The Palgrave Macmillan Wildlife Trafficking

A Deconstruction of the Crime, the Victims and the Offenders

Tanya Wyatt



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Critical Criminological Perspectives Series Standing Order ISBN 9780–230–36045–7 hardback (*outside North America only*)

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Wildlife Trafficking

A Deconstruction of the Crime, the Victims and the Offenders

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© Tanya Wyatt 2013 Softcover reprint of the hardcover 1st edition 2013 978-1-137-26923-2

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First published 2013 by PALGRAVE MACMILLAN

Palgrave Macmillan in the UK is an imprint of Macmillan Publishers Limited, registered in England, company number 785998, of Houndmills, Basingstoke, Hampshire RG21 6XS.

Palgrave Macmillan in the US is a division of St Martin's Press LLC, 175 Fifth Avenue, New York, NY 10010.

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ISBN 978-1-349-44385-7 ISBN 978-1-137-26924-9 (eBook) DOI 10.1057/9781137269249

This book is printed on paper suitable for recycling and made from fully managed and sustained forest sources. Logging, pulping and manufacturing processes are expected to conform to the environmental regulations of the country of origin.

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

A catalog record for this book is available from the Library of Congress.

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Preface

I have been engulfed in the world of wildlife trafficking for nearly nine years now. I remember the moment that I realised this is what I should be devoting myself to. I was a United States Peace Corps Volunteer in Ukraine working at a women's NGO that was trying to prevent the trafficking of people. I had just completed an MA in Criminology, having written a thesis about human trafficking. In one of the hundreds of magazines and books I read during that two-year period, there was a *National Geographic* article about jaguars and how they were being poached and trafficked. A brief search for scholarly work in this area quickly revealed this was a new avenue for research and one that I immediately felt passionate about and dedicated to.

I have always been an environmentalist. I attribute this to being born and raised in Oregon, one of the greenest states in the US in terms of politics and nature. The view of the Three Sisters snow-capped mountains outside the window of my childhood home certainly contributed to my passion for the planet. My Saint Bernard/Husky mix companion spawned my love of animals. My sister's role as 'Recycle Girl' for Tumalo Grade School undoubtedly engrained the obsession to produce as little waste as possible. This led me to a degree in biology, which was supposed to have led to a career in zoology or forensics, but the former never materialised and the latter seemed too boring after hours of labs. So I went for hands-on law enforcement instead and was a police officer for nearly five years. I thought this would be a meaningful way to assist people, but became disillusioned that this wasn't the way to help. This - and a terrible economy in 2002 - led my husband and me to the Peace Corps, where I had my revelation.

I began my research into wildlife trafficking at the University of Kent where I had the good fortune of being supervised by two different schools: the School of Social Policy, Sociology and Social Research, where Criminology sits, and the Durrell Institute of Conservation and the Environment. It was the perfect blend of my experiences and passions – justice and the environment. Here I learned about Green Criminology, for which I have become a strong advocate. My research introduced me to many of the stakeholders that are active in combatting wildlife trafficking. Upon graduation, it was disappointing to find that academic departments by and large were uninterested in Green Criminology and my research. Whilst looking for work, I volunteered and worked part time at various NGOs and for the US Federal Government, looking for a way to contribute to the debates on environmental policy and the illegal wildlife trade. When the job announcement for Northumbria listed Green Criminology as a speciality, I knew that I needed to apply. And that brings me to my current situation, where I am an active member of an international Green Criminological community that researches both wildlife trafficking and a range of other invisible green crimes and harms that plague our planet.

This book is the compilation of the years of research I have conducted, the thousands of articles and media reports that I have read and the hundreds of conversations that I have had with police, NGOs and academics over the last nine years. It is intended to provide a wide overview of wildlife trafficking, to move forward the conceptualisation and understanding of victims and offenders, to further the direction of how prevention strategies and policy interventions should be approached, and to advocate for more political will to end this urgent threat to many of the species of the globe.

Acknowledgements

My thoughts and understanding have been shaped by a variety of people over the years and I would like to thank them: Dr Majid Yar, Professor Larry Ray, Professor Stuart Harrop, Dr Alison Rosser, Professor Nigel South; Crawford Allan and the staff of TRAFFIC North America, who let me spend a summer with them doing research; Michael Zwirn and the staff of Wildlife Alliance, who brought me on as a volunteer; Senator Jeff Merkley and his Capitol Hill staff, who gave me an internship and taught me the inner workings of the US government; David Higgins and the staff of INTERPOL's Environmental Crime Programme, who let me spend a week interviewing them: Professor Lorraine Elliott and colleagues at the Transnational Environmental Crime Project, who let me spend a wonderful sabbatical at Australian National University. Thank you to the many other people in the police, customs, border agencies, intergovernmental organisations, CITES and NGOs in Russia, the US, the UK, Australia and many countries in Europe and Asia for taking the time to talk with me. A final thank you to my husband for changing his career. This allowed me to begin mine and has given us a lifestyle where we can continue travelling the world together.

Acronyms

ACRES	Animal Concerns Research and Education Society
ALERT	Australasian Environmental Law Enforcement and
	Regulators Network
ARREST	Asian Regional Response to Endangered Species
	Trafficking
ASEAN-WEN	Association of South East Asian Nations-Wildlife
	Enforcement Network
CAWT	Coalition Against Wildlife Trafficking
CITES	Convention of the International Trade in
	Endangered Species of Fauna and Flora
EIA	Environmental Investigation Agency
ENV	Education for Nature Vietnam
FFI	Fauna and Flora International
GRASP	Great Ape Survival Project
ICCAT	International Commission for the Conservation of
	Atlantic Tunas
ICCWC	International Consortium on Combatting Wildlife
	Crime
IFAW	International Fund for Animal Welfare
INTERPOL	International Criminal Police Commission
IUCN	International Union for the Conservation of
	Nature
LRA	Lord's Resistance Army
MAFF	Ministry of Agriculture, Forestry and Fisheries
NEST	National Environmental Security Taskforce
NGO	Non-Governmental Organisation
RENCTAS	National Network Against the Trafficking of Wild
	Animals
SAWEN	South Asia Wildlife Enforcement Network
SSN	Species Survival Network
TRAFFIC	Trade Records Analysis of Flora and Fauna in
	Commerce
UNEP	United Nations Environment Programme

UNESCO	United Nations Educational, Scientific and
	Cultural Organization
UNODC	United Nations Office of Drugs and Crime
USAID	United States Agency for International
	Development
USFWS	United States Fish and Wildlife Service
WCO	World Customs Organization
WWF	World Wildlife Fund

1 Introduction

Trading wildlife is not a new phenomenon. Humans have been reliant on wildlife for food and shelter throughout history. It could be said then that the use of wildlife - both non-human animals and plants – is engrained within human cultures. This relationship with wildlife has led and is currently connected to the overexploitation of species. Historically, there is evidence of this overexploitation. For instance, in the US in the 1800s, both Atlantic Sturgeon and Shortnose Sturgeon were hunted for meat and caviar to such levels that by the early 1900s the populations had dropped severely and fishing was greatly reduced (Sweka et al. 2006). Populations began to recover and by 1980 commercial fishing operations of Atlantic Sturgeon were again at high levels (Sweka et al. 2006). This only lasted until 1996 when populations again fell, and a moratorium was placed on commercial and recreational fishing (Sweka et al. 2006). Fishing of the Shortnose Sturgeon only lasted until 1967, when it was listed on the Endangered Species Preservation Act (American Museum of Natural History 2010). Similarly, in New Zealand with the arrival of Europeans in the 1830s, pervasive logging of the native Kauri trees led to their populations greatly dwindling (Terra Nature 2003). Local construction, the exporting of logs, clearing for agriculture and fires have resulted in less than 1 per cent of the original forests surviving (Terra Nature 2003). Yet despite the clear loss of these forests, Kauri trees were not protected until 1973 (Terra Nature 2003).

Regulations and laws to curb such destruction of wildlife have been in existence for hundreds of years, although in the examples above, none were put into place until quite late (Lyster 1985). Even with these laws though, humans continue to threaten the survival of other species, largely through consumption. As Lyster (1985) argues, a critical juncture has been reached where humans now have the capability to decimate entire populations of wildlife and because of this destructive capacity, more intense initiatives at the international level must be undertaken. As will be detailed, measures to protect species from extinction are being taken, but regardless of this, consumption of wildlife thwarts the restrictions and still threatens the survival of many species. This book will explore the intricacies that the illegal trade in wildlife encompasses and the current international efforts to stop this devastating green crime.

To begin, this introductory chapter provides the background information regarding the illegal wildlife trade and the green criminological perspective that sets the foundation for the entire text. First, the issue of definition is addressed detailing all the aspects of the smuggling operation, that is poaching, harvesting, collecting, transporting, exporting, importing, processing and selling. An overview of what has been and is being trafficked is given as well as the estimated numbers that are trafficked. The list will include, but is not limited to, live non-human animals and plants, and their products and derivatives. This leads to a discussion of the challenges in estimating both the scale and the profit of the illegal wildlife trade due to the differing value of the 'commodity' along the smuggling chain and the particular dynamics of the dark figure of this crime. The green criminological context in which the book is framed is then laid out. The introduction concludes with an outline of the entire book, with brief details of the contents of each chapter.

Definitions

The illegal wildlife trade is a multi-stage smuggling operation which encompasses numerous activities that will each be defined here. Wildlife is taken to comprise all non-human animals and plants that are not companion or domesticated animals. This means that 'pets' are not wildlife, nor are livestock, but that zoo animals and others that are being farmed, yet are not truly domesticated, are also wildlife. This would include bears and tigers, for instance, which are now the focus of farming initiatives. Wildlife does include all plants and trees as well as propagated individuals.

In the illegal wildlife trade, wildlife is first poached, collected or harvested. Poaching is the act of killing the non-human animal to use it in one of the various ways that will be detailed below. The killing is accomplished in a variety of ways, depending upon the species of the non-human animal. Poaching of game meat, such as deer, sometimes involves the use of dogs to flush out the prev so that it can then be shot. Other non-human animals are also killed by guns. For instance, elephant and rhinoceros poaching often involves weapons, though in some instances rather than rifles or shotguns, tranquiliser guns are used to only subdue the individual animal and then the tusk or horn is taken while it is still alive. Poaching can also involve snares and traps that either kill the animal or hold it until it can be killed. This is the case when poaching fur-bearing mammals and ungulates for traditional medicines. Pits are also used to capture and then transport or kill terrestrial non-human animals. Fish and marine mammals are obviously caught with nets and hooks. There are undoubtedly other means by which wildlife is poached in addition to those listed here.

However, not all non-human animals are killed within the illegal wildlife trade. The collection of wildlife occurs when non-human animals or plants are taken alive, again to be used in various ways. Often the live wildlife is captured with nets or traps and then transported or smuggled further along the smuggling chain. For some species, the young or eggs are targeted for ease of capture and smuggling. For some non-human animals, like the pangolin, being kidnapped is unfortunately quite simple as they roll into a protective ball to escape predators. If that predator is a human, they can easily place the pangolin in a sack to be transported to the market or restaurant to where they are bound. Plants too are taken alive and then smuggled to their final destination. Harvesting refers to the routine killing of non-human animals or plants in order to supply both the legal and illegal markets. Harvesting is often the term used when trappers hunt furbearers. It is also the language used when cutting timber trees are harvested, both legally and illegally, to be used for building houses and furniture, for fuel etc.

The language defined here is the terminology typically seen in texts and heard in the media. Arguably though, the words chosen desensitise the listener or reader from the harm that is taking place. Non-human animals are 'killed' or 'harvested' rather than 'murdered' – a word reserved only for human victims. Non-human animals are also 'collected' or 'captured', but as Sollund (2011) proposes, this is akin to kidnapping and can certainly be referred to as such. The vocabulary employed immediately sets non-human animals and plants apart from people and makes them the 'other', thus detaching them from humans. To avoid this distancing, insensitive or 'othering' terms will not be used if possible. This is also the reason for using the term 'non-human animal'. After all, humans are animals too and adopting this term is intended to remove the separation that humans have created between themselves and other species.

This defines only the first point of the smuggling operation. Once taken, either alive or dead, the wildlife is then transported further towards the market and final buyer. This may be directly to a market, or for wildlife that is used to make products, to a processing place, which will be discussed shortly. In either case, the transportation may take place internally within one country, transnationally between adjacent countries or internationally between countries long distances from each other. The transnational and international transportation is where the smuggling occurs, as the wildlife is secreted across borders, avoiding proper Customs and Borders inspections. If headed for a market or for a processing facility, either way, depending upon the tactics employed, this may involve fraudulent documentation. One aspect of this may be to mis-label the species, so documentation shows one species that is allowed to be traded when in fact the actual wildlife is another similar species. In these and other instances with fraudulent documentation, what is actually illegal then gets transferred into the legal sphere. This means that the wildlife is then not physically hidden, but made to appear legitimate.

In international instances of smuggling, the forged documentation must account for either or both the export and the import of the wildlife. This is particularly the case when this involves a species listed within the appendices of the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES), which requires an export permit for Appendix II species and an export and import permit for Appendix I species. Therefore, the country of origin of the wildlife must allow the export of the wildlife, and for Appendix I species, the destination country must also have given permission for the wildlife to be imported. In cases of transiting through a country, CITES species will need a re-export permit indicating it has been transferred between countries. For the domestic wildlife trade, the documentation required varies greatly by country and in some cases may not be required at all. Many countries, though, require hunting permits for non-human animals to be killed. This is also often the case for cutting trees on public land; some government agency most likely has to give permission for the trees to be taken.

When forged or fraudulent documentation is not the tactic employed, the smuggling will entail much more involved means of secreting the wildlife during their journey. Again, this is largely species dependent, but these tactics are known to be used: secret compartments on planes, trains, boats and vehicles; mixed in with other cargo; hidden on people's bodies or within their luggage; and sent in diplomatic post that is not subject to Custom's inspections.

Links to drug trafficking are clear at this point in the chain as numerous law enforcement agencies have confiscated wildlife with drugs. For instance, Colombian and Mexican drug cartels have been stopped at the US border with shipments of wildlife products mixed in with drugs (UN 2002). The Colombian groups are even known to put the smuggled cocaine inside of boa constrictor snakes (UN 2002). Elephant tusks have been confiscated with hashish inside and exotic birds have been in shipments of methamphetamine pills (Wyler and Sheik 2008). Methamphetamine has also been linked to the poaching of abalone in South Africa (Schoofs 2007). According to the Brazilian National Network Against the Trafficking of Wild Animals (RENCTAS 2001), 40 per cent of the wildlife smuggling rings in Brazil, which are thought to number around 400, are suspected of trafficking drugs as well. There is then a connection to drugs within the smuggling aspect of wildlife trafficking. Connections to other crimes will be explored later.

The above list of smuggling tactics is most likely not a complete list of strategies; as the illegal wildlife trade operates in the 'underworld' there are undoubtedly techniques for smuggling that have yet to be uncovered. It can be seen, though, that how the smuggling takes place is largely determined by whether the wildlife is alive or dead. Live wildlife is much more difficult to smuggle and perhaps more conducive to the use of fraudulent paperwork.

As mentioned, for some of the products that are obtained from wildlife, a processing stage takes place. Processing is the alteration of the wildlife into a saleable product. This might involve grinding down rhinoceros horn to make medicine or carving ivory into a dagger or decorative item. Furs and leathers must be dried or tanned and sewn into fabrics, clothing, accessories, etc. Timber must be cut and sawn into boards. Again, this is very species dependent and it is also regionally dependent. For example, elephant tusks are taken in Africa, but will be carved in the Middle or Far East. Fur is poached in Russia and also dried and made into clothing there, so the processing place varies with the species that is being trafficked and therefore may occur before or after smuggling. Again, the language typically used here is very telling. Wildlife is 'processed' into 'products' removing their individuality and sentience and placing them as material objects on the capitalist market.

More of the intricacies of this process will be teased out as examples and explored throughout this book, but needless to say it is a complicated process with many factors at play. After being smuggled to the destination, the wildlife or wildlife product is then sold to the final buyer, who may have in fact made a specific order for a particular species, or the wildlife will be put up for sale at a market. This may be a physical location or a website online. The International Fund for Animal Welfare (IFAW) in the UK conducted a study in 2005 that found selling of illegal wildlife through the Internet to be significant. Their one week online intensive survey of websites found over 9,000 wild non-human animals and their products for sale from over 122 traders (IFAW 2005). Most of the species for sale were protected by law (IFAW 2005). Auction sites are difficult to regulate and that, coupled with the low concern over wildlife crimes, has meant that little effort has been made to police these websites (IFAW 2005). In 2007, eBay, probably the most popular online auction website, agreed not to allow international sales of products made from ivory (Greenemeier 2008), but a further investigation by IFAW (2008) found that eBay was responsible for 83 per cent of online ivory sales and 63 per cent of online wildlife trade. eBay acknowledged that in trying to allow legal domestic trade and preconvention CITES specimens, stopping the illegal portion of the trade was impossible (Greenemeier 2008). It has promised to crack down in the same way as it has tackled drugs and pornography in the past (Greenemeier 2008).

The illegal wildlife trade or wildlife trafficking is this complete process from killing and kidnapping of wildlife, through alteration into products if necessary, then smuggling within or between countries, and selling to the final buyer in person or online. It is an intricate web with many commonalities, yet incredibly diverse in its structure due to the range of species and the products made from them. This is occurring on a significant worldwide scale that is threatening the survival of numerous species around the globe.

Scale and scope

CITES, referred to above, is the international convention that governs the trade of wildlife. It was brought into force in 1975 and since then, it has tracked the amount of trade and illegal activity that has been reported to the Secretariat in Geneva from the member countries. The scope and accuracy of the information about illegality will be discussed in the next section. As of November 2011 there were 5,457 non-human animals listed in the CITES appendices – 625 Appendix I, 4,685 Appendix II and 147 Appendix III (CITES 2012a). Additionally, there were 29,525 plant species - 301 Appendix I, 29,105 Appendix II and 119 Appendix III (CITES 2012a). This means there are 34,982 species that are monitored by the convention and 926 of those are threatened with extinction. These numbers have increased with the March 2013 Convention of the Parties, although at the time of writing, CITES had not updated their website. As is evident, even though it is estimated that there are several million species on the planet of which only 15 per cent are thought to have been discovered (Sweetlove 2011), there is a significant amount of species whose survival is threatened.

The 178 member countries each create a Management Authority to oversee the permit process and a Scientific Authority to advise on the status of species that are traded. Through discussion and collaboration, species are listed within the three appendices so that each contain species facing varying levels of threat and require a different set of permits to be legally traded. Appendix I includes those species that are highly endangered and are only traded within limited circumstances, such as for breeding or scientific purposes. Again, these transactions must have an import and an export permit. Appendix II species are facing less of a threat, but are subject to quotas as to how many individuals can be traded. Export permits must accompany these trades. There is also an Appendix III, which is essentially a way to indicate that a species may be approaching the Appendix II threshold. Parties can request that specific species be placed in Appendix III because they have concern over the survival of local populations.

The non-human animals traded are mammals, birds, reptiles, amphibians, fish and invertebrates. The plants include the range of trees, shrubs, orchids, cacti, vascular and non-vascular plants. The legal trade is worth billions of dollars annually and includes millions of individual wildlife (CITES 2012b). The WWF (n.d.a) estimates a yearly total of USD 160 billion. As indicated above, a portion of this trade is live non-human animals and plants. These fill the demand by zoos, circuses and laboratories as well as for private collections, gardens and as companion animals. There are also derivatives or processed goods made from wildlife. This is incredibly diverse, ranging from food to medicine to clothing to decorative objects. CITES keeps track of 104 different forms in which wildlife is traded. This includes parts, such as baleen, bark, bones, carapaces, claws, feathers, flowers, fruit, gall bladders, genitalia, scales, shells, skins, skulls, tails, teeth and tusks. The trade also includes live non-human animals and plants, eggs and raw coral. Additionally, there are products simply labelled as derivatives and extracts. Belts, leather products (small and large), handbags, carvings, ivory carvings and pieces, trophies, garments and rugs are some of the products that could be decorative items or souvenirs. For a sense of the immensity of the trade, the World Wildlife Fund (WWF) (2002) reports that 25,000-30,000 primates, 2-5 million birds, 10 million reptile skins, 7-8 million cacti and 500 million tropical fish are traded each year. This is just a glimpse of the legal trade. The full scope of both the legal and illegal trade is difficult to truly calculate, but as will be argued throughout this book, is occurring on a scale and in such a way that it must be challenged.

The dark figure of wildlife trafficking

The legal trade then is vast, encompassing hundreds of millions of individual wildlife from the entire spectrum of species diversity. Even exact figures of the legal trade are hard to quantify due to the shear scale and inconsistencies in measuring. Documentation can be by individual non-human animal or plant, by the kilogram, by the unit or by some other measure of weight. So it is nearly impossible to place an exact figure on the scale of the legal trade. This difficulty is amplified when trying to determine the amount of illegal wildlife that is traded, which is actively being kept out of the public and criminal justice realms. Thus it could be argued there is a particularly large dark figure, or unknown amount of criminal activity. Estimates of wildlife trafficking typically appear as the profits earned from the black market. The estimate converged upon by most experts is thought to be between USD 10 and USD 20 billion, which does not include fisheries or timber, so the number could be much higher (CAWT n.d.; Wyler and Sheikh 2008; McMurray 2008; Fison 2011). Such high profits means that wildlife trafficking ranks as one of the most profitable crimes in the world behind drugs and weapons (Fison 2011). Yet it remains on the fringes of both academia and policy.

The United Nations Environment Programme's (UNEP) Wildlife Conservation Monitoring Centre hosts the CITES Trade database, which is the collection of data that has been reported back to CITES from the Parties. Illegal transactions that are found are also reported to the Secretariat and can be searched on the database. In searching for all the illegal trades from CITES' entire history until the last full years of data, it is possible to gain some insight into the trends surrounding the illegal wildlife trade. Figure 1.1 shows the number of illegal items that were reported to CITES each year between 1975 and 2010. This does not include data that was reported to CITES by kilogram or other weight measure. This data unfortunately had to be excluded in order to be able to have a consistent unit of measurement for analysis. In the first years as the convention gained prominence numbers were low, but these steadily increased. This probably has more to do with the increasing sophistication and capacity of law enforcement to uncover illegal wildlife and better reporting mechanisms to CITES than an increase in the actual amount of illegal wildlife being traded.

Noticeably, there is a peak of illegality in 1998, a dip in reports in 1999 and 2000 and then a very large drop in reported illegal items in 2001. Presumably, the significant decrease in 2001 could be connected to the September 11 World Trade Centre bombings in New York and the fact that law enforcement resources were pulled from all areas, including environmental and wildlife law enforcement, to address concerns with terrorism. This would result in fewer wildlife traffickers being detected rather than an actual decrease in wildlife trafficking. For the next several years after 2001, reporting

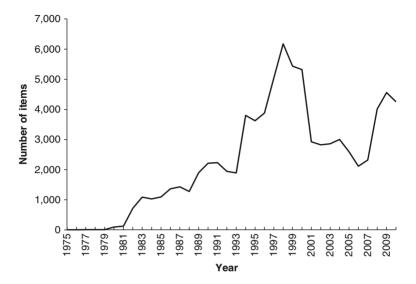


Figure 1.1 Illegal items reported to CITES, 1975–2010

continues to stay low or drop with an eventual upswing beginning in 2007. Whilst this may show more about law enforcement efforts and reporting patterns of Parties, it does show to some degree the global engagement with the illegal wildlife trade and provides some insight into what is being trafficked as well as where, which will be discussed in Chapter 2.

There are four main reasons why a more accurate picture is difficult to obtain. In conjunction with the legal trade, the sheer scope of the illegal trade is the first challenge in calculating and discovering the actual amount of illicit transactions. There are varying estimations as to the proportion of the legal trade that is illegal. It is thought that within the tens of thousands of wildlife trades a percentage of these are actually illegal, but have been laundered or blended into the system in one of the various ways described above. For instance, groups in Russia have placed the percentage of timber that is illegally passing unchallenged across the Russian–Chinese border at between 20 and 30 per cent (EIA and Telepak 2001). In other parts of the world, researchers believe 50 per cent (Brack 2007) or even 100 per cent of trees felled are taken illegally (Seneca Creek and Associates 2004). Overall, though, it is difficult to say and there are likely to be variations between regions, yet the illegality of the wildlife trade is placed within the range of 25–70 per cent (CAWT n.d.).

The sheer scale is a factor because it is nearly impossible to be able to check every shipment of legal wildlife, including timber and fish, as it is imported or exported for hidden illegal wildlife and/or fraudulent documentation. Member countries of the European Union are required to have special departments to inspect the legal wildlife entering their countries, but because of the number of imports, the trained inspectors adopt a risk-based approach, which singles out certain cargo for inspection. In the case of the UK, this results in only 10 per cent of wildlife shipments undergoing scrutiny for illegal transactions (Wyatt 2013c). This type of regime might arguably be considered best practice, although there are certainly countries that are unable to inspect even to this level.

This leads to the second reason that there is a large dark figure of crime for wildlife trafficking. When inspections are able to take place, there is often a significant amount of expertise and knowledge required to uncover illegal wildlife. Personnel must be familiar with the documentation that is required, such as CITES import and export permits and the various items of local and national paperwork that would also accompany the transaction. This is further complicated when the documentation has been forged or is fraudulent. Staff must also be able to identify species, so that they can verify that the wildlife being traded is actually the wildlife that is listed on the paperwork. This can mean taxonomic identification of hundreds of species and subspecies across the plant and animal kingdoms. Wildlife products, particularly derivatives used for traditional medicines, are even harder to identify and most likely require DNA testing to identify the species. Not all countries are able to fund or supply the type of training that is necessary to equip Customs and border inspectors with this specialised knowledge. Funds or capacity for wildlife forensic technology is even more limited. So even if wildlife is scrutinised, the illegality may remain hidden because of the lack of scientific expertise on the part of the inspectors or lack of access to the necessary technology.

The third reason that estimations are inaccurate pertains to the consistency of what and how things are measured, as alluded to above. Some species are measured in tonnes, like fish and timber, rather than counting individuals, which is how other species

are accounted for. It is difficult to gauge the exact scope of how much wildlife is lost to wildlife trafficking when using these differing figures. As mentioned, other estimates focus on how much profit is earned by the black market. Measurement issues also arise in this instance. This is because prices of wildlife 'products' and 'commodities' vary quite significantly along the smuggling chain described previously. The poacher will sell the wildlife for a minimal amount, but the final buyer could pay many times more than that. These differing values and their inconsistent application on estimation of black market profits can contribute to unreliable estimates. In connection to this issue, declared values at Customs are often used rather than the true market value, which in all likelihood would be much higher in order to avoid charges at Customs. Additionally, value of wildlife varies considerably across the globe (Cook et al. 2002), so where the worth is being determined will also impact upon the estimates of profit. Of particular note is that trying to capture the monetary value of wildlife is an anthropocentric analysis of the illegal wildlife trade. This kind of evaluation does not reflect the intrinsic and aesthetic values of wildlife and only regards wildlife's instrumental worth to humans.

This human-centred approach is key to why there is a large dark figure of crime for wildlife trafficking. Nearly all crime has some amount of shadow or dark figure of crime, which refers to the amount of criminal activity that is occurring which is not known about and often not reported to the authorities. In other crimes, such as rape, there are large dark figures compared to other so-called conventional crimes because the victims choose not to report the crime to the police. This is because of shame and embarrassment over their victimisation, fear of not being believed and the fear of being treated poorly or blamed for the crime (Wolitzky-Taylor et al. 2011). These factors lead to very low reporting rates and therefore high estimations of a dark figure. As will be discussed in detail in Chapter 4, the victimhood within wildlife trafficking is one in need of further discussion. The question of who is the victim of this green crime has yet to be agreed upon and the wildlife involved are certainly unable to report their victimisation. This means that unless the smuggling is disrupted or a person comes forward with information regarding trafficking, the green crime will go unreported and unnoticed. This may account for estimates that what is discovered is only, for instance as in Vietnam, 10 per cent of the entire illegal trade (Drury 2009). To put that in context, the number of confiscations and seizures reported is only one-tenth of the total volume of illegal wildlife that is being smuggled. Additionally, there is a remoteness to much smuggling that adds to its hidden nature. Threatened and endangered non-human animals are kidnapped or killed in hard to reach or not well-travelled places. Plants and trees are taken from similar places. This isolation and 'otherness' of the victims greatly impacts upon the high shadow aspect of the illegal wildlife trade. The reoccurring concept of the 'other' leads to explanation of the underpinnings for this book.

The green criminological underpinning

Since 1990, when Lynch (1990) first proposed inclusion of environmental issues within the criminological agenda, the field of green criminology, as it has come to be called, has evolved and gained wider acceptance. Though it is still on the margins of criminological research, green criminology is gaining momentum as a distinctive subfield that challenges traditional approaches to criminological inquiry. Drawing on its critical criminological roots, green criminology moves beyond mainstream and conventional depictions and explorations of crime and its definition. Its aim is to shape public policy through combining political and practical action (South 2010). In connection with this, green criminology also explores the role of corporations and powerful entities, including the state, in perpetrating environmental harm and crime and examines their role in defining what it is that is criminal (White 2011). Power is integral to these discussions, as those with it can sway outcomes to what they desire and in the case of green crime, that means continuation of environmental destruction (Westerhuis et al. 2013). Green criminology exposes these power relationships and the injustices that stem from them. What is considered injustice, though, is dependent upon the conceptualisation of victimhood and harm (Westerhuis et al. 2013) and green criminology is unique in its approach to these.

Green criminology's distinctiveness then, in addition to particular concern for the much-neglected environment as a subject of study, is two-fold. Whilst critically analysing the conventional legal aspects of green crime pertaining to environmental regulations and violations that traditional approaches would solely focus on, most green criminologists expand their exploration to include harms as well. For instance, as Mol (2013) has found, palm oil production, like other agrofuels, is touted as a sound green fuel alternative to fossil fuels that will provide jobs for people and improve impoverished economies. On closer inspection though, whilst perfectly legal and in fact an encouraged activity in some areas such as South America, the production of palm oil is harmful to the environment and the people that it is supposed to be supporting (Mol 2013). The vast monoculture plantations deplete soil nutrients and require large amounts of water and petrofuels to sustain them (Mol 2013). The scale undertaken by these agribusinesses has displaced local agriculture and subsistence practices of the local people, thus disrupting and destroying societies and cultures in the process (Mol 2013).

In another example, South (2007) analyses the overlooked yet harmful practice of Western corporations 'finding' medicines in developing nations and patenting them through Western intellectual property regimes. These companies' assertion of ownership over traditional knowledge not only steals those people's cultural heritage, it also deprives them of potential economic support (South 2007). This 'bio-piracy' is deemed legal, but the context is that the legal apparatus is located in the West where corporations hold a significant amount of power to influence the system. Green criminology pushes the traditional boundaries to include evaluation of such transgressions, which cause injury to humans, the environment and non-human animals regardless of their legality (White 2011).

The second distinction is also contained within context - that victimhood is extended beyond only humans to the environment and non-human animals (see Chapter 4). As Cazaux (2007: 88) has argued, green criminology needs to not just broaden the scope of criminological inquiry into green issues, but truly integrate an expanded notion of victimhood and 'transcend a normative anthropocentrism'. As proof of this possibility, she explores the harm caused to the non-human animals that are tagged and labelled as part of displays of human ownership and methods of conducting research (Cazaux 2007). Not only does this legal, unquestioned practice physically harm non-human animals that have toes removed, for instance, but it also reinforces the power dynamics between humans and non-human animals by perpetuating a system of identifying non-human animals as property (Cazaux 2007). As property, these non-human animals can be treated by their owners as the owners see fit.

Other examples in this regard, can be seen in Beirne's (2007) work around animal rights and animal abuse. As he explores, human abuse of non-human animals is not only on an individual basis, but also extends to institutionalised harmful practices (Beirne 2007). This means acts of cruelty to companion animals, for instance, but also incorporates exposure of the harmful yet legal practices of factory farming and slaughter (Wyatt 2013a). Victimhood is not limited to non-human animals though, as will be discussed in Chapter 4; there are initiatives to widen the scope even further to plants and the environment. Challenging these unquestioned harms and hidden victims is an integral part of green criminology.

This green criminological underpinning shapes the discussion that is generated in this book. Inclusion of harm in addition to crime and inclusion of the environment and wildlife as victims allows for the entire smuggling operation of the illegal trade in wildlife to be critically evaluated criminologically. As will become more apparent, there are aspects of the illegal wildlife trade that, depending upon their location and context, are not illegal. This may be in regards to non-human animal welfare or abuse, or violations of trade or hunting laws that may result in civil or administrative sanctions rather than criminal penalties. With the harm-based approach of a green criminological perspective, these aspects are also critically examined. This will also encompass exploration of the wider impacts of wildlife trafficking. Not only do individual non-human animals and plants suffer and lose their lives, but also ecosystems that are intrinsically valuable are destroyed. Ecological justice will then be combined with non-human animal rights and species justice, which argues that all species have the right to live free from institutionalised and individual instances of harm carried out by humans (White 2008). That is not to say or to leave out the fact that wildlife trafficking impacts upon people. The ways in which marginalised groups and communities are disproportionately affected by environmental destruction will also be explored. This framework will inform the rest of the discussion, which will take place in the following order.

The layout

After this introduction, the book contains a further seven chapters, which will explore in more detail the variety of elements of wildlife

trafficking that have been introduced here. In Chapter 2, the contemporary patterns of the illegal wildlife trade will be detailed. This will look at the differing nature and extent of wildlife trafficking within different regions of the world. Central to this discussion is the motivation behind the variety of demand for different wildlife products that takes place. This is broken down into four categories of demand processed commodities, collector's items, traditional medicines and food – that are drawn from previous work (Wyatt 2012b), but which will be expanded upon here. The ubiquitous nature, scale and perpetration of wildlife trafficking make it a significant problem. Chapter 3 will focus on why it is that the global community, researchers etc., should be concerned and dedicated to stopping this green crime, including a discussion of the environmental, economic, criminal and social impacts. Though these macro issues are important, there is also the individual element to wildlife trafficking. The harm and victimisation that takes place will be explored in Chapter 4, including a critical evaluation of victimhood and the introduction of a hierarchy of victims that is often adopted under a human-centred approach to the environment. Chapter 5 addresses the other side of this spectrum by analysing the construction of blame and the explanations of perpetration. A similar hierarchy of offending is developed.

There are a variety of stakeholders involved in tackling this problem – from law enforcement to conservationists; from governments to charities. The next chapter will set out the complex interplay between the varieties of Parties that often have competing agendas when trying to engage with this overarching problem. This leads to a discussion of the transnational collaborations that are taking place to combat wildlife trafficking, such as the Association of South East Asian Nations – Wildlife Enforcement Network (ASEAN– WEN), the International Consortium on Combatting Wildlife Crime (ICCWC), the Coalition Against Wildlife Trafficking (CAWT) and others. The book concludes with a summary of the complicated nature of the illegal wildlife trade as well as predictions for the future and possible ways forward in trying to stop it.

2 Contemporary Patterns

Wildlife trafficking is not isolated to the remote regions of the planet or specific to the areas with high biodiversity or a high number of endemic species. It is a ubiquitous activity that either through supply, transfer or demand affects most nations of the globe. This chapter will map these patterns of smuggling as well as give estimates as to the extent of wildlife trafficking that is taking place in the different regions. This chapter will also develop the reasons for the demand for wildlife and wildlife products. The demand is broken down into four categories: processed commodities, collector's items, traditional medicines and food (Wyatt 2012b). For each of these categories, the parameters, which make them distinctive, will be given and the global smuggling patterns for that category detailed. The chapter will then break down the supply side dynamics of wildlife trafficking. Whilst most previous efforts to curb wildlife trafficking have focused on the supply, this chapter makes a case for combating this crime predominantly from the demand end, but also taking into account aspects of the supply side, which can be altered.

Global patterns

As indicated, no part of the world is isolated from wildlife trafficking. In some capacity – as a source, a destination or a transit area – all regions of the planet are involved, however minutely, with this black market. That being said, there are some generalised patterns that can be observed when tracking this green crime. Areas with high biodiversity or 'hotspots' are likely to be source regions. It is from these places that non-human animals and plants are targeted for the global illegal trade in wildlife. This means that South and Central America, Africa, and South and Southeast Asia are frequently the origins of wildlife and wildlife products fuelling the illegal trade. This is certainly not always the case. There is smuggling from Russia, Canada and the US, which have lower levels of diversity, but still have species that are in demand.

The main areas that are consumers of wildlife and wildlife products are first: China (McMurray 2008), where the demand for traditional medicines drives wildlife consumption; second, the US (McMurray 2008), which has a diverse range of demand, from exotic companion animals to traditional medicines to bushmeat; and a close third, the European Union (McMurray 2008), with similar varying demands as in the US. The Middle East also features in the demand side of the trade, with a highly profitable market in birds of prey for falconry stemming from this region. This might be one of the most lucrative trades, as a Saker or Peregrine falcon can fetch up to USD 100,000 during the final sale (Wyatt 2011). Other areas of Asia, such as Korea and Japan, are also part of the illegal trade, particularly of ivory, as are countries such as Vietnam and Thailand.

Returning to the CITES Trade database, the information contained there can also aid in understanding the global patterns of the illegal wildlife trade. As shown in Figure 2.1, CITES groups countries into the main regions of the world. The six main regions are featured here, though CITES keeps data for Antarctica as well. Again, these numbers of items are individual units of products rather than weights or volumes, which would add to the amount of illegality. Items are separated into those that were illegally imported and those that were illegally exported. Well above other regions for the amount of illegally imported wildlife is North America. If this is examined further, the US alone has over 50,000 illegally imported items in the 36 years of data. This is more than all other areas combined. As before, this may indicate more illegal activity or better detection and enforcement or a combination of both. It may also mean more engagement with CITES and proper implementation of the requisite legislation. This is particularly notable in that the Asian region

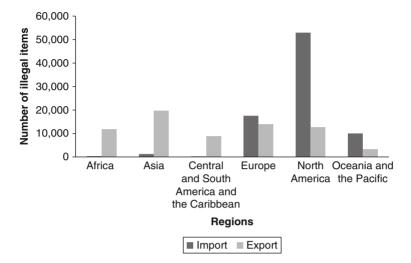


Figure 2.1 Illegal imports and exports reported to CITES from 1975 to 2011

has around 1,000 items imported illegally. Experts, as mentioned above, believe that this is not the case. Illegal exports are highest from Asia and Europe followed by North America and Africa. Admittedly, reported data is limited in its true reflection of the prevalence of crime and this is the case with green crimes such as the illegal wildlife trade. However, it does highlight compliance or lack thereof with CITES as well as exposing the contradiction between what is suspected to be happening (high numbers of illegal imports to countries in Asia) and what those countries are uncovering and reporting on.

These data are broken down even further by comparing the percentage of illegal imports of the regions in Figure 2.2 and the illegal exports in Figure 2.3. North America accounts for 64 per cent of the illegal imports reported to CITES and 18 per cent of the illegal exports. Asia had the most illegal exports with 28 per cent of the total and just 2 per cent of the illegal imports. Europe had 21 per cent of the illegal imports and 20 per cent of the illegal exports, whilst Oceania and the Pacific (so Australia, New Zealand and the Pacific Island countries) had 12 per cent of the illegal imports and 5 per cent of the illegal exports. Africa accounted for 1 per cent of

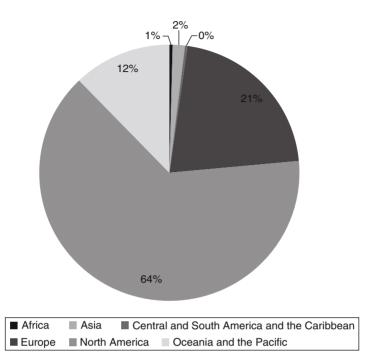


Figure 2.2 Illegal imports reported to CITES from 1975 to 2011 broken down by region

illegal imports and 17 per cent of illegal exports. Finally, Central and South America along with the Caribbean nations who are Parties to CITES had 1 per cent of illegal imports and 12 per cent of illegal exports. Again, whilst this may not be an accurate reflection of the exact scope of the trade that is occurring, it does support the assertion that every region of the world is touched by wildlife trafficking. Even areas such as Africa or Central and South America, which are thought of as source countries for the wildlife that supplies this black market, have some recorded instances of illegal imports as well. So the flow of wildlife is both in and out of all areas of the world.

Exploring Internet sales of wildlife adds another dimension to the global trends. IFAW (2008) found that the US dominates Internet sales of wildlife, most of which is in all likelihood illegal. In

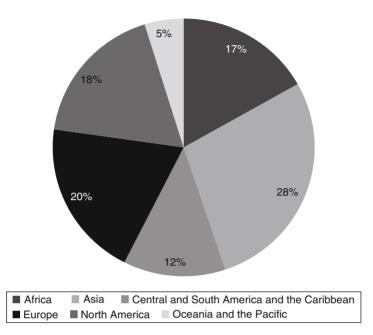


Figure 2.3 Illegal exports reported to CITES from 1975 to 2011 broken down by region

their study in 2008, the US was followed by Europe, consisting of the UK, France and Germany, which accounted for 15.2 per cent of online sales (IFAW 2008). In a more targeted study into the European ivory trade, it was discovered that France had the most online sales of ivory, followed by Spain, Portugal, the UK and Germany (IFAW 2011). Interestingly then, origin countries do not necessarily feature as the sellers of the wildlife. A more detailed examination of perpetration, including those using the Internet, will take place in Chapter 5.

It is important to note that these smuggling routes do not necessarily occur in isolation from other crimes. Many of the areas where wildlife is taken from are also areas that supply drugs (Wyler and Sheikh 2008). As shown in the introduction, there is evidence that wildlife and drug trafficking can be linked. This shows that mechanisms and routes for different black markets overlap and are even occurring in conjunction with one another. Knowledge about the nature and extent of one black market can then also inform other black markets.

The demand

Evident from these snapshots of aspects of the illegal wildlife trade is that it is a diverse black market with many facets. The different black markets within the larger trafficking phenomena are not uniform; they each have unique drivers and elements that will affect the nature and make up of that particular illegal trade. A key difference that impacts upon the structure of each of these facets is that the perpetrators along the smuggling chains, and particularly the final buyers, have different motivations for participating in the illegal trade and in the consumption of wildlife. These drivers behind consumption seem to coalesce into a comprehensive theoretical framework to explain similarities and differences within the patterns of illicit trades that previous categorisations of taxonomic groups or connections to other crimes have not captured. These categories of demand are also very particular to the consumption of wildlife, though they do share some commonalities with previous comparative research of the motivations in the drugs and wildlife trades (South and Wyatt 2011).

Drawing upon previous work (Wyatt 2012b), the next sections detail categorisations of demand that lend to the multi-faceted nature of wildlife trafficking. The numerous types of demand within one black market make wildlife trafficking distinctive from other black markets where the demand, for instance of drugs or weapons, is much more uniform. These distinctions are important in understanding the illegal wildlife trade and therefore essential in developing anti-trafficking strategies, as a 'one size fits all' approach would not aid in stopping such a diverse crime. Figure 2.4 illustrates the four categories and provides examples of wildlife in each as well as those wildlife markets that may overlap between categories and meet multiple demands.

Processed commodities

As mentioned in the introduction, not all wildlife that fuels the illegal trade is alive or simply killed and used directly. Much of the wildlife that is consumed is first made into some sort of product that

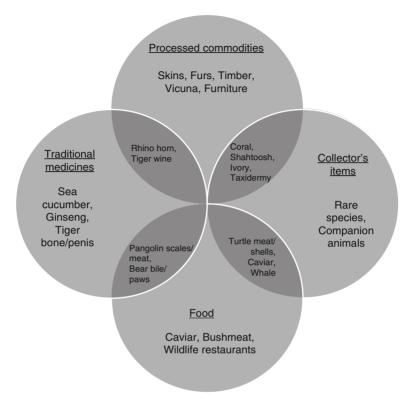


Figure 2.4 Categories of demand

is in demand. Species that are targeted by this type of demand are both abundant and scarce. For instance, both rare and more common timber species are illegally logged and then sawn into lumber for houses, furniture, household goods etc. Common non-human animal species, such as sable and foxes, are poached and their fur is then processed into pelts used in the fur industry. Similarly, rare chiru (Tibetan antelope) and some rare big cats like snow leopards are killed for their skins, which are also processed into garments. As will be discussed later, some of the items in demand fit into more than one of these categories; this is the case with the above listed chiru skin, known as shahtoosh, as well as the snow leopard pelt, which are both processed commodities and collector's items. The common thread between all of these products then is not their availability, but that they must be extensively altered into a desired form to be sold at market. The need for processing gives the trade of this group of wildlife commodities distinctive aspects; the most obvious being that there must be infrastructure in place to make the furs, skins, timber etc. into a product that can then be manufactured into a final item, be it a garment, rug or chair. Because of the size, scale and visibility of such infrastructure, it is argued that the equipment and/or factories are in all likelihood connected to a legal enterprise.

Tanning and drying of illegal skins and furs and their manufacturing into clothing is mostly taking place within factories that are also producing legal fur clothing. There may be a few instances where this is done individually outside of a factory, but as seen for instance in Russia, the largest auction house for fur undoubtedly also contains some illegal fur (Wyatt 2009). This is clear from sales records indicating more sable pelts being sold than the number of sables allowed to be hunted in almost each of the last ten years (Dronova and Shestakov 2005). So a legitimate garment manufacturer will purchase laundered fur and process it. Similarly, processing of illegally obtained logs and the resulting construction of household goods, furniture and timber for houses is in all likelihood taking place a majority of the time in factories that are also processing these items from legally sourced trees. To have an entire factory for an illegal wildlife market would require expensive equipment and be blatantly obvious. This laundering aspect of processed commodities makes them particularly difficult to uncover and to regulate.

Further difficulty in tackling such illegal wildlife products stems from the embedded corruption within this market. In most instances, it is argued corruption must feature in the creation of these processed commodities. Without business owners or officials to enable what is illegal to be blended into the legal sphere, there would not be the infrastructure available for these products to be made or sold. Returning to the above example of the fur industry in Russia, sable is one of the most popular furs within the fur industry and is predominantly trapped in Far East Russia. As mentioned, the number of sable that can be trapped each year is regulated by the government. Yet despite this established quota, research by Dronova and Shestakov (2005) revealed that in the proceeding ten years at the Saint Petersburg annual fur auction, in eight of those years the amount of sable pelts sold exceeded the government set quotas. This indicates that somewhere within the industry corrupt individuals are supporting or hiding the illegal behaviour that is trapping too many sables, and then selling them into the legitimate market. This could be the middlemen that buy from the trappers and then sell to other business people that are supplying the auction house; it could be people in the auction house; it could be both, but this demonstrates that when illegal wildlife is altered into a commodity, corruption probably plays a role in laundering it for a legitimate market.

The demand for processed commodities is on-going, though the form that the product takes may change with trends in fashion. In the above example of the fur industry, whereas there is a fairly steady demand for fur, the species of fur or type of garment made from it may change from year to year. The style of furniture changes and the demand for new furniture and houses is steady, so the need for timber is also continual. This continual nature of the demand means that more processed commodities are always being made. Consumers can buy multiple items or there are new consumers to tempt. The illegal market for this category of demand then is quite pervasive, and this adds to the difficulty in combatting it.

Additionally, there appears to be no set geographic pattern from the source to the consumer of processed commodities. There may be a cultural dimension to this demand – certainly fur, for instance, is more popular in some regions than others, so for individual commodities there may be more pronounced flows of smuggling. What does appear to be a definite part of the pattern is a correlation to affluence. Processed commodities are in demand by populations of people who have disposable incomes to engage in globalised material consumption. Therefore they can buy new clothes or furniture as fashion changes or as desired. This is the category where it is most likely that the consumer does not know that what they are buying was at one point illegal. They may not be able to identify the type of fur or more commonly identify the species of timber that their furniture is made of. This can be compounded in the case of timber, as big box stores have been known to source wood from illegal operations (EIA 2007a). So for processed commodities, they certainly may be entering the demand side of Western countries, but this is not always known by consumers.

Collector's items

In contrast to the nature and extent of processed commodities, the demand for collector's items is, as one would expect, less frequent and more hidden. Depending upon the species that the collector is looking for, there is some opportunity within this category for laundering of wildlife in a different way than to the above. CITES has provisions for the farming and captive breeding of species. This means that for instance falcons and other birds of prey are raised in captivity or rare orchids are propagated in gardens. Laundering can occur if a species is taken from the wild, but then through corruption or falsification is given CITES permits saying that it is a legal captive-bred or propagated individual.

A characteristic of this category and the next, traditional medicines, is that there is the possibly widespread belief that wildlife taken from the wild is superior in terms of genes or behaviour than any individual that comes from a farm or garden. So collectors seek wild caught non-human animals and plants to add to their collections (Wyatt 2009). These collections are often made up of rare companion animals, and therefore a range of primate species, small and big cats, parrots and other birds, reptiles, insects and arachnids. Others focus on rare and endangered plants such as orchids, cacti and pitcher plants.

As with processed commodities, there does not appear to be an overall geographic pattern to the flow of collector's items. Again, it seems tied more to wealth than to location. Contrary to this though is the flow of ivory, which is very clearly from the elephants' range, which is now predominantly in Africa rather than throughout Asia as well, and going predominantly to the Far East and Southeast Asia. For instance, Christy (2012) has found that the Philippines have a significant demand for ivory carvings. This is tied to the Catholic religion widely practiced there and the tradition of having icons of saints, which are carved out of ivory (Christy 2012). Again, this provides evidence of a cultural element to some demand of wildlife.

The elephant is possibly the wildlife in greatest demand in this category as ivory is a much sought after collectible. That ivory is listed here in collector's items and not in processed commodities indicates the overlap of categories that was mentioned before. Whilst ivory is usually carved, so processed in a way, it is included as a

collector's item because the illegal trade most closely matches the pattern of illegal trade for other so-called collectible wildlife. There has been an international ban on ivory for decades and the only means of laundering it is to obtain or falsify paperwork that would show it is from before the ban. That is not to say that this does not happen. As recently as July 2012, two jewellers in New York City pleaded guilty to smuggling wildlife by falsifying records of ivory carvings in their store (Harbfinger 2012). The documents that they forged indicated that the ivory had been purchased in Hong Kong in the 1970s before the 1989 ban on selling ivory (Harbfinger 2012). However, shipping crates indicated that the ivory jewellery had arrived from India (Harbfinger 2012). Ivory, other than before this ban, is strictly prohibited from international trade throughout the world.

The ivory market becomes more complex because of some domestic ivory trade that is allowed in Asia. Because of this there are some legal venues in which ivory can be sold locally. This must come from ivory from within that Asian country. The carving of ivory should technically not be taking place, unless it is happening on an extremely small scale. This is because, as mentioned, the ivory in these countries must be from within that country and Asian elephants that would be the source of this ivory are protected and very few in number. The carving must then be hidden, as essentially no new items should be produced. The ivory items must be smuggled unless there is forged paperwork, and the international selling must also be hidden unless the laundering described above has taken place.

This aspect coincides with other wildlife in this category. For instance, the smuggling of falcons for falconry consists of a collector seeking a specific bird. An egg or small bird of prey must then be captured from that species' range, which can be remote and isolated, and then hidden along a long journey to the final buyer (Wyatt 2011). In this case, this can be from Far East Russia through Central Asia into the Middle East, where falconry is still practiced. Or, as with ivory, forged paperwork must be obtained, in this instance, inaccurately showing that the falcon has been captive-bred.

The demand in the collector's items category is very specific. This detail, the illegality, the transnational nature and the fact that the

wildlife may often be live results in the smuggling being highly organised and hidden. Additionally, this black market is highly profitable, as in the case of the USD 100,000 for a falcon mentioned earlier, or the estimated USD 50–60 million that is generated annually from ivory (The Trade and Environmental Database [TED] 2005). All these factors create the conditions for organised crime to be drawn to and facilitate these trades. This again is in contrast to processed commodities, where legitimate operations play a larger role. For collector's items there is a sophistication that is required to find a specific species, smuggle it over long international distances while needing to keep it hidden because it is obviously illegal. Organised crime with extensive transnational networks is capable of meeting this demand.

Corruption features in collector's items as well. Fraudulent paperwork and smuggling often require bribery of officials. In the case of the falcons, organised crime will create 'paid corridors' by paying Customs and Border agents to look the other way when it comes to the smuggled wildlife (Wyatt 2011). This is the case with transportation employees as well. This type of corruption is different to that within the category of processed commodities, as in that case the corruption is of legitimate industries and is more pervasive rather than the bribery of isolated individuals along the chain. Organised crime, in addition to being involved with collector's items, plays a role in the illegal trade of traditional medicines.

Traditional medicines

Traditional Asian Medicines or Traditional Chinese Medicines have been used for nearly 5,000 years (Cameron et al. 2004). The basis for them is raw non-human animal and plant material that is simply either ground, washed or dried or manufactured into plasters, pills or tablets (Cameron et al. 2004). The structure of the illegal trade in wildlife for traditional medicines is quite similar to the above trade in collector's items. The similarities are that for those consuming traditional medicines there is also the long held cultural belief that non-human animals and plants taken from the wild provide specific treatments and have special properties that the same species raised in captivity would not have. So even for instance, if bear bile for arthritis is available from a farmed source that would not impact upon the threatened populations of wild bears, wild bears would still be hunted and poached because their bile is supposedly of a particular quality that is necessary for the proper treatment of the human ailment. In conjunction to this belief is the idea that traditional medicines are more useful and beneficial than Western medicine, which is often viewed in the East as invasive and damaging (Drury 2009).

The products that make up the traditional medicine market are sourced from both protected and non-protected species. There is an exception in cases of protected non-human animals that if they are legally killed during sport or trophy hunting their parts may be used if the proper permits are in place (Milliken and Shaw 2012). The blend of legal and illegal then makes unpicking the illegal trade particularly difficult. The illegal trade, then, includes bear bile, as stated above, rhinoceros horn, saiga antlers, musk glands from musk deer, teeth, bones and penises of tigers and leopards, shells of marine turtles, pangolin scales, Asiatic cobras, agarwood, sea cucumbers, seahorses, orchids, ginseng and a range of roots, berries, leaves, stems, rhizomes and bark (Cameron et al. 2004).

Many of the species that are in demand as traditional medicines are becoming increasingly rare, such as tigers, bears and rhinoceros. The scarcity of these non-human animals contributes to the increasing profits that can be obtained from selling products made from them. For example, rhinoceros horn is worth thousands of dollars a kilogram (Smith 2009). As with collector's items the high amount of profit and need for secrecy attracts organised crime and criminal networks into this black market. Such powerful groups have the capability to carry out poaching of non-human animals, which are protected by armed patrols and other formal mechanisms. Additionally, these groups are able to hide the long distance transnational trafficking of illegal products through elaborate smuggling operations or bribery.

The illegal trade in rhinoceros provides an example of these dynamics, though they are one of many non-human animals that are targeted for use in traditional medicines. The horn of the rhinoceros has been used for hundreds if not thousands of years to reduce temperature, of blood especially, and flush toxins from the body (Milliken and Shaw 2012). Horn has been employed to treat fevers, seizures, headaches, measles and strokes (Milliken and Shaw 2012). This departs from current applications, particularly in Vietnam, such

as use in curing life-threatening diseases like cancer (Milliken and Shaw 2012). This urban myth of its effectiveness persists even though no evidence anywhere in the world has been produced to support such claims (Milliken and Shaw 2012). Despite this lack of evidence and dwindling rhino populations (the last Javan rhino was poached in Vietnam in 2010 [Milliken and Shaw 2012]), poaching of rhino and abuse of legal trophy hunting is persistent. Legal trophy hunting is used by Asian criminal syndicates to obtain horn and they also engage in the targeted killing of wild rhino, even from national parks (Milliken and Shaw 2012).

Law enforcement has taken a more paramilitary approach to stopping this unrelenting pressure of poaching (Ayling 2012). Ayling (2012) argues that, regardless of the increased efforts by the police, these groups remain resilient, which she has defined elsewhere as the capacity to adapt (Ayling 2009) and the ability to absorb and withstand disruptions (Bouchard 2007; Ayling 2009). This ability comes from the multiple actors switching roles and filling vacancies stemming from arrests or other disruptions, and the flexibility of the actual smuggling, be it personnel involved or routes taken (Ayling 2012). Multiple routes are available particularly to those groups which are involved in smuggling for several black markets (Ayling 2012).

The above example and the illegal trade in traditional medicines differ from that of collector's items in two ways, the first of which is the scale. As mentioned, poaching and capturing for collector's items occurs on a smaller scale than that of processed commodities and also occurs on a smaller scale than that of traditional medicines, though this is possibly changing with the increase in poaching of rhinoceros for their horn. It could be argued that the demand for traditional medicines is more sustained than that of collector's items and is embedded within a much larger population of people and within a legitimate industry. There are an unknown number of people collecting rare products or individual 'specimens' of wildlife, but this is undoubtedly a smaller number of people than those who use traditional medicines, which could potentially be large portions of the population throughout China, the Far East and Southeast Asia.

This leads to the second difference, which is the location of the demand. Collectors are found throughout the world. There does not

seem to be a specific region or area that collector's items are destined for (except ivory), but in the case of traditional medicines there is a clear connection between region and/or culture and the flow of illegal products. Either the illegal product is being smuggled to a location in Asia or, as has been found in research by the Trade Records Analysis of Flora and Fauna in Commerce (TRAFFIC) (Cameron et al. 2004), to Asian diaspora communities in Europe and North America. These communities can be connected to smuggling networks that supply stores within these areas with traditional medicines that are frequently illegal because they are made with endangered and protected wildlife. As with the other categories of demand presented here, there are overlaps in terms of species and characteristics. In this case, there is cross-over between the demand for traditional medicines and the demand for wildlife food.

Food

As with the other categories of demand, there is a fair amount of diversity as far as species within the demand for wildlife as food. On one hand there is the desire to consume exotic foods, such as bear paws and whale. There is also the demand for luxury products, which may be or at least have been more prevalent. For instance, caviar is such a commodity: is a luxury item that at some point in history might have been fairly readily available though expensive, yet now because of over consumption has become even more of a luxury because populations of sturgeons are diminishing.

On the other hand, there is also wildlife which is fairly readily available in certain regions though still considered exotic. This is the case, or at least was recently the case, with pangolins. Pangolins are mostly found in Southeast Asia and are a common feature of wildlife meat restaurants. They are becoming so popular though that there is concern over some of the pangolins' species survival (Pantel and Anak 2010). Similar consumption of bushmeat in Africa also places pressure on endangered and threatened populations of wildlife. Bushmeat is the term used to describe meat that is sourced from wildlife and illegally obtained. It is often threatened or endangered (Bushmeat Crisis Task Force 2009b). As the forest in Africa is often referred to as 'the bush', the term originates from Africa, but can also be applied in other contexts, such as in Asia and South America (Bushmeat Crisis Task Force 2009b). Demand is often within the region where the non-human animal is found, but there is demand for some bushmeat in diaspora communities in the West (Bushmeat Crisis Task Force 2009a).

This was found to be the case in London where a BBC News undercover investigation found significant quantities of illegal domestic meat from sheep and goats and illegal bushmeat smuggled from Ghana for sale in a Hackney market (Lynn 2012). As will be discussed further in Chapter 3, in this instance the cane rat that made up the illegal bushmeat is not a protected species, the problem is that illegal smuggling of such products bypasses health and environmental inspections that may have public health implications. This appears to be a consistent problem in the UK, where bushmeat smuggling is undetected at the many ferry ports and airports (Lynn 2012).

Depending upon the value of the wildlife food and the distance it travels to its final buyer, organised crime may or may not be involved. For instance, it is believed that the Russian Mafia and Japanese Yakuza are facilitators for the highly profitable black market trades in caviar and whale. This is in contrast to bushmeat where local people are often the suppliers to restaurants or kill the wildlife for personal consumption. Markets and restaurants play a key role in the trade of illegal wildlife meat by selling and serving it as well as coordinating with middlemen to supply them. As with traditional medicines and collector's items, those consuming wildlife meat often believe that meat taken from the wild has a better flavour or has better properties than wildlife that has been bred in captivity. This may have to do with cultural beliefs that eating wildlife enables the person to take on some of the essence of the non-human animal (Momii 2002).

Non-human animals that are consumed for food may, too, be targeted for their medicinal properties. Pangolin scales, bear bile and saiga antelope horns are examples where parts of the wildlife are used for medicine, but the meat is also eaten. As mentioned above, there are such overlaps between the categories of demand. Again, Figure 2.4 gives some indication of what this cross-over in demand may consist of and summarises the differing categories. The overlaps between processed commodities and collector's items are those collectors' items that may in fact need to be altered to be sold. For instance, coral and ivory carvings must undergo processing to become a collectible. So, too, would shahtoosh – the delicate wool from the Tibetan antelope that is made into shawls and scarves. Additionally, there are collectors of dried and preserved wildlife so there is taxidermy that must take place to fulfil these demands.

Collector's items also cross-over with food. Turtles are poached and this can fill two demands; one for the shell or carapace that can be carved into a collectible item and the other for food, such as turtle soup etc. As mentioned, caviar and whale also sit within both of these categories as they are a luxury collectible on one hand and a food item at the same time. The overlap of food and traditional medicines is similar to the turtle just discussed as one species meets multiple demands. An example here is the pangolin, where the scales are used in traditional medicines and the body used for food, and the bear, where the bile is used for medicine and the paws and other parts for food. Finally, the rhino and tiger feature in the overlap between traditional medicines and processed commodities. This is similar to the overlap of processed commodities and collector's items because the medicine in this case must be processed - rhino horn ground and made into medicine, the bones of tigers used to make wine. This is true of other species as well where their horn, antlers or parts are made into pills or plasters. So there is some amount of crossover, but overall there are clear distinctions between the types of demand and the drivers behind the consumption of different species of wildlife.

The scale of each of these categories is also difficult to quantify. CITES Trade data does provide some indication of at least the illegal products that have been uncovered. Figure 2.5 features the 21 categories of products that have over 1,000 illegal items reported to the Secretariat between 1975 and 2011. This was out of a total of 87 different types of illegal wildlife products that were recorded. Out of all of these, the live non-human animal or plant is the most common illegal item and possibly the most common legally traded wildlife as well. These can meet the demand for both collector's items and pets, as well as potentially for food. Traditional medicines seem to be prevalent as derivatives are the next highest category of illegal items. Decorations and or clothing, which are processed commodities, also feature prominently as there are skins, leather products, shoes, carvings, handbags and trophies all within this dataset. Confiscated meat is here as well, clear evidence of wildlife meeting a demand for food.

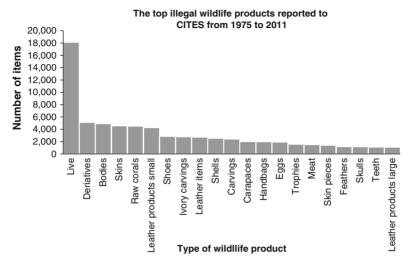


Figure 2.5 Illegal wildlife products with over 1,000 items reported to CITES from 1975 to 2011

The factors that underpin these theorised categories are the next focus of discussion.

Factors affecting the demand

In breaking down the different wildlife black markets by the commonalities of why they are in demand, it is hoped that the factors that interplay to form markets with different characteristics and components will be highlighted. In exposing the commonalities and the factors that shape them, it should be possible to then develop more targeted and effective interventions as will be discussed later. To summarise, the commonalities can be categorised as – after the taking of the wildlife it must be manufactured into a processed commodity for sale; or the wildlife is a collector's item because of exoticness and/or rarity; or the wildlife is used to make a traditional medicine that most likely has a long cultural history; or the wildlife is eaten for subsistence, but also as a luxury item. Whilst the differing motivations for demand unite species within these distinctive categories, there are general factors present in the illegal wildlife trade that affect the perpetrators and the resilience found within the categories. These factors that interplay to determine the perpetrator seem to generally be the level of profit, the abundance or scarcity of the species, and the location of the demand compared to the wildlife's range. The singular factor affecting the resilience of a category or of a particular trade in a certain species is cultural tradition.

The level of profit that a particular species of wildlife may earn on the black market seems to be the determining factor as to when organised crime is involved in the illegal trade. This is evident in their role in caviar and whale from the food category, as well as in the trade of rhino horn in the traditional medicine category, falcons in the collector's item, and sometimes timber in the processed commodities. Scarcity also seems to be correlated to organised crime and this could be because of the connection between scarcity and profit: as something becomes scarcer it also becomes more valuable, which could lead to the involvement of organised crime. Abundance is then linked to other perpetrators or facilitators than organised crime. Local and regional people are the main players within those black markets where the wildlife is more common and easier to obtain. Fur as a processed commodity, pangolins as food and ginseng or sea cucumbers are examples of this. There is no example of a collector's item where this is the case, which lends evidence to the fact that abundance and scarcity play a role in determining who is involved.

Another factor affecting the perpetrators involved in the illicit market is the location of both the wildlife and the consumer. If the two are in close proximity to each other, then it is more likely that local and regional people will be those that are killing or kidnapping the wildlife. If the wildlife must be smuggled over long distances to reach the consumer, this is a much more organised and risky operation that will in all likelihood cost more and therefore again attract the skills of organised crime to facilitate it. So the location is key, but again this appears to be because of the connection to profit and to the complexity of the smuggling that is necessary.

Finally, an important factor correlated to the pervasiveness within several of these categories is culture. The presence of an ingrained traditional use of wildlife leads to committed consumption. Traditional medicines, food and some processed commodities have a foundation within cultural practices of different groups of people. Traditional medicines are prevalent throughout China and Southeast Asia; ivory carving (a processed commodity) is also common there, and bushmeat is a staple in some nations in Africa, to give a few examples. What this factor adds to the structure of these black markets is resilience. Resilience in that despite rapidly decreasing numbers of some of this wildlife, such as rhinos and pangolins, the demand flourishes unabated; the perpetrators are able to alter their patterns to meet demand despite law enforcement and conservation efforts. This particular factor relating to culture makes curbing the illicit trade in food, traditional medicines and ivory especially challenging.

The supply

As mentioned, those supplying the illegal wildlife trade also have different motivations for doing so. There is a category of people who do so out of desperation or impoverishment. These people will live in proximity to the wildlife and be able to poach or take non-human animals and plants for either their own personal consumption or to sell. In this case, they are reliant on wildlife food for survival or the money that they obtain from selling what they have taken from the environment is necessary for them to live. Whilst it may be perceived then that poverty is the main driver of such species exploitation, TRAFFIC (2008a) has concluded that in fact wealth is the key factor in the loss of much biodiversity. This is because as described above regarding the demand for luxury food or products and traditional medicines, wealth brings them within the purchasing power of the middle class. As the middle class grows then in certain regions of the world, the pressure on wildlife increases as those people demand to consume wildlife products. So while there are those that kill wildlife out of poverty, it is not definite that these people are the main suppliers to the wildlife black markets.

Suppliers are also those who have a parallel legal job which allows them to exploit wildlife with little risk of detection. There are certainly people employed in industries where this is the case. For example fur trappers not only legitimately hunt furbearers to supply the fur market, but it is possible for them to take more than they are allowed (Dronova and Shestakov 2005). Loggers have been known to engage in similar behaviour. There are also people who supply wildlife markets where non-human animals are legally sold to the public. This, too, presents the opportunity to sell illegal wildlife and for those capturing the wildlife for these markets to make additional money by taking rarer species.

There are also those people employed specifically to target certain species to fill a specific demand. The recent uptake in rhino poaching has been perpetrated by armed bands of men in helicopters with night vision equipment killing the rhinoceros to take their horns (Milliken and Shaw 2012). This is obviously a very detailed specific act of green crime. In another example, trained ornithologists are paid to steal eggs and small birds of prey from their nests in Russia and Central Asia to then be smuggled to the Middle East for falconry (Wyatt 2011). Again this is evidence that it is not always poverty that is driving suppliers in the illegal wildlife trade. This is a brief overview of the patterns of supply; the entire collection of offenders will be looked at in more detail in Chapter 5.

Conclusion

Both the supply side and the demand side of the illegal wildlife trade are very diverse, not only in terms of the species that are targeted for this green crime, but also the motivations and actors that are involved. Whilst supply is generally confined to certain areas with more biodiversity, this is not always the case and less biologically diverse nations must also cope with the pressure on their wildlife from the global trafficking that takes place. Demand, too, can be everywhere though it is predominantly China, the US and Europe that are fuelling the consumption of non-human animals and plants. The demand can be split into four categories that have common characteristics that make up their exploitation. These are processed commodities, collector's items, traditional medicines and food. Each has differing levels of organisation, profit and a mixture of scarce and abundant species within the groupings. Such differences account for the presence or absence of organised crime. The cultural aspect of traditional medicines and food in particular lend these categories a resilience that is difficult to overcome when developing strategies to combat wildlife trafficking. In finding these commonalities, it is hoped that tactics that are more specifically and effectively targeted

can be developed to reduce the amount of biodiversity and lives lost. This must be a multi-faceted approach that predominantly addresses the demand for wildlife, but that will also tackle the supply when possible. This will be discussed in further detail later on, but the next chapter turns to why it is important that wildlife trafficking is stopped.

3 Significance

Now that some understanding of the scope and scale of wildlife trafficking has been detailed, notably within the limitations regarding the accuracy and amount of information obtainable, the reasons why it is important to combat this green crime will be analysed. The illegal wildlife trade presents a number of risks and threats to a number of different aspects of societies, communities and ecosystems around the world. The aspects can be broken down into environmental, economic, human well being and national security impacts. Each of these will be explored in turn to demonstrate why it is significant and urgent that more efforts are employed to decrease this green crime.

Environmental impacts

Environmentally, wildlife trafficking threatens biodiversity through the extinction of the species that are trafficked; by the introduction of invasive species that can then outcompete native species, disrupting ecosystems and again possibly leading to extinction; and through the introduction of diseases that might be transmitted to native wildlife, again causing ecosystem disruption and once again possibly leading to extinction. Extinction is problematic not only for the loss of life of that species, but also because loss of one species can lead to the instability of the ecosystem and in the case of timber and coral greatly impact upon climate change. When ecosystems are disrupted and/or environmental degradation is significant this can impact upon human populations as will be discussed later. Environmental security then – having access to a safe, healthy and sustainable environment that can support long-term life of people and other species – is essential for the environment, humans and other species, but can be compromised in the ways listed above by wildlife trafficking, as will be demonstrated.

Loss of biodiversity

Biodiversity loss is often associated with habitat destruction where plant and non-human animal species get squeezed out of their natural ranges because of human encroachment. Loss of habitat and limited access to food sources then leads to a reduction in species and a decrease in biodiversity in these areas. A contributing factor to biodiversity loss, though acknowledged much less often, is the direct harvesting, collecting, hunting and poaching of wildlife for human use and consumption. Africa is a case in point where both elephant and rhinoceros populations are threatened because of poaching. In 2012, Cameroon experienced a spike in poaching where over 400 elephants were killed for their ivory (WWF 2012). As mentioned, Black rhinoceros are perilously on the edge of extinction due to demand arising from Vietnam in particular for the use of rhino horn in treating cancer (Milliken and Shaw 2012).

Many shark species, too, are imperilled because of the demand for products made from them. Shark fin soup is driving the loss of several species. Sharks are the apex predators of food webs, so the loss of this species has significant effects on the composition of the entire ecosystem (Shark Alliance 2010). Prey species can reach high numbers with no predation, which can greatly reduce and disrupt the amount of base foods, such as plankton and algae (Shark Alliance 2010). This can destabilise the entire ecosystem as the food availability for many species is then out of balance (Shark Alliance 2010). Biodiversity loss is the result of direct human consumption of wildlife. It also takes place because of the ecosystem disruption stemming from that consumption.

This is not confined to demand for non-human animal products; illegal logging also impacts significantly on biodiversity. Clear cutting, both legally and illegally, decreases species diversity in areas where it takes place. For instance, the high demand for cedar means that it is illegally logged in Far East Russia. Yet, cedar seeds and leaves are the main food for the wild boars as well as the main habitat in which they live. Loss of the cedar forests as a place to live and loss of their main food supply are thought to be the reasons why wild boar population numbers have decreased. The Amur or Siberian tiger, of which approximately 400 remain, is reliant on the wild boar for food, so the loss of cedar is connected to the threat of the Amur tiger going extinct because of the link between species in ecosystems (Wyatt 2012a).

Furthermore, illegal logging and timber trafficking, a significant and large portion of wildlife trafficking in general, are major contributors to deforestation. Deforestation is a key factor in climate change as it accounts for, according to the United Nations Food and Agriculture Organisation (2006), 20 per cent of global CO₂ emissions. Forest cover is essential in combatting global warming as tree and plant transpiration help to regulate CO₂ and oxygen levels. Without this, the negative impacts of climate change may become unavoidable. If sea levels rise as predicted, flooding and droughts will also likely increase and these will in turn further destabilise the environment and have impacts upon biodiversity and species survival. As Norris et al. (2002) note, rising temperatures affect the thaw and freezing of sea ice in the Arctic. With fewer weeks where there are solid ice flows on which to hunt, polar bears struggle to find food (Norris et al. 2002). Less food means less fat stores to survive the winter and, for females, less fat stores to produce milk (Norris et al. 2002). Both of these lead to an increase in mortality of adult and infant polar bears and are directly tied to global warming (Norris et al. 2002). Though human well being will be discussed in more detail shortly, it is worth mentioning in the context of climate change that with severe alterations to the weather and environment of certain regions of the globe, environmental security will be impacted. It is believed that people will be displaced from their homes, becoming environmental refugees, which obviously has social, economic and political impacts on a global scale.

Invasive species

Linked to the loss of biodiversity stemming from wildlife trafficking, is that wildlife trafficking can be a vehicle for the entry of non-native or invasive species into an ecosystem. This clearly has environmental

security implications, as will be demonstrated, because life support systems and ecosystem services can be damaged with the introduction of disease and/or invasive species. Such occurrences are thought to be increasing around the world. For instance, records in the San Francisco Bay area show that whereas between the years of 1851 and 1960 an invasive species was found every 55 weeks, currently one is found every 14 weeks (USFWS 2005). These are only the cases where the stowaways or smuggled non-native species were actually found. As mentioned previously, it is difficult to estimate the amount of illegal wildlife trade and in this instance, the number of potential invasive species that have entered various regions. Additionally though, the smuggled non-human animal or plant may not turn out to be the invasive species. Part of the problem with illegal shipments is the lack of inspection, which creates the possibility of stowaway wildlife being transported with the smuggled wildlife and becoming an invasive species or introducing a disease to the new environment (Wvatt 2013c).

A specific example of the damage that can be done by an invasive species to the local environment can be seen in the Florida Everglades. Burmese pythons have been brought to Florida as part of the pet trade. Upon maturity, these snakes can reach up to eight feet long. Trends have shown that owners of the pythons have illegally released them into the wild, most likely because they are unable or unwilling to care for such a large snake. This has several negative impacts upon the unique and fragile Everglade and Florida Keys ecosystems. Burmese pythons are able to outcompete native snakes and other predators due in part to their adaptable and diverse diet where they will eat a variety of prey (Harvey et al. 2008). Additionally, Burmese pythons have long life spans of up to 25 years, have a high reproductive output and can travel long distances (Harvey et al. 2008). These qualities all enable them to be more successful hunters than the native species, which then lose their food supply and are decreasing as a result. Also, the Burmese python is preving upon species that are themselves endangered such as the Key Largo woodrat and round-tailed muskrat (Harvey et al. 2008). This is evidence that an invasive species can have significant impacts upon ecosystems and environmental health as they kill and outcompete native wildlife, which can reduce biodiversity and in turn disrupt the stability of the environment.

Disease transmission

Not only can invasive species brought by wildlife trafficking decrease biodiversity and destabilise ecosystems, but wildlife trafficking can also serve as a mechanism for carrying diseases. As Karesh et al. (2005) have indicated, the international dimensions of both wildlife trade and markets where non-human animals from around the world are coming into contact with each other creates the conditions for naturally occurring diseases that were once isolated to certain species to be readily passed between non-human animals. This, coupled with the speed of modern transportation enables the spreading of disease in ways not witnessed before (Karesh et al. 2005).

In the legal wildlife trade there is at least the opportunity for health and veterinary inspections to catch potential diseases. For instance, in Australia in 2002 four Green Tree pythons arriving from Singapore were found to be carrying Wamena virus, a lethal infection to a variety of cold-blooded non-human animals such as fish, amphibians and reptiles (Hyatt et al. 2002). Quarantine procedures eliminated any danger that the virus would have posed, yet in instances of wildlife trafficking there is the very real possibility that such diseases could be transferred to the native flora and fauna. This has implications for the health and stability of the ecosystems as well as potentially reducing the amount of biodiversity because of species loss to these diseases. In the extreme, it can compromise environmental security by damaging the ecosystem to such a degree that it cannot supply food for the species that inhabit it.

Additionally, non-human animal diseases have the potential to infect farm and agricultural industries. This has welfare implications as livestock would undoubtedly be culled if there was the threat that they were infected. The foot and mouth and mad cow disease outbreaks in the UK are both evidence of this fact. Furthermore, there would be economic impacts if a disease were to be transmitted into a non-human animal industry both for the businesses involved and the people employed within these areas. There is also the possibility that the disease could endanger people, as it has been documented in recent years that some diseases do have the capacity to transfer to humans as well as non-human animals, such as Severe Acute Respiratory Syndrome (SARS) and the Ebola virus, which will be discussed more shortly. The connection to industry leads to an exploration of economic impacts of the illegal trade of wildlife.

Economic impacts

Whilst the threats of wildlife trafficking have been broken down here into four aspects which they affect, the differing threats are not confined to impacting upon one aspect. As will be evident, certain threats are cross-cutting amongst the different aspects of society. That is the case with all of the above environmental impacts – loss of biodiversity, introduction of invasive species and disease transmission - all have the potential to induce economic impacts. This is because wildlife trafficking can threaten natural resources which a society might be reliant upon for income in the form of government tax revenue, business profits and personal livelihoods. Businesses can be threatened, such as within the agricultural industry when invasive species and diseases are introduced. This can then damage the livelihoods of people in those sectors as well as decrease the profits of companies and the tax revenue for governments. Food scarcity and environmental insecurity also have economic impacts as they may force people to move to new locations. The financial burden of this may be at an individual level, but arguably, if it occurs on a large scale, this type of migration from environmental degradation may be supported by governments.

Government

The economic impact upon the government mostly stems from the loss of tax revenue when wildlife is trafficked rather than legally traded. This is particularly the case with timber. It is estimated that USD 10 billion is lost within the global timber market each year due to illegal timber circumventing the legal market where taxes and Custom's duties would be charged (Schloenhardt 2008). Less revenue for governments coming from the import and export taxes on timber means that social services and the people in need of them can suffer. Lost revenue and lost natural resources, such as timber also mean that that country can struggle to develop (Brack 2007). This is because the government may not have the necessary funds to improve national infrastructure, healthcare or education.

Revenue loss in the case of the illegal timber trade also occurs because the black market skews the legitimate market, so that the real demand for timber is not truly reflected in prices or taxes on legal sales of timber (Brack 2007). In the case of Indonesia, one of the countries struggling with large-scale illegal logging and timber trafficking, it was estimated that in 1996, USD 660 million in revenue was lost due to illegal logging (Four Corners 2002). In 1998, this was estimated to be USD 1.5 billion, a huge loss for a country unable to cover the costs of education and healthcare required for its people (Four Corners 2002). Timber trafficking then affects government revenue in terms of cheating the government out of taxes that should be paid on all timber and by distorting the true market prices.

There is also the economic impact to the government of the costs to fund law enforcement to combat wildlife trafficking. This includes the salaries of officers and agents as well as all the associated costs of equipment and training. Notably, since minimal effort and resources are often put towards wildlife trafficking, these costs are marginal. There are also costs associated with housing confiscated wildlife. The burden often falls to the government to temporarily house and find permanent homes for live non-human animals and plants that have been rescued from trafficking (Wyatt 2013c). Arguably though, most of the economic impact could be on business and industry.

Business and industry

Many global industries and businesses depend upon a healthy environment to support their practices. In fact, the UNEP (2007) estimates that half of the world's jobs are linked to fisheries, forestry and agriculture, all of which are dependent upon ecosystem stability and health. As shown, loss of biodiversity, invasive species and disease can damage the health of the environment and in turn these industries that are reliant on it. The illegal wildlife trade, because it can and does cause these environmental threats, then has a connection to the economic well being of industry, governments and individuals.

For instance, the United Nations Food and Agriculture Organisation found that in 2003 one third of the global meat trade was under embargo because of non-human animal disease outbreaks, such as mad cow disease and avian influenza (Karesh et al. 2005). Such outbreaks, as mentioned, not only have welfare consequences as thousands if not millions of non-human animals are killed to prevent the disease spreading, but there are also economic consequences for those businesses that must lose that much of their 'product'. Obviously, this has a profound impact on the agricultural sector and those people employed by it.

Another example comes from the poaching of the pangolin in Southeast Asia. The pangolin is an insectivore that is now one of the most trafficked non-human animals in Asia because of the demand for their exotic meat and traditional medicines made from pangolin scales (Pantel and Anak 2010). One pangolin eats as many as 70 million ants and other insects annually, so is essential in balancing the ecosystem as well as controlling 'pests' within farming regions (World Association of Zoos and Aquariums [WAZA] 2011). With the loss of the pangolin throughout much of its range, it is predicted that pest levels will rise in the area and more crops will suffer damage, resulting in financial losses and the threat of food scarcity. Lack of food or damage to the environment that limits its ability to support life because of overexploitation of a species within that ecosystem is further proof of wildlife trafficking's link to environmental security issues. This raises concerns for businesses, governments and people. As will be explored below, other impacts to people also come from wildlife trafficking.

Human impacts

As discussed above, there is the potential that wildlife trafficking can impact upon the revenue of businesses and governments. This of course has a personal impact upon individual people as well. So human well being can be damaged economically through the illegal wildlife trade. Additionally though, from the environmental impacts, human well being and security can also be physically threatened through the introduction of zoonotic diseases from unregulated wildlife, such as SARS from civet cats and Ebola from monkeys. Physical well being and security can also be threatened by the violent nature of some of the black markets of wildlife.

Livelihoods

When industries suffer because of an unhealthy environment, in this case from disease or invasive species introduced from the illegal wildlife trade, individual people are also negatively impacted. Since, as stated above, half of the world's jobs are linked to the environment (UNEP 2007), disease or degradation can have far-reaching negative consequences. The jobs referred to are within the fishery, forestry and agricultural industries, which are all susceptible to the dangers posed here. Large-scale damage to any of these sectors has the potential to negatively affect the security and the well being of the people that are reliant on these products for food or as a means of employment.

Disease is not limited to non-human and human animals; smuggled plants and trees can also transmit disease, which could threaten forestry jobs. Parts of Europe, including the UK, are currently dealing with a disease that infects Ash trees (Forestry Commission 2013). Whilst not introduced through the illegal trade, the disease is believed to have been brought on a legal shipment of nursery plants (Forestry Commission 2013). The point here is that even with the proper checks that occur during legal trade, disease is able to be transmitted transnationally. The illegal trade, which purposely circumvents all inspections, holds even greater potential to bring a disease into a new area. In the case of the Ash trees, there are 386 sites where the infection has been found, including nurseries, newly planted areas and established woodlands (Forestry Commission 2013). It is expected that most of these trees will die from the disease (Forestry Commission 2013), which has impacts on the health of the environment and ecosystems. This incident is not necessarily out of the ordinary and live trees are not the only source for diseases (Gray 2012). Ash disease is one of ten tree diseases in the UK that are having a significant impact on the survival of certain tree species (Grav 2012). One of the other diseases is Dutch elm disease, which arrived in timber from overseas logging operations and resulted in two waves of tree deaths that were large in scale (Gray 2012). Trees have also been infected by invasive species, particularly introduced insects such as the spruce spark beetle that threatens commercial stands of forest (Gray 2012). Loss of trees and forests can affect the livelihoods of people employed in the timber industries.

Invasive species can also have a negative impact on fisheries, such as in the Great Lakes region of the US where the non-native zebra mussel has altered the ecosystems of some of the lakes, thus damaging the fishing industry and the lives of those employed by it. Zebra mussels were also not smuggled into the country, but provide a clear example of the damage that can be done by an invasive species not only to the environment, but to people as well. It is thought that the mussels were in ballast waters of ships travelling from Europe that arrived in Lake St. Clair in 1988, where the first zebra mussel colony was observed (United States Geological Survey (USGS) 2008). By 1998, all five Great Lakes were infected as well as the Mississippi,

Tennessee, Hudson and Ohio River basins (USGS 2008). Currently, some inland lakes in Michigan also have zebra mussels (USGS 2008). As the mussels filter a great deal of water daily, this alters the ecosystem because during filtering, all plankton and other life is eaten or collected; this disrupts the food chain for the other species within the lakes (USGS 2008). This has meant the near extinction of one clam species and the decline in other non-human animal populations (USGS 2008). Additionally, the immense size of zebra mussel colonies clogs water ways and water pipes affecting people's access to running water; it is expected that the management of this invasive species will cost billions of US dollars in the coming years (USGS 2008). Clearly, such an invasive species has large-scale economic impacts and also implications for the livelihoods of those living near the lakes with the threat to their water supply as well as the damage to the fishing and shellfish industries that are declining because of the zebra mussel.

Not only do disease and invasive species then have the potential to impact upon human livelihood, but there are also collecting and harvesting methods used within the illegal and legal trade that can adversely affect people. Overfishing, clear cutting and illegal logging are practices that can damage the environment in such a way that in the future, jobs will be lost because there will no longer be any of these natural resources available. The discussion in the introduction of the sturgeon in New York and the Kauri trees in New Zealand are proof of this as both of these industries ceased to operate after the species were overexploited; this cost many people their jobs as well as damaging the environment.

In addition though, there are people who are reliant on the environment outside of employment. Rural villagers and other populations of people are directly sustained by the land that they live on. Deforestation, biodiversity loss (from poaching or invasive species) and/or disease can damage people's environment to an extent that it will no longer support them; this means not a loss of income, but a loss of food and shelter, which ultimately has impacts on migration and on people's health. In Indonesia, it is estimated that tens of millions of people are directly dependent on the forests for their livelihoods (Four Corners 2002). With clear cutting of forests and illegal logging for timber trafficking, many of these people will lose access to forest products that they are reliant on (Four Corners 2002). Their health will obviously suffer if they are struggling to find food. This is the case for overfishing as well. The International Criminal Police Organisation or INTERPOL Environmental Crime Programme's (2013c) latest project, SCALE, is combatting fisheries crime in part because depletion of fish stocks will lead to food insecurity for many of the world's people. The resulting food scarcity caused by these forms of environmental degradation may lead to forced migration within a country or across borders. As is evident, there are many environmental practices that are impacted upon by destructive environmental practices that are connected to the legal and illegal wildlife trade.

Health

In addition to economic and subsistence livelihoods suffering from environmental degradation, which is tied to wildlife trafficking, individual human health can be threatened by the smuggling of wildlife. Trading of non-human animals can pose a risk to human health through the transmission of zoonotic diseases. Zoonosis is where a disease passes from a non-human animal host to a human. Spreading of such diseases has been shown to correlate with unchecked wildlife trade (Naim 2005). SARS and the Ebola virus, as mentioned, are two of the more well-known diseases of this kind. Yet, there are a myriad others that could threaten human well being and are more prevalent than those mentioned.

Primates, which are popular as pets in the collector's item category proposed here, in particular carry a variety of transmittable diseases. These can be monkey pox, Hepatitis A and B, Herpes Simplex B, shigellosis (dysentery in a highly infectious form), cholera and tuberculosis (Green and CPI 1999). Of additional concern is that a portion of primates who fuel the pet trade are coming from laboratories, where they have been experimented upon, but now serve no purpose. For instance, medical laboratories conduct research into the connection between simian immunodeficiency virus (SIV), which is thought to be the precursor to the human equivalent, human immunodeficiency virus (HIV) (Green and CPI 1999). Once the research is complete, these primates are then sold off, sometimes entering the pet trade. There is the potential that they carry disease and additionally most likely have behavioural problems. Both of these pose a danger to the humans that come into contact with them. Other mammals also carry diseases that are transmittable to people. Tapeworms can be carried by small mammals, which cause cysts in the liver, lungs and brains of people (Green and CPI 1999). Similarly, such non-human animals can carry roundworms that travel throughout a human host eating the organs including the brain. Human leprosy can be transmitted by armadillos, which again are part of the pet trade (Green and CPI 1999). Most recently, there was the fear over swine flu or H1N1, also a zoonotic disease. Reptiles, too, carry zoonotic diseases, such as salmonella (Green and CPI 1999). As they make up the bulk of the pet trade, both legal and illegal, this can be a cause for concern. Further concerns stem from the pet trade because birds, too, can carry zoonotic diseases and are prevalent in the pet trade. For instance birds carry the avian flu, but can also transmit parrot fever, or psittacosis, which causes a high fever, severe headache and pneumonia-like symptoms in people (Green and CPI 1999).

New diseases are appearing somewhat regularly. A new coronavirus has just emerged and cases of human infection have occurred in Saudi Arabia, Jordan, the UK and Germany (Gallagher 2013). There are only 12 cases, but six of these people have died (Gallagher 2013). The disease is similar to SARS and like SARS is more than likely transmitted from a non-human animal to a human; in this case it is suspected to come from bats (Gallagher 2013). Once a person is infected, human to human transmission is possible (Gallagher 2013). Health authorities are not worried at this stage as it appears that transmission is difficult (Gallagher 2013), but this demonstrates the potential threat to human health of an unregulated illegal trade. Smuggled wildlife bypasses essential routine health inspections and necessary quarantines that safeguard both the health of the nonhuman animals being traded and the individual humans that may come into contact with that wildlife.

As is evident, there are portions of wildlife trafficking that are very profitable. In such black markets, there is a large incentive for those involved to protect these profits; this then coincides with high levels of violence in order to maintain control over these markets. In these instances, such as in the illegal trades of rhino horn and elephant ivory, not only are there non-human animal victims, but there are also human victims of violence, which is employed to protect criminal profits and continue trafficking. This is demonstrated by the dozens of rangers throughout Africa in regions where gorillas, rhinos and elephants live that have been murdered by poachers while the poachers hunt the non-human animals (Dell' Amore 2012). Sixty rangers are reported to have been killed throughout the world in 2012, but it is believed that many more deaths go undetected and unreported (Dell' Amore 2012). The violence is not confined to the rangers; the rangers, too, kill poachers as part of their job to protect the wildlife. Human physical well being and security are also at risk from this aspect of the illegal trade.

Economically and physically then the illegal wildlife trade can pose a threat to the security and well being of people. Livelihoods can be damaged, as can health. Humans engaged in protecting wildlife and those living in proximity to valuable species can also suffer insecurity because of the violence that is employed to ensure some criminals continue to profit from wildlife trafficking. Whilst there is significant danger posed to people, there is also more macro-level danger at the level of national security.

National security impacts

The use of violence to gain and protect profits obtained from varying wildlife black markets uncovers the fact that the illegal wildlife trade should be and needs to be considered in traditional national security concerns. It can threaten national security because wildlife trafficking is carried out through corruption at various levels, organised crime and possibly terrorists and insurgents. All of these actors are known to challenge the rule of law and the sovereignty of various countries around the world. This can destabilise nations and regions and is therefore a national security issue. The concept of national security employed here is one that is broader than the traditional view of security that focuses on military security. Conceptualised here, national security encompasses larger territorial inviolability (Romm 1994) in addition to economic and political interests that protect the values and stability of the state (Jordan and Taylor 1981). Threats to national security occur when actions or threats of actions impact upon the state's capability to ensure these interests and values. As will be detailed below, elements of wildlife trafficking can limit the state in these ways. Additionally, wildlife trafficking, as mentioned, creates environmental insecurity and this insecurity also limits the state's ability to protect economic and political interests as well as the values and stability of the nation. Environmental insecurity is therefore linked to national security and thus wildlife trafficking impacts upon national security in multiple ways.

Corruption

No universal definition of corruption exists, but work by Holmes (2006) has uncovered that there are several actions and non-actions which a wide, diverse range of people agree are corrupt. For instance, in countries where it is often normal for officials to demand a bribe to undertake a task that they do as part of their occupation, people in those countries tend to believe that this is corruption regardless of its normalisation (Holmes 2006). Other such actions are the diversion of public funds to personal accounts, bribes for breaking the law and bribes for ignoring criminal acts (Holmes 2006).

Official corruption is integral to much of the perpetration of the illegal wildlife trade. Much of the smuggling of non-human animals and plants that make up this black market would not occur were it not for corruption of the officials in origin, transit and destination countries as well as corruption of the employees of transportation agencies involved along the smuggling chain. Officials, who oversee the issuance of permits for procuring wildlife, and for importing and/or exporting, can be bribed to give permits that appear to make trading certain wildlife legal. This can be done by providing documentation claiming the wildlife is pre-CITES, for instance, or identifying the species as one that is allowed to be traded when in fact they are a banned species. Customs agents along the black market routes are also subject to corruption and can ignore smuggling if bribed. State officials can also unscrupulously grant property ownership to themselves or others, where illegal logging or poaching can then take place (Global Witness 2007; Wyatt 2012a).

Corruption can be beyond these individual people profiting from wildlife trafficking; it can be much more systemic in nature and occur at high levels of government. Those corrupt officials profiting from the black market may enable the trade to continue by not implementing the pertinent legislation. Additionally, there may be instances where enforcement of laws relating to wildlife trafficking are actively not enforced. There seems to be evidence of this in countries of the former Soviet Union where corrupt officials overseeing law enforcement and the courts allow wildlife trafficking to continue (Naim 2005). The North Korean and Cambodian governments are both suspected of being active players in the trading of illegal wildlife and timber to fund political parties and maintain power (Tagliacozzo 2001; Naim 2005; Global Witness 2007).

The Cambodian government seems to have been inextricably linked (and potentially is still) to large-scale illegal logging and timber trafficking in Cambodia (Global Witness 2007). Relatives and close friends of the Prime Minister are given land that is protected and log it regardless of national laws prohibiting such activity (Global Witness 2007). There is documented evidence of senior officials selling jobs within their departments, such as within the Forestry Administration, as well as the departments producing false documentation to hide the true value of the land and timber in order to circumvent protection laws (Global Witness 2007). There are also instances of trafficking timber to China, robbing Cambodia of millions of US dollars of revenue and the profits from this trafficking going to fund a special branch of the military that is under the control of the Prime Minister (Global Witness 2007). Though Cambodia has laws to protect its natural resources, and to prosecute corruption and collusion, no one has ever been charged in cases related to forestry crime (Global Witness 2007).

Corruption, then, to maintain the illegal wildlife trade occurs in such a way that not only individual corrupt officials profit, but it also occurs in a systemic fashion to keep the black market flourishing. Such calculated circumvention of the rule of law and flouting of a nation's sovereignty are clearly threats to national security. As will continue to be demonstrated, wildlife trafficking has other impacts upon national security in addition to the challenge of the rule of law that takes place due to the corruption inherent within its perpetration.

Organised crime

Wildlife trafficking, as indicated, is highly profitable and at the same time there is a low risk of detection and/or punishment; this has presumably been the factors that have drawn organised crime to participate in the smuggling of wildlife (Cook et al. 2002). Additionally, as it can be a complicated operation with the capturing or killing, then smuggling and selling of illegal and sometimes live wildlife, there is a level of sophistication required to manage the

chain of events and be successful (Wyatt 2012a). Organised crime with its large networks and experience in smuggling other illegal goods is capable of smuggling wildlife. Evidence has been found in Germany (van Duyne 1996), Cambodia (Tagliacozzo 2001), Japan and Russia that this is the case, particularly in the trafficking of whale and caviar (Lemonick 1994).

Since organised crime has traditionally been involved in other black markets, there is evidence that they combine the smuggling of the different commodities. In Brazil, 40 per cent of drug seizures are connected to wildlife (Lemonick 1994) and the same is true in the US where 33 per cent of cocaine seizures also have wildlife seizures (The Scotsman 2002). There are multiple other drug connections as described in the Introduction. The World Bank has found evidence that wildlife trafficking occurs in conjunction with weapons and human trafficking (International Bank for Reconstruction and Development/The World Bank (IBRD) 2005). There is a clear connection then of wildlife trafficking to other national security concerns such as people and weapons smuggling, but the involvement of organised crime is also part of the national security threat. This stems from the influence that organised crime can have on politics, the media, the public, the courts and the economy (Levi 1998).

Politicians can be bribed or in 'the pocket' of organised crime and this can affect the legislation that gets enforced and implemented. Organised crime can also control or impact on the media, which has political implications as well as implications as to what the public are made aware of. Keeping criminal activity that might outrage the public out of the media is one possible scenario for how organised crime could use their influence. The courts could also be targets for bribery to affect convictions and/or sentencing. The economic consequences of wildlife trafficking, and other black markets like it, were detailed earlier and organised crime can play a role in such disruptions to incomes and government revenues through their illegal activities. Organised crime can also be powerful enough to challenge the state or have some control over it.

There is both historical and current evidence of this. The drug cartels that developed in Colombia in the 1980s provide proof of previous organised crime groups that were powerful enough to challenge the state. As Bunker and Sullivan (2010) theorised, the Medellin cartel model, or the first phase in the evolution of cartels, rivalled the

state because they employed extreme levels of violence and did not hesitate to challenge the authority of the state. The reason why these cartels did not continue to challenge the state was because of their hierarchical model with a single person as the leader; with the fall of Pablo Escobar, the cartel essentially ended (Bunker and Sullivan 2010). In the second phase, the cartels, again from Colombia, but in Cali, are flexible and networked rather than hierarchical and they utilise corruption more than violence (Bunker and Sullivan 2010). Bunker and Sullivan (2010) argue that while the reduction in violence appears to be less of a challenge to the state, corruption is far more insidious as it co-opts the state from the inside and actually exerts much more control over it.

The current evidence that organised crime can impede the rule of law and challenge national sovereignty again comes from drug cartels, but now from Mexico. With on-going corruption and co-option of politicians, the military and the police in Mexico, Bunker and Sullivan (2010) predict the emergence of a third phase of cartels. This one will be a 'criminal state successor' as it will have its own parallel polity as part of its criminal enclave and supersede the state's monopoly on use of force. Again, organised crime is involved in the highly profitable wildlife black markets, and such groups could potentially act in the ways of the cartels described. This presents the possibility that wildlife trafficking by organised crime can threaten national security in a more traditional way of challenging the authority of the government.

So if organised crime manipulates the government through corruption or challenges outright the authority of the state, either way, the country risks further economic damage stemming from the isolation brought about when government legitimacy is lost or in doubt. Stability in such nations is lacking as they cannot govern without interference. Similar consequences arise in areas where terrorists and insurgents are active and as evidence is beginning to show, these actors, too, are involved in wildlife trafficking.

Terrorism and insurgency

An obvious part of traditional and mainstream security agendas are terrorism and insurgency. Little attention has been paid though, certainly from an academic context, to the connection of terrorism and other conflicts to natural resource theft like wildlife trafficking. Terrorism is conceptualised in line with Schmid's (2008) research, which found that terrorism has two distinct parts. First, it is a doctrine, which employs certain tactics for generating fear. Second, it involves coordinated violence targeted to produce the desired effects on multiple audiences (Schmid 2008). Organisations that fit this definition, such as Al Qaeda, are thought to play some role in wildlife trafficking so that they receive the profits from the black market to fund these violent activities (Wyler and Sheikh 2008; Wyatt 2011).

In the case of falcon smuggling, buyers of falcons are thought to place an order for a particular species of bird of prey and possibly even a colour of that bird (Wyatt 2011). Middle Eastern organised crime groups that are supposedly connected to offshoots of Al Qaeda arrange for this order to be filled by employing specialists to capture the birds from their ranges; this historically has been Central Asia, but is occurring more in Russia now, where the falcon populations are higher, but dwindling (Wyatt 2011). Profits from obtaining the falcon, potentially up to USD 100,000, are then supposedly used to buy weapons and support the training camps of the terrorists (Wyatt 2011).

Insurgent groups are rebel groups that are challenging the rule of the state. Some evidence suggests that insurgents are also funding their activities through the profits obtained from the illegal wildlife trade. This is the case in parts of Africa where it is known rebel militia groups kill elephants to poach ivory and that, in Sudan for instance; the ivory is sold to buy weapons, and in Somalia sold to pay the salaries of the militia (Naylor 2004). This has also been documented in Mozambique and Angola (Warchol et al. 2003; Naylor 2004).

The most recent and potentially most worrisome account of insurgent groups involved in wildlife trafficking is the testimony of a man who had escaped from the Lord's Resistance Army (LRA). The LRA is a militant rebel group that has been operating in central Africa since the late 1980s and is responsible for widespread human rights violations including forced child soldiers, mass murders and rapes (The Resolve and Invisible Children 2013). The escapee from this rebel group has said that he and others had been ordered by their leader, Joseph Kony, to kill elephants and bring him the ivory (The Resolve and Invisible Children 2013). Rangers in Garamba National Park in Congo believe that they have chased off LRA rebels who were trying to poach elephants and other escapees from the LRA have reported the rebels are being given food for ivory that they poach (The Resolve and Invisible Children 2013). This particular connection and the overall trend that wildlife trafficking is connected to national security issues in various countries around the world has caught the attention of the United Nations Security Council, who discussed this in late 2012 (The Resolve and Invisible Children 2013).

Further risk to national security associated with terrorism and insurgency comes from the speculation that in addition to receiving profits from wildlife trafficking, such groups may resort to using illegal wildlife as a vector for transferring disease (Wyler and Sheikh 2008). As mentioned, zoonotic diseases can be transmitted from infected wildlife to people or non-human animal diseases could be transmitted between wildlife and domesticated non-human animals, thus infecting the farming and agricultural industries. It is thought that this may be a means that terrorists could use for a bioterrorist attack, which could take human lives, instil fear and/or cause costly economic losses by damaging major industries. Wildlife trafficking's link to corruption, organised crime, terrorism and insurgency are profound proof that it is a significant crime, which can have large-scale consequences and therefore needs to be addressed.

Conclusion

There are many important reasons why the illegal wildlife trade is a significant crime that warrants more attention from governments and others engaged in the fight against all types of crime. The threats to the environment posed by wildlife trafficking arise from the loss of biodiversity that it can cause, and the disease and invasive species that can be transmitted and transported with the illegal wildlife. All of these can produce instabilities in ecosystems that can then disrupt human lives and industries thus having far-reaching effects beyond environmental damage. Environmental insecurity of this kind could potentially force the movement of large numbers of people who live in proximity to degraded environments.

There are separate economic and human concerns as well. National revenues can be lost when trafficking circumvents proper channels where taxes would be collected. This could well result in fewer social services and less money for infrastructure or other projects that could draw corporate and international investment. Disease within the agricultural sector can compromise food supplies causing lost income and endangering human life. Food scarcity is another aspect of environmental security that could be linked to the illegal wildlife trade. Disrupted ecosystems may no longer produce food for wildlife or for people. Without access to food people may become environmental refugees, which not only affects individual people, but could also have large-scale economic implications for governments and aid agencies. Wildlife trafficking is facilitated by corruption, organised crime, terrorists and insurgents, so is also linked to powerful criminal elements that challenge the rule of law and the legitimacy of some nations. These elements also pose risks to human physical well being and security by employing violence and potentially destabilising government institutions.

These more traditional criminological and security studies concerns connect green crimes, such as wildlife trafficking, to the more mainstream debates of criminology and to the larger security agenda. Green crimes and wildlife trafficking are interwoven into this sphere and therefore taking them seriously and investing more resources in them is important and highly relevant. Better understanding of how the varying wildlife black markets function and developing tactics to combat them will not only help to save wildlife and the environment, it will also aid in combatting other crimes, threats and harms. Just as people are not removed from the environment, green crimes do not occupy a separate sphere that does not impact upon the other crimes and harms in society. The combination of risks and threats in multiple aspects of society and the links to conventional crimes and human well being makes the illegal wildlife trade a significant danger that needs to be targeted for concerted efforts to curb the amount of wildlife that fuels this black market.

4 Construction of Harm and Victimhood

This Chapter delves into the contentious area of harm and victims within the illegal wildlife trade. The often times conflicting perspectives from which harm can be constructed will be looked at first. Depending upon whether an anthropocentric, biocentric or ecocentric approach is taken when assessing the presence of harm, the definition of who can be harmed and what harm is changes. This leads to an exploration of victimhood within wildlife trafficking. The discussion centres on who are victims of the illegal trade - is it the individual non-human animals? Can plants be victims? Are those who lose natural resources the victims? Can the environment or planet be a victim? Is it the country? This sets out a hierarchy of victimhood within the illegal trade that is not dissimilar to the hierarchy of human victims. This does not refer though to the primary, secondary and tertiary levels of victimhood, where the amount of suffering of victims is attempted to be quantified (Davies 2011). The hierarchy here conceptualises the worthiness and legitimacy of victim status, which is usually adhered to.

The 'ideal' wildlife victim is the critically endangered charismatic mega fauna, like the tiger, whereas other less appealing animals, such as the pangolin, are less 'worthy' victims or in the case of plants and invertebrates, invisible altogether. Along this continuum are also people and communities that maybe victimised by the trade because it damages their livelihoods. Non-human animals that are rescued from the illegal wildlife trade also face further possible victimisation depending upon what fate they are given upon being found. This section explores the euthanasia, rehabilitation, reintroduction or life in captivity that non-human animals face when law enforcement rescues them from the smuggling chain. The chapter concludes with thoughts on what societies' moral obligation is around harm and victims in this context.

The construction of harm

In uncovering and documenting the full extent of the activities and injuries that are ingrained within the illegal wildlife trade, it is essential that exploration takes place beyond the limitations of only what is criminal as dictated by the various legal codes of the countries in which wildlife trafficking occurs. If investigation were confined to this narrow definition, much of the harm, injury and victimisation would remain invisible and go unchallenged. As Halsey (1997: 217) has made clear, 'Criminologists have failed to explicate the many theoretical and practical implications arising from the continued existence of so many legal yet ecologically damaging practices'. These unquestioned practices are not only ecologically damaging, but they are also the source of suffering and victimisation for a range of subjects that are frequently invisible to the criminological gaze. Expanding the scope of inquiry to encompass an enlarged sense of harm and victimisation has a significant precedent in criminological history.

Evidence of this is present in the work of Sutherland (1945) when he introduces the concept of 'social injury' in his exploration of white-collar crime. Social injury, while not specifically defined, attempted to capture the breach of moral standards that takes places in those situations that are not criminalised. Arguably, this is not confined to white-collar crimes that are committed. Examples of social injuries are all too prevalent and as Beirne and Messerschmidt (2006) propose, encompass such things as imperialism, racism, sexism and poverty, not all of which are criminal, but certainly all cause harm and suffering. Notably, what constitutes social injury changes with historical, social and political contexts. For instance, and it is not the only example of forced racial segregation, Australian aborigines were removed to stations and missions in remote parts of Australia away from European settlements. Those of mixed blood, so aboriginal and European parents, were labelled as half-castes (Horton 2010).

These mixed race people were forcibly taken and kept away from the stations where only full blooded aborigines were allowed to live (Horton 2010). A policy of 'merging' was pursued by the Victorian Board of Protection of Aborigines. This resulted in children being taken from their mothers, broken families and forced assimilation to the European culture that had overrun the aboriginals' traditional home. Such policy was in place for decades (Horton 2010). Instances of social injury and injustice like this are well within the legal sphere, but from the moral and ethical perspective of today, they are grossly discriminatory and harmful. Breaking out of the confines of a positivist approach is essential and crucial for criminology to challenge and aid in the abolishment of such abuse.

Schwendinger and Schwendinger (1975) and Muncie (1998) advocate that in fact for those concerned with social justice and safety, inquiry must look beyond crime to see dangers and threats such as poverty, pollution, genocide and human rights etc. This is in large part due to the fact that the state is often complicit of these injurious behaviours in addition to being the actor that keeps them from being criminalised in the first place (Pearce 1976). Therefore it is critical that harmful behaviours, too, are investigated to make visible the suffering and injury that can otherwise remain unexamined and hidden.

Furthermore, social and moral norms are a dynamic part of society and cultures. As noted above and as Sumner (1994) indicates. norms can be outdated or obsolete and as these inform the formulation of laws, they must be re-examined for their acceptability by current standards. Such emancipatory inquiry that has impacted the definitions of what is criminal is evident in the laws pertaining to domestic violence and, as mentioned, racial discrimination. It is argued that in addition to continuing to fight for true equality among people, the environment and wildlife, too, are deserving of this emancipation from victimisation and suffering. Green criminology has already begun such critical exploration, but can further challenge the exclusion of other species and the environment in discussions of criminalising harmful and injurious actions and omissions. Since a harm-based approach as adopted here opens criminological inquiry to suffering and injury, in researching green crimes and the illegal wildlife trade in particular from this angle, it becomes important that

there are differing guiding perspectives in how humans approach their relationship to non-human animals and nature.

Anthropocentrism

The most common, and arguably the most damaging, of these approaches is an anthropocentric one. In this approach, humans are at the centre of consideration. Nature and other species are then seen as only having instrumental worth that is determined by people. What is criminalised then or what is harmful is defined in terms of ensuring profit and human production and consumption rather than any consideration of the well being of other life forms, the ecosystems or the planet (Halsey and White 1998). Rhino poaching, again, provides an example of this concept. Profit from selling the horn, and the medicinal value (though false) to humans, is prioritised over the survival of individual rhinos and the rhino species. This epitomises the anthropocentric view where human desire and 'need' is more important than the suffering, well being or survival of another species. This human-centred approach extends beyond our relationship with just one non-human or an entire species; it is evident in most people's and most governments' approach to the environment as a whole, where for instance pollution has maximum levels rather than being restricted altogether. For example, the Clean Water Act in the US establishes effluent standards. This sets the maximum amount of a pollutant allowed in wastewater discharge (Everson 2012). Obviously then pollution is allowed, but limits are set as to how much harmful substance is permitted into water.

Ironically, wildlife trafficking and other green crimes prove problematic under this approach. The anthropocentric approach is so focused on the short-term gain that the eventual damage to human livelihoods and health caused by overexploitation is not recognised or acknowledged. Human profits and well being are threatened in direct contradiction to the aim of an anthropocentric approach, yet in not understanding the interconnectedness of people to the environment destructive behaviours continue unquestioned. The core principle in this perspective is the human element and there is in fact no relationship with the natural world beyond the instrumental. Harm pertains only to human injury and therefore only humans and their institutions can be victims.

Biocentrism

Other approaches see humans' relationship to the environment much differently. In a biocentric approach, the interests of the environment and other species take priority over that of humans. Nature then has intrinsic value and this is more valuable than human concerns. In situations where the two conflict, the environment would be prioritised over human interests (Halsey and White 1998). It is difficult to find an example of such an approach. The closest case may be those few places where human visitation is strictly limited to conservationists. They monitor the health of the ecosystem and the population numbers of the wildlife, but no human recreation or habitation is allowed. For instance, a few islands of the coast of New Zealand are sanctuaries like this, as are several of the islands in Palau. Under this approach, who and what can be a victim of harm and crime is obviously much expanded, as the environment, non-human animals and plant species all become the subjects of inquiry and therefore possible sufferers of human-induced injury. Wildlife trafficking and even legal wildlife trade, when examined under this approach, become entrenched with victimisation. Individual non-human animals and plants are viewed as victims, as are the environment and the various ecosystems that are suffering biodiversity loss and destabilisation due to both the illegal and legal wildlife trades

Ecocentrism

Ecocentrism is an attempt to balance the anthropocentric and biocentric approaches. In this approach, humans are viewed as part of the ecosystem, therefore the harmfulness of their activities is weighed against their necessity. Long-term ecosystem health and sustainability are the measurements used to gauge whether human activities are justifiable and allowable. The environment and other species do have intrinsic value then, and when human actions or omissions harm these they are seen as victims. This approach challenges what is an essential human need, but does permit human production and consumption within the parameters set by sustainability and health of the environment. If this is violated, criminally or otherwise, those subjects are visible victims. National Parks could be viewed as an example of an ecocentric relationship to the environment. Sections of the environment are set aside for protection and are not allowed to be exploited; yet human recreational activities are allowed to take place within strict limits so as not to damage the environment. This combines the conservation of the ecosystems, which are seen as valuable in their own right, and human enjoyment and use of these spaces.

The legal wildlife trade as it is now practiced would be deemed harmful under this approach as arguably it is not done within sustainable levels or ensuring a healthy environment. This is particularly evident in the fishing and timber industries, which are both perfectly legal, yet have harvested certain kinds of fish and trees to the point that these species may not survive. This is evident in the fishing of cod in the Atlantic Ocean and Irish Sea. Cod populations collapsed due to overfishing. Overfishing took place because of either the lack of political will to address the issue or the inability to implement regulations to limit the amount of cod that could be fished (Brown 2011). This is a clear example of an anthropocentric approach to the legal trade of wildlife. Human consumption and employment were prioritised over the well being of the cod and the marine ecosystem, and as a result all fishing of cod in this area has to stop. Additionally, wildlife trade is being fuelled by other human practices, such as falconry, pet ownership and various forms of legal consumption that can be challenged as not being necessary. Wildlife trafficking, too, is harmful and the environment, the species and the ecosystems are victims of that harm.

Who are the victims of the illegal wildlife trade?

The above sections illustrated who the victims of wildlife trafficking are, to some degree. The following sections will provide further conceptualisation as to how such victimhood can be understood and how each proposed victim can be made to be a subject of harm and emancipatory inquiry. This will entail exploration of people, the state, non-human animals, plants and the environments as victims.

People

In regions where people are reliant on wildlife or the health of the environment for their direct livelihoods, certainly these people would be victims as their economic security and well being may be

threatened. However, this seems best labelled as indirect victimisation, which Davies (2011) describes as when the crime impacts upon people who are not directly involved in it. In these instances, the harm is somewhat removed from the person and it may be possible for that person to turn to other sources of food or supplement their income in other ways. Certainly, this may not always be possible. More direct victimisation as a consequence of wildlife trafficking is evident if there are human illnesses or fatalities that occur as a result of the trade in non-human animals or plants infected with zoonotic diseases. In some instances though as will be discussed shortly, a human victim of disease brought about by criminal activity or morally suspect consumption of threatened or rare species may be viewed as a less 'worthy' victim than others. As mentioned, within the human security section, people employed as rangers to protect wildlife and prevent trafficking are murdered by wildlife traffickers. This clearly demonstrates the victimisation of humans within the wildlife trafficking criminal sphere.

In an anthropocentric framework, only people and the state would be the victims of wildlife trafficking. This stems from the fact that the environment and other species are only accorded instrumental value. Additionally and likely because of being assigned only monetary worth, the environment and other species have been and are still conceptualised a majority of the time as property (Beirne 1999). Therefore when wildlife is trafficked or poached, it is often times characterised as theft resulting in the human from whose land the wildlife was taken being a victim of a property crime, or if from public lands, the state being the victim.

States

Again, the state as a victim is of a more indirect nature. Loss of revenue from smuggled wildlife, which avoids Customs duties or taxes, is one way in which this victimisation occurs. Victimisation can also be conceptualised in this case as the loss of cultural and environmental heritage from public lands or lands set aside for conservation and preservation, such as national or nature parks. This is evident in the sites that are listed as part of the United Nations Educational, Scientific and Conservation Organisation (UNESCO) World Heritage Sites. Of the 962 sites worldwide, 188 of them are 'natural' areas and 29 mixed-use of cultural and natural (UNESCO 2013b). The criteria for selection reveal a mixture of anthropocentric and more biocentric perspectives regarding nature. To be listed, a site must be an outstanding example of a landscape illustrating significant stages of human history (UNESCO 2013a). Other criteria are outstanding examples of human land-use or human interaction with the environment (UNESCO 2013a). Aesthetic beauty and biodiversity are also valued, as are geological, biological and ecological processes that are significant (UNESCO 2013a). Interestingly, cultural and natural criteria have been combined in the last few years (UNESCO 2013a). Dangers then to Everglades National Park or Great Barrier Reef are talked about in terms of losing a piece of human history with the intimation, at least in part, that this is tragic for people rather than placing the focus on the loss of other species' life.

Many times the loss is of threatened or endangered species. Often these can be endemic species, therefore unique, to certain areas. Decreasing populations or extinctions can harm the society and the state further than the loss of heritage just discussed. This is connected to the potential for wildlife trafficking to inhibit or limit viable industries, such as eco-tourism, which focus on nature and wildlife. This could be considered another form of economic victimisation. For instance, countries in Africa with national parks are reliant on tourists coming to see the wildlife in the park (Warchol 2004). If these nonhuman animals become scarce for any reason, poaching or otherwise, fewer tourists will come and less money will be made. In relation to elephant and rhinoceros poaching, it is also possible that the level of violence that is used to kill the wildlife, including inter-human conflict between rangers and poachers, might deter tourists. Live wildlife has economic value to the state and to people so when they are threatened or stolen, people become victims of these crimes because of the financial loss.

Evidence shows that the illegal wildlife trade perpetration is increasingly of a transnational nature (Warchol 2004; Wyatt 2012a). The previous examples of the LRA poaching elephants (The Resolve and Invisible Children 2013) and of Asian crime syndicates poaching rhinoceros (Milliken and Shaw 2012) support this. In the extreme then, transnational armed militia or organised groups cross borders to poach non-human animals or harvest valuable plants. In these instances, it is possible to see state victimisation because national security is compromised and crimes committed. The sovereignty of the nation and the rule of law are challenged – a form of victimisation.

Similar to human victims, the state victimisation tends to be when an anthropocentric approach is adopted, as the environment or wildlife are conceptualised as belonging to or are the property of the state. This then leads to the state being a victim of theft or vandalism, a property crime. Arguably, if wildlife trafficking is only a property crime this warrants very little punishment from the criminal justice system. Yet burglary or shoplifting will earn a criminal more imprisonment in most countries than wildlife trafficking. Proof of this is seen in Kenya in March 2013 when a smuggler who pleaded guilty to smuggling 439 pieces of worked ivory was fined just USD 340 (Kenya Wildlife Service 2013). This is certainly not a deterrent and does not reflect the loss of life of the elephants. In the case of ivory poaching when militias cross transnational borders, the state may also be a victim of a different crime as the poachers have entered the country illegally. The state's authority is also challenged in these instances where outside perpetrators traffic wildlife. Both of the previous sections are grounded in conceptualisation of victimhood from an anthropocentric framework. In other approaches to who can be harmed, victimisation occurs beyond the state and humans.

Non-human animals

Historically, anthropocentric definitions of crime and harm have viewed non-human animals as property. Additionally, humancentred stances have looked at non-human animals as the prototype of violence in people or non-human animal abuse as a predictor of inter-human violence (Beirne 1999). These approaches, too, fail to recognise the intrinsic value of lives other than human lives. Biocentric or ecocentric approaches to harm though expand the notion of who can be the victim of harm to non-human animal species. As previously argued, there is a precedent for increasing the scope of who is visible to criminological inquiry. A closer examination of the smuggling practices and the experiences of the wildlife in the illegal wildlife trade under a biocentric and ecocentric approach will provide evidence of the existence of suffering and injury.

Most non-human animals that fuel this illegal trade must be kidnapped from their habitat or of course killed in order to be 'manufactured' into the required product. The other much smaller percentage might be farmed, which might be an equally harmful event. If domestic farming is any indication of the conditions that captive non-human animals are kept in, then farming operations of wildlife are likely to be traumatic. For instance, practices in pig farming keep pigs indoors without access to dirt or mud, thus disrupting the pigs' natural behaviours (Wyatt 2013b). Overcrowding and close quarters make the pigs bite each other, so tails are removed to prevent injury; this also creates toxic amounts of faeces that not only harm the pigs, but the people working with them, and the surrounding environment. Farming of wildlife is not likely to create better conditions for captive non-human animals.

Nets, snares, pits and leg-traps are all used to capture wildlife alive. All of these methods are stressful to the individual and have the potential to cause injury to the non-human animal. Further suffering occurs when the non-human animal is left in the trap waiting for the trafficker to collect them. Non-human animals can further injure themselves in these situations whilst trying to free themselves, and also suffer from exposure and lack of food and water. Some non-human animals are then obviously killed – the ultimate form of harm. For some this happens directly without being captured, as is the case with elephants, rhinos or some non-human animals consumed for bushmeat. Weapons such as guns and bows and arrows may be used in these instances. Others – again, non-human animals consumed for bushmeat or furbearers – will be killed in various ways when found in traps.

Some non-human animals kidnapped for the live trade have particularly high mortality rates. For instance, young great apes are targeted for live capture for zoos and private collections (GRASP 2012). The adult great apes try to protect the young and are killed with guns by the poachers (GRASP 2012). This leads to estimates of between one and 15 deaths for every live great ape captured (Nijman 2009; Nellemann et al. 2010). All species that are taken alive, though, must still contend with being smuggled.

The transportation of live non-human animals is inevitably stressful and potentially traumatic for individual non-human animals. Smuggling though, with at times the added level of secrecy and its hidden nature, adds further possibility of transportation taking place in hazardous and harmful conditions. In cases where illegal wildlife is essentially being laundered through a legal route (for example, with fraudulent paperwork indicating that the wildlife is a legal rather than illegal species), the wildlife is transported in the open. This type of legal transportation can still be harmful. Non-human animals are packed into containers that may be too small or have too many individuals in them (Wyatt 2013c). Turtles shipped legally, for instance, are placed in food containers within a large wooden box amongst other containers of non-human animals for shipment on planes. In Europe, where regulations stipulate that each individual should have enough space to stand within their container, there are still legal shipments that do not conform to this welfare standard (Wyatt 2013c). The journey times may be quite long. Non-human animals are shipped on airlines in the cargo hold, so may undergo extreme and harmful temperature fluctuations. There is also the issue of lack of food and water, darkness and loud noise. Non-human animal welfare even in the legal trade, then, is stressful and has the potential to cause suffering.

Covert smuggling, where the non-human animal must be hidden outright, is even more injurious. Endangered birds that make up the illegal pet and falcon trades are sometimes tranquilised to induce calmness when being smuggled. In the case of falcons, they may also have their eyelids sewn shut (Wyatt 2011). They are swaddled, put into tubes and then hidden in luggage. Mortality rates for smuggled birds are high, with only around 10 per cent surviving to their destination (Lyapustin 2006). Reptiles and mammals must endure similar conditions during smuggling. The conditions are particularly injurious to young great apes (GRASP 2012). For example, Landais (2008) estimates that for every one of the great apes in captivity in Egypt, ten have died en route.

Other aspects of wildlife trafficking can be even more harmful. The making of traditional medicines and food from non-human animals provides multiple examples of injurious behaviours. Obviously, numerous non-human animals are killed to be made into products or eaten. In some cases, this is fairly straight forward as indicated above, because they are shot. Yet other non-human animals are made to suffer even more. In the case of pangolins, which are in high demand as an exotic meat, they are sometimes boiled alive to be made into soup (Pantel and Anak 2010). Some rhinos are merely tranquilised while having their horns sawn off while they are alive and are then left to die from blood loss or shock (Milliken and Shaw 2012). Bears are kept alive in small cages where metal shunts are inserted into their gallbladders in order to collect bile (World Society for the Protection of Animals [WSPA] n.d.). Sharks are caught, only to have their fins chopped off before being thrown back into the ocean to die a slow painful death (Humane Society International 2013).

The harm, injury, suffering and death are all profound evidence of the victimisation of non-human animals within the illegal wildlife trade. There is not an instance of a trade that is happening that is not harmful in some way. Kidnapping, smuggling, death or life in pain and/or confinement leads to non-human animal suffering. This and their intrinsic value and therefore right to life warrant that they, too, be visible as victims of this black market. In fact, they are the first, most direct victims of wildlife trafficking, although in order to agree to this, an ecocentric or biocentric approach must be adopted. If that is the case, more than just non-human animals are viewed as victims.

Plants

The non-anthropocentric approaches to harm not only enable nonhuman animals to be viewed as victims, but there is also the capacity to view plants and other species from different kingdoms (Archaebacteria, Eubacteria, Protista and Fungi) as victims as well. Whereas here the discussion centres on victimisation from wildlife trafficking, visibility of non-human animals and plant species has relevance for the range of other green crimes such as pollution, deforestation and other causes of environmental degradation. Recognising plants as victims of green crimes and wildlife trafficking is an important enhancement to the scope of victimisation. In the limited capacity that wildlife trafficking has received criminological research attention, it is possible that plants have been the least frequent topic of inquiry. Admittedly, there is a growing literature around illegal logging and timber trafficking, but this is not framed within the victimisation of trees or forests. Yet there is an argument to be made for their inclusion and this approach.

Biocentrism and ecocentrism advocate for the intrinsic value of all life. This certainly also pertains to plants, fungi, bacteria etc. Plants form the critical and essential basis of all functions in ecosystems; their loss both en masse and individually can have ecological impacts in terms of food supply, air quality and soil erosion. These are of course essential to human survival, but again beyond this anthropocentric bias, plants support non-human animals' lives and also have a right to life. Individual trees have already been given a degree of recognition by UK legislation. All local councils have a legal duty to protect trees and this is expressed in the form of Tree Preservation Orders (Online Planning Offices 2006). Trees that are particularly beautiful or which are essential to the structure and diversity of a woodland are given these protection orders (Online Planning Offices 2006). It is acknowledged that trees have aesthetic value as well as playing a crucial role in the ecosystem in supporting other wildlife (Online Planning Offices 2006). Whilst there are elements in these orders that are anthropocentric in nature, it is fairly progressive to require local government to protect wildlife and specifically individual trees. Killing a tree that has a preservation order can result in a USD 30,000 fine in a Magistrate's court and unlimited if taken to the higher Crown Court (Online Planning Offices 2006).

Further precedent for this more radical definition of who can be a victim can be seen in the fairly recent proposal in Switzerland. The Swiss Constitution requires that the dignity of living beings is taken into account when dealing with them; this includes non-human animals, plants and other organisms (Federal Ethics Committee on Non-Human Biotechnology (ECNH) 2011). Non-human animals should not be made to suffer without just cause; nor should they be humiliated, or have their appearance significantly changed. Plants, too, must have their dignity considered. This means recognising that they have innate value and should not be altered in ways that change their nature (Hamill 2012). It even goes so far as to say that having flowers picked may impinge upon plants' dignity (Hamill 2012).

The main crux is protecting the integrity of the plants in the face of genetic engineering. Such legislation challenges terminator technology, for instance, where plants are altered so that they do not bear seeds that reproduce. It also challenges non-human animal–plant hybrids, where, for example, tomatoes are spliced with fish genes to make them more resistant to freezing during transport. The updating of the Swiss Constitution frames the consideration for plant dignity in terms of morality, a truly progressive (and encouraging) stance. As this demonstrates, the scope of who can be a victim can be enlarged and the next section addresses whether this can be expanded even further to encompass the environment itself as a victim.

The environment

The next logical step in enhancing victimisation is then to consider the entire ecosystem and environment as a whole. In an ecocentric or biocentric stance, these are both recognised as victims. Not only are individual non-human animals and plants victims, but also the environment is a collective victim. As Westerhuis et al. (2013) point out, the environment itself though is rarely defined or conceptualised. With that in mind, it is important to explore concepts of the environment to fully understand who is the victim.

The distinction gets made between the built environment and the natural environment. The built environment is quite simply the space that is altered by humans. Villages, towns, cities, mega-cities, roads, bridges, canals, dams etc. all make up the built environment that people have made to support their lifestyles. It is the non-natural space that has been disturbed and modified as the result of human cultural activity (Johnson et al. 1997). These built structures often overlap and blend with the natural environment – that which is not made, altered or otherwise affected by humans (Johnson et al. 1997). Admittedly with the prevalence and scope of human civilisation and technology, there is probably not a place on Earth to which this completely and truly applies. Car exhaust, ozone depleting substances and perhaps even something like dish soap have more than likely touched places that may appear to be pristine. Yet Johnson et al. (1997) argue that use of the phrase continues even though it is not strictly true. It provides a distinction between spaces that allows each of them to be examined. Certainly, humans are part of the natural environment, yet our culture can remove and disconnect us from unaltered areas.

Environment in this book, unless otherwise indicated, has and will refer to the natural environment. That environment is made up of both living and non-living elements that are both visible and invisible to people. It also includes the processes that are going on, such as transpiration of plants, the nitrogen cycle and others that support all types of life. Victimising the environment then means to disrupt or degrade this space and these processes, to alter and damage the systems that are functioning naturally – that is without human intervention.

That is not to say that only the natural environment can be a victim of green crimes or the illegal wildlife trade. The built environment, too, can be a victim. Wildlife and life-sustaining processes and elements are present within cities and other spaces of the built environment. Pollution and other green crimes can then cause the built environment to be a victim. This is less applicable in the case of the illegal wildlife trade, since the wildlife that predominantly fuels this green crime is taken from the natural environment. A discussion of the construction of the built environment is beyond the scope of this book, but constitutes a side note to acknowledge that this construction may be the source of victimisation for the natural environment. The natural environment is the last category to be explored, which leads to the proposed hierarchy of all of these victims.

The hierarchy of victimhood

Figure 4.1 proposes how victimisation is typically conceptualised from an anthropocentric approach. Humans are the victims of main concern and with humans there are differing levels of 'worthiness'. This corresponds to mainstream criminological research that finds that there are certain 'ideal' victims (Davies 2011). The innocent, vulnerable person (usually a woman), who cannot fight back is the most worthy of public sympathy and concern. This victim is least responsible for their victimisation. In conventional crimes, men are viewed as less 'ideal' or 'worthy' victims, as they should be able to protect themselves. Women or men who are drunk, for instance, or engaged in what is believed to be illegal activities, immoral behaviours or breaking societal norms are the least 'worthy' and may in fact be blamed for their victimisation. Similarly, humans who are reliant on wildlife are the most 'ideal' victim of wildlife trafficking. This may be the person whose wildlife, which they consume, has been taken and they have been able to stop the offender. They may have their means of survival disrupted. This may not even extend to survival, but simply be a disruption to their cultural or historical tradition of wildlife consumption.

Next in this hierarchy are humans that are property owners, so if non-human animals are poached from their land or if trees are taken from this property, then they are victims of wildlife trafficking. Again this predominantly stems from the economic loss of a valuable commodity and the violation of a person's ownership, in this case of wildlife. Humans that are equally victimised by the illegal

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The hierarchy of victims from an anthropocentric viewpoint			~
Broad categories of victims	Victims within the categories		
Humans	Wildlife is their livelihood	/	
	Property owners	/	of he
	Rangers		
	Disease from consumption		ife
	Poachers		The most worthy victims of wildlife trafficking
	Invaded by introduced		fict
The state	species		(ing
	Developing country exploiting		
	wildlife		l SI
	Corrupt		
Non-human animals	Charismatic mega-fauna		
	Mammals		
	Birds and reptiles		우 井
	Insects		e e
Plants	Trees		dlife
	Collectible flowers(i.e.		e tra
	orchids)		affic
	Other flora		The least worthy vic of wildlife trafficking
The environment	Well-known hotspots		The least worthy victims of wildlife trafficking
	Hotspots		ms
	Less diverse regions		
	Less known or unknown regions		\checkmark

Figure 4.1 The hierarchy of victims from an anthropocentric framework

wildlife trade are those employed as rangers and serve in protecting wildlife in parks and preserves around the world. They are victims in those instances where they are injured or killed in commission of their duties. For example, as mentioned, dozens of rangers lose their lives each year in the National Parks of Africa trying to protect the various wildlife that is the target of wildlife traffickers (Dell' Amore 2012).

Then there are people who may contract disease from eating wildlife that is infected. In these instances of victimisation, the human victim of disease may be seen less sympathetically because they are engaging in illegal or prohibited behaviour. They have either poached a non-human animal for personal consumption or they are purchasing 'exotic' meat from an endangered species at a market or restaurant. Either way, the behaviour is illicit and due to this they are partly to blame for their victimisation.

Finally, and interestingly, the poachers themselves are sometimes conceptualised as victims. This is twofold. First, they may be forced to poach because of economic necessity, so have very little agency in their illicit actions. This lack of choice created by economic desperation removes them from being seen as an offender. Second, hunting or collecting of wildlife may have been criminalised within some people's lifetimes, so what once was legal hunting becomes poaching. This poaching may be done then not out of necessity, but out of a sense of entitlement or continuing with behaviour that they believe should still be allowed. This may not necessarily be a form of protest against the criminalisation – although it could be – but simply routine behaviour that people have been socialised to partake in. Either way, on some level it is viewed that whilst engaging in illegal behaviour, these people are not completely responsible for their criminality. By having their livelihood or traditional activities cut off from them, they are defined as victims of a world more concerned with the environment than with people. Ironically, for the majority of the time, this is not the reality.

Hierarchy exists both between humans and the state and within states where wildlife trafficking occurs. States are 'lesser' victims than people, though most probably receive more regard than nonhuman animals, plants and the environment. States that are the most 'worthy' victims are those that are trying to protect their natural resources, but are invaded and/or preyed upon by transnational organised crime groups or militarised groups of traffickers that poach aggressively and with impunity. Developing nations that do not have the resources to protect their wildlife are also victims, but to a lesser degree than those actively engaged with combatting wildlife trafficking. The least worthy state victims are those nations that are corrupt and do not have enough rule of law to address wildlife trafficking or other crimes. In fact, such corrupt nations are likely to have government officials involved within the illegal wildlife trade. These are categorised as barely victims and may be viewed below non-human animals in the overall hierarchy.

There are members of the public and scholars who argue that nonhuman animals can be and are victims of wildlife trafficking. In some cases, they may be *the* victims, therefore above humans within this proposed hierarchy of victimhood. Others though might still prioritise people as the predominant victims, while possibly advocating that non-human animals lack capacity for emotion or pain to render them victims and that they are simply economic commodities or medicinal tools to be used as and when humans see fit.

For many of those that do believe that non-human animals are victims, even this is nuanced into a hierarchy on which certain nonhuman animals are 'more' victims than others. There are two factors that contribute to placing non-human animals above each other. First, and of highest consideration, is that some non-human animals are aesthetically preferred by people over others. This tends to be the so-called charismatic mega fauna – the panda, big cats, elephants, rhinoceros and gorillas that capture the human imagination. These beautiful majestic creatures are the focus of conservation campaigns or anti-trafficking campaigns when there are such efforts. The World Wildlife Fund's campaign to stop wildlife crime in early 2013 demonstrates this. Their 'Hands Off My Parts' posters feature an elephant, a tiger and a rhino - the charismatic mega fauna mentioned (WWF 2013). The organisation has a tradition of using these non-human animals in their public service campaigns (Newman 2013). These non-human animals and the lack of violence to them make up their strategy of inspirational messaging to get the public engaged (Newman 2013). WWF membership and brand recognition indicate that this is a successful tactic and WWF are certainly helping to curb the illegal wildlife trade. The point is, in terms of visibility of victims, preference and priority and therefore victim status is then accorded based upon perceived beauty and aesthetics.

Second, non-human animals believed to have sentience or more capacity for emotions and higher thinking are regarded more highly. Their increased potential for understanding or for experiencing pain means that they can be victims. Again, this prioritises the mega fauna – primates, cetaceans and elephants – over the rest of the non-human animal kingdom. Reptiles, amphibians and certainly insects are lower on the victim hierarchy, if not in fact completely invisible because they are perceived to have less capacity for emotion and/or pain as well as being less intelligent.

For those not subscribing to an ecocentric approach, where all life is equal, plants, if considered victims at all, are below nonhuman animals in priority and concern. And yet, again, even within the plant kingdom a hierarchy is evident. This, too, stems from anthropocentric notions of value and aesthetics. At the top of the plant victim hierarchy are trees. This is predominantly because of their high commercial value and integral use as a building material of a wide variety of human objects. Additionally, trees are awarded aesthetic value, as they are crucial aspects of landscapes and nature. This again is a human-centred stance around their instrumental value. Flowering plants, like orchids and pitcher plants, are other plants deemed beautiful to the human eye and fall below trees in this victim hierarchy. Their 'value' is purely an aesthetic one and not widely conceptualised as essential to the healthy and proper functioning of ecosystems. Plants used for agricultural crops are also at this level. All other plants, grass, so-called weeds, etc., are below these that are the most useful and beautiful.

Below even plants in conceptualising who can be a victim of wildlife trafficking is the environment as a victim. Consideration of individual non-human animals and plants as victims is already pushing the boundary, so the idea of a collective victim consisting of a complex interplay of non-human animals, plants, fungi, bacteria and a range of species not necessarily seen or known is more difficult still to consider. The environment then is the least likely entity to be given victimhood status in this hierarchy. If it does feature, then the environments that people are the most concerned with are those well-known hotspots that are the most likely habitats of the mega fauna. Campaigns to save the Amazon and other known hotspots are prioritised over less well-known yet still highly diverse areas, for instance the Congo Basin. Regions with less biodiversity are still further down the victim hierarchy and at the bottom are those areas with little diversity that are not well known.

There are differences in perceptions and visibility of the many possible victimisations within wildlife trafficking. Much of this depends on individual people's environmental philosophy – anthropocentric, biocentric or ecocentric – and also on a society's or culture's relationship between humans, the environment and other species. Anthropocentric frameworks in a majority of cultures and legislation perpetuate speciesist practices that cause the harm, suffering, death and victimisation of other life forms on this planet. It is obviously to the detriment of the victim, but it is also, as discussed later, a detriment to people both morally and in terms of well being. But first, the end of some of these victims' suffering does not stop after being trafficked. Particularly, for live non-human animals that are rescued from the illegal trade, they may face further injury and harm.

The victimisation continues

Conservation NGOs and law enforcement agencies do make attempts around the world to combat wildlife trafficking. In these efforts, there are numerous incidents of success where wildlife is rescued from the smuggling operation. Whilst the NGOs and law enforcement are well meaning in their practices, there is still the possibility that non-human animals freed from wildlife trafficking can be further victimised through death, life in captivity or reintroduction to the wild.

Euthanasia

As has been detailed throughout this book, the various stages of the illegal wildlife trade are emotionally and physically damaging to the victims. The initial capture may have caused injury and emotional trauma and the smuggling, too, may have caused such injuries or further aggravated the wounds and/or trauma inflicted earlier. This leads to the rescuers of these non-human animals deciding if the survivors will be given the chance to recover or if they are too injured or traumatised and that they should be euthanised.

There seems to be no accurate figure as to how often this takes place, but it is safe to say that euthanasia of wildlife freed from traffickers is a regular occurrence. The compassion and humaneness by which this is done undoubtedly varies from place to place and person to person. Presumably though, non-human animals rescued from the illegal wildlife trade are freed mostly by professional organisations, be they conservation NGOs or law enforcement. These organisations will hopefully have on staff or have cooperative arrangements with trained veterinarians and non-human animal welfare specialists who will euthanise them as humanely and as quickly as possible. Obviously though, not all of those non-human animals rescued from wildlife trafficking have to be put down; some will remain in captivity or be returned to the wild.

Rehabilitation and life in captivity

Some of the injuries that are suffered, the lasting emotional effects from the trauma of wildlife trafficking, or the possibility of introducing disease to wild populations can keep the non-human animals from ever being returned to the wild. In these cases, the non-human animals are kept captive in a range of facilities for the rest of their lives. These might be rehabilitation centres, zoos, wild animal parks or other enclosed conservation centres. It has been documented that for a majority of wildlife, a life in captivity is stressful (Carlstedt and Shepherdson 2000). This therefore is inherently harmful because of the related diseases and deleterious effects on reproduction that are linked to stress (Carlstedt and Shepherdson 2000). For example, birds of prey that are kept captive for use in falconry endure a life of continual trauma as they are unable to become accustomed to or acclimatised to the presence of humans (Ash 2007). The limited space in captivity, the unnatural social groups or extreme isolation that wildlife are forced to live with inflict psychological harm on some species more than others. Again, whilst rescue efforts and support for wildlife is well meaning, life in captivity for non-human animals is a practice throughout the world that needs to be questioned because it is harmful. There certainly may be benefits to the continuance of such practices, but these must be tempered with the individual and species level suffering that is perpetuated.

Reintroduction

Ideally when wildlife is rescued from the black market, they would be returned to the wild. This would be good for the species as it maintains genetic diversity in the population and good for the environment and ecosystem as it maintains biodiversity. Hopefully, too, it will be good for the individuals in that they will survive, find a territory or social group and find a mate. For some species though, human knowledge of certain of these aspects is limited. People know very little about the group dynamics of some primates, for instance, or how territory is shared between birds of specific species. Reintroduction then can further traumatise and endanger the lives of the rescued wildlife. In the case of tigers, they breed well in captivity and live tigers or the surviving cubs are occasionally rescued by law enforcement or NGOs from the illegal wildlife trade. In the decades that this had been happening though, tigers have most likely never been successfully reintroduced to their natural environment. One man in India claims to have reintroduced a female tiger into a national park after she had spent years in an English zoo (Tigerworld n.d.). He insists that she survived and raised cubs, but others claimed that she had been killed or that she became a man-eating tiger (Tigerworld n.d.).

The World Conservation Society in partnership with Inspection Tiger in the Russian Far East will be attempting to reintroduce three cubs later this year (Miquelle 2013). The Siberian or Amur tiger cubs were most likely orphaned because their mother was poached (Miquelle 2013). After several days of dedicated searching and tracking, the NGO and anti-poaching group took the captured cubs to a rehabilitation facility (Miquelle 2013). They will have minimal human contact in order to best prepare them for their return to the wild, where human conflict is one of the main threats to their survival (Miquelle 2013). Reintroduction is challenging because of the tigers' limited experience of hunting if they have been in captivity and issues around territory (Miquelle 2013). That is not to say this should not be done or other efforts like it. It is preferable to continual captivity both for the individual and the population's health and well being. The point is that there needs to be more research conducted into the behaviour of wildlife that is victimised by the illegal wildlife trade. This can help reintroduction become more successful and aid in combatting the loss of biodiversity that this black market causes. Increasing our knowledge of the workings of ecosystems and the specific role of species within them should be considered part of the obligation we have to correct the harm that we are causing.

The moral obligation

Humans are the cause of a vast majority of the destruction to the planet and other species. There is the argument – an anthropocentric selfish one – that we need to decrease our damaging behaviours and extreme consumption patterns for our own sake, because we are threatening our own survival. True, this is part of the scenario. Yet, as indicated by the long list of victims of wildlife trafficking, which is equally as long for other green crimes, human actions are responsible for an array of suffering and harm to creatures unable to defend or

speak for themselves. People knowingly cause this pain and injury. We are responsible for the irreversible degradation and extinctions. We can no longer deny that we are the cause. As the abolitionist, women's and civil rights movements have expanded the scope of harm to others that we are all morally obliged to treat equally and fairly, so too must the environmental rights and species rights movements be taken on as a moral obligation to other species and the planet.

This hierarchy should not exist then, yet even within the group of human victims proposed here there is an observable discriminatory nature to victimisation. Discrimination is even more pronounced in this hierarchy when looking inter-species. This was not intended to merely describe the relationship most often exhibited between people and other species; the proposed hierarchy has attempted to identify the causes of these prejudices in order to generate discussion and tactics as to how we can reshape our discriminatory approach to the other beings of this shared planet.

Moral obligation to right the wrongs humans have inflicted on the environment and to stop the pain and suffering caused does not have a religious context or origin. Rather than a spiritual development, morals can be seen as part of evolution (de Waal 2010); behaviours that evolved to ensure the survival of the species – and not just our own. There is clear recognition within these morals that survival of all species is to the benefit of the ecosystem, the planet, the collective. Moral behaviour and obligation is then expressed by reducing our human footprint and our consumption, which will then allow other life to flourish alongside people.

This moral obligation also stems from beyond the 'now'. Whilst we should seek to end the harm and degradation that we cause as soon as possible, a crucial and significant part of humans' moral obligation is leaving a healthy and vibrant planet for the next generations. From the species and ecosystem justice approaches advocated and adopted here, this intergenerational justice of leaving not just a sustainable environment, but a healthy flourishing one, extends beyond the next human generations, but also to the generations of non-human animals, plants, fungi etc. that come after us. In terms of wildlife trafficking, in order to do this, we must uncover who it is that is responsible for the illegal wildlife trade.

5 Construction of Blame and Offending

In common with defining and determining who is a victim within the complicated chain of wildlife trafficking, unpicking who is the offender and therefore who is held responsible can also be challenging. This chapter introduces the idea that there is also a hierarchy of offending. In terms of the offender, there are those who might be consider 'blameless' due to the circumstances under which they illegally poach or harvest wildlife. Who can blame the impoverished villager for killing endangered wildlife to eat or to get money for food? Within this spectrum though there are also the smugglers those middlemen, corrupt law enforcement and government officials, and transportation employees - who move wildlife along this illicit chain. There are also those people overseeing and organising parts or all of the smuggling process. These might be transnational organised crime groups as well as individual criminals. Not to be overlooked in wildlife trafficking perpetration are the processors who sculpt decorative corals and make traditional medicines, the sellers at markets and restaurants and of course the buyers, all of who are playing some role within a wildlife trafficking operation. There are then differing levels of blame, responsibility and 'evil' that can be attached to the different actors because of their differing motivations and levels of engagement in committing this wildlife crime. The next section unpicks these motivations and what level of guilt is then ascribed to the perpetrators.

The capturers

As described earlier in Chapter 2, the first stage in trafficking is the collection or harvesting of the wildlife. This could be the live kidnapping of a non-human animal, the taking of live plants or the killing of a non-human animal or plant. As will now be detailed, there are a range of actors involved at this stage with differing levels of skills and different motivations. Taken together, these characteristics determine the construction and placement of blame and guilt upon the offenders at this initial stage. There are those who poach and take plants as part of a subsistence life style and/or out of necessity, but there are also those who supply the black market out of a sense of entitlement and/or greed.

Subsistence poachers/harvesters

Many of the world's people may live in proximity to natural resources that they rely upon for food or income. Maybe more often than in the past, there is conflict between people's need to access these resources, which as mentioned is typically how wildlife is conceptualised, and the need to preserve these spaces and the species living there. People in these areas may indeed poach and take plants illegally. This may be for personal use (a wildlife and green crime, but not trafficking), but it can also be for money.

This is what has been happening for several years in the Galapagos Islands of Ecuador. The Galapagos Islands, world famous for their biodiversity, are essentially the last location where a spiky species of sea cucumber can be found (Wu 2007). Sea cucumbers are echinoderms that are related to starfish and serve an important ecosystem role by moving along reefs and sea beds, eating debris and other matter and re-depositing the material (McKenna n.d.). This has been compared to the function of an earth worm in terrestrial settings (McKenna n.d.). Loss of sea cucumber larva to the ecosystem has had a noticeable affect on other species within the food chain (McKenna n.d.). Sea cucumbers are a delicacy and medicine in East Asia, but populations of sea cucumbers there have been decimated because of the demand. The numbers in the Galapagos have been dropping as well and a ban on their harvesting was enacted in the mid 1990s (Wu 2007). This has not stopped local residents from harvesting them (Wu 2007). People openly illegally take them and do so saying that

this is their only means of making money and therefore surviving (McKenna n.d.).

In this case and others like it, the poacher/harvester sells their illegal kidnapped or killed wildlife to a middleman who then smuggles them further along the black market. In the example of the Galapagos, sea cucumbers are sold to people who dry them and then they are smuggled to Taiwan (Wu 2007). This category of offender is offending out of economic necessity or marginalisation. Their criminality can be conceptualised in terms of their poverty. Because of their circumstances, their actions are understood and therefore little or no blame and/or guilt is usually ascribed to subsistence offenders.

Opportunistic poachers/harvesters

Those living in proximity to natural resources and non-human animals may exploit them because the opportunity is available, not because there is any economic need. Often this is in conjunction with a legitimate occupation, so the perpetrator can capture or collect protected and endangered species without drawing attention or suspicion. The fur trade mentioned previously provides proof of this. Trappers are engaged in a legitimate occupation, but hunting furbearing mammals typically happens in more remote or isolated areas where there is little oversight over the trappers' activities. This means that an unscrupulous trapper can take more furbearers than he is allowed without much fear of being caught (Wyatt 2012a). He simply takes advantage of the opportunity that presents itself, and is not poaching out of economic need. Again, as with subsistence poachers, opportunists may consume the wildlife themselves or sell them on. Fur must be dried, tanned and then manufactured into rugs or clothing. In this case then, the opportunistic poacher or a middleman must coordinate with a person or a business that has the means to do this. Since there is no intention or premeditation to poach, opportunists are to blame, but on a relatively low level due to the minimal scale of injury that usually results from their actions and the occasional, random nature of their offending.

Specialist poachers/harvesters

Then there are those people who are calculated in their capture of non-human animals and plants. It may be that they target particular

species to sell on to middlemen or sell the wildlife themselves at market. This is not done out of economic necessity; it is a rational choice based upon high profits and high probability of not getting caught. The worldwide illegal market in orchids can often fit this description. For example in Mexico, many orchid species are nationally and internationally protected yet continue to be the focus of illegal collection and trade for personal and commercial horticultural collections (Flores-Palacios and Valencia-Diaz 2007). There are instances, as seen in the falcon trade, where these collectors are part of a transnational organised crime group in which they are the initial actor in the network. They could be filling an order for a particular 'specimen' that has come through the transnational organised crime network from a wealthy buyer (Wyatt 2012a). Offending in this category is not opportunistic or for sustenance - it is specialised and professional, requiring specialist knowledge and skills to locate, capture and transport specific species. Blame and guilt in these cases is high and much more straightforward, as will be discussed in more detail shortly.

The smugglers

After the initial capture of the wildlife, trafficking is made up of a large and varied group of offenders, who carry out the actual smuggling or trafficking. These middle stages before the wildlife reaches the final buyer have the most people involved, and those people's interaction with each other differs considerably depending on what wildlife is being smuggled and the individual person's motivations. This whole collection of people who play a role in this middle stage, be they individuals or those acting in concert as part of a network, are classified as the smugglers.

Smugglers act under a profit motive. They may be 'self-employed' individuals acting alone to make money or they may be employees of a larger informal or formal network. A smuggler, in all the various forms, is one criminal piece of the larger puzzle. They may smuggle whichever product for money – wildlife, drugs etc. – so they are not necessarily acting out of ideology when moving wildlife along the smuggling chain. They are probably moving other black market products too.

Individuals

As stated, this middle stage of smuggling contains a high level of variation as to who is involved. It is not always easy or possible to clearly separate offenders into compartmentalised categories. This is because offenders act individually and as part of groups or networks. Their jobs in the smuggling chain in either case may be the same. For instance, the smugglers who are employees of transportation companies can be train, ferry and airline workers that smuggle illicit goods themselves or will take bribes to let others carry them. They may be acting alone as the opportunity presents itself, as part of an informal network of criminals, or as part of a transnational organised crime group. Depending upon the organisation of the country's infrastructure, these employees may well be government workers. So while transportation company employees individually smuggle wildlife for profit, in the context of networks, these offenders will also play a role.

Other individuals are also smugglers. There are media reports fairly often covering the arrest of individuals at various airports around the world, who have been caught with non-human animals, usually eggs or reptiles, hidden on their person or in their luggage. These smugglers are those people who wear elaborate clothing with pouches made to carry individual eggs or carry luggage with secret compartments in it to hide the wildlife as the person crosses the border. Again, this, too, may be a tactic that is part of criminal networks and organised crime groups. The individual offender may be smuggling the wildlife for themselves, so they are smuggler and buyer; they may be selling wildlife further down a smuggling chain to be processed into a commodity or to be sold to someone else, or they might be selling them directly to a final buyer. As is evident, the pathway of smuggling for wildlife is highly variable. Smugglers are active and committed participants acting under a profit motive. This increases the amount of blame and guilt attached to them compared to subsistence or opportunistic poachers, but most likely less blame is given to them than to specialist poachers.

The middlemen

A key individual in a smuggling operation of any kind is the middleman. Once again, they may act as a singular individual or in collaboration with others. A majority of those people who have captured and/or harvested wildlife move them further along a smuggling network. This may well be to a middleman or in more organised trafficking, to the next individual along the chain of the smuggling operation. Middlemen are not necessarily part of 'organised crime' per se in the traditional sense of a hierarchical, long-standing criminal network (Hagan 1983). In the context of wildlife trafficking, the middleman is the equivalent of a 'fence' – someone who moves stolen goods within networks. Presumably most of the time this is disorganised crime, where clearly there is some level of organisation and structure to the offenders' actions, but it is not connected to organised crime, as will be discussed in more detail shortly (Reuter 1985).

As Domalain (1977) and Nichol (1987) both describe, the middleman is that person who buys wildlife from the poacher (subsistence or opportunistic) and transports them to a wildlife market or to a restaurant that sells exotic food or bushmeat. In many parts of the world, areas in Southeast Asia and South America for instance, this transportation is taking place from remote areas where the poaching has taken place and the middleman then moves the wildlife to provincial or regional markets and restaurants (Domalain 1977; Nichol 1987). In some cases, the middleman could be taking the wildlife to a place where it will be processed. For instance, any wildlife that is used for traditional medicine will be taken somewhere for the pills, tonics, plasters etc., to be made. The middlemen may then have some knowledge of wildlife, probably from experience of transporting it to be sold elsewhere, but will also move any illicit product that can be sold. This means they probably do not act out of ideology, but purely from a profit motive weighed against the low risk of detection and/or minimal amount of punishment. Within the hierarchy of offenders, middlemen do not carry that much blame, though their part in the smuggling can be responsible for the pain, suffering and death of the live wildlife.

The networks

Individuals then make up some part of the middle stage of the smuggling of the wildlife within the illegal wildlife trade. Clearly, in many instances the smugglers are connected to other people in some manner. An unknown amount of wildlife trafficking is facilitated by criminal networks. Presumably most of wildlife trafficking is in fact probably carried out by some form of network that is disorganised in the sense that Reuter (1985) proposes and was described above. Yet there is an unknown portion as well that is engineered by 'organised' crime in various forms, as mentioned previously. Each of these networks will be taken in turn.

Disorganised crime

The networks of this type are organised in the sense of being structured and capable of perpetrating green crimes and wildlife trafficking consistently and mostly successfully, but they are 'disorganised' in the sense that they are not a part of formal organised crime groups, which will be discussed next. An incident in 2010 in Birmingham, UK, provides an example of disorganised wildlife trafficking. A man had collected 14 peregrine falcon eggs from southern Wales (Marshall 2010). He went to Birmingham Airport with them and put them into socks and then into his clothing to keep them warm and concealed on his flight to Dubai (Marshall 2010). A cleaner at the airport was suspicious of his behaviour in the bathroom and reported him to Custom's agents, who then conducted a search and found the hidden eggs (Marshall 2010). Evidence in the case indicated that he was filling an order for this particular species and delivering them to the Middle East so the falcons could be used in falconry (Marshall 2010). Clearly, this crime has a set structure and a plan, but it does not have connections to organised crime. This man is a convicted criminal who has been arrested for this offence before (Marshall 2010), but neither he nor his buyers in the Middle East acted because of the direction of an organised crime group. This is how it is classified as 'disorganised' while being quite structured.

This 'disorganised' crime then has a network that enables the smuggling of wildlife from the initial capture further down the chain. Middlemen may certainly have close or informal ties to these networks. Other actors within these networks are the various agents that are needed to facilitate the smuggling through potentially long transportation chains with numerous checkpoints. In the example above, individuals act as smugglers who carry out the transportation and hiding of the wildlife. In some cases of wildlife trafficking, the disorganised network will include transportation workers, which might also be individual smugglers as mentioned before. The employees of train, coach, ferry or airline companies may hide and carry the

wildlife themselves, or they may take a bribe not to notice someone else who is doing that. Within these networks, too, are law enforcement officers that accept bribes to look the other way. Most likely this is Customs or Border agents tasked with searching for contraband goods at border checkpoints. The network might also include other government officials who aid in the forgery of documentation, so that illegal wildlife looks legal.

There must also be sellers and buyers. The sellers might be markets and stores (either physical or virtual) or restaurants. The buyers will be detailed in more depth shortly. If the wildlife needs to be processed, there must be actors within the network who can do this. Again, this may be individuals, but it could also be businesses. Illegal logging is an instance of this. Illegal logs must be processed into timber and most likely timber companies that own saw mills will undertake this. They may or may not know that the wood is illegal.

Again, these are informal networks and connections and do not fit in the more traditional conceptualisation of organised crime. In general, blame is higher in these dedicated, proficient networks as the offenders are acting out of greed rather than desperation. It is possible though, that not all the offenders in the network will be ascribed with the same amount of blame or guilt. As discussed below, each of these different offenders has a different level of engagement with the crime, which affects the amount of responsibility attached to them.

Organised crime groups

In addition to the informal yet organised criminal groups, there are certain species and certain demands, as outlined in Chapter 2, that are met by formal and more traditionally conceptualised organised crime. A full exploration of definitions and constructions of organised crime will not be tackled, but a brief discussion of the parameters of organised crime that were used here in connection to wildlife trafficking follows.

It has been noted, as with so many concepts in the social sciences, that there is not a single unanimous definition for organised crime (Paoli 2001). However, organised crime in this book is conceptualised in a particular manner, so that will be clarified here. As indicated above when discussing disorganised crime, organised crime, too, is highly organised and structured (Passas 1995). Where it differs from the above is in three ways. First, organised crime has an element

of continuity and resilience (Hagan 1983). This gives these groups their characteristic long-standing nature. Second, organised crime is characterised to have a high amount of rationality behind its activities (Hagan 1983) making the crimes very calculated. Connected to this rationality is the relationship between organised crime members. As von Lampe and Johansen (2003) have found, these associations are not based upon faith and trust. In fact they operate with the absence of trust or outright mistrust. Finally, organised crime utilises violence to maintain its power or to complete its mission (Abadinsky 2000).

Organised crime in today's wildlife black markets does not always conform to previous thinking of the hierarchical clans that operate in the 'underworld' (Paoli and Fijnaut 2006). They just as readily have a different structure and engage in so-called overworld activities, meaning they are connected to the mainstream political and industrial infrastructure (Paoli and Fijnaut 2006). Organised crime then is violent, long-lasting, structured, rational and adaptive, with networks to legitimate and illegitimate industries.

With that in mind, it is this concept of organised crime that, as has been indicated previously, is involved in the illegal wildlife trade. From the evidence available, this appears to not only be on a transnational scale, but could be organised groups operating at local, regional and national levels as well that then coordinate with more transnationally linked networks. As argued, organised crime is engaged in the more lucrative, profitable markets in wildlife traffick-ing as well as those that require a greater amount of infrastructure and sophistication in order to take place.

It is thought then that trafficking in ivory, rhinoceros horn, falcons and some timber are most likely orchestrated by organised crime somewhere along the chain of smuggling. More anecdotal evidence ties them to caviar and whale meat trade, as mentioned earlier. Naylor (2004) notes that organised crime targets elephants in Africa. The valuable ivory is then smuggled to East and Southeast Asia, where recent reports show that ivory selling is flourishing (Christy 2012). Religious practices in places such as the Philippines help to sustain a trade that kills hundreds and maybe thousands of elephants a year (Christy 2012). Part of this is the carving of the ivory into elaborate religious icons, so manufacturers and processors are connected to organised crime.

Similarly, members of organised crime undertake sophisticated and highly technological hunting and poaching operations of rhinoceros in Africa. Wildlife wardens detail criminals with helicopters, night vision equipment, silencers and tranquilisers who expertly track and kill rhinos (Flanagan 2010). The horns are chopped off and the rhino left to bleed to death (TRAFFIC 2013b). NGOs are reporting that this is a crisis as poaching is at a 20 year high and population numbers are approaching dangerously low levels for the species to survive (TRAFFIC 2013b). Again, processors are involved as the horns must then be made into medicines. Markets and sellers obviously also play a role as the medicine must reach the consumer.

Falcons, too, are targeted by organised crime as mentioned. Supposedly, Middle Eastern organised crime groups arrange the collection of specific species and even specific colours of birds of prey to be captured from Siberia and Far East Russia (Wyatt 2012a). They then orchestrate the smuggling of these birds over thousands of kilometres by rail, road and air to reach the Middle East where they will be used in falconry. Mortality rates can be quite high and it is believed that some birds never recover from the trauma of the smuggling journey (Wyatt 2012a). Timber, too, because of the equipment and infrastructure needed, such as large lorries and roads to remote locations, in addition to the profit to be had, is thought to entice organised crime participants (Tagliacozzo 2001). They are connected to businesses that process the illegal wood and potentially to businesses that sell it.

The above is not repeated to once again provide evidence of the connection of organised crime to the illegal wildlife trade, but to illustrate the level of involvement and types of activities that organised crime undertakes in order to smuggle wildlife. As is clear, their actions are calculated and profit-minded. There is no consideration of the environmental consequences of biodiversity loss or deforestation. There is also no consideration of the non-human animal abuse, suffering and death that wildlife trafficking causes. It is this level of greed and disregard for the concerns of the environment and the wildlife that makes organised crime fall at the highest level of blame in the offender hierarchy. They are attributed with a high level of responsibility and guilt for this green crime taking place.

Other 'organised' crime

Whilst the above details the role and blame of more traditionally conceptualised organised crime, it should not be overlooked that there are other kinds of 'organised' crime that facilitate the illegal wildlife trade; corporations and states have also been implicated in this green crime, as have terrorists and insurgents. Crimes committed by corporations and states are 'organised' in a similar way to disorganised crimes. The criminal actions are structured and coordinated, so are organised, but do not conform to conceptions of organised crime with the elements of violence and adaptability. Corporate and state criminals are resilient, but arguably their power comes from different sources than that of organised crime. They create the criminal laws to protect themselves (Pearce 1976). Furthermore, these actors also do not fall within disorganised crime that is more indicative of loosely networked individuals. Therefore, corporations and state criminals are committing organised criminal acts in a slightly different context to the others described.

For instance, the government of Cambodia (Tagliacozzo 2001; Global Witness 2007) has been known to profit from and be a part of the smuggling chain of timber. Fairly recent Greenpeace (2007) research finds that logging corporations in the Democratic Republic of Congo are the perpetrators of large-scale illegal logging in central Africa. They received permission to log after a moratorium was declared, so there is a link to state corruption as well (Greenpeace 2007). Further in the supply chain, big box stores, such as Wal-Mart and IKEA have been linked to buying illegal timber (EIA 2007a). These are all 'organised' crimes and may be part of the routine activity of the corporation or state.

These are only a few examples of the state and corporate connections that have been uncovered. States and multi-national corporations are in a unique place to be able to hide their crimes from the public because of their power over the media and agencies that might be able to uncover their criminal activities (Jupp et al. 1999). It is arguable then that there may be a large dark figure of crime related to wildlife, environmental and other crimes that are perpetrated by these powerful actors. Further research (if it were possible to gain access) would most likely reveal that even more states and corporations are involved in the illegal wildlife trade. This is presumably because of the high profits and safety from detection and punishment. Due in part to the ability to remain hidden from the public eye, states and corporations may not be considered when ascribing blame for the illegal wildlife trade. Whenever it is discovered, these offenders are highly blame worthy as they, like organised crime, act in a calculated manner. States in particular can be demonised for their role in wildlife trafficking since they are considered by many to be guardians of the environment. Corrupt individuals acting alone are also wildlife trafficking offenders, but might not be looked upon as harshly as more organised state exploitation of wildlife.

Examples have been given of the role of terrorists and insurgents in trafficking wildlife. As is evident from the level of violence and calculation in poaching wildlife, particularly elephants, these groups hold a high level of blame and guilt. They purposely prey on the most lucrative species to fund their violent, destabilising operations. The poaching that typically takes place is on a disturbing scale of large groups of numerous non-human animals. This additional victimisation and the scale of killing place terrorists and insurgents at the highest point on the hierarchy.

The middle stage of smuggling is crowded with diverse offenders mostly all motivated by profit. Their levels of involvement differ though in terms of frequency, ideology and commitment. These factors affect how much blame and guilt is given to the offender. After smuggling, the wildlife is sold and in some cases they will be processed and then smuggled again. Though selling and processing have been woven into the above discussion, more detail is given here as to these actors' role in wildlife trafficking.

The sellers and processors

The poachers themselves may sell the wildlife, as might the middlemen. The other smugglers, too, may sell the wildlife and there is also the possibility that the poachers or the smugglers will process the wildlife into a product to be sold. Arguably, these scenarios are probably not the typical cases. In many parts of the world, wildlife is sold in open air markets that sell domesticated non-human animals and plants alongside wildlife. This is seen throughout Southeast Asia and is certainly the case in Vietnam (Drury 2009). Similarly, wildlife is also sold in restaurants that also sell farmed plants and meat from domesticated non-human animals (Drury 2009). Market sellers of wildlife, restaurateurs and cooks most likely know what they are allowed to sell or serve. They are therefore knowing, willing offenders in wildlife trafficking.

Not all markets in today's world are physical spaces that can be visited by consumers. As mentioned, an added dimension and challenge for wildlife trafficking is that much of the selling of wildlife is now occurring over the Internet. Presumably, the sellers in this case also know what is illegal and legal to sell. However, there is an added layer: the website host. The individual seller is an offender, but is eBay also guilty? They have not actually sold the illegal wildlife, but they have provided a forum for this to happen. Blame and guilt in the case of the market seller of wildlife, virtual and physical, is high and fairly straightforward. Blame and guilt to those businesses that unintentionally facilitate illegality is murkier. If the company were to do nothing to monitor or stop the illegal activity, the level of blame and guilt would be quite high. As with eBay though, they have made seemingly sincere and sustained efforts to police this forum and probably then remove some amount of their guilt by their reparative actions.

Exploration of the blame and guilt of processors also proves to be less clear. For well-known illegal products such as ivory and rhino horn, guilt and blame to those people who are carving figurines and making pills is straightforward. Where responsibility becomes less clear, is when wildlife, such as trees or fur, is processed into products. There is the possibility that the business or person manufacturing the timber, furniture or clothing, for instance, will not know the wood or fur is illegal. It is reasonable that companies in these industries should be required to have a certain amount of accountability regarding the supplies that they are buying. If diligent efforts are made to ensure that they are sourcing their products from scrupulous places and they are then deceived, little blame or guilt is ascribed. Companies that act irresponsibly or negligently, however, should be held accountable for their contribution to the loss of wildlife that takes place when using illegally obtained wildlife. At the end of this long chain of smuggling is the person by whom the wildlife is finally consumed either as food or medicine, or by whom the wildlife is owned as a pet, decoration or other fashionable item. This group of people also covers the range of the blame hierarchy, as will be argued now.

The buyers

People who purchase and consume wildlife do so for a variety of reasons. The motivations behind their consumption can be linked to the amount of guilt that is attached to them if they are arrested for a wildlife offence. There are people who actually do not know that they are purchasing an endangered species or that they have committed a crime related to trafficking in wildlife. Next, there are buyers of endangered wildlife that deny wrongdoing, although they realise the threatened status of the non-human animal or plant. Collectors, as mentioned in Chapter 2, and those who ideologically believe in the consumption of wildlife might be viewed as committed buyers. There is a small distinction that will be made here that some committed buyers are not seeking a rare collectible, but subscribe to a belief that consumption of wildlife is healthy and/or an entitlement.

Accidental

Not every consumer makes informed purchases and as wildlife artefacts can be memorable keepsakes from travel to different parts of the world, it is typically tourists buying mementos that make up the accidental group of illegal wildlife buyers. This is seen most frequently with things such as objects carved from turtle and tortoise shells, where the tourist would not be aware that the species from which the trinket was made is threaten or endangered and therefore protected. Whilst technically, it is illegal to purchase these items, in incidents such as these it could be argued that there is very little guilt on the part of a tourist unknowingly or accidentally buying an object made from an endangered species. Another species which this happens with are the various types of coral that are protected vet still made into decorative items sold to tourists. Less often, uninformed tourists may also purchase pets, usually reptiles and birds, to take home, again, not realising that this is not allowed. Online shopping also creates the possibility that someone will make a purchase without knowing that the wildlife is protected. Whilst this is less excusable as they have the means to check illegality (the Internet), blame and guilt are also low in these cases.

It could be argued though that lack of intent or knowledge is not an excuse for engaging in illegal behaviour, particularly one that is potentially quite harmful and can have far-reaching effects. Holding tourists and online shoppers more accountable might warn people that they must be careful in their purchases. This may in turn have an impact on both the supply and the demand of these products, which possibly in turn could affect the trade in these particular species.

Denial

Some buyers are aware of the conservation status of the object or live wildlife that they are buying. They may rationalise this purchase though as not being harmful or that in fact it is actually helping to conserve the species or educate the public. This is the case when zoos, aquariums, gardens and museums partake in wildlife trafficking. There have been instances where zoos and aquariums make purchases on the black market to add to their collection of nonhuman animals. This has been found in the case of great apes where uncertified or unscrupulous zoos pay for wild caught gorillas and chimpanzees, for instance (GRASP 2012). These people have specialist knowledge of the species which they are buying, so are undoubtedly aware of the proper channels of how to buy non-human animals and what can and can not be bought. In those cases where the reasons seem to be noble ones - the desire to find a mate for an endangered species for instance - little blame or guilt is attached to these offenders' actions.

There are of course instances of wildlife trafficking from these types of organisations where this is not the case. Zoos and aquariums do have profits and income to worry about, so having particularly rare or endangered species to draw crowds can prompt some officials to make these illicit purchases. Maybe less known, but highlighted by Green and CPI (1999), is that zoos and sanctuaries also sell non-human animals illegally on this black market. Zoos and sanctuaries have limited space to house non-human animals and births or 'acquisitions' can stretch these facilities to their capacity. It has been uncovered in instances such as this that some zoos have sold their excess 'stock' on the black market. Not only is it profitable, but it also relieves overcrowding. Research facilities that experiment on chimpanzees and other primates have also been implicated in these kinds of sales. Chimps that are too old or ill to continue being experimented on have ended up in the illegal pet trade. These offenders are all aware of the legality of their actions, but again can justify it as good for the individual non-human animal or good for the overall survival of the species. There is also a profit motive for some. Blame and guilt are higher than for those who have unknowingly bought a prohibited item.

Possibly even less well known than the relationship of zoos, sanctuaries, gardens and aquariums to the illegal wildlife trade is the role that can sometimes be played by museums. Anyone who has been to a natural history museum or a museum with a preserved wildlife collection probably has a sense of the vast number of wildlife specimens that exist in the hundreds of museums around the world. A vast majority of these were collected at a time in history when the species' survival was not threatened. There are a few cases though where specimen collection has continued and the wildlife may in fact be illegally poached, as may be the case in the Philippines with some of their ivory pieces (Christy 2012). An investigation found that the National Museum there may currently give false certificates for ivory carvings to people for personal religious use (Christy 2012).

It is not out of the realm of possibility that museums are acquiring illegal wildlife specimens. Evidence from other black markets, such as antiquities, indicates that employees of museums are at times a part of the networks that obtain and launder rare items. CITES has a clause that allows for the trade of specimens that were acquired prior to the implementation of the convention in 1975, which is one way this type of laundering can take place for wildlife. A new endangered individual is killed, but passed off as a pre-convention specimen. Pre-sumably, officials are fairly calculated in these offences and also hold more blame than those who have accidentally offended.

Committed

Buyers who hold the most blame and guilt in terms of wildlife trafficking are those who are committed to the consumption of wildlife regardless of the illegality and the negative consequences involved. This could be said for collectors who fuel one of the demand categories drawn upon here (Wyatt 2012b). Collectors, it could be argued, are even more to blame than other buyers as they are calculated in their pursuit of particular rare and endangered species. Committed buyers also feature in the categories of demand for traditional medicines and food. Those that are committed to this type of consumption of wildlife products may not go out of their way to purchase something rare or endangered, but ideologically they are not opposed to humans using wildlife as they like, even when it threatens the survival of those species.

People eating bushmeat and using traditional medicines come into the category of this type of committed buyer. Their culture and traditions lead them to believe that wildlife is for human consumption and even if that threatens the wildlife, they continue to consume these products. This is noticeable in the persistent and even increasing use of rhinoceros horn in Southeast Asia, particularly in Vietnam (TRAFFIC 2013b). Despite media and public awareness campaigns highlighting the plight of the black rhino, rhino horn is still used as a traditional medicine and even as a recreational drug (Milliken and Shaw 2012). Consumption of exotic wildlife and bushmeat is defended in similar ways.

These offenders are certainly to blame for the role they play in decimating wildlife populations. This is higher than those buyers mentioned previously. These offenders are incredibly difficult to address, though, as such ingrained notions of culture (traditional foods and strong belief in the curative properties of the medicines made from wildlife) and entitlement, in this case to the consumption of wildlife, is an ideology that is yet to be overcome. Some would argue that in fact it should not be overcome, as concepts of non-human animal and environmental rights are Western ideas that should not be forced upon other cultures. Demanding adherence to species and ecological justice is viewed by some as the latest form of imperialist or colonialist action by Western nations. This added complexity makes blame and guilt in this case dependent upon one's philosophical approach to nature and other species. For some, there is little guilt for endangering wildlife that one's culture has traditionally consumed and for others this is no excuse to risk the extinction of species that also have the right to life.

The hierarchy of offending

As introduced and described above, there is a diverse group of offenders that make up the web of activity that is the illegal wildlife trade. Motivations for each of these offenders differ and depending upon what that motivation is, it is theorised here that this determines a corresponding level of blameworthiness and guilt. Those offenders who poach out of desperation, be it financial or to avoid starvation are at the bottom of this hierarchy of offending (Figure 5.1). Their own difficult circumstances by and large make it seem acceptable to commit a crime. Whereas for mainstream offences, poverty and social exclusion are not excuses for committing an offence (those who steal

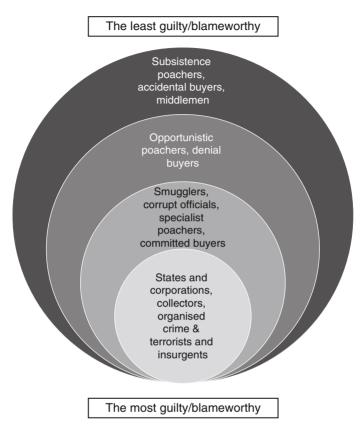


Figure 5.1 The hierarchy of offending

food and money are still held accountable for their actions). Yet if it is a green crime, for which many are of the view that there is no victim, then there is no guilt and no blame. The life and well being of the human is prioritised over the environment. That is not to say that this should not be the case. The point is to highlight that within the dynamics of green crimes, human desperation is viewed in a particular way. It could be argued that if a person is starving and they steal food from another person, there should also be no guilt or blame attached to their actions to survive, but because of the power dynamic between human relations, this is not the case. Only slightly more blameworthy or guilty are those wildlife offenders who offend accidentally. These tend to be tourists or well-meaning pet buyers who buy a souvenir made from wildlife or a non-human animal for a companion. There is the possibility that the souvenir is made from a prohibited product like coral or turtle shells or that the non-human animal is prohibited within the pet industry. This could be the case with plants as well. A tourist may purchase an orchid or cacti that are in fact not allowed. Such buying may now happen online. Their ignorance of the law places them on a low rung of the hierarchy ladder.

The middlemen within the wildlife trafficking network are also among those least guilty. These people do not necessarily act out of a sense of ideology or commitment to selling wildlife; their involvement is profit motivated. Due to their lack of attachment to the chain and because they are engaged in other activities as well, and possibly at the request of someone else, the middleman has little to be blamed for, especially in comparison to other offenders in the chain. This is true of those supplying live markets as well as the virtual ones.

Opportunistic poachers are those who poach not out of desperation, but because they were in the right place at the right time. There is a chance to take a protected non-human animal or plant that will make them some money and the offender sees that there is little to no chance of getting caught. There is more guilt in this scenario because the opportunistic poacher does not need the money or the food that the wildlife would provide. They are simply acting out of greed and this brings them to the second tier on the hierarchy of offending.

Also within this level are the denial buyers that might be found in zoos, gardens and other more professional organisations that purchase wildlife. They are fully aware of the legislation and regulation that governs the trade in wildlife, but a few unscrupulous and greedy people within this sphere are willing to circumvent these measures. Their actions may well be for the individual welfare of the wildlife or for the genetic health of the population. In this case the blame may be reduced, but there are those who sell non-human animals from these facilities for personal profit or for money for the institution. Their informed position makes their level of blame higher, as does their motivation.

These have been the least guilty within the trade; there are those who hold a higher level of responsibility for this green crime and have a more profound impact on its continuation. At the bottom of these higher levels is the individual or disorganised crime smuggler. This includes nearly all of the various people who make up these categories; though if there is more blame attached to them, this is pointed out. This includes the person who is secreting the wildlife or wildlife product to get it past inspections at national borders. This may be in cargo or on their person. There is clear evidence of intent to commit a crime and clear lack of regard often times for the welfare of the non-human animals. The wildlife is frequently put into situations that cause them physical, mental and emotional stress. Of slightly more blame at this level are the corrupt officials who allow themselves to be bribed for the illegal wildlife trade to take place. Corrupt officials, too, are perfectly aware of the illegality of their actions and are willing to abuse their position in order to profit. They, too, share some blame for the conditions that smuggled wildlife is kept in as they can be a witness to the suffering and injury that is being caused.

Specialist poachers are also fairly high in the hierarchy in terms of blameworthiness. They are employed to seek out particular species for the committed buyers and collectors of wildlife. As they are cognizant of the crime that they are committing and in all likelihood educated on the threatened status of the species, the amount of responsibility that they hold within the chain is significant. Of greater responsibility for seeking out these species though, is the committed buyer – that person who believes that wildlife can and should be used as and when people see fit. They will eat exotic meat of the pangolin or tiger because it has health benefits beyond other foods. They will use rhino horn powder and ginseng in medicines to cure them of a variety of ailments. This continues despite the threat to the other species and therefore affords a high amount of guilt within this proposed hierarchy.

This leads to the highest level of blame. These are the most powerful actors within the network of wildlife trafficking and those most committed to its continuance. Those states and corporations that are profiting from the illegal wildlife trade fall within this level. They possibly flout international pressure, scientific advice and public sentiment to maintain their profitable, yet illegal activities. This is evident in industrial logging operations in prohibited areas (Greenpeace 2007). For such industrial logging to be taking place the government is complicit and the corporation is breaking laws. Both of these offenders are protected from being forced to stop and certainly from prosecution. Again, these offenders have intent to break the law to make money at the expense of the environment. There is a higher amount of guilt in these instances, too, because of the scale of the destruction. This is not the poaching of a few non-human animals or the felling of a few trees. These tend to be large-scale operations that drastically reduce population numbers, as is evident with the pangolin (Pantel and Anak 2010), or reduce a forested area by multiple acres, thus effecting the soil and stealing resources from the local communities. This increased scale of victimisation increases the guilt and blame and thus warrants a higher place on the hierarchy of offending.

Within the highest level of blame is the collector – that committed buyer who must have a rare reptile, such as a New Zealand tuatara, or a rare plant, such as a Christmas orchid. These collectors are committed to an ideology that they are allowed, even entitled, to use wildlife as natural resources and amusements regardless of the danger that this might pose to the wildlife's existence. This unrelenting demand for rare wildlife to demonstrate high status and/or wealth underpins the high level of guilt that they are ascribed with.

At the peak of the hierarchy are organised crime as outlined above, terrorists and insurgents. Organised crime groups are resilient, highly structured, rational actors making calculated decisions to smuggle wildlife. Their motivation is one of profit, which certainly does not differ from the other offenders in this chain. What differs is the level of calculation and the means employed to achieve their aims. As mentioned, violence is a key feature of organised crime groups and what distinguishes them from other criminal groups. Most of this is true for terrorists and insurgents as well. They are making calculated choices to kill wildlife for profit. The scale of such killing is large and the money is then used to fund other violent actions. This increased level of victimisation to both people and the environment, the calculated commitment to profit-making and, as seen throughout, the disregard for the survival or well being of other species are the reasons that organised crime, terrorists and insurgents are particularly blameworthy.

Punishment

After theorising levels of blame and guilt, it is possible to explore how these offenders should be punished. It is a common belief that punishment for not only wildlife trafficking, but also green and environmental crimes in general, is too weak and insignificant. Punishment is usually done by fines, which often appear to be too low. Possession of a tiger skin in Russia for instance, results in a fine of a few hundred dollars, though the skin is worth thousands of US dollars on the market (Wyatt 2012a). This is from a non-human animal of which there are probably only around 400 remaining. Or the recent fine of a few hundred US dollars for a smuggler in Kenya with over 400 pieces of ivory – again with many times more than that (Kenya Wildlife Service 2013). Fines like these are not going to deter people from committing a crime that results in many times more profit than the punishment.

When jail or prison sentences are given out, which overall is quite rare, the amount of time is usually months, but maybe a few years. Admittedly, this varies greatly by country and jurisdiction. In disorganised and organised criminal networks, minimal times of incarceration are also not a deterrent to activity. Presumably, many of the offenders in the smuggling chain have criminal records and have experienced prison before, so small prison sentences will not keep them from committing crimes with high profits.

As demonstrated, all offenders within this complicated transnational web of smuggling do not hold the same level of responsibility for the crime. The hierarchy helps to understand and visualise this. The lower two levels of the hierarchy can probably still be targeted with fines and minimal prison sentences, particularly for repeat offenders, but also deserve to have alternative forms of punishment considered. Community service if possible or education programmes about conservation and species loss may have a positive affect on those poachers and smugglers who are not committed to the ideology of wildlife consumption or would not do it if other income was available. The fines and small prison sentences might deter those opportunistic offenders.

At the next two levels of the hierarchy, the punishments need to increase substantially. Criminal organisations and corrupt officials need to be held accountable for the large-scale destruction to which they are contributing. Not only might this deter others from trafficking wildlife, it may also send a message about the value of wildlife to the world. This is certainly an anthropocentric approach to punishment, but it has been argued that by having low fines and short prison sentences, that a message is sent to everyone that wildlife is not valued. Increasing both of these may contribute to changing this ideology. The current punishment regime is not having an impact on the scale of wildlife trafficking. This hierarchy may help to unpick the complicated relationship of those involved and highlight the perpetrators in this chain of events who should truly be held responsible.

This hierarchy is not set out as a finger-pointing exercise. The rationale for developing a hierarchy of offending and theorising the different offenders place within it is not only to explore punishment in more depth, but also to better inform prevention strategies and policy interventions. Understanding motivations is key to altering behaviour and this is true of criminal behaviour as well. Those acting out of desperation or as a way to make money at the lower end of this hierarchy will need targeted programmes that will look much differently to those trying to get committed buyers or states to stop offending. In addition, placing offenders within a hierarchy is meant to provide a visualisation of the amount of victimisation caused. This demonstrates that not all offenders within the wildlife trafficking network are equal; some are causing more harm than others and this should not only inform which prevention strategies and policy interventions should be prioritised, it can also serve to address the inadequate sentencing and punishment associated with this green crime. Having a similar fine for a collector and for tourists in possession of illegal wildlife does not reflect the severity of the crime. The hierarchy provides a way to conceptualise and therefore better understand the diverse and complex set of offenders that are all contributing to the demise of many of the planet's species.

6 The Fight Against Wildlife Trafficking

The illegal wildlife trade is nestled between law enforcement, nonhuman animal welfare and environmental protection. This unique position means that there are multiple stakeholders determining the ways in which wildlife trafficking can be combatted. Whilst all are well-meaning, different kinds of organisations have different missions, so this diverse array of stakeholders may have approaches that come into conflict with one another. This chapter presents the agendas that collide when compromise must be reached between policing, conservation and the economy in relation to wildlife trafficking.

The policing of wildlife trafficking can involve two main different approaches – enforcement/criminalisation and regulation. Each of these faces different challenges in achieving the primary objective of compliance. Both of these, and compliance, will be discussed in turn before exploring the perspectives and hurdles faced by each of the actors involved that is police, Customs, scientists, NGOs and government officials, etc. The effort to curb wildlife trafficking in Cambodia will be a case study example in this chapter, showing how in this instance the country's governmental departments and several international NGOs join forces to stop wildlife and timber trafficking and how successful and challenging this cooperative effort has been.

How to combat wildlife trafficking

There are different approaches and different theories as to how harmful actions can be curtailed. In the case of wildlife trafficking, the harmful action is the overexploitation of species and the aim then is how this can be decreased or stopped. The debate typically centres on whether allowing some amount of trade within set limits will achieve this aim, or if banning trade altogether would be more effective. This is the crux of the argument: should trade in endangered or threatened wildlife be criminalised or should it be regulated? Either way, how is compliance ensured? The environmental perspectives presented earlier play a role in how a society might approach these questions. More ecocentric (and biocentric) societies may lean towards criminalisation as wildlife's intrinsic value is recognised. More anthropocentric societies may maintain trade so that wildlife can continue to be used by people. The arguments and approaches for criminalisation and regulation and the connection to compliance will be broken down and the role of the environmental perspectives highlighted.

Criminalisation

Enforcement or criminalisation, in the case of wildlife trafficking, is to stop wildlife from being traded or to ban that species and all products that derive from them from being traded. This is the least likely tactic taken, arguably because of the anthropocentric perspective of a majority of societies that insist on using wildlife as a natural resource. It is argued that removing any legal market for these products will end the killing of these species and this will allow for the population numbers to recover and trade can be re-visited in the future. Full protection sends a message that these species must be conserved. Bans also clarify the situation regarding what is allowed and what is illegal, so there are no grey areas as to which species or product can be traded.

Depending on the country, there are different levels of criminalisation. Wildlife trafficking and the related actions (poaching, smuggling, possessing, etc.) can be made into misdemeanours or felonies. In different jurisdictions, this may give law enforcement different powers to investigate, the case may enter a different court, and there will most likely be different penalties. Either way, though, the harm is labelled as criminal and holds some amount of stigma because of this.

Individual countries can of course approach criminalisation differently, but in general on the international stage, this is determined through CITES. However, 'bans' are actually a misnomer. Even Appendix I species that are supposedly banned from trade are only banned from commercial trade and can still be traded for scientific purposes. In the case of the rhino, there is an exception for trophy hunting (Milliken and Shaw 2012). For ivory as well, not all populations of elephants are Appendix I and countries with Appendix II species can trade in ivory (Martin et al. 2012). Furthermore, within that context there have been one-off sales and some 'trading partners' that have domestic ivory trade. Since a true complete ban has not taken place then, the discussion is around the cases where a vast majority of the trade is not allowed.

Notably, bans are not commonplace, and as mentioned, never appear to actually be complete bans. Even now there are those who argue that by completely (or nearly so) limiting trade this creates the conditions for the wildlife black market to exist. Rhino horn again provides an example. Martin (2012) claims that there is an artificial restriction created on the supply of rhino horn to the Asian markets by placing a ban on it. If horn was harvested from live rhinos and sold on a regulated legal market, this would stop the illegal poaching that is taking place (Biggs et al. 2013). Furthermore, increased rarity of species like the rhino that have shrinking populations only increases the value of the horn, which increases the incentive to poach by corrupt officials and local people (Oldfield 2003; Ginsberg 2004). Polar bear poaching may also provide a current example. Some scientists are finding that the prices of skins are going up because there is a decrease in polar bear numbers (McGrath 2013b). Experts have argued over whether or not this is the case (McGrath 2013b) and also failed to agree that poaching and hunting were an added pressure to the survival of the polar bear in addition to climate change. As a result, the polar bear was not up-listed from Appendix II to Appendix I at the March 2013 CITES meeting. Increased profits maintain or encourage the involvement of organised crime, further increasing the violence and level of sophistication, and probably success, of poaching operations. The argument, then, is that if bans are kept they contribute to the demise of the species. Criminalisation is therefore often not the strategy taken for complex reasons around black market forces in addition to human-centred motivations around using wildlife products.

Law enforcement is the stakeholder that is tasked with carrying out criminalisation in the form of enforcing criminal laws. As will be discussed shortly, the current amount of personnel and resources

dedicated to wildlife trafficking are not enough to tackle the scale and scope of the problem. This leads then to non-enforcement being most frequent, as the wide array of offenders detailed in Chapter 5 are able to elude law enforcement. In the instances where a wildlife trafficking offender is caught, it is likely to be one of the least significant and/or weakest people within the smuggling operation. This is also true if it is some kind of business. In common with organised crime and corporate crime offences, those that are orchestrating events are protected or hidden within the network so are not the people that come into contact with enforcement efforts by the police. Also in common with corporate crime, wildlife crime and green crime are not priorities for police agencies so even if they had the resources, they would not be put towards these types of crimes. Whereas for corporate crime this may stem from the power of corporations, for wildlife trafficking this stems from a lack of concern for the environment and the invisibility of the victims. Without incentives (non-human animal welfare and species rights are not enough), countries have no reasons to save wildlife (Martin et al. 2012). Criminalisation appears then not to provide any incentives for the country – it requires significant resources and may contribute to the trafficking that they are attempting to stop. It does in fact have benefits if you take into account protecting the health of the environment and ensuring the survival of other species. There is also the possibility that it may deter offenders. As mentioned previously, sanctions are light for those who are caught, so this does not necessarily deter others from committing the wildlife crime. Criminalisation, then, may only have had limited impact because first, it has never fully been applied (there are always exceptions to trade and never enough resources dedicated to enforcement) and second, the punishment after criminalisation is not a deterrent.

Regulation

Rather than not allowing the trading of wildlife (criminalisation), there is the strategy to regulate it instead. This would allow for trade that is set within certain limits so that species' populations will survive, but that human use is not stopped. This might entail, as will be discussed below with CITES, an administrative system that monitors trade and establishes the limits which are allowed. There are different ways to approach such regulation. There are mandatory regimes that

rely on governmental oversight to ensure compliance with the regulation and there are voluntary regimes that seek the cooperation of those from whom compliance is sought with little government interference (May 2005). May (2005) proposes that these approaches form a continuum and regulation can be scaled up or down this continuum from mandatory to voluntary. As Ayling (2012) notes, regulation rather than criminalisation is the chosen method of the 21st century.

There can be sanctions for violations of regulations, but this is the extreme in the case of regulation schemes. In general, regulation relies on cooperative methods, such as persuasion, negotiation and comprises to achieve compliance. This task may also be carried out by law enforcement agencies or more likely regulatory agencies that have enforcement or compliance officers. These methods are particularly evident in the workings of CITES, which is continually discussing and re-positioning the levels of protection for species, the quotas of certain species and how trade in 'high-value products' (Martin et al. 2012) is going to be regulated. The added complexity of regulating wildlife trafficking comes from black markets on the Internet where protected species are sold. IFAW (2008) advocates for the need for statutory regulation of wildlife sales on the Internet, but the form and implementation of this is challenging considering the scale and scope of the Internet and the multiple jurisdictions from which such regulation would need cooperation.

As the debate to legalise or to ban ivory and rhino horn continues, Biggs et al. (2013) suggest that the farming of crocodiles provides a good example of how regulated trade can work properly with the species surviving and human consumption also continuing. For decades, crocodiles were killed for their skins and because farmers and those living in proximity to crocodiles feared them (the latter still takes place). This led to many populations reaching near extinction levels. In fact even today, nearly one-quarter of the 23 species of crocodiles are threatened or endangered (Conservation International 2013c). In order to stop the overexploitation of wild crocodiles, efforts were made to farm crocodiles for their skin and meat. Some farming initiatives appear to have worked; wild Saltwater crocodiles, for instance, now have healthy populations and the farmed crocodiles have their skins sold for high-fashion leather. This is not the case for all crocodile species though. The Siamese crocodile's only living population in Cambodia is threatened by the

capture of wild crocodiles for farming operations and fishing techniques that drown the crocodile (Conservation International 2013c). Farming is thought to be the single factor that is keeping wild populations from recovering (Conservation International 2013c). Legal trade and farming must be thoroughly planned before implementation and then rigorously monitored to work, or as in the case of Cambodia, it does provide a means to capture, launder and endanger wildlife. Farming, too, may not meet the demands for wildlife in the case of those products discussed before where the consumers insist upon wild specimens being of superior quality. Therefore, they avoid farmed wildlife and continue to consume wild caught individuals.

Regulation creates the possibility for the prioritisation of violations. In the process of negotiating and compromising, the issues of most importance to the stakeholders can be given priority over others. In terms of wildlife trafficking, this may mean that species of greater consumptive value fall within the purview of the regulatory scheme and take up a majority of the resources. This may be at the expense of other species which are traded. Pangolins may well be discussed at a CITES meeting, but they never receive as much time as elephants even though their populations are suffering significant losses.

Voluntary regulation, too, can prioritise violations. Those that are easiest to comply with are addressed, but those that are more difficult to comply with or which the country disagrees with may be ignored. This has been the case with Japan and whaling. Though other nations have agreed to a moratorium on whaling, Japan has insisted for cultural and scientific reasons that they will continue. In voluntary regulatory schemes, this is always possible, as there is no way to enforce compliance.

Voluntary or self-regulation (Braithwaite 1982) can prove problematic. Whilst voluntary regulation works well with people and entities that have a sense of duty to comply and have the means to do so, such self-regulatory schemes are limited in their effectiveness for those who are not concerned with the potential harm that they are causing, do not have the capacity to comply, or do not fear increased regulation (May 2005). In the case of wildlife trafficking, there are individuals and nations then for which a voluntary approach will in all likelihood never be effective. They do not have a sense of duty to follow regulations or to the environment. Nations may not have the finances to create regulatory regimes to monitor trade or to enforce the regulations. If a country has no sense of duty and/or does not have the capacity to regulate wildlife trade, then further regulation is not going to deter them as they are already immune to the penalties of failing to comply, regardless of the punishment.

In common with the criminalisation discussion, other limitations to regulation schemes include the fact that having a regulated trade creates the infrastructure for an illegal trade to exist. By allowing a limited amount of trade, a cover is provided, a means of laundering illegal products within a legitimate market. For instance, the fact that there are some countries with legalised domestic ivory trading creates the possibility that illegally obtained tusks from Africa can be mislabelled as being domestic trades within Thailand. Trophy hunting of rhinos allows for wild poached rhinos to have their horns fraudulently labelled as trophies. A legal tiger skin trade within China allows wild tigers to be poached within or outside China and sold on a legal market although they are illegal. Regulation rather than protection can also imply that the wildlife is not worth conserving and actually increase exploitation (Ginsberg 2004). So both criminalisation and regulation are thought to create black markets, and this continuing debate creates a fairly continual flux to the approach to wildlife conservation.

Compliance

The global community has decided that wildlife trafficking needs to be combatted. There are ways to criminalise wildlife trafficking that could, and at times, are employed to do this, but more often regulatory approaches are adopted to try to tackle illegal trade while enabling legal trade to continue. Individually, countries have developed their own strategies for accomplishing this worldwide goal. A large piece of most countries' strategies is membership in international environmental conventions that aim to protect species and ecosystems. For wildlife trafficking, this means getting individuals, nations and businesses to comply with wildlife trade regulation under the framework of CITES.

CITES

The main international agreement to combat wildlife trafficking is the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES). The Washington Convention, as it is sometimes referred to, as it was first discussed at a meeting in Washington DC in 1973, began when 80 countries signed an agreement to regulate trade in certain species of wildlife (CITES 2012b). CITES came into force in 1975 and at the time of writing has 178 members. CITES might be seen to have a mixed approach that adopts criminalisation and regulation in order to gain compliance. Regulation is the main approach though, as the underlying principle of CITES' framework is an anthropocentric one that ensures the sustainability of wildlife trade for human consumption.

Criminalisation is not explicitly present within any of the articles that are contained within the convention, so CITES per se does not actually have criminal provisions in it. Nor does CITES have any law enforcement capacity. Criminalisation is evident in the ways that Parties become compliant to the articles of CITES. For instance, once a Party signs the convention they agree that they will enact legislation that will protect the endangered species listed in the CITES appendices. They will also create Management and Scientific Authorities that will oversee the permit system for the legal trade and establish the limitations of how much trade can take place. Soon after the US signed on to CITES in 1973, Congress passed on act that made the Endangered Species Act the foundation for compliance to CITES (Everson 2012). The Endangered Species Act does have criminal penalties for killing and/or trafficking endangered species, so demonstrates how criminalisation is present within the international framework of trade. Whilst other countries, such as the UK or Australia, have similar national legislation, not all Parties will necessarily choose a criminal penalty, but may institute a civil or administrative measure to regulate illegal trade in wildlife. Possession of a tiger skin in Russia, as mentioned, only warrants a USD 650 fine even though the skin can be sold for tens of thousands of US dollars (Wyatt 2012a). This is an administrative approach rather than a criminal one; if it were criminal, it would carry a higher fine as deterrence as well as a jail sentence.

As a side note, the US Endangered Species Act is an example of a more ecocentric piece of legislation. It appears to be the only US environmental legislation that is underpinned by a sustainability framework (Diedrich 2012). The act ensures the protection of wildlife and diversity for the enjoyment of future generations (Diedrich 2012). Whilst still somewhat human-centred in that conservation takes place for human enjoyment, there is at least recognition of value beyond consumption.

Predominantly though, CITES relies on regulation to gain compliance. Parties and their governmental structures are the conduits through which CITES attempts to get citizens of the world to stop illegally trading wildlife. The compliance discussed below though is of the Parties themselves to the convention. As mentioned, Parties agree when they become a member to the convention that they will draft and implement legislation at the national level that will comply with the parameters set out in the CITES articles, resolutions and decisions. Whether or not that actually happens is completely dependent upon the country. The Russian government, for instance, is criticised by Russian NGOs for not having properly implemented parts of CITES (Wyatt 2012a). Several years ago, this seemed to be the case because there was no set government agency with regulatory authority over forests; the responsibility was shifted several times between different departments during a restructuring, but was never permanently given to any of the departments (Wyatt 2012a).

As Sollund (2011) argues, CITES is designed to maintain the wildlife trade. This makes it clear then that its underpinnings are to draft provisions that will enable trade to continue and therefore the continued consumption of wildlife. It is in no way an advocacy organisation for species rights, or grounded in an ecocentric or a biocentric philosophy. Bans, which as stated above have never meant absolutely no trade, have only been implemented to allow species populations to recover, so that they can be traded again later. This is evident in that Appendix I listings of species are re-visited at the Conference of the Parties meetings to see if they can be changed to Appendix II, which would only limit trade. It is by design a utilitarian convention to ensure that wildlife continues to be available as a resource for human use.

It may not be general national-level implementation that a country fails to address. There are instances where countries take exception to portions of the convention. They then specifically choose not to implement legislation in these instances. Alternatively, the country purposely or unintentionally fails to enforce the provisions that they have adopted. India was subject to a Political Mission where

representatives of the CITES Secretariat and Standing Committee visited the country to observe why non-compliance was occurring (CITES 2000). In this case, the mission found that Forest Guards, who should be making arrests and investigating a variety of wildlife crimes, including poaching and possession of tiger products, had failed to do so in numerous instances (CITES 2000). They had buried the body of a poached tiger near one of their offices and not pursued any investigation and in fact lied about the tiger being attacked by a wild boar even though there were gunshot wounds (CITES 2000). Such blatant neglect of their duties and the Indian government's failure to know the actions of the enforcement agencies and to properly finance the programmes that were implemented to protect tigers in particular, led to India being visited by such a mission. CITES worked with India though to ensure the funding was secured, that law enforcement was held more accountable and that local people were made more aware of the plight of the tiger and the need to conserve it (CITES 2000). This shows how regulation can use negotiation and persuasion to achieve compliance.

In any of these cases – where legislation has not been implemented, portions are not adopted and parts or all of the convention are not enforced – CITES has little authority to force a Party to comply. In fact, their knowledge of such non-compliance might be limited as updates of both implementation of the convention and most data regarding trade is given to the CITES Secretariat through a self-reporting system (Reeve 2006). Some information also comes from NGOs (Reeve 2006). Compliance, which Reeve (2006) indicates is legally binding, is in practice voluntary.

CITES is unique in that the original articles of the convention did not set out how compliance would be demonstrated or monitored (Reeve 2006). This has come about in a secondary fashion with the resolutions and decisions that are adopted at the Conference of the Party meetings (Reeve 2006). The Secretariat, who can monitor all reporting, plays a crucial role in overseeing compliance, as does the Standing Committee, whose role in terms of compliance has evolved over the life of CITES (Reeve 2006). Country self-reports regarding implementation and enforcement were meant to be every two years, but are rarely completed (Reeve 2006). As Reeve (2006) notes, this makes it very difficult to determine which countries are in fact compliant with the convention. In the cases of non-compliance, a cooperative approach is first tried where CITES will work with the non-compliant country to make the necessary changes (Reeve 2006). When non-compliance is more blatant or more frequent, there is the possibility of trade sanctions in the form of stopping all CITES trade involving the country in question (Reeve 2006). This, too, though is a voluntary suspension that is in reality non-binding, but has been used to effectively gain compliance from Parties (Reeve 2006). Compliance to CITES is in general adhered to and as Reeve (2006) notes, a vast majority of countries comply and non-compliance has been decreasing, probably as expectations have become clearer.

Membership to CITES indicates that the country is attempting to gain compliance to the regulation and/or criminalisation of wildlife trade from its citizens. That debate between criminalisation and regulation is underpinned by the unanswered question how best to combat wildlife trafficking. There are multiple stakeholders that are involved in this conversation and have different roles in tackling the illegal trade in wildlife. The first of these to be discussed are the enforcers; the law enforcement agencies that are tasked with enforcing the criminal statutes and other regulatory regimes put into place. Concerns from stakeholders from the conservation side and from the economy will be described shortly.

The enforcers

Criminalisation and regulation both require people to enforce either the criminal statute or the civil/administrative statute that governs how much and in what manner wildlife can be traded. As with so many aspects of the illegal wildlife trade, which agency (or agencies) is tasked with this varies greatly depending upon the country that is being explored. Also depending upon the country that is being discussed, the law enforcement's commitment and capacity to tackle wildlife trafficking may differ substantially. Not every nation has specialised units or staff that are dedicated to environmental and wildlife issues. If these units are in place or if they are absent, law enforcement is still a key stakeholder within the cooperative effort to combat this green crime. Law enforcement's organisational structure and will greatly influence the success of curbing wildlife trafficking. The following sections discuss the specialised law enforcement that is part of this effort, from police officers to Customs; from prosecutors to judges.

Environmental law enforcement

Two types or categories of law enforcement are listed here. This is because the diversity of how police agencies approach wildlife trafficking and the diversity of wildlife trafficking itself mean that it may not fall on the same agency to police all aspects of the issues involved. Often there are agencies that are responsible for investigating pollution and waste issues that may be environmental law enforcement, like the federal Environmental Protection Agency in the US, for instance. Environmental law enforcement may be woven into every police officer's curriculum. For example, in the Netherlands environmental crime is a required course for every officer attending the national police academy. This includes the range of green crimes.

Environmental law enforcement may also refer to forestry departments. In addition to monitoring permits related to recreational use of parks and forests and watching for forest fires, these rangers or wardens also patrol for illegal logging. This is when environmental law enforcement per se is most relevant to wildlife trafficking. Forestry Administrations in Vietnam and Cambodia, for instance, play a vital role in stopping illegal logging and in turn this combats timber trafficking. As with the other stakeholders, there may be multiple motivations and concerns behind the actions of environmental law enforcers. Obviously, there is the motivation to protect the forest and part of that is to stop illegal logging and timber trafficking. More of a driver for law enforcement agencies though may be to catch the criminals and this would be the focus regardless of the type of crime that was being committed. The damage to the environment may be of secondary concern to the overall mission.

This is in the cases where law enforcement is actually engaged with the fight to combat wildlife trafficking and not as in the case of some countries where they are actually the criminals. In the previous discussion of corruption and in the chapter discussing offenders, it was indicated that there are instances where law enforcement is corrupted and actively trafficking or taking bribes not to notice illegal logging or smuggling. The stakeholders then may be part of the crime and this is a tremendous hurdle to overcome.

Wildlife law enforcement

Some countries go even further to separate out wildlife law enforcement from other environmental law enforcement and/or conventional policing. Again this may take place at the national level or within states, regions, or provinces. The US, for instance, has some states with Fish and Game Wardens or wardens for a state-level Department of Natural Resources. Their duties may be broad and cross-cutting across environmental issues, but might largely revolve around the policing of wildlife-related crime. This could be poaching of game and fish for personal use or domestic trafficking as well as potentially the transnational smuggling of those poached nonhuman animals. At the federal level, there are United States Fish and Wildlife Service (USFWS) special agents. Regarding wildlife trafficking, they coordinate investigations around the country pertaining to the Endangered Species Act, the Lacey Act and other pertinent statutes. The Lacey Act makes it a crime to trade any wildlife and their products, including plants and timber, which are illegally obtained under US or foreign law (EIA 2007b). This means that if wildlife or timber is poached or illegally taken from the origin country according to that country's laws and brought into the US, this would be a US federal crime (EIA 2007b).

Forensics

Supporting all of the work of the environmental and wildlife law enforcers are forensic scientists that process the evidence that is collected in these cases. Admittedly, wildlife forensics tends to be very limited in scope around the world. The US was the first country to have a dedicated forensic laboratory specifically for wildlife (Neme 2009). Because of the international nature of wildlife trafficking, the USFWS Wildlife Forensic lab in Ashland, Oregon has worked on investigations of a transnational scope (Neme 2009). Using DNA technology as well as advanced techniques to isolate isotopes of certain elements, wildlife forensics can help to identify the species and possibly the origin of an individual specimen of wildlife. The US lab has been able to do this with walrus tusks, feathers and bear bile (Neme 2009). Other countries certainly have this capability as well, most likely within the larger criminal forensic units.

An NGO that straddles the law enforcement and conservation divide is TRACE, the wildlife forensics network. They aim 'to reduce

illegal trafficking and persecution of fauna and flora through the coordinated application of scientific techniques in support of wildlife crime investigation' (TRACE n.d.). By establishing a network to exchange information about wildlife forensics as well as support training and capacity of forensic practitioners, TRACE is contributing to improving the capability of law enforcement around the world in collecting evidence and prosecuting wildlife traffickers. This is a particularly important aspect for any countries with limited access to technology.

Environmental and wildlife law enforcement as well as wildlife forensics are on the margins within the law enforcement community. Whilst they have a significant role as a stakeholder within wildlife trafficking – their efforts largely affect the success of combatting this crime – within the wider realm of law enforcement this type of law enforcement is 'second-class'. Whereas judges and juries may not think that environmental crimes are 'real' crime, there are officers that would subscribe to the same belief. When effort and attention are given to crimes that are not mainstream and conventional like murder, rape and robbery, it can be looked down upon within the field. This common notion also affects funding and resources. This is clear in the US where there are nearly 200 USFWS special agents to combat wildlife trafficking and over 5,000 Drug Enforcement Administration special agents combatting the 'war on drugs' (Neme 2009). This appears well resourced though compared to Russia Far East where a vast wilderness area with little infrastructure has two wildlife inspectors for the entire area (Wyatt 2012a). This marginalisation hampers the fight from the very beginning and inhibits one of the key stakeholders from performing to their potential.

Customs and border protection

Front-line and more traditional police are not the only law enforcement officers that have a role to play in combatting wildlife trafficking; Customs and Border agents play an essential role in investigating and uncovering the smuggling of wildlife at the numerous borders and checkpoints around the world. As with the previous discussion of law enforcement, Customs and Border agents may or may not be specialised. Some will have received extra training in searching for wildlife or in identification of species. Obviously, this is a key skill in trying to stop the illegal wildlife trade. There are countries that have created specialised units that receive this kind of training and these agents also serve as valuable teachers to other Customs agencies around the world. The United Kingdom Border Agency for instance has a dedicated CITES Enforcement team. They are predominantly stationed at Heathrow Airport in London, but can assist at other airports and ports around the country.

The motivation for Customs and Border agents remains within the law enforcement remit; the goal is to catch criminals and hold them responsible. Conservation of the environment may be a secondary concern for these stakeholders as well, who are mostly driven by the pursuit to nab the 'bad guy'.

Prosecution, the judiciary and the jury

Once wildlife traffickers have been arrested, they will be processed by the criminal justice system or the civil courts, depending again on criminalisation versus regulation. There are countries - the US, Australia. the Netherlands to name a few – which may have in certain areas or at certain levels of the government specialised prosecutors that will take these cases forward. These attorneys then have degrees in environmental law and/or work experience and training that has prepared them to handle the intricacies that are particular to wildlife trafficking and most likely, other green crimes. It is likely that they do not only work on environmental crimes, but will be assigned to them if they arise (Moore 2012). As Moore (2012) points out, in some state offices in the US, environmental cases will be reviewed for evidence of more conventional crimes that are easier to prosecute such as conspiracy, perjury and forgery. This provides evidence that prosecutors aim to make a case and punish an offender rather than make a statement about the environment necessarily.

There are certainly individual prosecutors who are advocates for the environment and aware of the importance of holding people responsible for wildlife trafficking and other green crimes. Prosecutors in the US have noted that the common perception by judges and juries that environmental crime is not really crime and that there is no victim is a key reason as to why environmental crime cases are unsuccessful (Rebovich 2012). Again, a competing narrative within the law enforcement stakeholders is that conventional crimes should be the centre of attention because of the human victims rather than wasting time and resources on the environment; only this time the source is the judges who decide the punishment and the juries who decide guilt or innocence. Anthropocentric approaches to crime and to victims pervade the entire context in which wildlife trafficking is handled. It occurs throughout the criminal justice system – starting with the police, through the courts and through to sentencing. As expressed, there is little room for victims beyond people to gain recognition within society.

All of the different enforcers share the common law enforcement mission of catching criminals and making them accountable for the crime or violation that they have committed. The environmental nature of these offences is secondary to this main motivation behind law enforcements' actions and there may be less focus on stopping victimisation. Not to say that many of these professionals are not avid environmentalists or supportive of non-human and environmental welfare. The point is that the different motivation by the organisation that they are a part of means that their relationship to wildlife trafficking and to the other stakeholders takes on a particular character. They are focused on fighting crime and must be concerned with proper procedure and chains of evidence to be successful in their role. Issues about conservation are subsumed to this.

What seems apparent for all of them is that in order to be the most successful in their portion of the fight against wildlife trafficking, these enforcers need to be specially trained in environmental and wildlife law. There are specific statutes that each officer must know and there must be knowledge of the wildlife that makes up this black market to inform how, where, when and at whom an investigation or search will be targeted. In many instances around the globe though, this fails to take place. Environmental and wildlife law enforcement are on the margins both in terms of status and resources. If this were not the case, it is possible that the law enforcement stakeholders would have much more of a voice in how the illegal wildlife trade is confronted, but with limited personnel and funding, they do the best with what they are given.

Conservation

The second group of stakeholders are those whose main aim is to conserve the environment and protect species. This, obviously, is a different organisational mission than a law enforcement one. Yet, because in some ways protection of the environment comes in the form of criminal or civil statutes, the conservation and law enforcement agendas' intertwine. Not all conservationists will agree on the enforcement approach that should be taken – criminalisation or regulation. Some scientists advocate for farming rhino horn to stop poaching; others disagree. Both are motivated by the desire to protect wildlife and the environment and as indicated, probably less so about catching and punishing the people who have done it.

Scientists, meaning biologists, ecologists and other specialists, are those uncovering the actual number of individuals that remain in their natural habitats and their specific behaviours. This informs much of the discussion around protection and conservation. International NGOs are made up of scientists and activists that are developing programmes in these areas to stop biodiversity and species loss. A few of these have specific programmes that target wildlife trafficking and as such they develop programmes targeted at combatting this specifically. Individual people are also concerned with conservation and environmental issues and contribute to the discussion in various ways. Each of these stakeholders will be discussed below.

Scientists

The dire predicament of the wildlife that is trafficked would not be known if it were not for scientists monitoring and researching wildlife population numbers and behaviours. They also play an essential role in rehabilitating and potentially reintroducing wildlife to their natural environments after they have been rescued from traffickers. Scientists, too, are a diverse group of people who may be biologists, ecologists, environmental scientists, zoologists, mammalogists - the list goes on. They also work for a diverse group of organisations. They may be research scientists attached to a university or research institute that is conducting a research project into some aspect of biodiversity or wildlife. Their research may not be explicitly about wildlife trafficking, but touch upon it as it is one of the main drivers of biodiversity loss and the main threat to the survival of some species. Scientists may be working for NGOs and their research and findings may then be part of NGO campaigns and outreach.

The data that scientists contribute to the discussion of wildlife trafficking is essential to understanding the nature and scope of the problem. As is all too obvious to the scientific and wider community, human impact upon the environment is a crucial part of developing management plans and solutions (Walker 2012). These natural or physical scientists then must also understand the human influences on ecological systems, including having to integrate human use of natural resources into their research (Walker 2012). Part of this is recognising the global inequalities of such use and as Walker (2012) notes, this may be problematic for natural scientists.

Additionally, these scientists may not be comfortable with debating or creating public policy (Walker 2012). The nature of such scientific research is that it is continually being re-visited, updated and disproven, so has some limitations in immediate application (Walker 2012). There is also nearly always an element of uncertainty regarding the findings, as the ecosystems and environments are incredibly complex with a high degree of unpredictability (Walker 2012). So even though the public and policy makers would like a straightforward solution based upon solid facts, this is not usually possible (Walker 2012).

In the case of wildlife trafficking, population numbers are truly only estimates. The quotas set for harvesting, hunting and allowable amount of trade are determined by those with the best knowledge around the size of the population and the breeding habits of that species. As indicated though, the reality of the numbers and reproduction of a species may not be exactly as reported. There is the possibility, too, that the species for which these decisions are being made has been the focus of very little research and so the parameters established for trade in that species may be misguided or uninformed. In light of this, it is hoped and recommended that the precautionary principle underpins the recommendations of scientists in this context and others. This is where preventive or anticipatory measures are taken when human activity threatens wildlife and/or the environment (Smith 2000). For wildlife trafficking, this would mean to stop trade if there is any possibility that trade may threaten the survival of that species. Additionally, quotas should be set at the lowest estimated levels to account for the possibility of them being based on inaccurate population estimates. This would give leeway so that trade would not pose a threat to that species.

Scientists are the data collectors and their aim is to achieve better understanding of the species or ecosystems that they are studying. While, as stated, this may now be affected by human actions, in general the scientists are not focused on humans as the subject of inquiry and this would apply to criminals as well. The point is that while aware of the threat posed by trafficking to wildlife, unlike law enforcers, the scientists are not focused on the offenders. The scientists' main objective is to assess the state of conservation and possibly point out threats (trafficking), but this does not come with the expectation to confront the offenders.

Non-governmental organisations

As mentioned, scientists may certainly work for NGOs and provide the data and research to support the NGOs campaigns and programmes. Conservation NGOs usually have wide remits that cover the range of environmental threats such as climate change, habitat loss, pollution, etc. There are several international organisations that have trafficking as one of the threats for which they develop and run campaigns and programmes. The following are the NGOs that are the most focused on the illegal wildlife trade and have the most international reach. There are certainly other international, national and local NGOs that are also contributing to the fight against wildlife trafficking; these are a few of the highlights.

TRAFFIC is the only international NGO that is completely dedicated to the issue of wildlife trade. It is a trade monitoring network that tries to ensure that trade does not threaten species survival (TRAFFIC 2013a). Its vision is of a world in which trade in wild plants and animals is managed at sustainable levels without damaging the integrity of ecological systems and in such a manner that it makes a significant contribution to human needs, supports local and national economies and helps to motivate commitments to the conservation of wild species and their habitats (TRAFFIC 2013a).

In common with CITES, TRAFFIC adopts an anthropocentric approach to conservation. Wildlife is conserved for human use. It is a key stakeholder, providing valuable information and data about the legal and illegal wildlife trade. Their research informs the discussions at CITES and other international forums where trafficking is debated. They engage with all the other stakeholders to develop solutions to wildlife trafficking, including law enforcement, other NGOs, governments, businesses and the public.

WWF is a partner organisation of TRAFFIC, but also has independent campaigns that focus on the illegal wildlife trade. They, too, bridge multiple stakeholders, particularly citizens (see below) and governments. It may be one of the most recognised organisations in the world with its famous panda logo. They are committed to conserving the planet from all the threats that it faces, including climate change and overexploitation. Interestingly, they back away from the more ecocentric notion of conserving nature for its own beauty and promote more of an anthropocentric reason for conservation. 'The diversity of life on Earth is not simply something to marvel over – it's also vital for our own health and livelihoods' (WWF n.d.b). Arguably, this is to gain wider appeal rather than the radical stance that we conserve nature for its own sake.

Conservation International's approach is similar, with many programmes aimed at overall environmental conservation.

Every person on Earth deserves a healthy environment and the fundamental benefits that nature provides. But our planet is experiencing an unprecedented drawdown of these resources, and it is only by protecting nature and its gifts – a stable climate, fresh water, healthy oceans and reliable food – that we can ensure a better life for everyone, everywhere.

(Conservation International 2013a)

As will be described in the case study, Conservation International does engage in programmes to help stop illegal wildlife trade. This comes as part of their initiatives to address biodiversity loss. They, too, reach out to the multitude of stakeholders and particularly highlight the role of science in their work.

IFAW, as mentioned, also works to stop wildlife trafficking and have done studies into the role the Internet is playing in this black market. IFAW's work obviously focuses exclusively on non-human animals and as such, this means domestic issues of non-human animal welfare as well. Their belief is 'in the intrinsic value of animals and that we have a responsibility to protect them from suffering and commercial exploitation' (IFAW 2012). This is clearly the most ecocentric approach of the NGOs, so their conservation work for non-human animals is for the benefit and well being of those non-human animals and not for people.

The Environmental Investigation Agency (EIA) (n.d.) 'believes in a future where humanity respects, protects and celebrates the natural world for the benefit of all life on the planet'. In a somewhat ecocentric, possibly even biocentric, approach, EIA recognises the benefit of conservation beyond just humans. Their approach is very cross-cutting in that they focus on green crimes specifically and do so through undercover investigation techniques. They produce robust research that is influential on the international stage, though they have much less name recognition and resources than the other organisations described here. They have and continue to uncover evidence of wildlife trafficking and often have public awareness campaigns trying to get non-compliant countries to deal with green crime in their jurisdictions.

Depending upon the NGOs approach, they may advocate for criminalisation or regulation, but in all likelihood their support of either one of those is based on their research and experience in the field. Regardless of an anthropocentric or ecocentric approach to conservation, the NGOs highlighted here are crucial stakeholders in the fight against illegal wildlife trade. They are providing scientific evidence, intelligence and solutions to both law enforcement and governments. They are also engaging with the public, businesses and each other in doing so.

Citizens

Individual people are also stakeholders in conservation and in the fight against wildlife trafficking. Much of the NGO funding comes from public support in the form of personal donations. In addition to getting people to donate, the NGO campaigns are geared towards raising public awareness and getting the public to speak up about conservation issues. The WWF campaign mentioned earlier, 'Hands Off My Parts', is a good example of this. Public service announcements, posters in airports, Facebook advertisements and tweets are all informing everyday people about the illegal wildlife trade and getting them to tweet, share on Facebook or sign petitions that wildlife needs to stop being consumed as is currently happening. This is timed to the CITES 16th Conference of the Parties, which is taking place at the time of writing in March 2013 in Bangkok.

Citizens then play a key role in supporting the work of NGOs, pressuring their governments for action against wildlife trafficking and acting as guardians of wildlife. All of these may result in a call for criminalisation or regulation of activities tied to wildlife trafficking. The public's aim is one of conservation and in all likelihood

for some, one of species welfare too. Individual people, too, may be concerned with holding the offenders properly accountable and tell their governments so. This is an example of where the missions of the stakeholders can cross-over and contribute to each other. Further cross-over is seen in that citizens are also stakeholders in the economy.

The economy

Arguably, the main area of friction between stakeholders comes from trying to balance the interests of conservation with the interests of the economy and people. As outlined above, conservationists are also concerned with the plight of people, but they often take the longer-term view that unsustainable and damaging environmental practices will eventually result in unprofitable industries, fewer jobs and unhealthy environments that cannot support human life. Those more concerned with the economy see that money must be made in the immediate future and people must have any kind of job that is available in the short-term. The latter are more likely to advocate for regulation – continued use – rather than criminalisation. Governments then as the main force behind the economy play a large role in determining the balance that is struck, or whether the economy is prioritised over conservation. Corporations also play a role in this discussion, as do individual people who are reliant on natural resources for work

Governments

The state is instrumental in its interaction with the previous two stakeholder groups. Obviously, the government is the funding and force behind the enforcers and the government is drafting the policy and most likely setting aside the land that is the focus of conservation. Admittedly, a portion of conservation takes place on private lands and reserves. Governments are also one of the key stakeholders in relation to the economy as the policies that they do implement are the result of the negotiation between conservation and the affects it may have on corporations, businesses and workers. Here the debate between criminalisation and regulation is most pronounced.

Policy and legislation drafted and implemented by the government would ideally strike a balance between economic and environmental interests. As is frequently the case though, it appears that the economy is prioritised over the environment. This is most evident in the oil and gas industries where drilling and shipping are continued and even increased despite the environmental devastation that they have caused. It is argued that it is too important for national economies and employment as well as the global economy for any sort of reduction in these activities. As Diedrich (2012) rightly points out, though, the externalities are not taken into consideration when deciding to continue these damaging practices. Externalities are the uncounted costs that do not factor into the final prices of consumer goods and services (Diedrich 2012). The environmental degradation and the loss of ecosystem services in the lands and oceans where oil has been drilled or spilled are not reflected in the costs at the petrol stations or in the costs of doing business for the corporations involved.

In regards to wildlife trafficking, governments are those that create criminal laws and/or regulations that will protect threatened species. A clear case when economic priorities have overridden the protection of an endangered species is evident in the plight of the Atlantic bluefin tuna. The bluefin is the most valuable commercial fish in the world (Oceana 2012). Populations have been reduced by an estimated 82 per cent and it is thought that there are only 25,000 mature adults remaining (Oceana 2012). Yet despite pleas from conservation NGOs and activists, bluefin tuna fishing has not been stopped and the regulations set out by the International Commission for the Conservation of Atlantic Tunas (ICCAT) largely ignored by those who have agreed to it (Oceana 2008). Some nations that profit from tuna, including Japan, have not adopted such regulations at all. Stocks of tuna are near collapse and may not recover. This conservation and environmental emergency is ignored for monetary worth of the tuna and the enjoyment of eating them. There is not only failure to preserve the life of this species, but also to make the connection that an industry – the businesses, the money and the workers - will not be able to continue.

Company profits are protected as are individual workers' jobs. The current capitalist economy based upon the free market model is the ultimate anthropocentric institution. Decisions are centred on profit and growth and this has yet to be tempered with environmental concerns. There are movements towards sustainability where needs of the present are achieved in a manner that will not compromise the needs of the future (Diedrich 2012), but whereas this is a reasonable, desirable direction to head in, carbon consumption and biodiversity loss still indicate that this is not really happening. This raises the question if governments are green washing their own practices by talking of sustainability and not actually implementing environmentally friendly practices. This may be the case for businesses as well, which advertise their environmentally friendly initiatives, but which continue to challenge environmental laws and regulations.

Corporations

The bluefin tuna example above demonstrates that companies, too, prioritise their profits over conservation efforts. In this case, it is not only the fishing companies, but also the restaurants and food wholesalers that also advocated for continued availability of the tuna. Fishing companies and the fishing industry in general are not alone in this. Logging companies, too, argue for maintaining the economic benefits of their industry, though this may sacrifice the conservation of some species. The decades long battle over the spotted owl in Oregon in the US is evidence of this dynamic.

In the mid 1980s, environmentalists petitioned for the spotted owl to be listed as an endangered species because estimates showed that there were only 2,000 pairs of the owls left (Andre and Velasquez 2010). Spotted owls' only habitat is old-growth forests, which were the main source of timber in the Western US (Andre and Velasquez 2010). Conservationists provided evidence that further loss of the old-growth forests would lead to extinction of the owls as well as mean the loss of beautiful virgin forests and disruption of the ecosystem (Andre and Velasquez 2010). They did acknowledge that stopping logging operations would mean the loss of jobs, but argued that the jobs were only viable in the short-term anyway because the amount of timber left available was limited (Andre and Velasquez 2010). The timber industry countered by saying that the benefits from the spotted owl were minimal, particularly compared to the damage that would be done to the American timber industry as a whole, which relied on these tracts of wood (Andre and Velasquez 2010). Old-growth timber is essential for wood and paper products and there were other forests that could be visited for their beauty (Andre and Velasquez 2010).

The court decisions and policies that followed mostly favoured the owl, as they were given twice as much area as the timber industry (Barringer 2007). The Bureau of Land Management (the government) and the timber industry had decided more recently though that there would be a three-fold increase in logging on this land (Barringer 2007). This would break the Northwest Forest Plan and endanger the owl again as their populations had not recovered (Barringer 2007). The industry is unsympathetic to the conservation concerns as is evident by their new plan, which 'restores the rightful primacy of logging to these tracts' (Barringer 2007). In probably a rare decision, the safety of the spotted owl and the prohibition of further logging were upheld through the Endangered Species Act. In this example, the corporations did not support criminalisation (banning logging altogether) or regulation (protection of some the land) and wanted economic and individual human interests prioritised over conservation.

Individuals

Clearly, individuals also feature as stakeholders advocating for protection of the economy over the environment. In the cases above of both the tuna and the spotted owl, the workers within these industries were fighting for job protection. While some of them may see the plight of the environment, they prioritise their own employment and livelihood over conservation. Of course this is understandable, yet arguably counterproductive, as their long-term employment is endangered by their very actions, which threaten the environment that sustains the industries in which they work.

The controversy over banning the trade in polar bears has raised similar debates. Indigenous people, particularly in Canada, were opposed to the proposed criminalisation of international trade in polar bear skins and parts (McGrath 2013b). These communities rely on the international sales of skins for income (McGrath 2013b). Whilst the proposal would not have prohibited the traditional hunting of polar bears by indigenous people, it would have stopped the international trade. With the loss of international trade, this meant that the indigenous communities would lose the income from selling the polar bear skins. This is the main reason they continue to hunt the bears rather than for the subsistence use of the polar bear parts. The ban did not pass at the 16th meeting of CITES. The conflict between human economic livelihood and protection of species is the most difficult balance to strike and one which has yet to be mastered. For further insight into how this difficult issue might be addressed, the next section is a detailed case study example.

Case study: Cambodia

In order to demonstrate the complex interplay that takes place between the stakeholders that have been outlined above, some stakeholders' work in Cambodia will be explored. Many countries would provide a rich showcase of the push and pull that occurs between all the varying actors who are trying to achieve their missions. Cambodia has been chosen for its fairly long history of interaction between the government, law enforcement, international NGOs and scientists. Efforts have particularly focused on law enforcement, which will be discussed in terms of the government and NGOs contributions. At times contentious and controversial, this collaboration has managed to create a patchwork of protection measures around the country that is helping to combat the illegal trade in wildlife and timber as well as protect the environment in general; all this whilst trying to balance the interests of the local people and the economy.

The government

Cambodia has had a tumultuous past that has been the site of various wars and conflicts. In the last decades though, development and growth have taken hold. The government is a multiparty democracy with a constitutional monarchy (Central Intelligence Agency (CIA) World Factbook 2013). The king is chosen by the Royal Throne Council from all royal male descendants and serves as head of state, which is a symbolic position (CIA World Factbook 2013). The Prime Minister is elected as the head of government and there are local elections at the commune level as well (CIA World Factbook 2013). Whilst great improvements to transparency and the economy have been seen in recent years, Cambodia still relies on foreign assistance for nearly half of its central budget (United States Department of State 2012) and struggles with governmental, military and police corruption as well as money laundering due to its cash-based economy (CIA World Factbook 2013).

The Royal Government of Cambodia, mainly through several of its ministries and administrations, discussed below, has established cooperative partnerships with several NGOs in relation to environmental protection and combatting wildlife trafficking. In 2005, in order to build science capacity in the country, Fauna and Flora International (FFI 2013) helped to design and create a Master's programme in biodiversity conservation in partnership with the Royal University of Phnom Penh. This will help to strengthen the science behind the conservation in the coming years. The programme continues to be a joint operation that has financial support from around the world (Royal University of Phnom Penh 2012). The Fisheries Administration works with NGOs to conserve coastal habitats and small islands off the coast. The preparations are being made for the first marine park in Cambodia as part of its partnership with FFI (FFI 2013). The Royal Gendarmerie, or military police, have partnered with NGOs as well, which will be discussed more in the next section. The two main governmental partners are the Forestry Administration and the Ministry of the Environment.

The Forestry Administration is part of the Ministry of Agriculture, Forestry and Fisheries (MAFF). They are responsible for the sustainable management of the forests throughout the country. This means that they collect scientific data and conduct research into the health of the forests as well as ensure that laws and regulations are being followed. The latter gives them the remit to 'investigate, prevent and suppress various forms of forest destruction, forest fires and forest clearing to ensure effective forestry law enforcement' (Forestry Administration n.d.). The Forestry Administration has rangers that carry out this last function in cooperation with several NGOs working in Cambodia. This will be returned to momentarily. Part of the Forestry Administration is also the Wildlife Protection Office and they make sure that Cambodia is compliant with CITES and control wildlife hunting and trade (Forestry Administration n.d.). This means that the Forestry Administration is a key component in fighting wildlife and timber trafficking.

Whereas MAFF and the Forestry Administration then have jurisdiction over the forests, the Ministry of the Environment is responsible for environmental protection and natural resource management (World Bank 2011). As the World Bank (2011) notes, there are overlaps in terms of functional duties, which weakens Cambodia's ability to sustainably govern their natural resources. The cross-overs are in 'land tenure administration, coastal and marine resource management, wildlife conservation, and protected area management' (World Bank 2011). Too few skilled staff and too small budgetary allocations also hinder conservation (World Bank 2011). However, all of these parts of the government work in collaboration with the international and local NGOs to tackle wildlife trafficking and ensure overall conservation of the Cambodian environment.

Law enforcement

The government provides the backbone of the law enforcement aspect that enforces both the criminal laws and the civil regulations that establish the protection of Cambodia's forests and wildlife. This role is filled by both the Forestry Administration's forest rangers and the Royal Gendarmerie officers. The forest rangers are stationed throughout the country and issue permits related to harvesting timber as well as investigate and file cases in court of forest and wildlife offences among a multitude of other duties (Forestry Administration n.d.). In regards to wildlife trafficking, they also play a role in rescuing wildlife and taking them to the rehabilitation centre outside of Phnom Penh (Forestry Administration n.d.). This is another example of the partnerships in the country as this is jointly run with the NGO Wildlife Alliance (Wildlife Alliance 2013). Wildlife Alliance's (2013) Wildlife Rapid Rescue Team and Care for Rescued Wildlife programme combines saving non-human animals from the illegal wildlife trade with a facility dedicated to rehabilitating them and returning them to their native Cambodian habitat.

The Royal Gendarmerie is a branch of the Cambodian Armed Forces and is tasked with keeping public order and maintaining internal security. As such, the military police have officers spread throughout the country. In this capacity, they then serve in patrol squads with the Forestry Administration forest rangers in the remote regions of the forest and in the national parks. Also within these groups are NGO staff, who will be discussed in more detail shortly.

As indicated, Cambodia has limited numbers of skilled law enforcement officers, little money budgeted to law enforcement and conservation, and persistent problems with corruption in both the military and the police. These factors likely feed off each other as low-paid officers are more prone to corruption. The NGOs that will be discussed next have all addressed these potential problems by building capacity and actually paying for the law enforcement themselves.

The NGOs

There are three main NGOs that will be focused on, which further demonstrate the way that collaborations work in practice to fight the illegal wildlife trade - Conservation International, FFI and Wildlife Alliance. Cambodia has some of the most endangered wildlife in the world, which is highly valued on the black market (Conservation International 2013b). This, combined with high levels of poverty, creates conditions where wildlife and timber are under threat. This includes the tiger, elephant, Muntjac 'barking' deer, Siamese crocodile, Sunbear and Pileated gibbon (Conservation International 2013b). Additionally, Cambodia has a culture of wildlife markets and restaurants, which sell skins, meat and other wildlife products (Conservation International 2013b). Conservation International (2013b) has partnerships with local governments at the commune level to develop alternative livelihoods for people to keep them from illegally hunting. They also run awareness campaigns to educate the local people about the devastating effects that trade and poaching are having on Cambodia's wildlife (Conservation International 2013b).

In an approach that is adopted by all three NGOs featured here, Conservation International financially and technically supports forest ranger and military police patrol operations. They alone provide assistance to 50 law enforcement officers that are patrolling on the ground in the Cardamom Mountains of Southwest Cambodia (Conservation International 2013b). Clearly, law enforcement in the Cambodian context is an example of collaborative efforts. Conservation International (2013b) does this because the Cambodian government lacks the finances and the will to provide sufficient law enforcement protection for wildlife and timber. Additionally, the presence of some outside oversight and interest might help to tackle the corruption, which Conservation International acknowledges is rampant. Lack of will in the government is also evident in that the judiciary are unaware of wildlife laws and poachers are frequently not held accountable (Conservation International 2013b).

FFI has multiple partnerships throughout Cambodia. As indicated, they have helped create a Master's programme in biodiversity

conservation, to which they continue to contribute. This should aid in having a more robust research foundation to inform the conservation policies that are implemented by the government. FFI also partners with the Fisheries Administration, particularly in regards to coastal and island communities. This includes special attention for marine turtles, such as the Hawksbill, which are endangered and victims of the illegal wildlife trade (FFI 2013). Collaborations with the Ministry of Environment and the Forestry Administration are also in place in regards to monitoring wild Siamese crocodile populations as well as the trade in farmed crocodiles (FFI 2013). FFI (2013) has also helped to create the Cambodian Elephant Conservation Group. This group is key in helping with human-elephant conflict and continuing research into the threats to these endangered elephants (FFI 2013). FFI (2013), too, equip, advise and train rangers in the Cardamom Mountains. They also, however, support the efforts in the Phnom Samkos Wildlife Sanctuary (FFI 2013), which is a different section of the forest than that supported by Conservation International. FFI also has on-going projects in local communities to address poverty (FFI 2013).

Finally, Wildlife Alliance, which as mentioned, assists with the wildlife rescue centre and also contributes to law enforcement efforts. Wildlife Alliance staff work at Phnom Tamao Wildlife Rescue Centre caring for, rehabilitating and potentially releasing wildlife that has been rescued from traffickers (Wildlife Alliance 2013). The Forestry Administration rangers head patrol squads and ranger stations in the southern Cardamom Mountains, while the military police provide additional man-power and Wildlife Alliance contributes onsite technicians (Wildlife Alliance 2013). Wildlife Alliance also provides training and equipment to each of the 12 rangers in the six stations that they help fund (Wildlife Alliance 2013). They also collaborate with local communities, particularly through mobile education where a van travels to remote communities in order to provide conservation education to school children (Wildlife Alliance 2013).

Law enforcement

Each, then, of these NGOs have taken on training, equipping, financing and technically supporting the Forestry Administration rangers and the Royal Gendarmerie military police. It is interesting that each NGO arrived at the same solution and has each managed to create and sustain a partnership with these agencies. Among the three NGOs, forest patrols cover a good portion of the Cardamom Mountains, which is possibly the largest forest left in Southeast Asia (Conservation International 2013b). That they have managed to maintain this relationship is also impressive considering the reputation of the police and military in Cambodia. This tactic of supporting these institutions may have gone a long way in circumventing the usual problems with corruption. They have certainly addressed the problems of lack of skill and finances through the programmes that they have implemented. Through cooperation, then, of the group of stakeholders, for the most part, there appears to be a collaborative effort to combat wildlife trafficking and address environmental harm.

Analysis

The above case highlights the roles of various stakeholders. The Royal Cambodian Government, which is representing the interests of the economy and conservation is attempting to balance these often competing sectors by adopting a sustainable management strategy to the use of natural resources, or so they say. This means that there is logging, fishing and wildlife consumption, but the levels allowed are trying to remain in line with the need to ensure use for future generations. This will meet the needs of the other stakeholders, such as logging and fishing companies as well as the ministries that are protecting the environment and the conservation NGOs. This should also meet the needs of the other stakeholders within these categories. Environmentally minded citizens are represented by the NGOs through the NGOs active engagement with the government itself and with the ministries joint programmes. Individuals who are employed by natural resource industries are still finding employment and supporting their families. In instances where employment is challenged by conservation interests, such as logging in the Cardamom Mountains, the Forestry Administration in partnership with one of the NGOs is developing programmes and training designed to teach alternative ways to earn money.

Law enforcement stakeholders, too, have had their needs met through this collaboration. Without NGOs, the Cambodian government does not appear to have the resources, or potentially the inclination, to establish a concerted law enforcement presence to combat wildlife trafficking, especially not to the level of professionalism and sophistication that the NGOs are trying to bring to the police. As Dupont et al. (2003) state, third parties are essential in enforcing laws and regulations when the government is unable to complete these duties.

The strategy adopted is one of mixed criminalisation and regulation. Endangered species are highly protected and poaching, killing or harvesting those are criminal offences, whereas other violations of logging permits or poaching non-endangered species in nature parks are civil penalties. There are regulations about how much logging can take place, how Siamese crocodiles can be farmed and around aquaculture of marine species. Law enforcement with the essential support of the NGOs is able to fulfil its duties, then, to enforce the laws and regulations as well as capture the offenders.

There is a down-side to having third parties such as NGOs responsible for law enforcement. As Ayling (2013) points out, there needs to be mechanisms in place to hold the NGOs accountable for their actions. This means that they should have transparent reporting as part of their standard working procedures. This will help to ensure that the NGO is engaged in the right type of activity and working towards the agreed-upon objectives of the government partner. It will also ensure that no human rights violations occur as part of their funding of the police.

In reading the websites of Conservation International, FFI and Wildlife Alliance, while there is some indication of awareness of the potential challenges regarding corruption and lack of political will from the Royal Cambodian Government (Conservation International in particular is quite explicit about this), overall the tone is positive and each seems to be able to achieve successes within this context. This raises questions as to how they have managed this, particularly after other NGOs have not faired so well. As previously discussed, Global Witness (2007) found that high-level government officials within the Forestry Administration and MAFF, both of which partner with the NGOs discussed here, were involved in illegal logging and timber trafficking. Members of the military were also implicated, along with four managers of logging syndicates (Global Witness 2007). Following the report that linked government officials, including the Prime Minister and his close friends and family, to

this illegal activity, Global Witness was no longer allowed to work in Cambodia (Silverstein 2011). The Prime Minister has even gone so far as to draft legislation requiring NGOs to register with the government and the government has the final say to approve the registration or not (Silverstein 2011).

So while work on the ground and in the field may be quite successful, tensions are still apparent at the higher levels, where unfortunately the stakeholder with the criminal connections has sway over the fight against wildlife and timber trafficking. The NGOs that are still working there obviously adopt a strategy to do so. Speaking out too much and being too critical of the government will probably mean the end of work in Cambodia. The alternative is then to compromise and make what impact they can. In Cambodia, this has meant staying quiet about huge land concessions to logging and mining companies in protected forests (Silverstein 2011). Collaboration, as would be expected, is a sticky business full of stakeholders vying for their own interests. In doing so, compromises are made. It remains to be seen if a balance has truly been reached in Cambodia between the environment and the economy, or whether trafficking and theft will override both.

A consensus has not been reached nor has a solution yet been found as to how the world should combat wildlife trafficking. As argued in Chapter 2, there is unlikely to be a one-size-fits-all approach to ending the illegal trade in non-human animals and plants. The stakeholders presented here are essential to gaining the information that is needed to draft and implement solutions that are designed around a particular wildlife black market. Law enforcement can uncover the motivations, offenders, routes and tactics; scientists and NGOs can uncover population numbers, migration patterns, life cycles and reproduction rates. This blend of data can be used to generate targeted prevention strategies and policy interventions. This may yet end the debate on whether to criminalise or not to criminalise; to allow a market or to ban a market. Presumably, this will not be the same for every species.

Whilst consideration in this debate must be paid to that third group of stakeholders, those speaking for economic interests, governments, corporations and individual people must ask themselves whether the planet can continue to prioritise short-term profits and livelihoods in the light of environmental collapse and long-term degradation that will at some point fail to support human industry or life. Humans are possibly the most adaptable species on the planet; surely we can be innovative and creative when it comes to how we make money and earn a living, and we can also help others do so in a way that is less harmful.

7 Transnational Collaborations

Looking at each of the stakeholders in turn leads to a discussion now of the transnational collaborations that are formed as a more concerted effort to curb wildlife trafficking. Of course CITES, discussed in relation to enforcement and regulation of wildlife trafficking, can be seen as a transnational collaboration. It is after all the only international convention specifically dealing with wildlife trade. The collaborations that will be expanded upon here though are those that are entered into by governments, international NGOs and intergovernmental organisations outside of the remit of an international convention. Collaboration can be approached in different ways as will be evident in this chapter. These different approaches appear to be by species, by region and by type of agency or agencies. A majority of the collaborations featured here are specific to wildlife trafficking, but INTERPOL and the species collaborations have it as one of several threats that they combat.

The species collaboration will be represented by the Great Ape Survival Partnership (GRASP), the Shark Alliance and the Species Survival Network (SSN). The regional collaborations that will be detailed are the Association of South East Asian Nations – Wildlife Enforcement Network (ASEAN–WEN), South Asia Wildlife Enforcement Network (SAWEN) and the Asian Regional Response to Endangered Species Trafficking (ARREST). The global collaborations that consist of governments, intergovernmental organisations and international NGOs are the Coalition Against Wildlife Trafficking (CAWT) and the International Consortium on Combatting Wildlife Crime (ICCWC). The latter is made up of INTERPOL, CITES, the World Customs Organisation (WCO), the United Nations Office of Drugs and Crime (UNODC) and the World Bank.

As no discussion about an international criminal justice issue would be complete without exploring INTERPOL, its role in helping nations around the world combat wildlife trafficking will be explored in depth, including the Environmental Crime Programme, the Environmental Crime Committee, the Wildlife Crime Working Group, the Fisheries Crime Working Group and the various projects and operations that they have coordinated. After each of these cooperative efforts has been described, there will be a critical evaluation of what limitations and challenges these efforts face and proposals as to what other alternatives might be tried.

The species collaborations

Rather than combatting wildlife trafficking by region or within a group of similar organisations as will be discussed shortly, collaborations can also approach the protection of wildlife from a species angle. Most species are obviously not only threatened by the illegal wildlife trade, but have other pressures on their survival as well, such as habitat loss and loss of genetic diversity within the small populations. Because of this, these collaborations target the range of threats, which includes wildlife trafficking, as demonstrated by exploring these collaborations – GRASP, the Shark Alliance and SSN – though there are others, such as the International Tiger Coalition.

GRASP

GRASP is a unique collaboration that brings together governments, intergovernmental organisations, NGOs and private companies to protect great apes – gorillas, chimpanzees, bonobos and orang-utans (GRASP 2012). The governments are predominantly from range states (23) of great apes, but there are also members in GRASP of non-range states (10) who support the conservation efforts and provide funding (GRASP 2012). The United Nations Environment Programme and the United Nations Education, Scientific and Cultural Organisation are the Secretariat. Because it is hosted within a UN organisation, it has

unique access to governments, which potentially means that it will have increased influence and impact (GRASP 2012). CITES is a partner as are the Convention on Biological Diversity, the Convention on Migratory Species, the RAMSAR Convention on Wetlands and the World Heritage Convention. There are 37 partner NGOs, such as WWF, Conservation International and IFAW as well as NGOs dedicated to great ape or specific great ape species conservation (GRASP 2012). In a rare engagement with private companies, three businesses also collaborate in GRASP. The three private partners are the International Ranger Federation (2013), a non-profit organisation that supports the world's park rangers, the Great Apes Film Initiative and Volcanoes Safaris (n.d.), a tourist agency that owns lodges and leads guided tours to see gorillas and chimpanzees. GRASP not only conducts its own programmes, but supports the projects of its partners as well.

A recent GRASP report outlines the threat that the illegal wildlife trade poses to great apes. The study finds that it is possible that 22,178 great apes have been lost in connection with wildlife trafficking from 2005 to 2011 (Stiles et al. 2013). This includes apes killed for bushmeat, adult apes that are killed so babies and juveniles can be captured, and apes that die while being trafficked (Stiles et al. 2013). A majority of these, 64 per cent, are chimpanzees, which are in demand from private zoos and collectors (Stiles et al. 2013). A disturbing finding of the report is that loss of great apes is not only still connected to habitat loss from mining and logging, where bushmeat was once a by-product, but that trafficking in apes has become an organised crime filling a particular demand of the wildlife market (Stiles et al. 2013).

As a species collaboration, GRASP will coordinate a response to this threat across the range of partners and stakeholders. Their proposals for combatting the trafficking of great apes are similar to the ones that will be seen throughout this chapter. They advise to increase law enforcement capacity through training, create task forces for environmental crime, more rigorously implement CITES and monitor the permit system, and address consumer demand through multimedia campaigns (Stiles et al. 2013). Additionally, and more inline with non-human animal welfare and species justice, they advocate for ending the use of great apes in television, films and advertising (Stiles et al. 2013).

Shark Alliance

The Shark Alliance is a coalition of NGOs that are dedicated to protecting sharks all over the world (Shark Alliance n.d.). The Pew Environment Group, which is part of the Pew Charitable Trust initiated this coalition and continues to coordinate its activities (Shark Alliance n.d.). The Shark Alliance aims to limit shark fishing to within the scientific limits underpinned by the precautionary principle and this includes working for stronger policies to combat shark finning (Shark Alliance n.d.). Additionally, the Shark Alliance seeks to establish safeguards and conservation guidance under CITES for sharks (Shark Alliance n.d.). Finally, the Shark Alliance and its members have developed an International Plan of Action for Sharks, which the alliance is seeking to make into a UN Resolution (Shark Alliance n.d.).

From the goals that the Shark Alliance has set, it is clear that illegal trade is one of the main threats to shark species. Whilst sharks suffer greatly from bycatch, where they are not the target species, but are caught during fishing anyway and then thrown back into the ocean dead, they are also threatened because of shark finning (Shark Alliance 2010). Shark fin soup is a sought-after delicacy in China and Hong Kong in particular (McGrath 2013a). Sharks are caught, have their fins cut off and then are thrown back in the ocean where they die (Shark Alliance 2010). This type of trade is illegal in many parts of the world and as it poses a threat to the survival of numerous shark species, Shark Alliance is trying to have much stricter limitations and monitoring mechanisms put into place (Shark Alliance 2010).

It appears that the Shark Alliance is at least partly successful in achieving its goals. At the March 2013 Conference of the Parties, CITES members voted to protect a certain species of shark, which is particularly valuable because of their fins (McGrath 2013a). The Oceanic whitetip shark was placed in Appendix II, which will regulate the number of these sharks that can be taken (McGrath 2013a). Further consideration was to be given to hammerhead and portbeagle, which are also targeted for their fins (McGrath 2013a) and they, too, were given greater protection.

Species Survival Network (SSN)

SSN takes a slightly different tactic with species collaboration. It is a network of 92 NGOs that form working groups on 15 species or topics to create programmes around advocacy, outreach, research and training (SSN n.d.a). There are working groups then collaborating on saving amphibian, bear, big cat, bird, elephant, fish, primate, rhino, sea turtle, timber, whale and dolphin. Other groups are focused on animals in captivity, implementation of CITES and trophy hunting. There is also a working group specifically for wildlife trade. Across all of the projects and groups the main aim of the SSN is to make sure that CITES is being promoted, enhanced and strictly enforced (SSN n.d.b). The SSN (n.d.b)

[...] strongly believes that such trade can occur only when evidence positively demonstrates that survival of the species, subspecies or populations and their role in the ecosystems in which they occur will not be detrimentally affected by trade and when trade in live animals minimizes the risk of injury, damage to health or cruel treatment. The species must always receive the benefit of the doubt if available evidence is uncertain.

This network is grounded in the precautionary principle as well as being framed in an ecocentric perspective that also takes on aspects of species justice in that it advocates ending the suffering and injury of non-human animals.

Species collaborations like GRASP consist of all of the stakeholders that were outlined in Chapter 6, whereas the Shark Alliance and SSN are made up only of NGOs. Both approaches have the strength of numbers as both collaborations have numerous organisations as part of the collaboration. It may be a strength as well that the partners most likely have less conflict amongst each other as they are all working for the protection and benefit of one or a group of species rather than balancing competing interests. A different way to approach combined efforts to tackle wildlife trafficking is to coordinate most closely with neighbours and the surrounding region.

The regional collaborations

These cooperative efforts to combat wildlife trafficking are centred on a particular region. The partners recognise the transnational nature of wildlife trafficking and that a coordinated approach that crosses borders must be implemented to have any effect on reducing the illegal wildlife trade. In regional collaborations the range of stakeholders are represented – governments, law enforcement, NGOs, intergovernmental organisations, etc.

ASEAN-WEN

The Association of Southeast Asian Nations – Wildlife Enforcement Network (ASEAN–WEN) is the largest network of its kind. It is a dedicated wildlife law enforcement intergovernmental network made up of ten nations – Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam (ASEAN–WEN 2013a). Working closely with CITES and INTERPOL since 2006, ASEAN–WEN takes a proactive approach to combatting wildlife trafficking in Southeast Asia where it is recognised that this region of high biodiversity is one of the hotspots for the illegal wildlife trade (ASEAN–WEN 2013a). There is concern that without tackling wildlife trafficking and other forms of biodiversity loss, 40 per cent of the non-human animal and plant species in Southeast Asia will be gone by the end of this century, which means a multitude of extinctions with the high amount of endemic species in the region (ASEAN–WEN 2013a).

In order to address this urgent problem, ASEAN-WEN creates a mechanism for these nations to share best practice as well as information on this green crime (ASEAN-WEN 2013a). In addition to annual meetings, there are frequent workshops and training held for all member nations, which are aimed to improve law enforcement response to wildlife trafficking as well as increase coordination and cooperation of these countries with each other and internationally (ASEAN–WEN 2013a). Key to increasing and improving capacity of police and Customs is to address the need for the specialised knowledge that was discussed in Chapter 6. ASEAN-WEN does this by not only holding training and workshops, but by also having resources online and in all the necessary languages for law enforcement to access at anytime. This includes texts of the Agreements and Protocols that provide the framework for their work, reports and publications that may provide useful information, and species identification and fact sheets, which provide sketches and other detailed information to help identify the species and derivatives most commonly smuggled (ASEAN-WEN 2013a).

Each member nation is expected to establish an interagency task force to carry out the mission of ASEAN–WEN (ASEAN–WEN 2013a).

Whilst not all nations appear to have met this expectation yet, CITES and other international partners such as INTERPOL and the United States Fish and Wildlife Service continue to help those nations without task forces to work towards their creation (ASEAN–WEN 2013a). The online resources also have information as to who makes up each country's interagency task force and all the relevant contact details. Several of these national interagency task forces combine their efforts to stop illegal wildlife trade, which often includes timber trafficking, with efforts to stop illegal logging and other green crimes (ASEAN–WEN 2013a).

Myanmar has received the latest capacity building workshop. As with all of the ASEAN-WEN workshops, the workshops build upon each other. For instance, in this recent workshop trainers who had completed a previous 'train the trainers' session were passing along their knowledge to their colleagues (ASEAN-WEN 2013b). Law enforcement officers from forestry, police, fisheries, border trade, Customs, port authority, rural development and immigration were in attendance, as were representatives from the attorney general, trade unions, general administration and local law offices (ASEAN-WEN 2013b). This clearly demonstrates the multifaceted approach and interagency collaboration that ASEAN-WEN has adopted to tackle wildlife trafficking. Further evidence is the Crime Report Hotline that is available to the public and the technical assistance that is provided by TRAFFIC and the FREELAND Foundation through funding from the United States Agency for International Development (TRAF-FIC 2008b); this signals a truly cooperative far-reaching inter-regional effort to stop wildlife trafficking.

SAWEN

Following from the ASEAN–WEN model, the South Asia Wildlife Enforcement Network (SAWEN) officially began in 2011 though discussion had been taking place since 2008 (International Centre for Trade and Sustainable Development (ICTSD) 2011). The eight nations that are undertaking this cooperative effort are Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. This, too, is an action-orientated collaboration that seeks to share best practices and coordinate law enforcement operations in combatting wildlife trafficking (ICTSD 2011). Similar to Southeast Asia, South Asia's wildlife is threatened by the illegal wildlife trade and tigers, elephants, marine species and medicinal plants have in particular suffered from poaching and overexploitation (ICTSD 2011).

CITES, INTERPOL, WWF and TRAFFIC also provide technical assistance to SAWEN and funding has come from the US Department of State (TRAFFIC 2011). SAWEN is working to establish a clear structure with a Secretariat in Nepal and a framework for communication and fundraising (TRAFFIC 2011). The inaugural training introduced participants to the scope of wildlife trafficking in South Asia and presented the implications this has for conservation in the region (WWF India 2011). Additionally they were introduced to the modern forensic techniques and tools that will help law enforcement (WWF India 2011).Whilst currently more limited in scope than ASEAN– WEN, SAWEN's creation signals a willingness of the nations involved to address wildlife trafficking, which is a promising step forward for a region that has often not had the capability or willingness to address green and wildlife issues.

ARREST

The transnational collaborations that take place do not happen in isolation from one another. Some of these collaborations, like ARREST, are actually designed to help other transnational collaborations with their objectives. Asia's Regional Response to Endangered Species Trafficking (ARREST) is a collaboration of the NGO FREELAND Foundation, the United States Agency for International Development (USAID) and other NGOs and organisations (FREELAND Foundation 2010). Interestingly, the FREELAND Foundation works to combat both wildlife and human trafficking, which is evidence of the connection between the various black markets. ARREST is a five-year programme that aims to reduce consumer demand, improve law enforcement efforts and improve regional collaboration and antitrafficking networks (FREELAND Foundation 2010). In Chapter 6 it was argued that making wildlife and green crimes mainstream will improve the law enforcement of these crimes and harms. ARREST aims to accomplish this by incorporating knowledge of wildlife law enforcement into the conventional police forces (USAID 2011). FREELAND Foundation then works with the member states of ASEAN as well as China, South Asian nations, NGOs and private companies (FREELAND Foundation 2010). These organisations include ASEAN-WEN, ASEAN Centre for Biodiversity, Animal Concerns Research and Education Society (ACRES), Asia Works TV, Conservation International China Programme, Education for Nature Vietnam (ENV), GreenEyes China, INTERPOL, JWT (an advertising agency), National Geographic, MTV-Exit, Wildlife Alliance, US Department of State, US Department of Justice, US Fish and Wildlife Service and US Forest Service.

This is a unique collection of organisations for a project. It is obviously well supported with US governmental agencies, which is presumably a reflection of the funding coming from the US and possibly the fact that the head of the FREELAND Foundation, Steve Galster, is American and has good connections to the government. There are also private corporations taking part, particularly TV and media outlets. This is an interesting and potentially useful tactic in the aim to reduce consumer demand. The programme holds further potential in that it makes the link between Southeast Asia, a source of wildlife as well as a destination, and other areas that are important in the illegal wildlife trade such as China and India. This is a crucial dynamic to be tackled in combatting wildlife trafficking.

Regional collaborations then hold promise for helping to reduce the illegal wildlife trade as they engage with the range of stakeholders and also adopt a multifaceted approach to the green crime. There may be less consensus within these collaborations, as opposed to the species collaborations, since the different countries involved may have varying levels of political will to stop the illegal wildlife trade. This is evident in ASEAN-WEN where not all members have created national task forces. This could also stem from different capacities to support wildlife law enforcement efforts. Central America, too, is in the process of developing a wildlife enforcement network and other regions, such as Oceania have the Australasian Environmental Law Enforcement and Regulators Network (AELERT), which is for all green crimes and not just wildlife trafficking. This cross-cutting tactic within regions may prove useful in decreasing supply and demand. This could be particularly true when combined with higher level efforts to fight the trade in illegal wildlife.

The global collaborations

Other efforts to stop wildlife trafficking take a more global view and involve high-profile governments and organisations. These collaborations may be less about developing on-the-ground programmes to tackle the illegal wildlife trade or being active participants in operations that target traffickers and more about raising public and political awareness about the green crime. Two of these are the Coalition Against Wildlife Trafficking and the International Consortium on Combatting Wildlife Crime.

CAWT

The Coalition Against Wildlife Trafficking (CAWT) is a partnership between governments and organisations that 'aims to focus public and political attention and resources on ending the illegal trade in wildlife and wildlife products' (CAWT 2012). The governments that currently form this coalition are Australia, Canada, Chile, India, the UK and the US; Australia is the chair at the time of writing in a rotating lead position for CAWT. The organisation partners are the American Forest and Paper Association, Cheetah Conservation Fund, Conservation International, FREELAND Foundation, Humane Society International, IFAW, International Union for the Conservation of Nature (IUCN), Save the Tiger Fund, Smithsonian Institution, TRAF-FIC, WildAid, Wildlife Alliance, World Conservation Society and WWF (CAWT 2012).

Whilst most of these are NGOs, there are other types of organisations involved. The American Forest and Paper Association is a national trade association that advocates for public policy for the sustainable use of US forests and forest products. The Smithsonian Institution is made up of 19 museums as well as nine research centres and the National Zoo in Washington DC. It is then playing a role in supporting CAWT's efforts with scientific information. A note about the IUCN: although it is not specifically aimed at addressing the illegal trade in wildlife, it plays a crucial part in data collection and information gathering that informs a significant amount of knowledge about wildlife trafficking. The IUCN is the largest and oldest global environmental network and has over 1,200 members and nearly 11,000 volunteer scientists who contribute to its programmes (IUCN 2012). Of particular relevance to this discussion is the creation and maintenance of the IUCN Red List of Threatened Species. The Red List places species into one of seven categories based upon their survival status - least concern, near threatened, vulnerable, endangered, critically endangered, extinct in the wild and extinct. These robust surveys of species' populations form a report that also details the causes for the status of that species. This is where wildlife trafficking and poaching are highlighted as contributing to the demise of a significant number of species. As stated, this data is essential in informing efforts like CAWT as to where interventions and policies need to be targeted.

CAWT seeks to use its unique partnership to aid in improving wildlife law enforcement by doing many of the activities that are evident in the previous examples, such as increasing training and information sharing (CAWT n.d.). Additionally, it tries to improve the cooperation of regional enforcement networks like ASEAN–WEN and SAWEN. CAWT, too, aims to reduce consumer demand, but is also trying to increase political will (CAWT n.d.). Both of these are welltargeted initiatives given previous lack of attention to these aspects. Members of CAWT take what they refer to as a 'shared-approach' where they act individually and jointly to meet their common goals as listed above (CAWT n.d.). Efforts also include assisting with CITES implementation where possible, improving legislation and penalties, and recognising extraordinary efforts to combat wildlife trafficking (CAWT n.d.).

Arguably, the profile of CAWT was raised in late 2012 when then US Secretary of State Hillary Rodham Clinton hosted a CAWT event 'Wildlife Trafficking and Conservation: A Call to Action'. For wildlife trafficking to be the sole subject of a high-profile event is indication of the growing awareness of the severity of the problem and the danger that it poses. This is further supported by the former US Secretary of State's call to have wildlife trafficking placed within foreign policy and on security agendas (CAWT 2012). As argued for in Chapter 3, wildlife trafficking is a threat to national security and this event recognises and supports that theory. Other influential agencies are making similar appeals and also engaging in efforts to improve the fight against wildlife trafficking at the highest levels.

ICCWC

Transnational collaborations also take place at high levels of intergovernmental organisations and like the ARREST programme seek to aid other collaborations in their fight against the illegal wildlife trade. In this case, the collaboration is the International Consortium on Combatting Wildlife Crime (ICCWC), which is pronounced as one-word – i-quick. This initiative has five partners: INTERPOL, the Secretariat of CITES, the WCO, the UNODC and the World Bank. As is evident from the title, the term wildlife crime is used, but is defined as what this book is calling wildlife trafficking – the exploitation of fauna and flora, in particular the poaching, trafficking and possession of illegal wildlife (CITES 2011). From ICCWC's official launch in November of 2010, it was intended to:

[...] bring coordinated support to national wildlife law enforcement agencies and to the subregional and regional networks that, on a daily basis, act in defence of natural resources. Ensure that perpetrators of serious wildlife crimes will face a more formidable and coordinated response, departing from the present situation where the risk of detection and punishment is all too low. It also seeks to deploy modern techniques and technologies that are applied in different areas to tackling wildlife crime, such as controlled deliveries and the use of wildlife forensics, and aims also to address international cooperation, money laundering and corruption.

(CITES 2011)

ICCWC, then, in common with the other collaborations explored here seeks to support, expand and enhance on-going wildlife law enforcement efforts to combat wildlife trafficking. Additionally, it is intended in the medium to long term to raise public awareness about wildlife trafficking and also, as ARREST is attempting to do in Asia, to make wildlife crime and trafficking mainstream issues within national law enforcement agencies.

ICCWC is particularly important as these are high-profile partners with a substantial global influence, so the potential to increase awareness and improve law enforcement capacity across the world is a possibility if enough outreach and resources are invested in this initiative. Although ICCWC was only able to undertake four events in its first two and a half years (Wyatt 2013b), the March 2013 Conference of the Parties of CITES had multiple ICCWC sponsored activities. Additionally, there is the possibility for a more concerted effort towards its stated goals as it has received nearly 2 million Euro worth of funding over the next three years. The events that have taken place may also prove to have an impact later on. The two in particular for which this may be the case is the UNODC Wildlife and Forest Crime Analytic Toolkit and the workshop on conducting controlled deliveries. The Toolkit is designed to assist law enforcement with conducting wildlife and forest crime investigations (UNODC 2012). The resources provided consist of information about 'wildlife and forest legislation, law enforcement measures, prosecutorial and judicial capacities, factors that drive wildlife and forest offences and the effectiveness of preventative measure at the national level' (UNODC 2012: 1). Additionally, the Toolkit enables the user to 'collect and analyse available data, gather evidence, prepare and preserve the wildlife and forest crime scene and identify suspects' (UNODC 2012: 1). This resource directly targets the capacity building of law enforcement to combat wildlife trafficking.

The controlled deliveries workshop may have a similar impact. Organised by the WCO, the controlled delivery workshop taught participants about the value and mechanisms of controlled deliveries. As indicated earlier, law enforcement when it does uncover smuggling, be it wildlife or other black markets, very frequently only arrests the smugglers and low-level criminals rather than those who are facilitating it or the final consumer. Taking a best practice from drug and tobacco trafficking operations, the WCO workshop outlined how a controlled delivery of wildlife would be utilised (CITES n.d.). When wildlife or a wildlife product is intercepted, with the right planning, it can be allowed to continue along the smuggling route so that investigators can gain intelligence as to the method and route of smuggling as well as the actors involved, including manufacturers, processors and buyers (CITES n.d.). This may also enable law enforcement to track the money, which will yield intelligence on money laundering and other criminal activities (CITES n.d.).

INTERPOL is a main partner within ICCWC and on its own is arguably the most important global collaboration to tackle wildlife trafficking. It obviously is not solely focused upon this green crime, but does have dedicated staff and support structures to address environmental crime and the illegal wildlife trade. Unlike the other global collaborations, INTERPOL engages with a less diverse range of stakeholders and is predominantly a collaboration amongst the international law enforcement community, though it does coordinate with international NGOs and intergovernmental organisations, as indicated with ICCWC. Its structure as well as its efforts to curb wildlife trafficking are detailed next.

INTERPOL

INTERPOL, especially through its Environmental Crime Programme and Environmental Crime Committee, is clearly a key stakeholder as well as one of the main conduits through which collaborations occur to combat the illegal wildlife trade. As it does not have any specific law enforcement power, and does not become a member to international conventions, INTERPOL has been included here under the collaborations. As will become clear, by the structure of the various working groups, and the structure of the projects and operations, it truly is a collaborative effort between INTERPOL and its member countries. The Environmental Crime Programme will be detailed, first followed by the Environmental Crime Committee and working groups that are relevant. Finally, an overview of the projects and operations that form the foundation of INTERPOL's collaborative work on wildlife trafficking will be given.

Environmental Crime Programme

INTERPOL's Environmental Crime Programme has a larger remit than only wildlife and timber issues. This programme also plays an integral role in combatting hazardous waste dumping and pollution crimes (INTERPOL 2013a). Additionally, they are aware that other threats to the environment exist and may eventually require the attention of law enforcement. For instance, carbon trading and water management issues are likely to become criminal concerns in the future (INTERPOL 2013a).

INTERPOL is not a law enforcement agency so does not have powers of arrest or the authority of police departments. It is the only global organisation that coordinates the sharing of intelligence and information amongst and between the law enforcement agencies across the planet (INTERPOL 2013a). The Environmental Crime Programme is a group of permanent, seconded and contract staff that facilitate the sharing of information pertaining to environmental crime. Additionally, INTERPOL, and the Environmental Crime Programme help coordinate and lead intelligence-led operations to break up criminal networks and organisations (INTERPOL 2013a). The Environmental Crime Programme also develops materials to share best practices among member states. The sharing of intelligence and information from member countries by and large comes through INTERPOL's National Central Bureaus. These are the liaison agencies within each member country that coordinates secure information exchange with INTERPOL headquarters in Lyon, France. The Environmental Crime Programme will liaise with the main communication centre at headquarters to receive any environmental criminal intelligence.

The Environmental Crime Programme leads or assists with projects and operations that are targeted at specific regions or at specific crimes. Both of these will be detailed shortly. They base their activities on the intelligence they receive and on the consultation and research that is conducted by their supporting structures. These structures are the Environmental Crime Committee, which will be detailed next, and the working groups that also play a role in developing operations and projects.

Environmental Crime Committee

Before there was a permanent Environmental Crime Programme, there was an Environmental Crime Committee, which began in 1992 (INTERPOL 2013b). This Committee continues to support the work of the Environmental Crime Programme. The Committee is made up of law enforcement officers, officials or experts from any of the 190 member countries (INTERPOL 2013b). The committee is run by a board called the Executive Committee. The Executive Committee serve four year terms and are elected from delegates at the bi-annual meetings (INTERPOL 2013b). There is a Chairperson, a Vice Chairperson and a Secretary. Currently, the Executive Committee has representatives from the US, Australia and South Africa.

The Committee acts as a forum in which law enforcement officials can meet face to face in order to discuss new strategies and practices, share experience and expertise, and build the bridges of international cooperation that are vital in the fight against international environmental crime.

(INTERPOL 2013b)

As is evident, there is a common theme running through the collaborations that have been explored in this chapter – sharing best practice and expertise and improving cooperation. The Environmental Crime Committee is further supported by three working groups that are made up of specialised criminal investigators from all over the world, who then run and advise on targeted projects (INTERPOL 2013b). Only two are discussed in the next sections as one of these working groups is dedicated to pollution.

Wildlife Crime Working Group

The Wildlife Crime Working Group focuses on the poaching, trafficking and illegal possession of protected non-human animals and plants (INTERPOL 2013b). To combat this green crime the group develops and leads projects that try to stop these crimes. The Executive Officers of the Wildlife Crime Working Group are the Chairperson, Vice Chairperson, Executive Support Officer and Secretary (INTERPOL 2013b). At the time of writing, this consisted of law enforcement officers from Thailand, Australia and New Zealand with a vacancy for a secretary (INTERPOL 2013b). The projects that these specialised criminal investigators are involved in and how they function will be discussed shortly.

Fisheries Crime Working Group

The Fisheries Crime Working Group is the most recent addition to INTERPOL's fight against environmental crime. This working group has the same structure as the Wildlife Crime Working Group, so has a Chairperson, Vice Chairperson, Executive Support Officer and Secretary (INTERPOL 2013b). These Executive Officers are from Norway, the US, Costa Rica and the UK (INTERPOL 2013b). The goals of this working group are to:

Enhance and develop the capacity, capability and cooperation of member countries to effectively enforce fisheries and crossover crimes;

Encourage and assist the exchange of information and intelligence related to fisheries crime among member countries;

Provide analytical and operational support to member countries in the enforcement of fisheries laws and regulations; Encourage and facilitate networking, channels of communication and exchange of technical expertise between member countries for the purpose of fisheries law enforcement.

(INTERPOL 2013b)

Again, the goals are quite similar to those seen in other collaborative efforts. This one is unique in that it is focused specifically on fisheries crime, though what is meant by that specifically is not outlined.

The Environmental Crime Programme, the Environmental Crime Committee and the Working Groups are all involved in the development and implementation of the projects that aim to reduce wildlife trafficking and other environmental crimes. The personnel of all these groups are also ultimately part of the projects and operations that INTERPOL coordinates or leads on, which have a direct impact on this green crime.

Projects

There are four main INTERPOL Environmental Crime Programme projects, which focus on different aspects of wildlife trafficking. Whilst the projects are supported by staff of the Environmental Crime Programme and members of the Environmental Crime Committee and Workings Groups, these are not the only stakeholders involved. NGOs, government ministries and intergovernmental organisations are also partners on these projects. This makes the projects essentially collaborations within a collaboration. Within these projects, specific operations are designed to target the type of crime on which the project focuses. These operations also demonstrate the cooperation between all the different partners involved in the collaboration.

LEAF

Project LEAF is an acronym for Law Enforcement Assistance to Forests. It is a collaboration between INTERPOL's Environmental Crime Programme and UNEP's climate centre in Norway (Grid Arendal) and is supported financially by Norad (Norwegian Agency for Development Cooperation) (INTERPOL 2013c). It recognises that illegal logging and timber trafficking are playing a role in climate change and therefore need to be addressed urgently within the efforts to stop global warming (INTERPOL Environmental Crime Programme 2013a). There are other projects and schemes created by the European Union and intergovernmental organisations that set standards for sustainably managing forest resources, but in spite of these efforts it is estimated that only eight per cent of the world's forests meet these standards (INTERPOL 2013c). Additionally, illegal logging and timber trafficking contribute to habitat destruction and species extinctions. Much of this illegal activity is perpetrated by organised crime and the profits gained are comparable to that of illegal drug production (INTERPOL Environmental Crime Programme 2013a). This project then is unique in addressing the criminal aspect of this environmental problem.

In order to combat this green crime which is linked to corruption, violence, loss of revenue, political upheaval and post-conflict instability, INTERPOL and its partners seek to create national task forces, run operations that break up smuggling, ensure that forest laws are enforced, and raise public awareness to have a real impact on the health of the environment (INTERPOL Environmental Crime Programme 2013a). In order to achieve these objectives, criminal intelligence is exchanged and analysed, operations are targeted at the high forest crime hot spots, such as the Congo basin and the Amazon, training and workshops are organised to increase capacity of law enforcement agencies around the world, and efforts are made to make the project sustainable to continue to support forest law enforcement with guidelines, resources and best practices (INTERPOL Environmental Crime Programme 2013a). Project LEAF is a relatively new project and as a result there have yet to be any high-profile operations associated with it. Although there is the possibility that one is on-going, but not able to be publicised.

PREDATOR

Project PREDATOR was launched in Hanoi, Vietnam in November of 2011 to combat the trafficking of Asian big cats (INTERPOL 2013d). This includes not only the much publicised tiger, but also leopards, clouded leopards, snow leopards and Asiatic lions (INTERPOL 2013d). Other collaborations discussed in this chapter take part in Project PREDATOR, such as ASEAN–WEN, SAWEN and ICCWC. Other partners include USAID, the UK Department of Food, Environment and

Rural Affairs and the UK National Wildlife Crime Unit (INTERPOL 2013d). The 13 range states of the tiger also participate (INTERPOL 2013d). The illegal trade in tiger skins and body parts is the main threat to their existence, which has reached an urgent state as there are only six subspecies left and there are less than 1,000 individuals of each of those species (INTERPOL 2013d).

It is suspected that this type of wildlife trafficking is becoming more organised and is perpetrated in conjunction with financial crimes and other forms of trafficking, such as drugs, guns and people (INTERPOL Environmental Crime Programme 2013b). The objectives of Project PREDATOR do not differ from those of Project LEAF. Again the aim is to increase law enforcement capacity, get them to cooperate more, increase awareness and provide supporting resources (INTERPOL Environmental Crime Programme 2013b). The project also seeks to run operations that target this kind of wildlife trafficking. As this project has been running for several years, Operation PREY Phase I has already produced results.

Operations

Operation PREY is designed to be a multiphase operation aimed at disrupting criminal networks that traffic in Asian big cats and their parts (INTERPOL 2013d). The first phase of this operation took place in late May of 2012. It should be noted that operation within the context of the INTERPOL Environmental Crime Programme projects does mean a law enforcement operation with intelligence gathering through surveillance and informants that culminates in execution of search warrants, arrests and seizures. In this case, the operation was regionally focused on the illegal tiger trade (INTERPOL 2013d). Police, Customs, provincial wildlife enforcement authorities and other government agencies in Bhutan, China, India and Nepal shared intelligence and cooperated on an international investigation that resulted in 38 arrests and 278 seizures (INTERPOL 2013d). The seizures were not only of tiger skins and body parts, but also of rhino horns, ivory, seahorses, orchids and cacti (INTERPOL 2013d). More details are not readily available as there are issues of confidentiality and security related to INTERPOL's operations. Seemingly, the results of the operation were good and will enhance the capacity of those involved to be able to carry out further such operations. In addition, as a multiphase operation, it is clear that further efforts are

being made in the tiger range states to combat tiger poaching and trafficking.

SCALE

Project SCALE is the newest project of INTERPOL's Environmental Crime Programme. It was launched in February of 2013 at the first ever fisheries enforcement meeting (INTERPOL 2013e). This also established the Fisheries Crime Working Group as a permanent support structure for the Environmental Crime Programme. Norad also supports this project, as does the Norwegian Ministry of Foreign Affairs and the Pew Charitable Trusts.

As a new project, in addition to increasing law enforcement capacity, creating national task forces, raising awareness and developing operations targeting fisheries crime, Project SCALE also aims to assess the needs of vulnerable countries (INTERPOL Environmental Crime Programme 2013c). The latter will be accomplished through consultation with vulnerable member states as well as drafting a case study of West Africa, a region plagued by fisheries crime (INTERPOL Environmental Crime Programme 2013c). Overall the project wants to enhance the network and expertise associated with marine law enforcement and impact upon these criminal networks that are also connected to human and drug trafficking as well as fraud and money laundering (INTERPOL Environmental Crime Programme 2013c). As with Project LEAF, since Project SCALE is in the very early months of implementation there are no associated operations at the time of writing.

WISDOM

Project WISDOM is the longest running project of INTERPOL's Environmental Crime Programme and as such has multiple operations, which will be detailed shortly. This project has three organisational partners as well as several partner countries. The organisations are IFAW, Humane Society International and the UK National Wildlife Crime Unit. The partner countries are Botswana, Malawi, Mozambique, Tanzania, Zambia and Zimbabwe (INTERPOL 2013f). Kenya and South Africa act as mentoring countries (INTERPOL 2013f). The project targets the poaching of elephants for their ivory and rhinos for their horns. This takes the format of the other projects, but also aims to prioritise deterrence of these crimes and to ensure that 'assistance delivered contributes to the broader civil objectives, including conservation and rule of law' (INTERPOL Environmental Crime Programme 2013d: 1). These are important macro-level issues that if addressed will not only help to combat the illegal wildlife trade, but also the range of other green crimes and criminal activities faced by these nations.

Operations

There have been four Project WISDOM operations since 2009 – Costa, Mogatle, Ahmed and Worthy (INTERPOL 2013f). Costa consisted of police, Customs, wildlife law enforcement and intelligence officers from Burundi, Ethiopia, Kenya, Rwanda, Tanzania and Uganda and resulted in nearly 100 arrests and the confiscation of almost two tons of ivory (INTERPOL 2013f). The arrests and seizures came from border inspections of vehicles as well as raids of shops and markets (INTERPOL 2013f). As happened in Operation PREY, Operation Costa also resulted in confiscations of other wildlife in this case leopard skins and also weapons, ammunition and vehicles (INTERPOL 2013f).

Operation Mogatle took place in 2010 and solely focused on illegal ivory dealing within South Africa (INTERPOL 2013f). Robust intelligence gathering and analysis before the operation meant that the operation consisted of visits to dealers that were suspected of illegalities (INTERPOL 2013f). This targeted approach resulted in the seizure of 400 kilos of ivory and rhino horn, 41 arrests and the closure of multiple illicit dealers (INTERPOL 2013f). Also in 2010, Operation Ahmed (named after a murdered ranger from Ethiopia) targeted ivory and rhino horn traffickers and dealers in Ethiopia, Kenya and Tanzania (INTERPOL 2013f). The forensic DNA evidence obtained provided valuable information to prove where the ivory and horn were coming from (INTERPOL 2013f).

Finally, Operation Worthy, which took place between March and April 2012, was INTERPOL's biggest ivory operation to date (INTERPOL 2013f). Botswana, Ethiopia, Ghana, Guinea Conakry, Kenya, Liberia, Mozambique, Namibia, Nigeria, Rwanda, South Africa, Swaziland, Zambia and Zimbabwe collaborated on a law enforcement operation that seized nearly two tons of elephant ivory as well as 20 kilos of rhino horn, leopard, lion and cheetah skins, crocodile and python skins, live tropical birds and lizards, and other wildlife all destined to be trafficked (INTERPOL 2013f). As with other operations detailed, Operation Worthy also resulted in the confiscation of weapons (INTERPOL 2013f). Over 200 arrests and seizures were made by police, Customs, environmental protection agencies, veterinary services, airport security, ministries of tourism and national prosecuting authorities at markets, ports, shops, borders and checkpoints around the 14 countries involved (INTERPOL 2013f). This diverse group of participants successfully broke apart a significant piece of the smuggling network in this region. This attests to the strength of collaborative efforts and provides proof why INTERPOL is pushing for the creation of national taskforces with the range of law enforcement stakeholders involved to effectively combat wildlife trafficking and other green crimes.

National Environmental Security Taskforce (NEST)

Within all of these projects is the proposal that countries should be establishing National Environmental Security Taskforces or NESTs. A NEST consists of police, Customs, prosecutors, forensics and environmental agencies and is a permanent collaboration occurring at the national level. The specialists that would make up the taskforce are senior criminal investigators, criminal analysts, training officers, financial analysts and other experts (see Figure 7.1). As the INTERPOL Environmental Crime Programme (2013a) suggests these can supplement an already existing taskforce within the country or be created specifically to combat environmental crime. The multidisciplinary approach is touted as a strength of NESTs and they will benefit from the support of INTERPOL and the National Central Bureaus (INTERPOL Environmental Crime Programme 2013a). INTERPOL has developed a guide to help countries create NESTs and will assist countries in doing this (INTERPOL Environmental Crime Programme 2013a). This is valuable in fighting wildlife trafficking, but will also aid in tackling other green crimes. In doing so, as the name of these taskforces indicates, security concerns in the broader sense that have been laid out in this book may also be addressed. This could be recognising the connection between a healthy environment and national security resulting in more attention being paid to protecting ecosystems and species.

From the description of INTERPOL's Environmental Crime Programme and the related support structures, it should be evident that

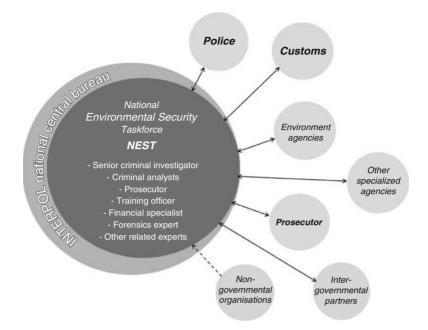


Figure 7.1 INTERPOL Environmental Crime Programme – National Environmental Security Taskforces – © INTERPOL

this is a unique and varied approach to the fight against wildlife trafficking. Not only are there permanent, seconded and contract staff of INTERPOL that manage and advice on the projects and operations, but there are also essentially volunteers from law enforcement agencies around the world that are contributing to the development and implementation of these projects and operations through the Environmental Crime Committee and the Working Groups. Whilst possibly unorthodox and simply a remnant from when environmental crime was not a permanent target of INTERPOL activity, this structure leads to a diverse group of specialised, experienced actors who, if the projects and operations are any indication, are making an impact on illegal wildlife trade and will continue to do so.

It also provides a good example of the strength of collaborations. INTERPOL, law enforcement, international NGOs, intergovernmental organisations and governmental ministries contribute in various ways to the on-going projects. This happens transnationally with countries from every region of the world contributing either with personnel or funding. Such collaborations increase trust and cooperation between the different stakeholders, which will most likely lead to further joint operations and a continued, sustained fight against wildlife trafficking, other green crimes and other global threats.

Analysis

Transnational collaborations are essential in creating a coordinated and far-reaching response to global threats such as transnational crime, green or otherwise. Arguably, it is even more important in the context of green crimes such as wildlife trafficking because individual countries may not have the political will power, skills and/or funding to combat the illegal wildlife trade on their own or at all. Though Dupont et al. (2003) were making the connection that third parties were essential in such instances for crime prevention, it seems this can be extended to collaborations as well. This can be seen by the crucial engagement of not only law enforcement, but also the active involvement of NGOs and intergovernmental organisations.

Just as the victims, offenders and stakeholders of wildlife trafficking are varied, so too are the transnational collaborations that take place. Collaborations can be constructed in several ways. Cooperation may be sought from governments, intergovernmental organisations and NGOs that focus on specific species. This was seen in GRASP, where the UNEP, range and non-range states of great apes, conservation organisations focused on great apes, and private organisations join in efforts to not only stop the illegal trade in great apes, but also to ensure their protection in general. The Shark Alliance, while also a species collaboration, is constructed differently in that it is made up only of NGOs rather than also having governments and intergovernmental organisations as partners. Species-type collaborations certainly link like-minded actors together with a common goal, so their focus might be very targeted. In instances with varied stakeholders, there is the possibility that they may have different and competing approaches to achieving the protection of the species for which the partners are collaborating. Those with the same stakeholders represented might be limited in the extent of their influence. So both compositions of species collaborations have advantages and disadvantages to their structure.

Regional collaborations may also have to contend with competing agendas as they are made up of the range of stakeholders described in Chapter 6. These actors may have conflicting interests in terms of the economy, conservation and enforcement of environmental laws. The strength of these collaborations is in the common goal of the partners to protect and secure their territories and regions from external threats. Their shared purpose of ensuring national and regional security and possibly preserving a common environmental heritage unites governments, NGOs, intergovernmental organisations and sometimes private companies.

Different partners, particularly government partners, however, have differing levels of engagement with such collaborations. As mentioned with ASEAN–WEN and SAWEN, there are still member countries that have not fully formed the taskforces that were expected of them under these collaborations. The other partners then may help to fill these gaps in terms of addressing conservation and enforcement in their neighbouring countries through the operations of the collaboration.

ARREST is a transnational collaboration that cuts across the other two collaborations mentioned within the regional context. This provides a valuable means of communication and cooperation between regions that are inextricably linked in regards to the illegal wildlife trade. This collaboration's strength is also in its ties to experts outside the regions that can provide useful training and capacity building as well as its connections to the media to create a sustained public awareness campaign in an attempt to address consumer demand.

Working above these collaborations are the joint efforts at higher levels between influential politicians and intergovernmental organisations. CAWT and ICCWC are acting internationally at the highest levels of diplomacy to raise the awareness and concern over wildlife trafficking and also encouraging support of capacity raising initiatives by governments and intergovernmental organisations. And working across these layers and amongst all the collaborations is INTERPOL's Environmental Crime Programme, which is facilitating information and intelligence exchange, developing and running law enforcement skills projects and leading and/or assisting with operations to combat wildlife trafficking.

There seems to be a large amount of effort going into the fight against the illegal wildlife trade. Yet as is clear, it is flourishing if not increasing. That is not to take away from the effort and commitment of all the actors and stakeholders described here. A vast majority of them are passionate, dedicated workers. It could be that these collaborations are all fairly new; whilst INTERPOL has been around for decades, until fairly recently its commitment to environmental crime was limited. ASEAN–WEN, the oldest of these initiatives, only started in 2006. There is hope then that if these collaborations are sustained, evidence of their efforts to build political will and capacity will become clear and wildlife trafficking will begin to decrease, not only because more law enforcement and conservation resources are devoted to it, but also because law enforcement and conservationists are more skilled and knowledgeable about combatting it.

Woven into the fight there must also be grass-root initiatives rather than only top-down collaborations, as are predominantly detailed here. Top-down initiatives, while useful, do not draw on the range of social actors who have other capacities and strengths, which are necessary to combat crime (Ayling 2013). Local people and smaller NGOs must also be given a voice. Also missing from this mix is the voice of social scientists, who study behaviours and markets. It is difficult to see how prevention strategies and policy interventions that are not grounded in empirical, evidenced-based understanding of human behaviour will ultimately be successful.

Additionally, the other layer that INTERPOL proposes will also help sustain the fight against the illegal wildlife trade. National Environmental Security Taskforces (NESTs) are the permanent nationallevel collaboration that provides the basis for a sustained consistent approach and response to wildlife trafficking and green crime. It has been suggested that state-centred initiatives may be more effective and last longer (Ayling 2013). Transnational collaborations are strong and valuable in the overall effort to end the illegal trade of all kinds of wildlife, but in conjunction with national-level initiatives. Transnational efforts are particularly strong in that they act with trust and altruism, which as Ayling (2013) states, is essentially opposite to the operation of criminal enterprises, which act out of suspicion and self-interest. The activities of all of these collaborations are crucial to reach the tipping point where law enforcement has the means, will and capability to enforce wildlife laws and regulations; where NGOs and intergovernmental organisations have the knowledge and the capacity to address both the supply and the demand; and where individuals, businesses and governments can agree on the value of wildlife and the environment.

8 Reflecting on Wildlife Trafficking

The concluding chapter summarises the complicated nature of wildlife trafficking; from its pervasiveness, to its hidden nature; from the supply side, to the demand side; from the construction of victimhood, to the construction of offending; from the conflicting perspectives of those fighting against it, to the transnational collaborations. The book ends by reflecting upon what wildlife trafficking will look like in the coming years, particularly focusing on its nature and extent in a world where most economies are struggling, most nations are enmeshed in neo-liberal capitalist policies, and most societies are driven by a consumer culture.

The big picture

There is not an area of the world that is not touched by wildlife trade. Non-human animals and plants are traded by the hundreds of millions every year. Much of this is legal, but there is a persistent, pervasive illegal trade that is threatening many species. Trade is driven by human consumption; consumption of food and traditional medicines and ownership of rare pets, plants and decorative objects. All types of non-human animals and plants are victims of wildlife trafficking; cacti, orchids, pitcher plants, trees, amphibians, birds, insects, mammals and reptiles. Even a rare fungus in the Himalayas is overexploited.

Due to the nature of crime in general and green crime in particular, there is a large dark figure of crime for wildlife trafficking; it is estimated that criminals are receiving billions of pounds in profit from illegally trading wildlife. If the past years are any indication of the trend, this is increasing and more non-human animals and plants are being targeted by traffickers and more species continue to be threatened with extinction, due in part to the illegal wildlife trade.

This is one of the most profitable black markets in the world yet is arguably the one that receives the least amount of attention and resources. It is not, however, a uniform black market, where the supply and demand of each species and their derivative is structured the same way. In fact, each species, depending upon theirlocation, the category of demand in which they fall and their human-assigned value, will have a black market that is distinctive to another species with different characteristics. Processed commodities, collector's items, traditional medicines and food each have different organisational structures, available profits and abundance. These differences lead to different offenders and actors being involved in the distinct black markets and particularly account for the presence or absence of organised crime. The cultural attachment to traditional medicines and food is particularly challenging in developing prevention strategies and policy interventions.

The destruction wildlife trafficking causes and its negative consequences are possibly more widespread and harmful than that caused by other black markets. Our market-driven culture that promotes consumption as a means to display status and wealth and equates progress to continual growth is having a profound and damaging affect on the biosphere that supports us and on the species that we share this space with. It is critical for the sake of the species that are being consumed and for the health of the planet that this green crime is reduced, or better yet, stopped.

The impacts

The implications for species, including our own, if wildlife trafficking continues unabated are numerous. The clearest effect is the extinction of species, which is within the realm of possibility for non-human animals such as the black rhinoceros and tiger, which are being consumed out of existence. Furthermore and less visible, ecosystems can become unstable because of the loss of biodiversity and species, furthering the loss of species and potentially affecting industries and ecosystem services that support human life as well as other species. Invasive species brought to new habitats through the illegal trade of wildlife can have similar negative consequences. Disease transmission between non-human animals, between plants and to humans from non-human animals can also damage industries and ecosystems and contribute to biodiversity loss and loss of individual life.

All of these environmental impacts are connected to the impacts to the economy, to people and to national security. As indicated, industries may suffer from the consequences of wildlife trafficking. Degraded environments cannot support some businesses, so businesses may be forced to close. For example, the agricultural industry is dependent upon the health of the environment. People and nations' food security is reliant on a robust, stable agricultural sector. Timber and wildlife tourism are businesses directly reliant on the viability of the environment. Reduction or closure of these businesses will undoubtedly affect the livelihood of people. Governments lose revenue in instances when wildlife is trafficked to circumvent the payment of taxes on legal shipments. This affects the social services available to the citizens and has an impact on the infrastructure of the country and potentially the amount of foreign investment that they may receive.

Damaged ecosystems cannot support human life, so people may be forced to move. The mass movement of people displaced from the conflict in Central Africa for instance, has created enormous refugee camps in neighbouring countries like Kenya. The sheer number of people has made it nearly impossible for governments or the United Nations to provide housing, food and shelter for the refugees and it takes years to find them permanent homes in new countries. Environmental refugees from degraded environments, be it from the consequences of wildlife trafficking or climate change, will most likely present the same problems. Humans are also physically threatened by perpetrators of wildlife trafficking by the violence that they use to maintain their black market. The multiple deaths of rangers defending wildlife is testimony to this.

These environmental refugees and levels of violence may have impacts for the security of nations, as has been evident in other contexts. The countries bordering Syria are struggling to cope with the influx of people fleeing the war there. The strain on these nations could force the collapse of their governments or create the conditions for them to be challenged by opposing forces. The violence accompanying the drug trade in Mexico threatens the police and civilians that are caught in the cross-fire.

National security and wildlife trafficking are also linked because of the way in which wildlife trafficking is perpetrated and the individuals involved. Corruption is integral to smuggling wildlife. These paid corridors enable anything to be moved anywhere. This is from corruption in the police, Customs, border agents and transportation employees at the ground-level, but is also evident at the highest levels, with the Cambodian government supposedly being connected to timber barons and trafficking. Organised crime plays a key role partly through its connection to corrupt officials. It relies on violence to maintain its power and is rapacious for profit. Organised crime is orchestrating several of the black markets in wildlife because of the organisation needed and the money available. Powerful organised crime groups are known to challenge the rule of law as is evident historically in Colombia and in present day Mexico. Terrorists and insurgents, who also challenge the rule of law and the sovereignty of governments, are being more directly implicated in the trafficking of wildlife, particularly in Central Africa where warlords are thought to be poaching ivory to fund their activities. These clearly all form threats to national security and this has been recognised by former Secretary of State Hillary Rodham Clinton. Other stakeholders, too, see this connection and are calling for more efforts and resources to fight wildlife trafficking.

The victims

Society in general and the criminal justice system in particular have a very narrow view of who can be a victim and in fact who is worthy enough to be a victim. Only in the last few decades have ethnic minorities and women become visible to the system and even this at times and in certain places is sadly lacking. Criminology has the capacity, and from an ecological and species justice approach, the obligation to advance the definition of victimhood to include all creatures that suffer harm, injury and death. The illegal wildlife trade is a green crime where such harm, injury and death are ingrained. It occurs at every aspect of this crimes' perpetration – the capture, kidnapping, killing; the transportation; the processing; the captivity. The hierarchy proposed here sets out how victimisation is typically conceptualised when anthropocentric societies take the time to consider the illegal trade in wildlife. Their main concern is the effect the loss of biodiversity or species will have on the people who are reliant on these resources or who are owners of the wildlife. States then are also victimised by the loss of wildlife because the governments lose out on revenue and income. Maybe then the actual victims, those who have died and suffered for human consumption, are considered. Most likely though this is the charismatic mega fauna that humans prioritise over other species because they are aesthetically pleasing to us. Other mammals might be noticed then, and afterwards, other non-human animals. Invisible to the label of victim are plants and the environment.

In the anthropocentric framing of our societies, we do not recognise other species' capacity for suffering, their intrinsic value or their right to life. Not only is this 'criminal' because of the harm and injury that it causes, but it is also blind to the interconnectedness of all species. Overexploitation will eventually hurt us as well as all the non-human victims of that consumption. There is hope though in new legislation that is appearing and in the continual campaigns by environmental and conservation groups that the criminological gaze can yet be expanded to see the victimisation of other species and the planet. Our obligation is also one of inter-generational justice. The individuals, both human and other species, who will inhabit the planet after us also have the right to a healthy environment. This shift in paradigm is arguably crucial to actually stopping wildlife trafficking as it fundamentally changes the ecological perspective by which most people form their relationship with nature and which underpins that unquestioned entitlement to overexploit other species.

The offenders

The individuals who are causing this pain and suffering are as diverse as the victims themselves. There are certainly people that poach out of poverty, but arguably this is a small portion of the illegal wildlife trade and does not have as great an impact as the middle-class and wealthy consumers that are demanding wildlife and wildlife products. These subsistence poachers are at the bottom of the hierarchy of offending proposed here. This hierarchy is meant to capture the blame and guilt that are attached to the offenders along the complex, lengthy smuggling chain. This conceptualisation serves as a means of understanding not only the offenders' motivations, which ties into the categories of demand, but is also meant to generate knowledge of the offenders' relationship to the victim.

The outer two tiers on Figure 5.1 are those offenders, like the subsistence poacher, who hold lower levels of guilt and blame for the trafficking of wildlife. This is because of their reasons and motivations for doing so. The drivers that have prompted them to commit this green crime are desperation, lack of knowledge, opportunity and even justification that they might be doing something right. This is in the case of denial buyers, who buy or sell non-human animals and plants in relation to collections, such as those found in zoos and gardens. Fines may well deter these offenders, as would short-term incarceration or alternative forms of punishment.

For the offenders in the upper tiers of the hierarchy, fines and short jail sentences will not keep them from smuggling wildlife. These people are committed to the black market either because of profit or ideology. Blame and guilt is higher at these levels and with that should come greater punishments of high fines, reparations and incarceration. The top of the offending hierarchy is characterised by blatant disregard to the near-extinction of their victims and to the suffering and pain caused by the kidnapping, the killing, the means to gather a derivative and the conditions during transportation. The offenders can resort to violence to commit their crime and they violate the trust of the government and the people who they serve by abusing the power given to them. Understanding the different motivations and levels of involvement of these offenders combined with the structures of the distinctive wildlife black markets is meant to aid in drafting targeted interventions and help the fight against wildlife trafficking. This is needed because a one-size-fits-all approach for every species will not address the underlying causes of why and how that non-human is being victimised.

The fight

Combatting wildlife trafficking is challenging not only for the scope and hidden nature that has been outlined, but also because of the often-competing agendas of the stakeholders who are engaged in the debates that frame how this is to be done. Law enforcement focuses on upholding and enforcing the law, but may have little regard for the environment or wildlife specifically. Conservation and environmental organisations are concerned with protection and preservation and possibly non-human animal rights and welfare. Governments and businesses as well as individuals may share these concerns, but these may be superseded by economic issues that are impacted by either altering the governance of the legal trade of wildlife or providing resources to combat the illegal trade.

Altering the governance may mean a shift from allowing some amount of trade of a particular species of wildlife to banning trade altogether. As was demonstrated, this is the divide between governments and businesses and the conservation and environmental groups. Law enforcement is then tasked with enforcing criminal sanctions or monitoring a regulatory structure with civil and administrative penalties for non-compliance. The African lion provides a further example of this complex problem. The African lion is the only big cat not listed on the United States Endangered Species Act and until fairly recently there has not been concern over lion population numbers. But that has changed; there are less than 40,000 lions left in the wild (Born Free USA 2013). Commercial trade in lion parts and trophy hunting is legal and allowed, yet in conjunction with habitat loss, these activities are having a detrimental effect on the survival of the species (Born Free USA 2013). Environmental organisations in the US are petitioning for the lion to be added to the Endangered Species Act. Their concern is that continued hunting will lead to the lion's extinction. Addition to the Endangered Species Act will prevent Americans from entering the US with lion trophies, thus effectively ending US participation in trophy hunting. This would have a tremendous impact as the US is the largest importer of trophies and parts from lions and the amount imported each year increased from 1999 to 2008 (Born Free USA 2013).

The flipside to the conservation organisations petition for protection of the lion is the trophy hunting organisations in Africa advocating that trophy hunting provides a necessary income to the regions where lions live (Songorwa 2013). Tanzania is home to 40 per cent of the lion population and warns that prohibiting Americans from trophy hunting there will cost the country and the businesses millions of US dollars (Songorwa 2013). Some of this money is used for conservation efforts, so it is argued that protecting the lion from hunting will damage environmental protection in the country as well (Songorwa 2013).

Who is right? Are lion populations truly stable in Tanzania as the person profiting from their deaths claims? Will making lion trophies in the US stop the lions' populations from declining? Or will it create a black market where lion trophy hunting will continue regardless? This is the on-going debate; these are the competing interests that lie at the heart of discussion of how to conserve wildlife and to combat wildlife trafficking. In the typical anthropocentric framework the human-centred approach would take priority – the lion will continue to be hunted. In the ecological and species justice approach that is proposed here, the precautionary principle must be applied and the lion needs to be protected because there is the possibility they are going to go extinct because of human actions. At the same time, alternative work and livelihoods need to be found for the people who will suffer from the cessation of trophy hunting. The lion has a right to life and human consumption cannot and should not be placed above this.

Whilst conflicts like this plague the efforts to combat wildlife trafficking, as Chapter 6 demonstrated, there are stakeholders that have come together and are successfully collaborating to protect the environment and maintain economic prosperity. The Royal Government of Cambodia, several Cambodian government ministries and departments, Conservation International, Fauna and Flora International and Wildlife Alliance cooperate to provide the law enforcement for the Cardamom Mountains in southwest Cambodia. They also develop educational programmes about conservation, run training programmes for other occupations that will have less impact on the environment, such as eco-tourism, rehabilitate wildlife and build scientific capacity in the country through post graduate degrees in conservation. These relationships have been criticised because of the reputation of the Cambodian government for corruption. The NGOs in these partnerships have chosen to try to protect Cambodia's wildlife even if that means partnering with unscrupulous people. Ideally, that would not need to happen, but they are doing what they can for the environment. This highlights other challenges to the fight

against wildlife trafficking than just the approach taken to protect wildlife. In this black market, those in power can be the criminals that you are fighting against.

The numerous stakeholders who all contribute to combatting wildlife trafficking and to the discussion of how it should be combatted also engage in transnational collaborations to stop the illegal wildlife trade. These also take different approaches depending upon which agencies are involved. Some transnational collaborations form around protection of a particular species, but then work across the globe to do so. The Great Ape Survival Project (GRASP) and the Shark Alliance are examples of this tactic. Whilst GRASP is a made up of intergovernmental organisations, NGOs, governments from range states and governments from non-range states, the Shark Alliance is only NGOs. Both of these strategies have advantages and disadvantages; like-minded organisations may have less internal conflict in developing projects, but without cross-cutting agency involvement, maybe their impact could be limited. The Species Survival Network (SSN) also focuses on species level protection, but its overall aim is to essentially act as a watchdog over nations who are CITES members. This adds a much needed external monitoring for compliance to a convention that is voluntary and until recently had limited capacity to gain compliance from the Parties.

Other collaborations have taken on a regional approach where neighbouring countries will have law enforcement, NGOs and intergovernmental agencies forming networks to combat wildlife trafficking and other environmental crimes. This is evident in the formation of ASEAN–WEN and SAWEN both of which have national level task forces that then cooperate on the transnational level. This has meant joint-operations to crack down on the illegal wildlife trade as well as on-going training and workshops to increase overall capacity of law enforcement in the region and to share intelligence and information. These collaborations benefit from the level of expertise that can be shared, but may fall short if all members do not put the same effort into forming a national network and then participating in the regional operations. The regional collaborations are further strengthened by other transnational collaborations, like ARREST, that combine and coordinate efforts of several regions.

Collaborations are also taking place at the higher levels as is evident by CAWT and ICCWC. Both of these consist of influential

governments or intergovernmental agencies, which are advocating for more political will to stop wildlife trafficking as well as supporting, or in ICCWC's case, organising capacity building programmes for law enforcement. Arguably, the most important transnational collaboration taking place is the work undertaken by INTERPOL and its Environmental Crime Programme. With support from the Environmental Crime Committee and the Working Groups on wildlife crime and fisheries crime, INTERPOL's Environmental Crime Programme has developed global projects that are improving the capacity of law enforcement to combat wildlife trafficking as well as providing a secure and much needed intelligence and information sharing infrastructure for all of its 190 member nations. Their operations demonstrate the strength of collaborations as law enforcement, NGOs, veterinarians, government officials and a range of stakeholders from multiple nations take part in successful disruptions of criminal networks engaged in smuggling wildlife. The National Environmental Security Taskforces (Figure 7.1) that they propose for each country would provide a permanent focal point for nations to channel a combined and sustained effort to challenge wildlife trafficking and all green crimes.

Evident from this analysis of collaborations is that all of the stakeholders explored earlier are present. Law enforcement is the most common member, which of course is expected when you are combatting crime. NGOs are well represented throughout the collaborations and in an indirect way this includes the voice of individual people who provide the funding and activism that supports the work of most NGOs. Intergovernmental organisations are also engaged, as are most of the governments that are effected by wildlife trafficking. Less involved, but still present in some of these collaborations are businesses, but their interests are usually represented through the governments. Both the individual efforts to fight wildlife trafficking explored in Chapter 6 and the transnational collaborations explored in Chapter 7 tend to adopt multifaceted approaches, which is crucial in addressing such a complex crime. There are clear efforts to limit the supply of wildlife by patrolling areas from which wildlife is taken. Maybe less evident, and this should be improved, is the efforts to provide alternative sources of food and income for people at this supply level. There are efforts to also tackle the other side of this market - the demand side. These tend to be public awareness campaigns reliant on

the media to educate the wider society about the threat to wildlife. In particular, efforts are being made to reduce the demand for traditional medicines, which are one of the main drivers of the illegal trade in wildlife.

As indicated, it seems that there are two elements missing from these initiatives. That is not to say that these efforts are not useful or successful, but if all aspects of the causes and correlations of wildlife trafficking are not addressed then efforts will always be incomplete. These two elements are local people and social scientists. There are certainly some grass-roots initiatives to protect wildlife and end their exploitation. The case study of Cambodia presented here has some of this element. The criticism is around how much of the effort. development and implementation is driven by those who are reliant on the wildlife. It appears that many of the projects are ideas coming from outside the community. Projects in Namibia are a good example of grass-root initiatives where the local people are integral to the design of eco-tourism ventures to provide jobs and income. Namibians once dependent upon wildlife or those whose employment in agriculture has been diminished because of the creation of nature preserves are consulted about new projects. Namibians are running the projects with the help of international experts, but it appears that it is the local people providing the direction. As the CEO of the African Wildlife Foundation says in the documentary Milking the Rhino (2009), you must have the local people on board if you are to save the wildlife.

The other missing element is contributions like this book, coming from social scientists. A clear lesson from other areas of criminal justice and criminological research is that punishment from the criminal justice system will only alter people's behaviour so far and has little to no impact on the causes of crime. In order then to decrease the illegal trade in wildlife, experts in human behaviour and researchers that can unpick motivations and drivers of why this crime persists must get involved and be heard. Enforcing the laws or regulations and developing projects without understanding what spurs the offenders is not going to change the fundamental reasons as to why people consume wildlife. To truly tackle this green crime, and all green crimes and harms, it is human behaviour towards the planet that needs to be quickly changed (Ehrlich and Ehrlich 2010) and social scientists are key to that endeavour.

The connections

As mentioned throughout, wildlife trafficking does not take place in isolation from other crimes and harms. It is woven into the web of other black markets and deeply connected to corruption and organised crime. Understanding the nature and scope of wildlife trafficking as well as the methods of smuggling and perpetration can then provide information relevant to other black markets. This is not only drugs, which were talked about in more detail, but weapons, people and antiquities trafficking as well. The ways in which law enforcement and the range of stakeholders combat black markets can also be studied and compared. For instance, controlled deliveries is a tactic taken from drug investigations, and it is being applied to wildlife. There are other best practices to be uncovered that should be shared between these separate yet intertwined crimes.

In further exploring wildlife trafficking and other forms of trafficking, it could be argued that wildlife trafficking is possibly the most destructive black market. Drug and weapons trafficking are characterised by violence and there are numerous human victims in their commission. Drugs have health, crime and economic impacts in the countries where there is demand. Drugs also have crime implications in the supply countries. Weapons trafficking is inseparable from violence and human injury and death as these weapons are used in crimes and insurgencies. Human trafficking obviously has profound levels of human victimisation and on a significant and disturbing scale. It, too, has health, crime and economic implications along the smuggling routes where the human victims transit. Wildlife trafficking threatens biodiversity, ecosystem and environmental health, transmits disease and invasive species and causes victimisation to thousands of other species each year. These impacts also have the potential to disrupt major industries, destroy human livelihoods and environments and threaten national security. This is not to belittle the victimisation or significance of other black markets; it is merely evidence that this overlooked green crime is in urgent need of more attention and resources.

Corruption and organised crime feature in so many black markets and in the perpetration of a variety of other crimes, such as money laundering and racketeering. The message to be taken from wildlife trafficking in regards to these two elements in particular is that more law enforcement effort to tackle them will have far-reaching effects beyond what may be initially suspected. As wildlife trafficking shows, corrupt officials and organised crime are opportunity seekers, who will engage in whatever profitable criminal activity comes their way. By targeting corrupt officials and organised crime, law enforcement may well be impacting on black markets and wildlife trafficking that they may not realise are taking place. This is also true for governments, who need to be more diligent and committed to rooting out corruption in particular; a difficult task to be sure, as it is often the government that is corrupt.

The illegal wildlife trade's closest connections are to other environmental issues. The conceptualisations offered here may provide guidance in approaching these concerns. For instance, the hierarchy of victimhood applies beyond the scope of wildlife trafficking. The environment and other species are also being victimised by other green crimes and harms. Pollution, the toxification of the environment, hazardous waste, ecosystem disruption due to climate change, the hole in the ozone layer, deforestation for agriculture and biofuels – all of these human-caused environmental degradations are victimising non-human animals, plants and the environment. The hierarchy proposed here through the lens of trafficking in wildlife is a means to challenge the anthropocentric framework that allows for these decisions to be made and is applicable in nearly all environmental contexts.

The same is meant for the hierarchy of offending. There is a clear message from governments and the criminal justice system as to the value of the environment visible in the sentences and ways in which green crime is punished. Damaging the environment, killing and consuming protected species and/or abusing non-human animals is not regarded as significant or important. All people responsible for these activities do not do so for the same reasons. They have different levels of engagement and commitment to the destruction. This equates to different levels of blame and guilt, which should translate into different levels of punishment. This conceptualisation is applicable to other green crimes as well and arguably to a wider range of crimes. As mentioned, inter-human victimisation has similar differences in motivations and commitment to the perpetration of crime, so this may well serve to inform punishment of violent crimes and property crimes. The efforts to fight wildlife trafficking through national and transnational collaborations may not be unique to this crime, but they still may serve as a model of good practice. Such interdisciplinary, interagency, multi-stakeholder approaches to problem solving may address the 'culture gap' that Ehrlich and Ehrlich (2010: 481) site as one of the crucial hurdles to overcoming environmental issues. This gap is that knowledge in modern society is compartmentalised and each one of us most likely knows very little beyond our own field (Ehrlich and Ehrlich 2010). By drawing on a variety of skills, knowledge and experiences, it is possible to fully understand a problem and create prevention strategies and policy interventions. Now it is important for even more people to contribute to tackling the illegal wildlife trade.

The future

What then does the future of wildlife trafficking and the fight to stop it look like? The 16th Conference of the Parties of CITES may well provide some guidance as to where this battle is going. The economic and cultural interests were as always in conflict with the push for conservation. There were 65 proposals to change the listing of species or to add them to the appendices (Bangkok Post 2013). Fifty-five of these passed (Bangkok Post 2013), several of which are fairly historic and signal a possible shift in the global community's approach to wildlife consumption. Despite opposition to the protection of several shark and manta ray species from the consumption of shark fin soup and medicines from manta ray gills by Asian nations, five species were given protection. This was the case for several species of turtles and tortoises too, which are killed for their shells. Of particular note is the listing of hundreds of new timber species. CITES has not been especially active in controlling timber trade, though it has the capacity and mechanisms to do so. This could indicate that CITES and the Parties are willing to take a more active stance on protecting timber species and cracking down on timber trafficking.

Further evidence of a more proactive stance and on the side of conservation is that eight countries have been threatened with trade sanctions if they do not take measures to curb their illegal ivory trade (Bangkok Post 2013). China, Kenya, Malaysia, the Philippines, Tanzania, Thailand, Uganda and Vietnam must put in place measurable and clear steps to reduce ivory trafficking within one year or they will not be allowed to trade CITES species at all (Bangkok Post 2013) as described in Chapter 6. There appears to be conflict between these nations, with consumer countries calling for more focus on the supply and origin countries blaming the demand. As argued, it is a combination of both and therefore all countries within the smuggling route, including the transit countries, need to collaborate to stop this. Vietnam is facing the same situation regarding its performance on rhino horn (Bangkok Post 2013).

Whilst these 'victories' for wildlife may indeed signal a change, there is indication it is a slight one and one that will continue to be challenged. Though some sharks and manta rays were given more protection, consumer countries were actively trying to stop this from happening (McGrath 2013a). There was repeated mention that China and Japan were trying to pressure developing nations in regions where sharks are not consumed to vote against the ban (McGrath 2013a). This is a disturbing dynamic that wealthier countries, which give foreign aid to developing nations, use that aid as leverage to get countries with no particular stake in a debated species to vote in the interests of the aid-giving nation. Wildlife protection is not considered and economics and culture are prioritised; economic concerns for the developing nation and economics and culture for the aid-giving nation.

Economics and culture were also the drivers behind the failure of the polar bear to be listed in Appendix I. Indigenous groups argued for the continued hunting and trading of polar bears to maintain their way of life and to keep the income that they get for selling the skins and parts (McGrath 2013b). In an ironic twist, climate change was used as part of the justification for not banning them from trade as it was the bigger threat to their existence. Polar bears will continue to be part of the legal trade, although many believe it is contributing to their limited chances of survival over the next few decades.

The possibility of voting by secret ballot at CITES is problematic and more so in the situations described above. A country can propose to vote by secret ballot and needs the support of ten other countries for this motion to pass (Stokes 2013). When voting takes place this way, the voting attributions are never published (Stokes 2013). This lack of transparency enables bullying and corruption to potentially happen as has been found in the secret voting of other conventions, such as the International Whaling Convention where Japan was accused of buying votes (Stokes 2013). Whilst CITES may have made some progress in the right direction at this Conference of the Parties, there is still signs that economics will continue to be placed above conservation and wildlife.

A multifaceted, multi-stakeholder fight against wildlife trafficking is essential. The supply side must be addressed with prevention strategies and targeted programmes to provide other opportunities to poachers. Targeting the demand side is possibly more crucial with a mix of enforcement and education. There is clearly no consensus, and none in sight, about whether to ban trade or regulate trade to protect species. These decisions need to be informed by good science – both physical, concerning the population numbers and reproduction of the species in trade, and social, focusing on the motivations and causes of crime and wildlife consumption. Each species needs to be given attention as what will be true for the gorilla may well not be true for the sea cucumber, so the commonalities and distinctions between the categories of demand must be researched to further the knowledge base in order to make fully informed decisions. The regulation is very important, but as Felbab-Brown (2013) points out, equally important in addressing crime is that law enforcement has the capacity and will to tackle it and that corruption is kept in check. It is critical that environmental and wildlife law enforcement as well as wildlife forensics are given the resources to improve. And as a planet, we have to challenge corruption from the lowest to the highest levels or risk losing our environment to their greed. We must stop the collaboration of government officials with the industries that they regulate (Ehrlich and Ehrlich 2010) and make governments as transparent as possible.

Underpinning the entire urgent crime of wildlife trafficking is this greed. This and the belief that consumption is still thought to be the only way to address economic problems and growth must be continual (Ehrlich and Ehrlich 2010). This consumption is characterised by the belief that we have the right to consume anything and as much as we want. To stop wildlife trafficking, we must realise that this is not the case. Non-human animals, plants and the environment have value beyond what we assign to them. Because of our connection to everything else and our ability to do so, we have an obligation to protect them for their own sake and for future generations of all species. Law enforcement, NGO, scientist and government efforts may diminish wildlife trafficking, but it is fundamentally up to society to alter our relationship with the planet and other species to be one of respect and active reduction of the harm and impact that we cause. We need to do this for our own survival, but we should do it because it is the right thing to do.

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