

Dealing with Environmental Harm: Green Criminology & Environmental Law Enforcement

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The Tasmanian Institute of Law Enforcement Studies (TILES) publishes regular Briefing Papers on topics related to the Institute's research program. Our fifth Briefing Paper is prepared by Professor Rob White. Rob is Director of the Criminology Research Unit, UTAS, and also is Director of the Australian Clearinghouse for Youth Studies. This Briefing Paper introduces readers to some of the key concepts of green or environmental criminology, and explores issues pertaining to how law enforcement agencies such as the police deal with environmental harm. Rob's book, *Crimes Against Nature: Environmental Criminology & Ecological Justice*, will be published in 2008 by Willan Press.

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Introduction

Environmental issues dominate media headlines today and are forcing many of us to re-evaluate our day-to-day practices – as citizens, as workers, as parents and as members of communities. So, too, concern about the environment is now starting to have greater resonance within the criminal justice field, albeit still in a fairly modest fashion. The aim of this paper is to introduce readers to some of the key concepts of green or environmental criminology, and to explore issues pertaining to how law enforcement agencies such as the police deal with environmental harm.

The paper begins by briefly describing the three core areas of green criminology, which broadly speaking relate to environmental justice, ecological justice and species justice. This is followed by a discussion of the nature and dynamics of environmental crime and the challenges these pose from the point of view of definition, disputation and action. The next section explores practical and organisational matters relating specifically to environmental law enforcement. The paper concludes by raising questions for law enforcement officials and others working in the criminal justice field about how best to negotiate and deal with environmental harms now and into the future.

Green Criminology

The field of environmental or green criminology is an emerging area of interest within criminology. Broadly speaking, green criminology is concerned with the study of environmental harm, environmental laws and environmental regulation by criminologists.³³ Insights provided by criminology on these questions are useful in their own right, as well as highlighting the importance of working in multi-dimensional ways.

For example, the development of green criminology over the last 20 years or so has led to new interests, new conceptualisations and new techniques of analysis.^{34, 7, 30} This is because there is increasing *acknowledgement* of the problem of environmental degradation and destruction, and the relevance of this to traditional criminological concerns with social injury and social regulation. There is also greater awareness of the *inter-connectedness* of social and environmental issues, for

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example, matters relating to poverty, health, indigenous people's rights, exploitation of non-human nature, corporate business misdealings, state corruption and so on are seen in many instances to be inseparable. As well, there is recognition of the need for *multi-disciplinary approaches* to the study of environmental harm, involving co-operation between different 'experts', including those with traditional and experiential knowledge associated with culture and livelihood (such as indigenous peoples and farmers), as well as sensitivity to ideas and research generated in intellectual domains such as law, police studies, political science, zoology, biology, philosophy, sociology and chemistry.

These kinds of observations and interrelationships are forcing us to re-think the social and natural universe, and to re-conceptualise the relationship between humans and nature in ways that accord greater weight to the non-human when it comes to assessing issues such as environmental harm. In practical terms, this translates into new and over-lapping domains of consideration within green criminology itself.

Analysis of environmental issues proceeds on the basis that someone or something is indeed being harmed. Within green criminology there are three broad approaches to the conceptualisation of environmental harm. These include reference to environmental justice, ecological justice and species justice.³⁶

Environmental Justice

Environmental justice refers to the distribution of environments among peoples in terms of access to, and use of, specific natural resources in defined geographical areas, and the impacts of particular social practices and environmental hazards on specific populations (e.g. ethnic minorities). In other words, the concern is with human beings at the centre of analysis. The focus of analysis therefore is on human health and wellbeing and how these are affected by particular types of production and consumption. A distinction is usually made between environmental issues that affect everyone, and those that disproportionately affect specific individuals and groups.^{37,21} In some instances, there may be a basic 'equality of victims', in that some environmental problems threaten everyone in the same way, as in the case for example of ozone depletion, global warming, air pollution and acid rain.⁴ As extensive work on specific incidents and patterns of victimisation demonstrate, however, it is also the case that some people are more likely to be disadvantaged by environmental problems than others.^{12, 14, 20} Within the environmental justice framework, it is humans that matter.

Ecological Justice

Ecological justice refers to the relationship of human beings generally to the rest of the natural world, and includes concerns relating to the health of the bio-

sphere, and more specifically plants and creatures that also inhabit the biosphere.^{29, 15} The main concern is with the quality of the planetary environment (that is frequently seen to possess its own intrinsic value) and the rights of other species (particularly animals) to life free from torture, abuse and destruction of habitat. Specific practices, and choices, in how humans interact with particular environments present immediate and potential risks to everything within them. Ecological notions of rights and justice see humans as but one component of complex ecosystems that should be preserved for their own sake, as supported by the notion of the rights of the environment. In this framework, all living things are bound together and environmental matters are intrinsically global and trans-boundary in nature. Ecological justice demands that how humans interact with their environment be evaluated in relation to potential harms and risks to specific creatures and specific locales as well as the biosphere generally. Within the ecological justice framework, it is environments that matter.

Species Justice

The third strand of green criminology is that represented by those who wish to include consideration of animal rights within the broad perspective.^{8, 6} In specific terms, concepts such as speciesism may be invoked. This refers to the practice of discriminating against nonhuman animals because they are perceived as inferior to the human species in much the same way that sexism and racism involve prejudice and discrimination against women and people of different colour.²⁵ The animal-centred discourse of animal rights shares much in common with the environment-centred discourse of green criminology, but certain differences, as well as the commonalities, are also apparent.⁶ For example, nonhuman animals are frequently considered in primarily instrumental terms (as pets, as food, as resources) in environmental criminology, or categorised in mainly anthropomorphic terms (such as 'wildlife', 'fisheries') that belie the ways in which humans create and classify animals as Other. Within the nonhuman animal concerns framework, it is animals that matter.

There are, then, three broadly different but connected conceptions of 'justice' within green criminology. Within the particular framework of each conception are divisions and differences based upon how specific 'interests' are conceptualised.

Very often conceptualisation of environmental harm encapsulates the concerns of all three strands – protection of biodiversity within our forests is not incompatible with sustaining localised environments, protecting endangered species and ensuring human happiness. These separate frameworks nevertheless have major consequences with regard to where individual scholars and researchers put their time and energy. The study of environmental crime, including animal



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cruelty, is greatly influenced by the perspective one has about the natural world generally, and thereby which issues ought to receive specific priority.

From a green criminology perspective, the key questions are: how do we engender a system of regulation and human intervention that will provide the best outcome for human and nonhuman, and what criteria do we use to conceptualise the nature of harm arising from human actions?

Environmental Crime

How environmental harm is empirically dealt with is highly contested within the green criminology literature, and there is no single definition that will satisfy all. One reason for this ambiguity over definition is that environmental harm can be conceptualised as involving acts and omissions that are both 'legal' and 'illegal'. For instance, from an ecological perspective, some activities, such as clearfelling of old growth forests, are legal but deemed to be highly destructive. The criteria for 'harm' and 'crime', therefore, depend very much upon the values, knowledge and deliberations of those investigating the nature of the human activity.

Defining harm is ultimately about values and priorities, and not just what the law says it is. The development of a green or environmental criminology as a field of sustained research and scholarship will thus by its very nature incorporate many different perspectives and strategic emphases. After all, it deals with concerns across a wide range of environments (e.g. land, air, water) and issues (e.g. fishing, pollution, toxic waste). It involves conceptual analysis as well as practical intervention on many fronts, and includes multi-disciplinary strategic assessment (e.g. economic, legal, political, social and ecological evaluations). It involves the undertaking of organisational analysis, as well as investigation of 'best practice' methods of monitoring, assessment, enforcement and education regarding environmental protection and regulation. Analysis needs to be conscious of local, regional, national and global domains and how activities in each of these overlap. It likewise requires cognisance of the direct and indirect, and immediate and long-term, impacts and consequences of environmentally sensitive social practices.

Analysis that is pitched at too high a level of abstraction, and that correspondingly reinforces rigid definitions and absolutist positions (e.g. humans come first; the earth is most important; any harm to animals is bad) precludes closely considered analysis of specific situations. The complexities of defining environmental harm, and debating how best to proceed in specific circumstances, are also mirrored in discussions of types of environmental harm. The categorisation of environmental harm is varied in that there are different ways in which environmental crimes have been conceptualised and sorted.^{34, 13} From the point of view of environmental law, for example, environmental harm encapsulates a wide range of concerns, some of which are subject to criminal sanctions but many of which are not.¹⁰ The kinds of issues canvassed under environmental law relate to laws and policies intended to protect water (e.g. pollution), air (e.g. ozone depletion), land

(e.g. pesticide regulation) and biodiversity (e.g. endangered species). From the point of view of harm, writers have also incorporated under the environmental harm umbrella concerns relating to employee health (e.g. exposure to radioactivity) and pathological indoor environments (e.g. the home, hospitals, workplaces).^{27, 16}

Criminologists and others are thus categorising environmental crimes in varying ways, and how they do so has implications for the study of environmental harm. For instance, Carrabine et al¹³ discuss environmental crimes in terms of primary and secondary crimes. Green crimes are broadly defined simply as crimes against the environment. Primary crimes are those crimes that result directly from the destruction and degradation of the earth's resources, through human actions. Secondary or symbiotic green crime is that crime arises out of the flouting of rules that seek to regulate environmental disasters, such as illegal toxic waste disposal.

There are a number of intersecting dimensions that need to be considered in any analysis of specific instances of environmental crime.³⁴ These include consideration of who the victim is (human or non-human); where the harm is manifest (global through to local levels); the main site in which the harm is apparent (built or natural environment); and the time frame within which harm can be analysed (immediate and delayed consequences). These various dimensions of harm pose particular challenges for environmental law enforcement, especially from the point of view of police interagency collaborations, the nature of investigative techniques and approaches, and the different types of knowledge required for dealing with specific kinds of environmental harm. Moreover, many of the operational matters pertaining to environmental harm are inherently international in scope and substance.

Contemporary discussions of transnational environmental crime, for example, are highlighting issues such as:

- Illegal transport and dumping of toxic waste;
- Transportation of hazardous materials such as ozone depleting substances;
- The illegal traffic in real or purported radioactive or nuclear substances;
- Proliferation of 'e'-waste generated by the disposal of tens-of-thousands of computers and other equipment;
- The safe disposal of old ships and airplanes;
- Local and transborder pollution, that is either systematic (via location of factories) or related to accidents (e.g. chemical plant spills);
- Bio-piracy in which Western companies are usurping ownership and control over plants developed using 'traditional' methods and often involving indigenous people's in the third world;
- Illegal trade in flora and fauna; and
- Illegal fishing and logging.

The list goes on. Indeed, the nature and dynamics of environmental harm are such that discussions surrounding definitions, deliberations and typologies will continue. While these discussions are crucial to informing our thinking in the here and now about environmental issues, work undertaken in this area also conveys a sense of urgency and priority vis-à-vis preventing harm. Regardless of disputes and contested ideas, there is ample documentation of environmental harm across many different domains of human activity.

In the light of this exposure of harms, a core concept utilised in green criminology, amongst other fields and disciplines dealing with the environment, is that of the precautionary principle. Indeed, social justice and ecological considerations demand that prevention of harm be conceptualised both in terms of the precautionary principle and in regards to intergenerational equity. The precautionary principle refers to the idea that official action be taken to protect people and environments in cases where there is scientific uncertainty as to the nature of the potential damage or the likelihood of risk. To invoke the precautionary principle is to involve assessment of risk. The principle of intergenerational equity asserts that future generations have the right to environments that are the equal in terms of quality and amenity to that of the present generation. Environmental law enforcement and crime prevention ought to be tied in some way to these wider concerns as well as to immediate pragmatic cases in which the harm is apparent and intervention already institutionally warranted.

Environmental Law Enforcement

One of the key lessons from contemporary police studies is that it ought to be based largely on a problem-solving, rather than a policy-prescribed, model of intervention. In other words, specific problems demand specific kinds of responses, and a "one-size-fits-all" policy will not be adequate to the task. This applies to environmental policing as it does to other types. This means that in pursuing environmental law enforcement there is a need to include place-based and harm-based analyses that go to the heart of the issues at hand.

Different kinds of places lend themselves to different sorts of environmental harms and different kinds of intervention. Initially, we have to be cognisant of the varying issues that pertain to different geographical levels. Some issues are of a planetary scale (e.g. global warming), others regional (e.g. oceans and fisheries), some are national in geographical location (e.g. droughts in Australia), while others are local (e.g. specific oil spills). Similarly, laws tend to be formulated in particular geographically defined jurisdictions. With regard to nation-states such as Australia, relevant laws include international law, federal laws, state laws and local government by-laws. A problem-solving approach to

policing of environmental harm demands a certain level of specificity. That is, general pronouncements about the nature of harm need to be accompanied by particular site or harm analysis.

The nature of environmental crime poses a number of challenges for effective policing. As indicated above, such crimes may have local, regional and global dimensions. They may be difficult to detect (as in the case of some forms of toxic pollution that is not detectable to human senses). They may demand intensive cross-jurisdictional negotiation, and even disagreement between nation-states, in regards to specific events or crime patterns. Some crimes may be highly organised and involve criminal syndicates, such as illegal fishing. Others may include a wide range of criminal actors, ranging from the individual collector of endangered species to the systematic disposal of toxic waste via third parties.

One of the initial questions to be asked of environmental crime is who is actually going to do the policing?³² Many jurisdictions have specialist agencies – such as environmental protection agencies – which are given the mandate to investigate and prosecute environmental crimes. The police generally play an auxiliary role in relation to the work of these agencies.

In some countries, however, members of the police service are especially trained up to be environmental police. In Israel, for example, an environmental unit was established in 2003 within the framework of the Police. It is financed by the Ministry of the Environment and includes police officers who form the 'Green Police'. These police carry out inspections, enforcement and investigation under a variety of laws in areas such as prevention of water source and marine pollution, industrial and vehicular pollution, hazardous substances, and prevention of cruelty to animals. Each year they carry out thousands of inspections of factories, landfills and sewerage treatment sites, in the process liaising with regional offices of the Ministry of the Environment.¹⁹ The UK also has wildlife officers in most constabularies

Within a particular national context, there may be considerable diversity in environmental law enforcement agencies and personnel, and police will have quite different roles in environmental law enforcement depending upon the city or state within which they work.^{32, 28} In a federal system of governance for example, such as with the USA, Canada and Australia, there will be great variation in environmental enforcement authorities ranging from police operating at the local municipal level (such as the Toronto Police Service) through to participation in international organisations (such as Interpol or Europol).

Specific kinds of crime may involve different agencies, depending upon the jurisdiction. For example, the policing of abalone poaching in Australia is generally undertaken by civilian authorities, except in Tasmania

and the Northern Territory where it is in the hands of the marine police.³¹ The trans-border nature of illegal fishing operations – across state as well as international boundaries – means that often a local police service (such as Tasmania Police) will necessarily have to work collaboratively with national agencies (such as the Australian Federal Police), that, in turn, will have relationships with regional partner organisations (such as Interpol).

In jurisdictions such as Canada, the task of enforcing the law against poaching (e.g. of lobsters) is in the hands of unarmed fishery officers.²³ The powers and resources available to specific law enforcement officials will vary greatly from jurisdiction to jurisdiction, and from agency to agency, depending upon whether or not the police are directly involved, and whether or not agents have been granted specific powers of investigation, arrest, use of weapons and so on to enforce environmental laws. Criminal enforcement of environmental law is basically shaped by specific national context, and the legislative and organisational resources dedicated to policing local environmental harms as well as those involving transborder incidents.¹⁷

Environmental crimes frequently demand a high level of collaboration with non-police agencies. For example, illegal fishing often involves customs officials, quarantine officials, federal and local police officers and sometimes the Navy. How best to organise law enforcement activities in regards to different environmental crimes is a perennial issue. Should specific environmental police units, within police services, be created, as in the case of Israel? Or, should 'flying squads' be created, that are comprised of personnel from different agencies and that reflect inter-agency collaboration and expertise?²² Or, should it be the specific crime in question that ought to shape the organisational make-up and operational activities of law enforcement? It has also been suggested that there is a need to develop systematic environmental crime policing strategies to provide broad policy guidance to police jurisdictions and to ensure consistency in the expanded police interactions with non-police environmental agencies.⁹

There are also major resource issues at stake here. This has a twofold character. First, governments will play a role setting priorities in regards to certain kinds of state intervention. For instance, the abalone industry in Australia is highly lucrative and generates millions of dollars in business each year. The global demand for abalone, and the high profits from abalone sales, has contributed to the growth in illegal harvesting. From a government point of view, this is a crime worth putting policing and other criminal justice resources into, including in the areas of prosecution and sentencing. On the other hand, there are cases in which environmental harm might be occurring, but in which governments are, for a variety of reasons, reluctant to act (e.g. illegal logging). Secondly, senior police managers have to decide how best to allocate resources within their agency. Public opinion, media and political attention, and internal policing dynamics will all affect if, why and how specific types of environmental crime are addressed. How environmental issues are perceived within a

police service will inevitably have an impact on organisational priorities.

Related to organisational matters, the dynamics of environmental crime are such that new types of skills, knowledge and expertise need to be drawn upon as part of the policing effort. For example, illegal land clearance can be monitored through satellite technologies.³ Toxic waste and pollution spills may require the sophisticated tools and scientific know-how associated with environmental forensics.²⁶ DNA testing is already being used in relation to logging, fishing and endangered species, that is, to track illegal possession and theft of animals and plants. Powers of investigation, particularly in relation to the gathering of suitable evidence for environmental crime, will inevitably be shaped by state, federal and international conventions and protocols, as well as by availability of local expertise, staff and resources.

The place and role of civilian scientists and experts within police law enforcement agencies and the further specialised professional training of police staff are issues that will require continuing review and assessment. Alongside a general familiarity with emergent technologies and techniques relevant to the detection, investigation, prevention and prosecution of environmental crime, police officers will need to be trained to be able to work in multi-disciplinary, multi-agency teams that also have the capacity to liaise with counterparts in other countries and jurisdictions.

Environmental law enforcement is a relatively new area of police work^{32,9} and is at a stage when perhaps more questions are being asked than answers can be provided. Certainly what would be useful is comparative assessment of local and nationally based 'good practice' in this area. So too, an assessment of how police work that 'gets a result' translates into prosecution processes and actual sentences for environmental offenders, will provide insight into how the work of the courts impacts upon the morale and activities of those working in the field.²³

Another crucial issue for police services, as well, relates to the dynamics of the interface between politics, the environment and law enforcement. Whose side are you on, should you take sides, and under what circumstances you need to take sides, are key questions for police when it comes to dealing concretely with environmental issues. Consider the following scenarios:

Case 1:

Protecting Loggers, Protecting Protesters

McCulloch²² describes how civil action was taken by environmentalists in the state of Victoria against a number of loggers, the Construction Forestry Mining and Energy Union (Forestry Division) and the Secretary of the Victorian Branch of the Forestry & Forest Building Products Manufacturing Division of the union. The environmentalists alleged that during a protest action in the Otway Ranges State Forest in 1999, they were prevented from leaving the forest by the defendants. The trial took over 64 days to be heard and involved

considerable time and financial costs to all concerned. For present purposes, this case raises important issues relating to the practical role of the police in instances where there is conflict between protagonists at the ground level. Police have a duty to uphold relevant laws. They also have a duty to protect individuals from potential harm, including assaults and, in this case, alleged involuntary detainment of protesters by forestry workers. The tensions and passions of the moment place police in a precarious position, one that easily may be seen as partisan rather than 'neutral' when it comes to resolving the immediate situation.

Case 2:

Policing Costs and Forest Protesters

Civil disobedience and public dissent are cornerstones of democracy (in that they reflect freedom of expression and the voices of the people) and have been at the heart of profound changes to present laws – from the unlawful actions of the suffragettes that led women to gaining the vote, to indigenous rights' movements that have altered the relationship between colonial powers and aboriginal peoples. In 2007, Allana Beltran was arrested for sitting silently on a giant tripod in the Weld Valley, dressed as an angel. She was protesting the logging of old-growth forests in Tasmania. What makes this case notable, is that the Tasmania Police, in conjunction with Forestry Tasmania, lodged a claim for nearly \$10,000 in 'lost costs' for having to attend the artist's March forest protest.³⁸ This was criticised by Green politicians as constituting interference in the political process. The editorial of local newspaper *The Mercury* was to advise that for the police, 'Their job is quite simply to enforce the law. Protests are a legitimate form of activity in a free country'.²⁴ The costs of policing protests, therefore, are seen as part of the legitimate costs of ensuring democratic participation. For police managers, however, the policing of such protests nevertheless has an impact on other parts of operational police work. The issue is whether such considerations end up shading into matters of political interference and thereby constitute a stifling of the democratic process.

The Challenges Ahead

Dealing with environmental harm is bound to challenge our conceptions of 'harm', our notions of 'crime' and our capabilities as analysts and practitioners in the criminal justice field. In considering the following issues, it is also apposite to bear in mind the kinds of skills, capacities and organisational relationships that will be needed if we are to prevent environmental harm.

- Many areas of harm to humans, environs and nonhuman animals are presently not criminalised. From an analytical point of view, conceptualisation of harm ought not to rely upon the legal-illegal distinction per se, especially since some of the world's most environmentally disastrous practices are in fact

still legal. Criminological intervention may well entail the exposure of negative, degrading and hazardous practices as a prelude to the banning and close control of such practices. New concepts of harm, as informed by ecological sciences and environmental values, will inevitably be developed as part of this process. Police services will need to be tuned into these kinds of developments.

- The uncertainties surrounding future impacts and consequences means that debate will occur over when preventative measures need to be introduced as a precautionary measure. Differences in opinion over future consequences means that those who take action now (such as protesting against a large polluting pulp mill) for the sake of up-and-coming generations may well be criminalised in the present. But the history of law reform is built precisely upon such tensions. For police, these pose great challenges in terms of professionalism, perceived neutrality in conflicts and expenditure of time, energy and resources vis-a-vis public order policing.
- While the specificity of the harm demands specificity in response, there are some forms of environmental harm that cannot be contained easily due to the enormous scope of the problem. For example, the transnational movement and illegal dumping of toxic waste will require international cooperation amongst police from different nation-states. Coordination of environmental law enforcement will require free exchange of information and constant surveillance across borders. Climate change and how to deal with it will ultimately require global action. It will also involve the criminalisation of what today is considered acceptable practice. For example, the imposition of severe water restrictions, and harsher penalties in regards to wasteful water use, is just one harbinger of things to come.
- Environmental law enforcement ought to be based upon a problem-solving approach, but it is not always easy to discern what is accurate or true when it comes to specific environmental harms. There is a need, therefore, for multi-disciplinary approaches to the study of environmental harm, involving co-operation between different 'experts', including those with traditional and experiential knowledge associated with culture and livelihood (such as indigenous peoples and farmers), as well as sensitivity to ideas and research generated in intellectual domains such as law, zoology, biology, philosophy, political science, sociology and chemistry. On the other hand, we have to be aware that there are major industries of 'denial' of environmental harm, including both corporations and governments, and this places pressure on police to act in non-partisan ways, and in a manner that upholds the rule of law universally.

Finally, it needs to be reiterated that dealing with environmental harm will demand new ways of thinking about the world, the development of a global perspective and analysis of issues, trends and

networks, and a commitment to the 'environment' as a priority area for concerted police intervention. Disputes over definitions of harm, conflicts between different citizen groups and ambiguities associated with police practices in specific situations mean that environmental law enforcement will necessarily be complicated, contentious and, at times, contradictory. It will certainly be challenging.

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