulation approach may produce effective and efficient policy outcomes, the emphasis on self-regulation and de-regulation on the part of many states has tended to impede the success of the regulatory project. Nonetheless, willingness to use the 'big stick' (including use of criminal sanctions),

and the systematic and diligent monitoring of compliance, has been shown to be vital to good governance and positive protection of the environment (White, 2011a).

#### Serious Harm - malum in se

This area of law refers to conduct inherently wrong by nature, and that is considered serious. The main issue here is to 'eradicate the problem' (usually framed in terms of banning of specific substances and/or activities). The intent of the law is the prevention and abolition of harmful practices, as seen for example in the application of public interest law in India to stop polluting industries from destroying sites of national significance (Mehta, 2009). Another example of this approach is the Montreal Protocol which effectively bans the use of ozone depleting substances (French, 2000). An emergent demand, aligned to some extent with calls for recognition of Earth Rights (already manifest in some country's constitutions), is for a new international law on 'ecocide'. This would make extensive damage to, destruction of or loss of ecosystem(s) of a given territory an international crime (the fifth crime against peace) (see Higgins, 2012). Prosecution of this crime is premised upon two major things: first, the acceptance of 'ecocide' as a *bona fide* crime; and second, that there exist institutional structures within which such crimes could be enforced and tried with appropriate sanctions available.

These latter developments are also fostered by changes in national legislation and constitutional arrangements, many of which are premised upon the idea of Earth stewardship. For example, in 2008 the people of Ecuador by a 63 per cent majority voted for a new Constitution, the first in the world to comprehensively recognize ecosystem rights and nature rights. As Walters (2011, p. 268) describes it, the occasion was eventful in a number of ways:

Much of the motivation for this came from widespread outrage at Chevron dumping millions of tonnes of toxic waste into the Amazon as part of its mining operations. The new document refers to 'Pachamama' the indigenous Earth Mother figure. Article 71 provides:

Nature or Pachamama, where life is reproduced and exists, has the right to exist, persist, maintain and regenerate its vital cycles, structure, functions and its processes in evolution. Every person, people, community or nationality, will be able to demand the recognition of rights for nature before the public organisms.

Much of the thinking for this new constitution was done by the local indigenous community and NGOs. ... Chevron reacted strongly. Its lobbyist told Newsweek:

The ultimate issue here is Ecuador has mistreated a U.S. company. We can't let little countries screw around with big companies like this – companies that have made big investments around the world.

Such developments constitute a major challenge to the dominant conceptions of the Nature–Human relationship; they also threaten established interest groups and their particular hold on natural resources and development agendas.

#### Environmental Law Enforcement

At the international level, agencies such as Interpol are central players in global environmental law enforcement. In 2010, at the 79th Interpol General Assembly, the Chiefs of Police from 188 countries adopted an Environment Enforcement Resolution. This resolution acknowledges that:

Environmental law enforcement is not always the responsibility of one national agency, but rather, is multi-disciplinary in nature due to the complexity and diversity of the crime type which can encompass disciplines such as wildlife, pollution, fisheries, forestry, natural resources and climate change, with reaching effect into other areas of crime.

(Interpol and UNEP, 2012, p. 2)

Reflecting concern over environmental issues, a summit of International Chiefs of Environmental Compliance and Enforcement was held in March 2012. This forum provided an opportunity for national leaders of environment, biodiversity and natural resources agencies to meet and discuss action around issues such as investigative assistance and operational support, information management, capacity building standards and effective networks, as well as commodity specific side-meetings covering fisheries, forestry, pollution and wildlife (Interpol and UNEP, 2012, p. 2).

Several different consortiums have been forged internationally to deal with specific types of environmental crime. For instance, the International Consortium on Combating Wildlife Crime is comprised of five intergovernmental organizations working to bring co-ordinated support to the national wildlife law enforcement agencies and to the subregional and regional networks that act in defence of natural resources: the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) Secretariat, Interpol, the United Nations Office on Drugs and Crime (UNODC), the World Bank and the World Customs Organization (WCO). This group is chaired by the CITES Secretariat (CITES, 2012).

On another front, Project Leaf (Law Enforcement Assistance for Forests) is an Interpol and United Nations Environment Programme (UNEP) climate initiative consortium that is directed against illegal logging and related crimes. The objectives of this Project are to:

- form National Environmental Security Task Forces (NESTs) to ensure institutionalized co-operation between national agencies, Interpol NCBs (National Central Bureau), and international partners;
- conduct operations to suppress criminality, disrupt trafficking routes and ensure the enforcement of international and national legislations on sustainable forestry;
- expand the project through awareness raising making a real contribution to global emissions goals, the protection of biodiversity and preventing environmental destruction (Interpol, 2012).

A NEST is a task force of a firmly established team of experts who work together to address a specific issue. They are comprised of senior criminal investigators, criminal analysts, training officers, prosecutors, financial specialists, forensic experts and others, drawn from police,

customs, environmental and other specialized enforcement agencies, and also involving non-government and regional organizations as appropriate.

Environmental policing is carried out in the light of both considerable variations in policing functions and agencies, and in relation to different levels of government (White, 2011b). To put it differently, those who do 'policing' work may not be the police, and the police are not necessarily involved directly in all types of environmental law enforcement work. Environmental law enforcement includes officials working for local municipal councils (and rural shire councils) through to those working on behalf of Interpol in Thailand. It also includes a wide range of NGOs that operate in various official and unofficial capacities. For instance, animal welfare may be deemed to be the official responsibility of organizations such as the Royal Society for the Prevention of Cruelty to Animals (RSPCA) who then investigate and prosecute cases of animal abuse. Other NGOs, such as Greenpeace Amazon, may not have an 'official' role per se, but nonetheless gather evidence of activities such as illegal logging which can then be passed on to relevant police and judicial authorities. Who precisely is going to deal with which type of crime is partly a function of the alleged offence, since this will often dictate the agency deemed to be responsible for a particular area – whether this is disposal of hazardous waste, trade in endangered species, illegal fishing or money laundering associated with trafficking of illegal forest products.

#### Courts, Prosecution and Penalties

Today, there are over 350 environmental courts and tribunals (ECTs) authorised in some 41 countries (Pring and Pring, 2009). In part, the growth in the number of ECTs has mirrored the increasing importance of environmental matters in international forums and law. The impetus for specialist judicial forums stems from continual pressures worldwide for effective resolution of environmental conflicts and/or expanding recognition of the need for procedural and substantive justice vis-à-vis environmental matters. For instance, the 1992 United Nations Conference on Environment and Development adopted a series of principles. Principle 10 of the Rio Declaration, in mandatory terms, specifies that 'Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided' by states in environmental matters. Pring and Pring (2009, p. xiii) explain that effective 'access to justice' can be seen in three basic stages – at the beginning, middle and end of the adjudication process: (1) access to get to and through the ECT door; (2) access within the ECT to proceedings which are fair, efficient, and affordable; and (3) access to enforcement tools and remedies that can carry out the ECT's decision and provide measurable outcomes for preventing or remedying environmental harm. Among the building blocks for an effective environmental court or tribunal are the mobilization of scientific and technical expertise and the competence of judges and decision-makers.

With regard to the latter, the establishment of courts with special expertise in environmental matters provides an institutional setting within which judicial training can find most purchase. For example, Interpol provides information to support the work of prosecutors of environmental crimes, while in England a substantial tool kit has been prepared to guide magistrates in assessing the seriousness of environmental offences, determining sentencing criteria for environmental offences and working through specific types of cases (Interpol Pollution Crime

Working Group, 2007; Magistrates' Association, 2009). The United Nations Environment Programme (2007) likewise has put resources into judicial training on environmental law. These documents are underpinned by the idea that we need to take environmental crime seriously, and to do so we need sanctions that reflect the seriousness of the crime. However, a defined environment court reaffirms and concretizes the importance of these ideas. It does so by providing a ready forum for the development of specialist expertise aided by the availability of technical experts within the court itself (see Preston, 2011a). Moreover, such courts and tribunals provide a ready platform for the further extension of environmental jurisprudence and coherent sanctioning processes.

The multiple demands placed upon specific environmental protection agencies by different sections of government, business and community, and the varied tasks they are required to juggle (for example, compliance, education, enforcement), may lead to a dilution of their enforcement capacities and activities in both the national sphere and the international arena. The expense of fighting cases in higher courts is itself a deterrent for agencies that are cash-strapped yet have to assume the legal costs associated with prosecution. Special environmental courts and tribunals offer the hope of lower costs and an array of alternative dispute resolution procedures (Pring and Pring, 2009). Accordingly, the establishment of such agencies may well have a positive ripple effect throughout the environmental law enforcement and prosecution landscape.

It may well be that an International Environment Court (or equivalent) with requisite United Nations support is required as well (see Higgins, 2012; but also see Hinde, 2003). This is especially so if we are to adequately deal with environmental matters such as for example, those pertaining to the international spaces of our oceans (for example, pollution, concentrations of plastic, illegal fishing, transference of toxic materials). Such a court could draw together transboundary expertise from the various environmental law enforcement networks to assess environmental crimes and harms that have international or global consequences.

A series of mock trials, for example one held on 30 September 2011 in the UK Supreme Court on the Canadian Athabasca tar sands (among other issues), and another organized by the Environmental Defenders Office in Melbourne on 18 February 2012 on climate change and provision of eight new coal mines in Queensland's Galilee Basin, were based in part upon notions of ecocide, Earth rights and superior responsibility of corporate managers. In most cases, these managers were found guilty of extensive destruction, damage to or loss of ecosystem(s) well-being. These events, too, sharpen the focus on the possibilities and limitations of existing environmental legal institutions.

A range of penalty types, approaches and mechanisms have emerged in regards to environmental sanctions. These fall into the broad categories of civil, administrative and criminal justice responses. Recent developments in this area include the following types of sanctions and remedies (White, 2010):

- prosecution as a central tool in enforcement and compliance activities, which means
  using the full application of criminal laws and criminal sanctions strategically and in
  proportion to the nature of the offence, including the use of imprisonment;
- alternative sentencing mechanisms which involve the compulsory contribution of offenders to an environmental project, that requires restoration or enhancement of

the environment;

- civil penalties for less serious breaches of environmental law, which ensure timely and efficient application of sanctions appropriate to the nature of the offence;
- imposition of stricter liability regimes (and use of nominated accountability) given the technical and resource difficulties in prosecuting large companies, which criminalizes actions in ways that allow courts to sidestep some issues of *mens rea* in cases of corporate crime;
- tailored enforcement approaches that take into account organization type, which
  means that sanctions such as fines are suited to the firm-type rather than the offence
  committed;
- restorative justice and enforceable undertakings approaches that can involve the
  offender, victim and community mutually discussing the nature of the offence and
  suitable remedies, as a prosecution alternative, and which are aimed at repairing the
  harm at a substantive level.

The sanctioning process for environmental offences presently covers a broad range of strategies, with new possibilities on the horizon (Preston, 2007, 2011b). Bell and McGillivray (2008), for instance, mention the use of cumulative penalties, as in the case of points systems in motoring offences, so that a penalty infringement notice (PIN) does not become 'routine' or permit wealthy operators the 'right' to pollute. The more often you cause harm, the greater the penalty each time. Ensuring that the enforcement hammer is brought down hard enough on violators is also seen by Eastern African judges as essential to countering the idea that low fines are merely the cost of doing business (Mwebaza, 2010, p. 8). How the burgeoning range of sentencing options translates into particular sentencing outcomes warrants ongoing and close scrutiny. Importantly, it also points us in the direction of problem solving, rather than punishment *per se*, as a key objective of courts dealing with environmental harm.

#### Environmental Victims

Transnational environmental crime increasingly incorporates, in law, transgressions against humans, animals (and plant species) and specific environments. Who or what is harmed has major implications for both environmental law enforcement and for legal remedies and processes as well.

For example, a restorative justice approach seems to be ideally suited to dealing with environmental crimes insofar as they hold that promise that things will be done to rehabilitate or repair the harms that have occurred. A creative interpretation and implementation of restorative justice principles allows for recognition of particular categories of victims that may not normally be considered. For example, Preston (2011b, p. 143) describes how future generations or non-human biota may be considered victims:

Environmental harm may require remediation over generations and hence the burden and the cost of remediation is transferred to future generations. Remediation of contaminated land and restoration of habitat of species, populations and ecological communities are examples of intergenerational burdens passed from the present generation to future generations. Where intergenerational inequity

is caused by the commission of an environmental offence, the victims include future generations .... The biosphere and non-human biota have intrinsic value independent of their utilitarian or instrumental value for humans. When harmed by environmental crime, the biosphere and non-human biota also are victims. The harm is able to be assessed from an ecological perspective; it need not be anthropocentric.

Identification of victims is only part of the restorative process however. The voice of the victim needs to be heard as well as part of restorative justice proceedings.

Harm is not necessarily the same as victimization, especially if the latter is interpreted as applying strictly to humans. For example, environmental victimization has been defined as specific forms of harm which are caused by acts (for example, dumping of toxic waste) or omissions (for example, failure to provide safe drinking water) leading to the presence or absence of environmental agents (for example, poisons, nutrients) which are associated with *human* injury (see Williams, 1996). Management of these forms of victimization is generally retrospective (after the fact), and involves a variety of legal and social responses. Importantly, the central actor in this definition is humans (not non-human animals or eco-systems). Much the same can be said of reconceptualizations of environmental rights as 'human rights' in that the selfsame concept is premised upon notions of humanity.

Nonetheless, the law does allow for a modicum of protection for the non-human as well as the human. This is reflected in legislation pertaining to endangered species (for example, particular animals such as tigers) and to conservation more generally (for example, in the form of national parks). The definition of 'victim' is indeed evolving and expanding. Public interest law, for example, has been utilized to give standing to human representatives of non-human entities such as rivers and trees. For example, a river was represented at a restorative justice conference in New Zealand by the chairperson of the Waikato River Enhancement Society (Preston, 2011b, p. 144, fn 53). In increasing number of cases there are 'surrogate victims' who are recognized as representing the community affected (including harms to particular biotic groups and abiotic environs) for the purpose of the restorative process. Public trust and public interest law have been used to establish future generations as victims of environmental crime (Mehta, 2009; Preston, 2011b), the victims including human as well as the environment and non-human biota, for which surrogate victims (such as parents or NGOs) have provided representation.

Who speaks for whom is nevertheless still controversial; especially when it comes to natural objects such as trees, rivers and specific biospheres (Besthorn, 2004). Critics, for example, argue that there is a danger that if agencies such as the court adopt environmental restoration within a particular framework of understanding – both in regards to sanctioning processes, and constructions of 'Nature' – then more harm could result. Part of the concern here is the idea that the 'voice' that gets heard, when it comes to restoration policy (including one might presume, restorative justice proceedings) is too often that of the human, not that of the non-human. This raises important and fascinating issues regarding the criteria by which judgement around restoration is to be made, and the kind of ecological and zoological expertise required to adequately be a surrogate victim for the non-human.

While the environment is obliquely referred to in the UN Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power, it is clear that for human and non-human